Ministry of Energy

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Fair Hydro Trust
Investor Presentation

January [xx], 2018

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Presenters

ONTARIO POWER GENERATION

Ken Hartwick
Chief Financial Officer &
Senior Vice President – Finance

John Lee
Vice President, Treasurer

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I. Introduction and Transaction Overview

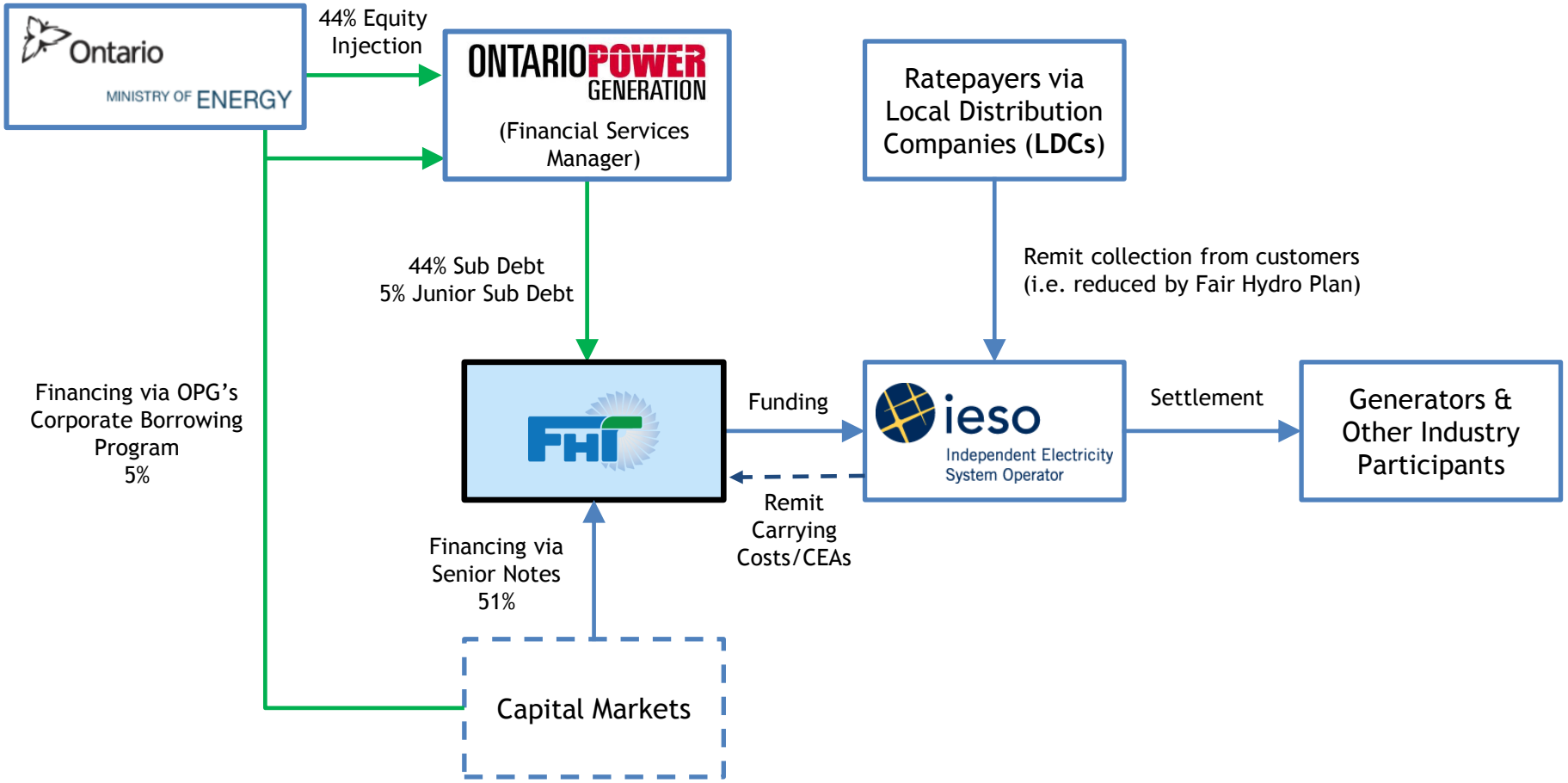
Introduction

Ontario's Fair Hydro Plan	• The Province of Ontario announced its Fair Hydro Plan (FHP) on March 2, 2017, which proposed to lower the average electricity bill for eligible customers[1] (referred to as Specified Consumers) by 25% (the Fair Adjustment) • The 25% reduction includes an 8% rebate equivalent to the provincial portion of the harmonized sales tax granted by the Ontario government in January 2017 • It is expected that the rate reduction will be in effect until April 30, 2021, with any rate increases until that date limited to the rate of inflation in Ontario
Legislation	• On June 1, 2017, the Ontario government passed the *Ontario Fair Hydro Plan Act, 2017* (together, with the regulations promulgated thereunder, the FHPA or Act) to give effect to the FHP, legislation that reallocates certain electricity costs over time and provides immediate rate relief contemplated by the Fair Hydro Plan to Specified Consumers • The FHPA is supplemented by regulations related to the implementation of the FHPA (the "Regulations") • The FHPA imposes an irrevocable and non-bypassable charge recoverable from Specified Consumers and referred to as the Clean Energy Adjustment (CEA) that will be determined by Ontario Power Generation (OPG) in its role as Financial Services Manager under the Act • The CEA will be determined for each six month reference period and converted by the Ontario Energy Board (OEB) into a $/kWh rate and added to electricity invoices sent to Specified Consumers commencing on May 1, 2021 • From July 1, 2017 to April 30, 2021 (the Moratorium Period), no payments in respect of CEA will be collected; during this period the Independent Electricity System Operator (IESO) is obligated to pay all funding and other expenses of the Trust (excluding principal) (referred to as Carrying Costs) under the Regulations
Fair Hydro Trust	• The implementation of the Fair Hydro Plan will be financed by the Fair Hydro Trust ("FHT", the "Trust" or the "Issuer") through the issuance of senior, subordinated and junior subordinated notes • Structured to be bankruptcy remote and even though consolidated by OPG on an accounting basis is ring fenced from OPG's other creditors • The FHT term notes will be repaid through the CEA payments received from Specified Consumers

[1] Primarily Regulated Price Plan-eligible customers.

Transaction Structure

- Concurrent with every issuance of senior notes, it is expected that OPG will purchase subordinated debt and junior subordinated debt of the Trust in an aggregate amount not to exceed 49% of all outstanding debt

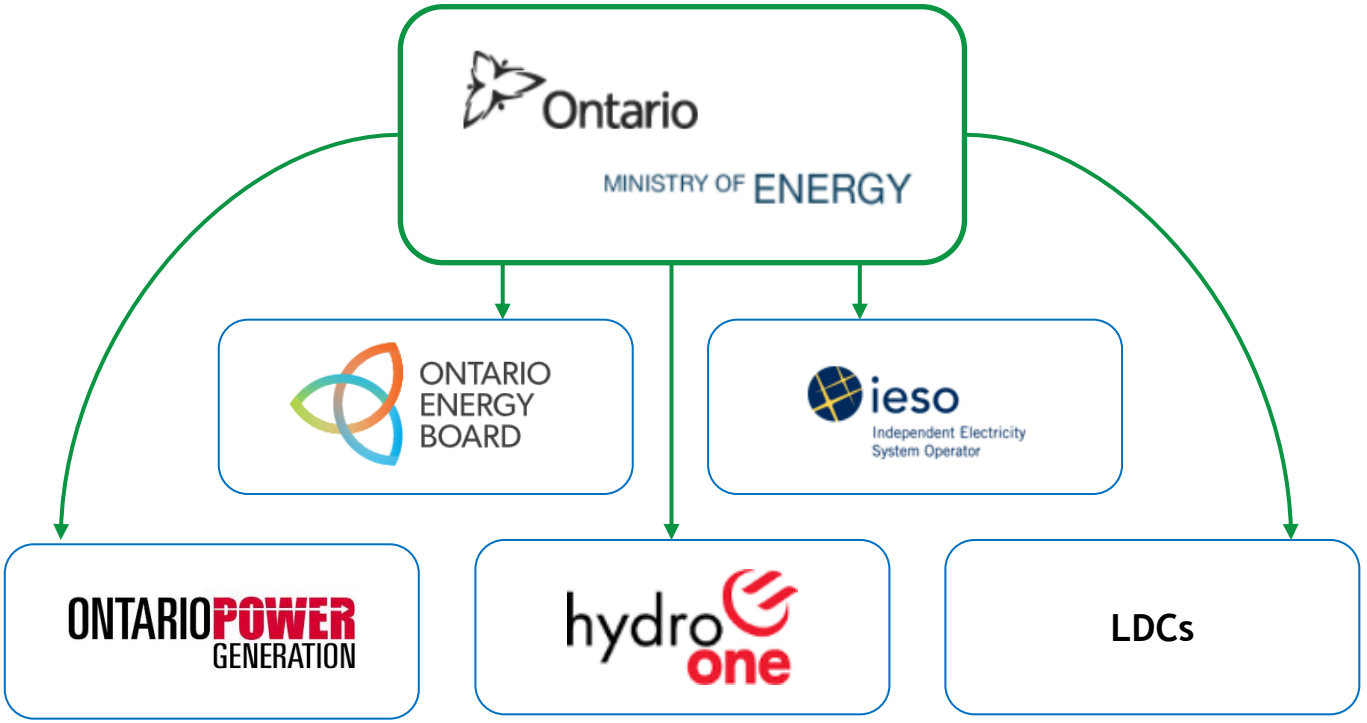


Note: The diagram above is based on subordinated debt of 49% of all outstanding debt; under the Master Trust Indenture, the Trust covenants to maintain the level of subordinated debt plus junior subordinated debt at not less than 35% of all outstanding debt
Note: The assets and liabilities of the Trust are deemed, under the *Electricity Act, 1998* to exclude the assets and liabilities of OPG, and vice versa.

II. Ontario Electricity Market

Overview of Ontario's Electricity Market

- Highly regulated electricity market comprised primarily of three components: generation, transmission and distribution; ~$22 billion in average annual cash flows[1]
- Transmission rates, distribution rates, and OPG's regulated rates are set by the OEB
- Rates for the majority of the remaining generation supply are set by direct contracts with the IESO (e.g. wind, solar, hydroelectric)



[1] Source: "Ontario Planning Outlook – A technical report on the electricity system prepared by the IESO" dated September 1, 2016. The amount represents the mathematical average of the system costs on page 44 in the appendix "Data Tables for the OPO Technical Report".

Key Industry Participants

Participants	Credit Ratings *(DBRS / S&P / Moody's)*	Description
Ontario Ministry of Energy	**AA (l) / A+ / Aa2** [1]	• The Province of Ontario through the Ministry of Energy sets the policy for the electricity system
Ontario Energy Board	--	• Independent public regulatory agency established under the *Ontario Energy Board Act, 1998* and has the authority to regulate Ontario's electricity market, including the activities of transmitters and distributors • Sets the regulated price for the commodity cost charged to most residential electricity customers via the Regulated Price Plan (RPP); RPP rates are set twice a year (May and November)
ieso Independent Electricity System Operator	**A(h) / -- / Aa2**	• Not-for-profit corporation established under the *Electricity Act, 1998 (Ontario)* • Manages the operation and reliability of Ontario's bulk power system and administers the wholesale electricity market
Ontario Power Generation	**A(l) / BBB+ / --**	• Corporation formed under the *Business Corporation Act (Ontario)*, whose sole shareholder is the Province of Ontario • Principal business is the generation and sale of electricity in Ontario and is Ontario's largest clean energy electricity generator, providing approximately half of the province's electricity
hydro one	**A(h) / A / A3**	• Ontario's largest electricity transmission and distribution company, delivering electricity to over 1.3 million customers across the province, and to large industrial customers and municipal utilities

[1] The credit ratings noted are for the Province of Ontario.

Key Industry Participants – LDC Overview

- As part of the restructuring of Ontario's electricity industry under the *Energy Competition Act, 1998*, the municipal electricity utilities became municipally-owned business corporations, including LDCs. The majority of LDCs continue to be municipally-owned, while others have been sold to or acquired by Hydro One or private-sector owners
- An LDC is responsible for distributing electricity to customers in its OEB-licensed service territory, and in some cases to other distributors

Select Aggregate Market Stats[1]

Number of LDCs in Ontario	65
Residential & Small Commercial[2] Revenue	$18.89 billion
Residential & Small Commercial[2] Metered Usage (kWh)	52.39 billion
Residential Customers	4.61 million
Small Commercial[2] Usage Customers	0.44 million
Total Residential & Small Commercial[2] Customers	5.05 million

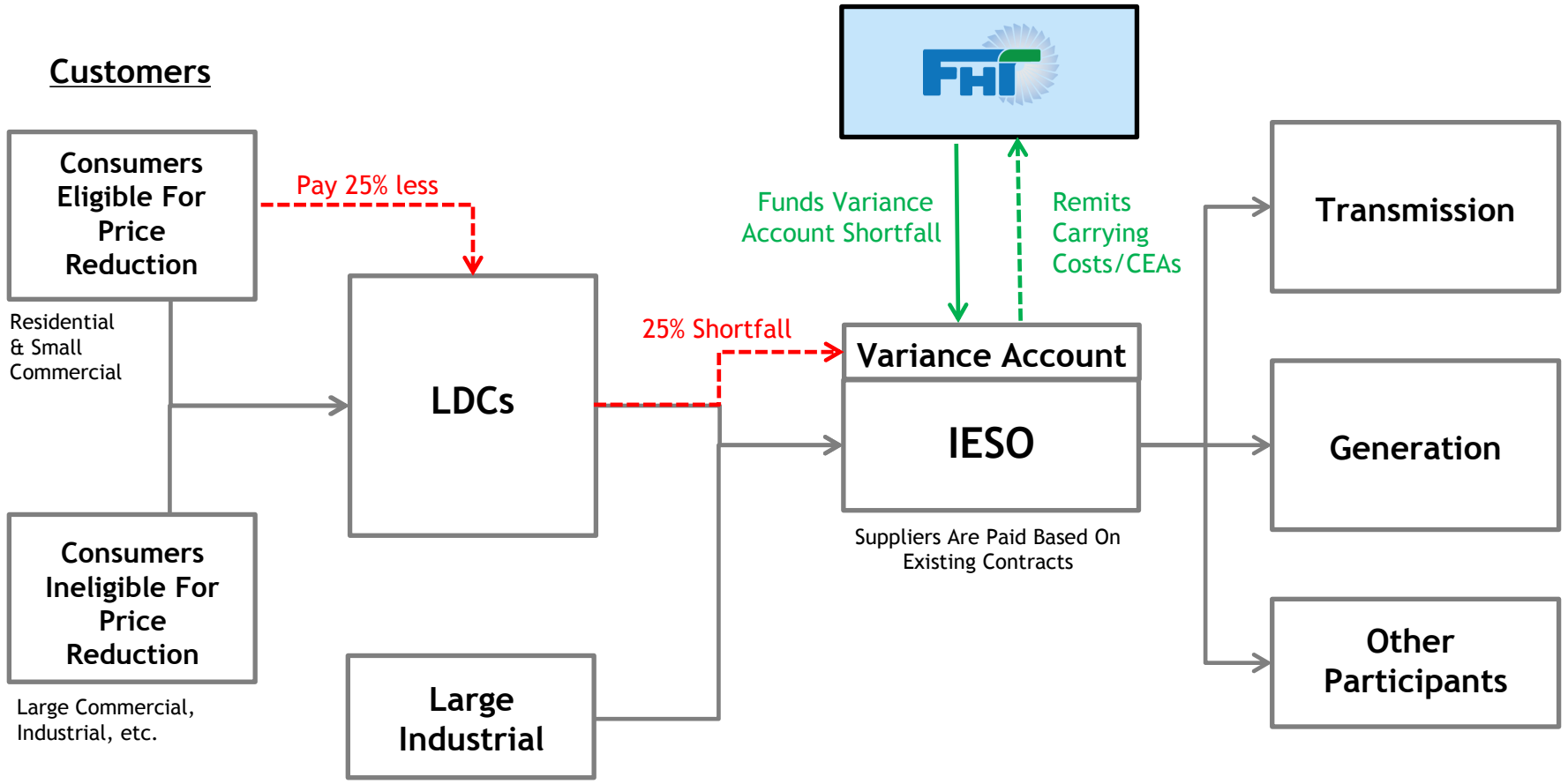
Top 5 LDCs by Customer Base[1]

	Rating[3] *(S&P/DBRS/Moody's)*	Customers[4] *(MM)*	Revenue[4] *(C$MM)*
hydro one	A / A(h) / A3	1.30	$4,533
alectra utilities	A / A / --	0.96	$3,642
TORONTO HYDRO	A / A / --	0.75	$3,886
HydroOttawa	BBB+ / A / --	0.32	$1,130
London Hydro	A / -- / --	0.15	$488
		3.49	**$13,680**

[1] Source: OEB 2016 Yearbook of Electricity Distributors
[2] Small Commercial includes General Service <50kW Customers
[3] Most recent rating reports from S&P, DBRS and Moody's
[4] Residential and Small Commercial customers

Electricity Market with FHT

- Under the FHPA, each month the IESO determines the shortfall that results from the Fair Adjustment and records this amount, together with financing costs, in a variance account
- FHT will finance the shortfall and is entitled to recover its costs and the principal and interest on its debt through CEAs from Specified Consumers



III. Legislative and Regulatory Framework

Legislation Overview

Purpose	• The FHPA was enacted to ensure that clean energy costs and clean energy benefits are fairly allocated among present and future Specified Consumers • Clean energy costs are costs allocated to consumers as a result of Ontario's clean energy initiatives; clean energy benefits are benefits that accrue to both present and future electricity consumers
Specified Consumers	• A category of consumers that generally is comprised of residential consumers, small businesses and farms • Includes consumers with a demand for electricity of 50 kW or less or those that use not more than 250,000 kWh of electricity annually
Rate Reduction Period	• **July 1, 2017 - April 30, 2018** – Specified Consumers charged an invoice amount that is 25%[1] less than the regulated rate that would otherwise have been determined by the OEB; the 25% reduction includes an 8% rebate equivalent to the provincial portion of the HST previously granted by the Ontario government • **May 1, 2018 - April 30, 2019** - regulated rate established in the first year of the Rate Reduction Period anticipated to increase by the rate of inflation in Ontario • **May 1, 2019 - April 30, 2021** - rate reductions will be established by future regulation but anticipated to increase by the rate of inflation in Ontario

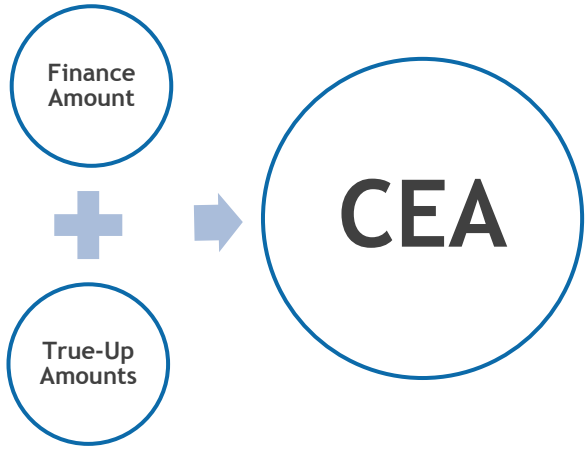
[1] Based on a typical Toronto Hydro customer; the amount of the reduction for any given Specified Consumer may vary from this account.

Legislation Overview, cont'd

Regulatory Asset	• Each month the IESO determines the shortfall that results from the Fair Adjustment and records this amount, together with the costs of financing the shortfall, in a variance account • The IESO has the right to recover the balance recorded in the variance account from Specified Consumers (such right is the Regulatory Asset) • The IESO may transfer a specified portion of the Regulatory Asset to the Trust for a cash purchase price equal to the amount recorded in the variance account
Investment Asset	• The Trust is not obligated to purchase Regulatory Assets from the IESO • If the IESO and the Trust agree to the transfer of a specified portion of the Regulatory Asset, such transfer results in the creation of a current and irrevocable property right that is immediately vested in the Trust (such right is an Investment Interest) • By acquiring an Investment Interest, the Trust will be entitled to recover all of its financing costs and acquires the right to impose, invoice, collect, receive and recover CEAs from Specified Consumers
Moratorium Period *(July 1, 2017 to April 30, 2021)*	• CEAs are not permitted to be collected from Specified Consumers during this period • The IESO is obligated to pay all Carrying Costs, excluding repayment of principal on any debt obligations, during the Moratorium Period and extending to July 31, 2021. The Carrying Costs incurred by the IESO will be added to its Regulatory Asset variance account pursuant to Regulations • As security for the performance of its obligations, the IESO has granted the Trust a first-priority security interest in all of its accounts receivable • The IESO has a $2 billion general credit facility from the Ontario Financing Authority (OFA) which can be used to pay the Carrying Costs

Clean Energy Adjustments

- Under the FHPA, the CEA is the amount payable by Specified Consumers to cover the cost of financing the shortfall from the Fair Adjustment and the associated costs of the financing, including payment of principal, operating costs of the Trust and funding of reserve accounts
- CEAs shown on an invoice issued to Specified Consumers represents the amount of the consumers' indebtedness and may not be set off or bypassed

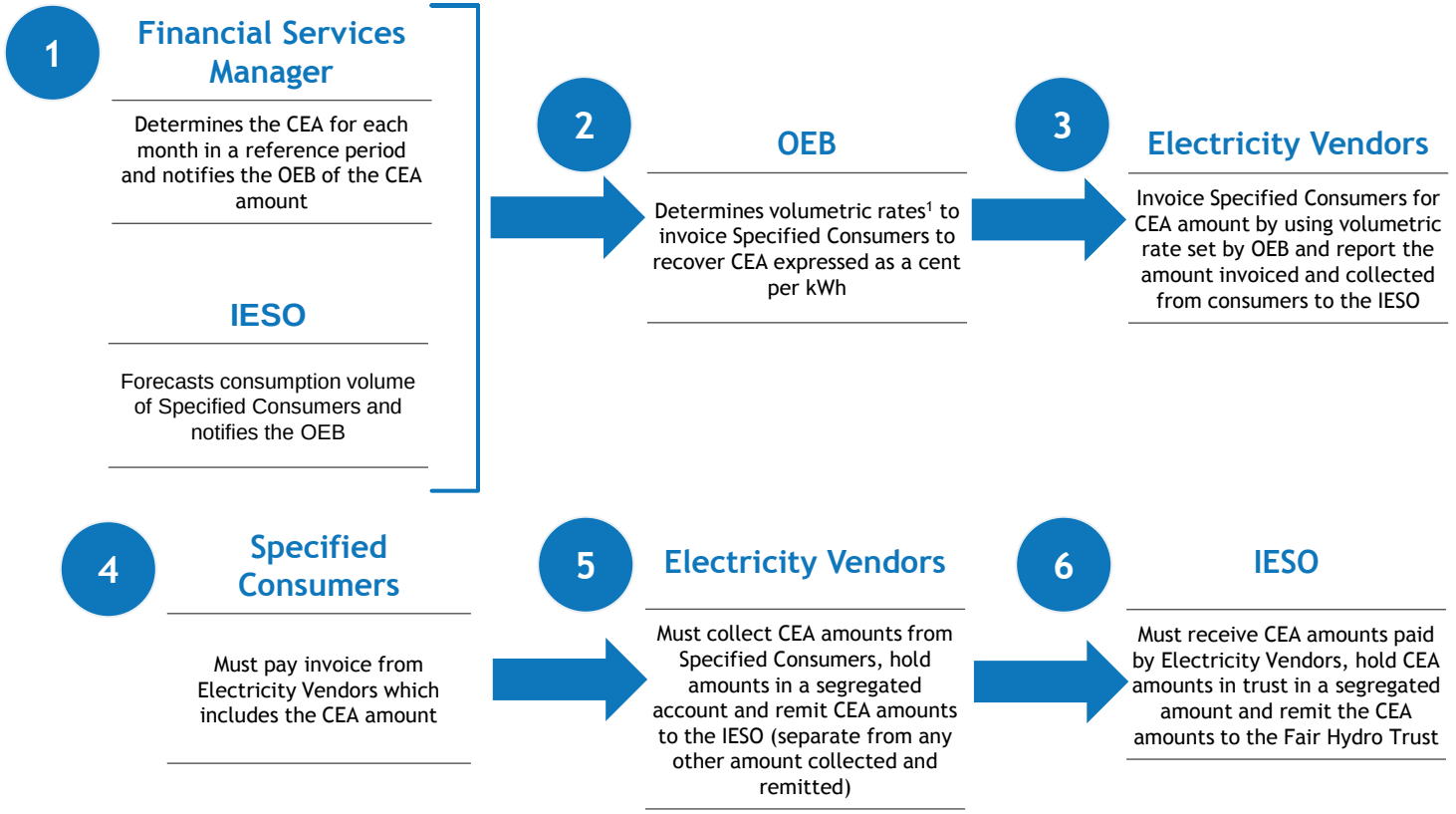


Finance amount = estimate of the amount payable by the Trust mainly in respect of principal payments, interest costs, Trust expenses and taxes, reserve account deposits and derivative payments

True-up amounts capture the difference between the finance amounts incurred by the Trust and the CEAs collected from Specified Consumers and also include other anticipated shortfalls and differences due to various factors (e.g. consumer defaults and delays, billing lags, write-offs and variations in electricity consumption)

Billing and Collection of CEAs

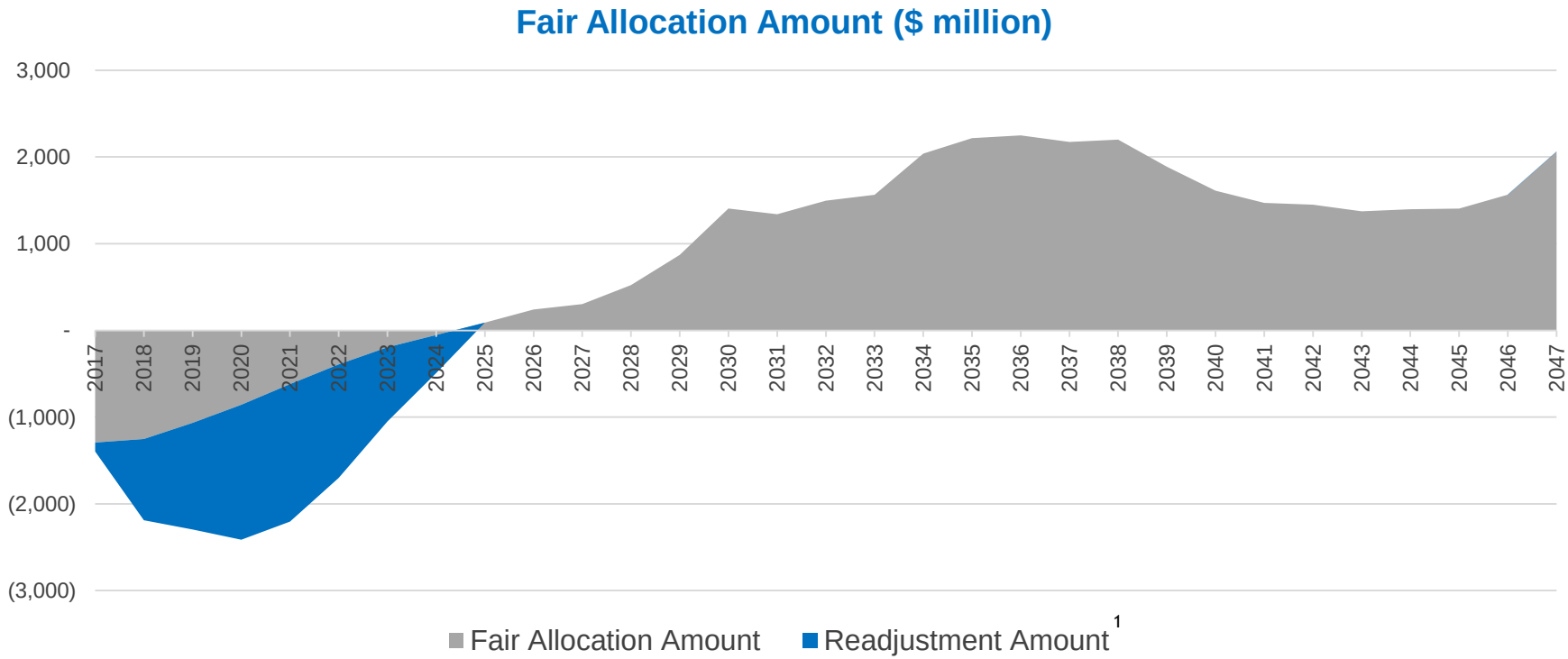
- CEA amounts for billing and collection purposes will be managed outside of the IESO's current settlement processes set out in the Market Rules for electricity invoice amounts
- Collection risk for CEA amounts are mitigated through statutory rights in the FHPA, the collection obligations of the IESO under the Master Transfer & Servicing Agreement (MTSA), and the ability to include amounts into the true up mechanism
- IESO is allowed to commingle the CEAs during a monthly period before remitting to FHT. If the IESo's rating is downgraded below investment grade, it will not be allowed to commingle CEAs and will remit within two business days of receipt



[1] The rates will be determined by dividing the CEA amount by the forecasted energy consumption in the reference period by Specified Consumers.

Fair Allocation Amount

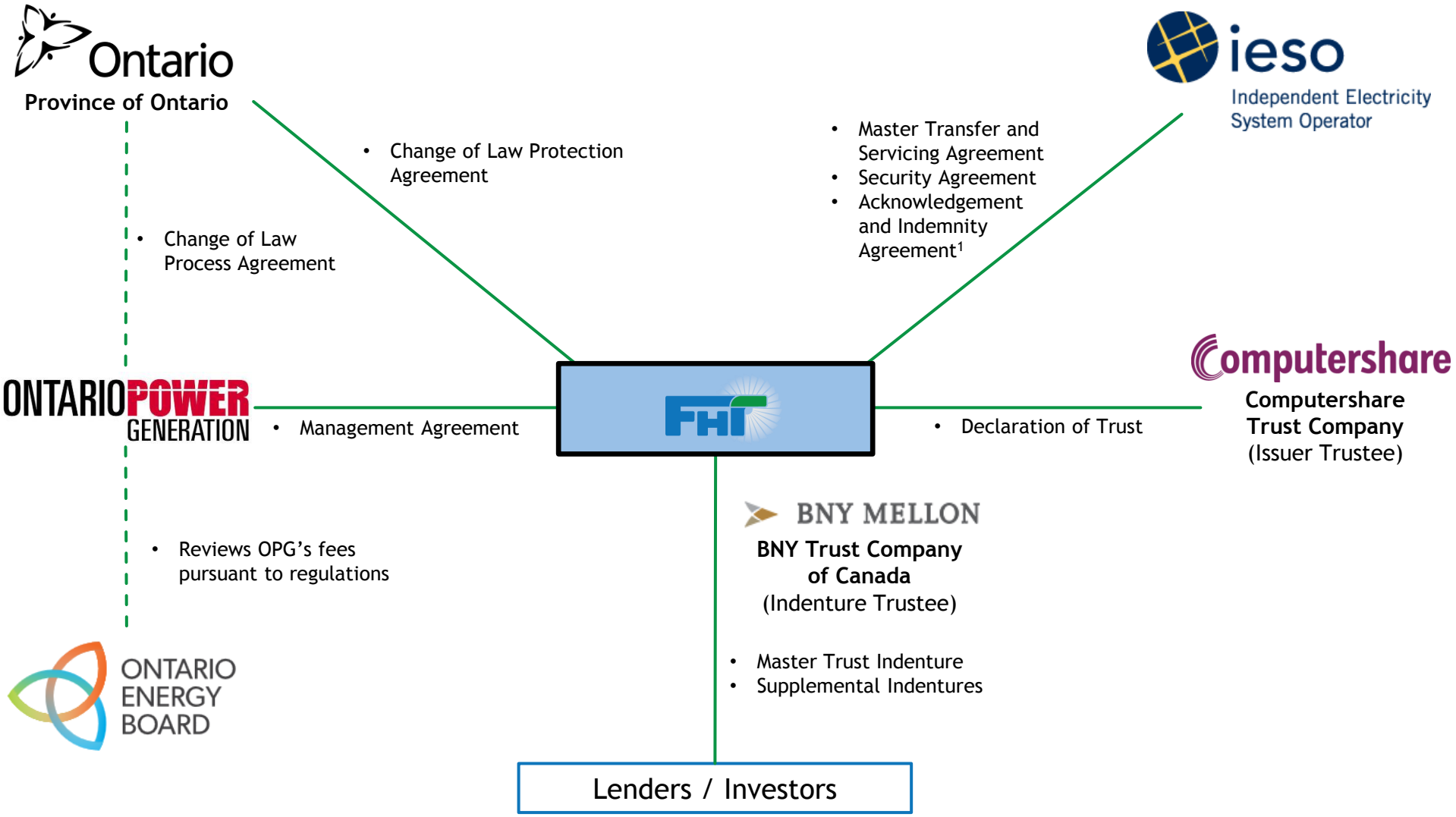
- The Fair Allocation Amount (FAA) is the estimated clean energy costs without the FHP compared to these same costs reallocated on the basis of estimated clean energy benefits to Specified Consumers in respect of each reference period and includes operating and financing costs of the FHT
- If the FAA is negative, this means that the Minister of Energy has determined that current Specified Consumers have borne more than their fair share of clean energy costs (with the consequent rate reduction for current Specified Consumers); the FAA is expected to be negative until at least May 2024
- The Ministry of Energy may provide updated FAAs to OPG from time-to-time



[1] The Readjustment Amount represents the amounts by which Specified Consumers overpaid for clean energy initiatives in the past. It has been incorporated into the FAA to further reduce electricity bills for such consumers.

IV. Contractual Framework

Simplified Contractual Structure



[1] Agreement between IESO and Indenture Trustee.

Key Agreements

Change of Law Protection Agreement

Parties	• (1) Province of Ontario and (2) Indenture Trustee as Trustee of the Issuer, on behalf of Specified Creditors[1], and (3) OPG as Financial Services Manager (FSM)
Purpose	• Provides assurance to Specified Creditors that upon the occurrence of a Protection Event referred to below, the Province of Ontario will pay all Approved Obligations on behalf of the Trust, with limited rights of acceleration
Key Terms	• **Term**: Continues for as long as any protected obligations of the Trust that are secured under the Master Trust Indenture (MTI) remain outstanding • **Mandatory Payment**: Upon the occurrence of a Protection Event, the Indenture Trustee has the right to require the Province to pay all Approved Obligations when due and payable • **Priority of Payments**: The priority of payments is governed by the waterfall provision under the MTI • **Adherence Conditions**: OPG as FSM is required to comply with certain conditions, including the delivery of an Adherence Compliance Certificate, prior to the issuance of debt which is to benefit from the Change of Law Protection Agreement from the Province (such debt called "Approved Obligations") • **Suspension Notice**: The Province may deliver a suspension notice upon the occurrence of the acceleration of any indebtedness of the Trust or a default in performance or misrepresentation by OPG as FSM pursuant to certain internal reporting and other requirements contained in a process agreement between OPG and the Province, and any new funding obligations that are incurred during a suspension period will not have the benefit of the Change of Law Protection Agreement, except that the Change of Law Protection Agreement applies to Post-Suspension Refinancing of previously issued Pre-Approved Refinancing

[1] **Specified Creditors** are any other Person that is owed a payment obligation by the Issuer that gives rise to a Finance Amount in respect of the Issuer.

Key Agreements

Change of Law Protection Agreement (cont'd)

Protection Events

The occurrence of any of the following events:

(1)

- The Legislature repeals (and does not replace on an equivalent basis) or amends the Act or any portion thereof as in effect on the date hereof
- The Legislature enacts or amends any other statute
- The Lieutenant Governor in Council repeals (and does not replace on an equivalent basis) the regulations made under the Act or any portion thereof as in effect on the date hereof
- The Lieutenant Governor in Council, a minister of the Crown, an official of the government or a board or commission all the members of which are appointed by the Lieutenant Governor in Council makes or amends any "Regulation" (as defined in Part III of the Legislation Act, 2006) as in effect on the date hereof
- The implementation of a change in the organization or structure of the IESO or Ontario's electricity market undertaken at the initiative of the Province or an entity controlled by the Province

in each case that adversely affects the ability of the Trust to pay its obligations when due and payable, taking into account any funds available in reserve accounts, any credit enhancement available and any reasonably expected potential effect of a true-up amount

(2)

- A court of competent jurisdiction determines that all or a portion of the Act or the regulations made under the Act, is *ultra vires* or invalid in a way that adversely affects the ability of the Trust to receive amounts in respect of its Investment Interest so that it can pay Approved Obligations when due and payable

Key Agreements (cont'd)

Master Transfer and Servicing Agreement

Parties	• (1) IESO, as transferor and servicer; (2) Trust
Purpose	• Provides for the transfer, by the IESO to the Trust of the Regulatory Asset, and upon such transfer the Trust acquires an Investment Interest and describes the servicing obligations of IESO
Key Terms	• **Transfer of Regulatory Asset**: The IESO may offer, no more frequently than monthly, to transfer the Regulatory Asset to the Trust. The Trust has the right, but not the obligation, to accept IESO's offer. • **Servicing Duties:** The IESO will be responsible for servicing the Investment Interest under the regulations, including collecting CEA amounts from Electricity Vendors and remitting the same to the Trust, including: – Establishing a segregated account for collecting CEAs and use reasonable efforts to cause Electricity Vendors to do the same; – Collect CEAs from Electricity Vendors; – Remit CEAs monthly to the Trust (unless downgraded below investment grade in which case it will remit daily); – Prepare monthly servicer reports; and – Forecast electricity consumption of Specified Consumers • **Moratorium Period:** During the Moratorium Period (until April 30, 2021) and extending to July 31, 2021, the IESO is required by regulation to fund all Carrying Costs of the Trust. The Carrying Costs incurred by the IESO will be added to its Regulatory Asset variance account pursuant to regulation. • **IESO Letter of Credit:** After the Moratorium Period, the IESO will provide the Trust, a letter of credit or other form of security, as security for the commingling risk of CEAs collected by non-rated or non-investment grade rated Electricity Vendors and not yet remitted to the IESO

Key Agreements (cont'd)

Management Agreement

Parties	• (1) Issuer Trustee, on behalf of the Trust, and (2) OPG, as Manager and acknowledged and accepted by the Indenture Trustee, on behalf of specified creditors
Purpose	• Issuer Trustee delegates to the Manager all powers and duties of managing the Trust
Key Terms	• **Duties Include**: – Negotiating and executing program agreements; – Preparing, in accordance with applicable securities laws, any offering documents to be furnished by the Trust to prospective purchasers of funding obligations; – Review or cause to be reviewed, records of electricity vendors on an annual basis with respect to CEAs (or less frequently in certain circumstances); – Preparing monthly portfolio reports; – Preparing financial statements; and – Paying taxes on behalf of the Trust • **Incurrence of Funding Obligations**: Manager will determine how and when to incur funding obligations to acquire Investment Interests • **Standard of Care**: Manager will perform its duties diligently and in conformity with the Trust's obligations under the program agreements • **Resignation/ Termination:** Manager may not resign from its duties or terminate the Management Agreement as long as funding obligations of the Trust are outstanding • **Management Fees:** OPG is entitled to charge the Issuer a fee to earn a return and to recover costs and expenditures incurred by OPG on behalf of the Issuer

Key Agreements (cont'd)

Other Key Agreements

Security Agreement	• As security for the performance of its obligations under the Regulation to pay the Trust's carrying cost during the Moratorium Period, IESO has granted the Trust a first priority security interest in all of its accounts receivable
Acknowledgement and Indemnity Agreement (IESO)	• IESO, as servicer under the MTSA, acknowledges that a security interest has been granted to the Indenture Trustee thereby assigning as security the rights and benefits of the Issuer under the MTSA to the Indenture Trustee, including the right to enforce the indemnities provided to the issuer with respect to IESO's duties and obligations under the MTSA
Change of Law Process Agreement	• Outlines procedural requirements between the Province and OPG with respect to issuing debt that benefits from the Change of Law Protection Agreement • Among other things, OPG is required to deliver to the Province a process certificate, outlining the material terms of proposed debt issues and confirm such debt offerings will not cause the protection agreement maximum (as updated from time to time in the Financing Plan) to be exceeded
Declaration of Trust	• Establishes FHT to carry out activities for the exclusive benefit of its unitholders • Specifies the rights and powers of the Issuer Trustee (Computershare) • The Issuer Trustee has delegated all of the powers and duties of managing the Trust to OPG under the Management Agreement

Allocation of Servicing Role and Responsibilities

- The shared responsibilities of servicing and management roles are summarized below

	OPG	IESO	LDC
Review Records of LDCs with Respect to CEAs (annually or less frequently in certain circumstances)	✔		
Determination of CEA for a Reference Period, including the True-Up Amount	✔		
Ongoing Reporting for Trust and Reporting to the Rating Agencies	✔		
Management of Ongoing Debt Issuances	✔		
Cash Management	✔	✔	
Preparation of Monthly Servicer Reports		✔	
Remittance of CEA to IESO and to the Trust		✔	✔
Responding to inquiries by customers if practicable, or forwarding such inquiries to OPG		✔	✔
Customer Billing			✔
Customer Collections			✔
Customer Meter Reading			✔

V. Financing Program

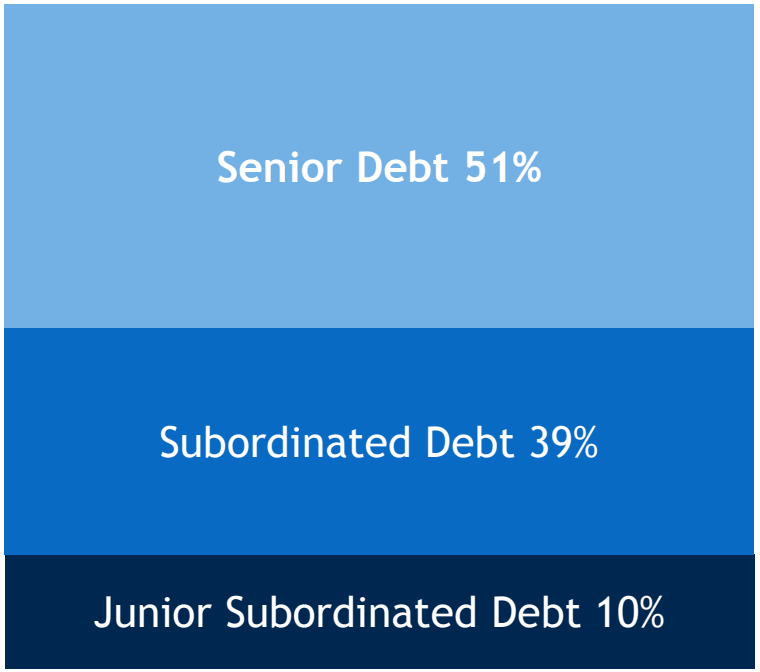
Financing Plan / Strategy

- OPG is responsible for administering the FHT financing program
- Given the size (~$20 billion) and longevity (~10 years) of the FHT financing program, the funding strategy has been designed to provide flexibility
- Warehouse financing (ABCP conduit and bank funded) and subordinated debt and junior subordinated debt funded by OPG will be used to fund monthly Regulatory Asset purchases from the IESO
  - Periodically refinance the warehouse facility through the issuance of term debt (likely access the market 2-3 times per year)
- Term debt can take the form of bullet bonds or could be issued as amortizing bonds

Warehouse Financing	• ABCP conduit and bank funded and subordinated debt funded by OPG will be used to fund monthly Regulatory Asset purchases from the IESO
Term Debt	• Term debt issuances will be used to refinance warehouse financing and the subordinated debt and junior subordinated debt funded by OPG • Both Canadian term debt and U.S. term debt market will be considered • Maturity profiles will be structured to ensure reasonable alignment with the FAA (bullet bonds with sinking funds or amortizing bonds)
Subordinated Debt	• Subordinated debt provides credit enhancement for senior debt (ranks behind senior debt in cash flow waterfall)

Financing Structure

- The Trust will fund Regulatory Asset purchases through the issuance of senior, subordinated and junior subordinated secured debt
- Senior debt (51%) will be sourced monthly from committed warehouse facilities, and the periodic issuance of term debt
- Subordinated debt (49% anticipated; minimum of 35% required) will be purchased by OPG, primarily funded by equity injections from the Province (44% of 49%) and the remaining portion from OPG (5% of 49%)



Senior Notes
Warehouse facilities and term debt issuances (in Canada and/or the U.S.)

Subordinated Notes
Provided to Trust by OPG via equity injection from the Province

Junior Subordinated Debt
- OPG equity injection (5%) via its corporate borrowing program
- Provided to Trust by OPG via the Province (5%)

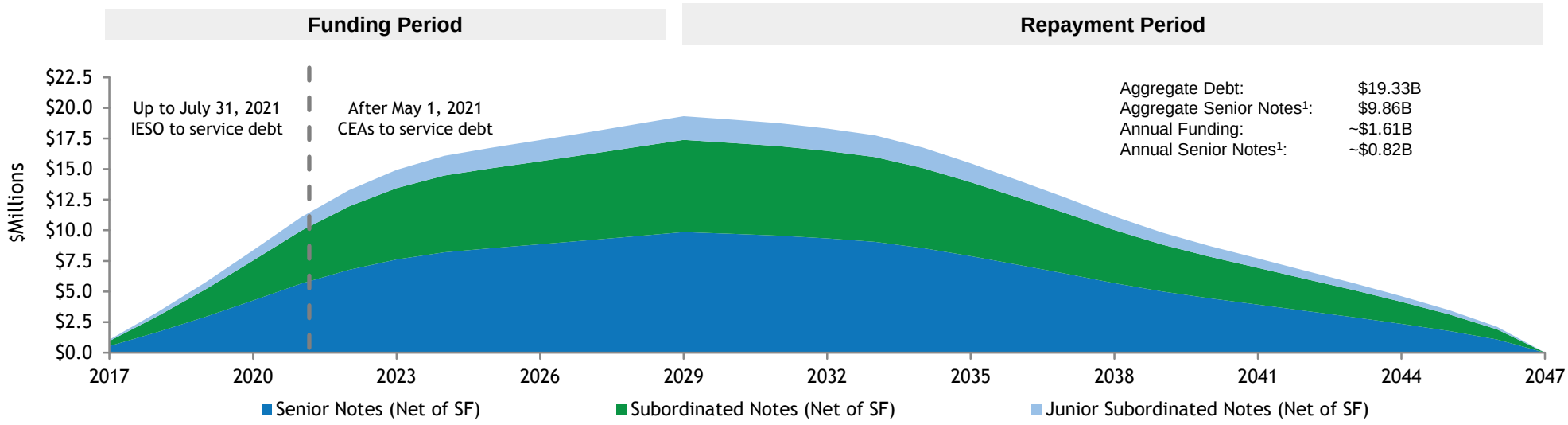
Note: Assumes 49% Subordinated Debt.

Aggregate Financing Program

Illustrative Debt Summary - Funding & Repayment Period (Annual)

- Based on the Fair Allocation Amount and the Province's electricity bill reduction targets, the following debt profile for the program is expected, peaking at just under $20 billion by 2029
- Various tranches of debts will be issued periodically during the period of 2017 - 2028, which are expected to mature over a period after 2029

Illustrative Aggregatee Funding and Repayment Profile (Annual; Net of Sinking Fund ("SF") Payments)

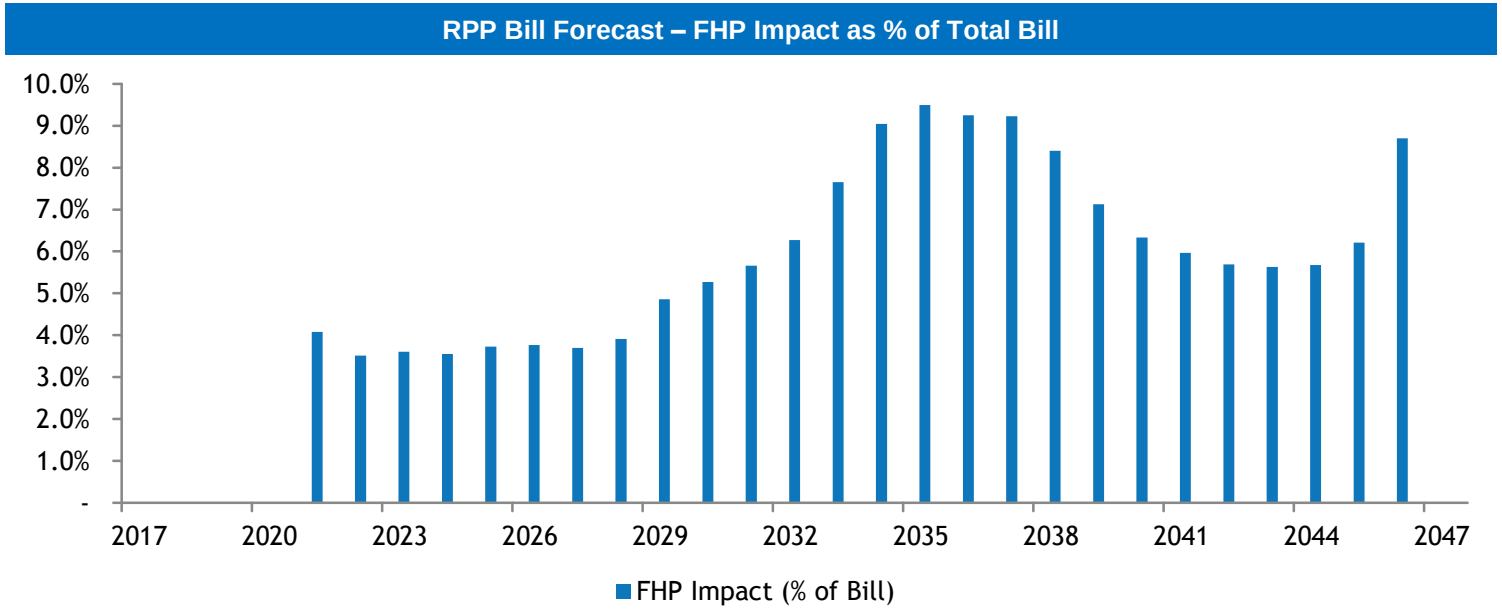


[1] Assumes 51% Senior Notes

Consumer Bill Forecast with FHP

RPP Bill Forecast - FHP Impact % of Total Bill (C$ per Month)

- Over the duration of the Fair Hydro Program, the CEA for the average residential customer is anticipated to remain below 10% of the total electricity bill
- Max CEA as a percent of the total bill is forecast to be 10.1%
- Average CEA as a percent of the total bill is forecast to be 6.9%



Capital Markets Platform

Master Trust Indenture

Parties	• (1) Computershare Trust Company (Issuer Trustee), on behalf of the Trust, acting through OPG as the Manager; (2) BNY Trust Company (Indenture Trustee) on behalf of Specified Creditors
Purpose	• Governs the terms of the debt issued by FHT and cash flow waterfall

Key Terms

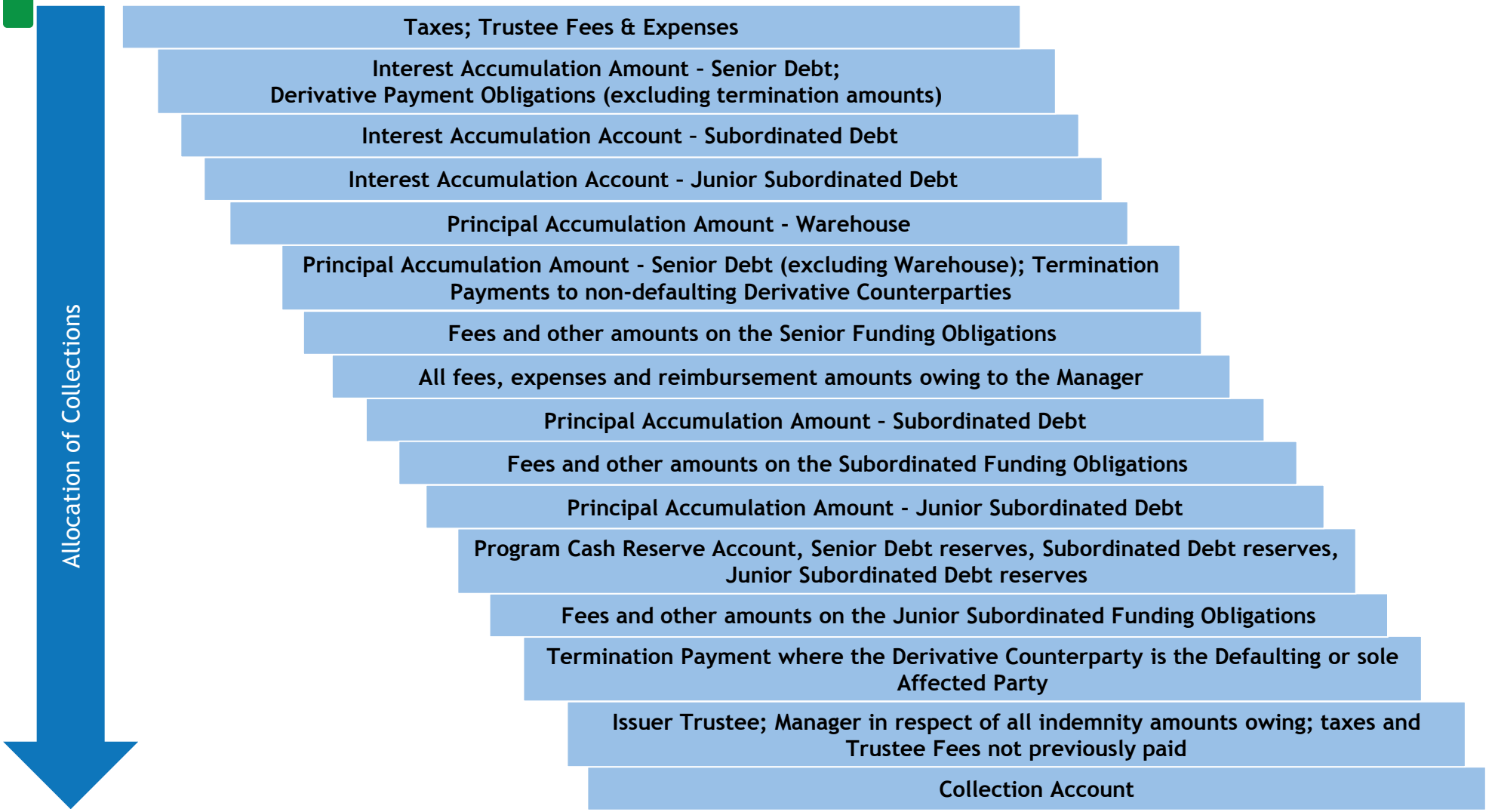
Incurrence of Funding Obligations	• Trust may incur funding obligations under a variety of instruments including: – Note issuances under supplemental indentures – Borrowings under credit agreements – Purchase of notes under note purchase agreements – Letters of Credit/Guarantees under credit enhancement agreements – Liquidity loans under liquidity agreements backing short term notes
Conditions Precedent	• Prior to incurring additional funding obligations, the Trust confirms to the Indenture Trustee and each rating agency that: – the incurrence of such additional obligations will not cause an adverse effect – the incurrence of such additional obligations is materially consistent with the Financing Plan • It will also be a condition precedent that (i) each rating agency confirm that the issuance of such additional funding obligations will not result in a reduction or withdrawal of any existing ratings of outstanding funding obligations and (ii) the Indenture Trustee has received certain assurances as to the applicability of the Change of Law Protection Agreement to such funding obligations

Capital Markets Platform

Master Trust Indenture – Key Terms (cont'd)

Security	• Granted over all assets of the Trust, including the Trust's investment interest, all collections under the MTSA and all accounts
Subordination	• Provides for three different classes of funding obligations – (i) senior – (ii) subordinated – (iii) junior subordinated
Events of Default	• Include payment defaults, representation and covenant breaches, insolvency and Change of Law Protection Agreement ceasing to be in full force and effect against the Province
Acceleration	• CEAs cannot be increased to the level required to immediately repay all outstanding principal following acceleration. The increase in CEAs is limited under the Regulation to the amount available per the FAA • However, the CEAs are allocated to paying the senior indebtedness first. Accordingly, the subordination of debt across all series of debt would advance the repayment of the principal amount for senior funding obligations • After an acceleration, all Senior Term Notes will be paid parri-passu

Waterfall



Note: This waterfall indicates the priority of payment prior to an Event of Default and acceleration; additional information on the priority of payments after an Event of Default and acceleration can be found in the Offering Memorandum.
Note: After paying interest on the senior debt, no interest payments will be made on the subordinated debt unless there will be sufficient amounts remaining in the Interest Accumulation Account for what should be accumulated for the Senior Notes after making such payments.

VI. Summary of Offering

Summary of Indicative Terms

Initial Fair Hydro Term Issuance	**Class**	**Size**	**% of Trust**	**Expected Maturity**	**Principal Payment Default Date**	**Rating (DBRS / Moody's)**
	Senior Term Notes	$[ ] mm	[ ]%	[ ]	[ ]	AAA (sf) / Aa2 (sf)
	Subordinated Notes	$[ ] mm (Not Offered)	[ ]%	[ ]	[ ]	[ ]
	Jr. Subordinated Notes	$[ ] mm (Not Offered)	[ ]%	[ ]	[ ]	[ ]
Issuer	Fair Hydro Trust, a single purpose, bankruptcy-remote wholly-owned subsidiary of the Financial Services Manager					
Financial Services Manager	Ontario Power Generation, Inc.					
Servicer	Independent Electricity System Operator					
Source of Repayment	• Moratorium Period: Statutorily mandated remittances from IESO (Up to July 31, 2021) • Post Moratorium Period: Non-bypassable charge from residential and commercial customers in Ontario, related collections and reserve accounts (After May 1, 2021)					
Principal Accumulation Date(s) and Principal Accumulation Amount(s):	Principal Accumulation Date ●, 20●			Principal Accumulation Amount $●		
Payment Frequency	Semi-annual					
Interest	Fixed rate					
Senior Note Credit Enhancements	• Semi-annual (or more frequent) True-up • Reserve Account • Subordination					
Program Cash Reserve Account	After Moratorium period, an amount equal to 0.50% of the aggregate amount of all outstanding Senior, Subordinated and Junior Subordinated funding obligations					
True-up	Calculated on at least a semi-annual basis post-moratorium period					
Subordination	Subordinated and Junior Subordinated Notes will be retained by OPG					
Additional Issuance	Master Trust Indenture allows for the issuance of additional notes subject to satisfaction of Rating Agency Condition					

VII. Key Risks and Mitigants

Risk Mitigation

Risk	Description of Risk	Mitigants
Political Risk	• Future legislative action to change or challenge/invalidate the Act or the Change of Law Protection Agreement might materially adversely affect a holder's investment in the Notes	• Limited Guarantee provided by the Province of Ontario via the Change of Law Protection Agreement in favour of lenders/investors in these circumstances
Under Collection	• If the IESO inaccurately forecasts electricity consumption or if OPG uses inaccurate consumer delinquency or write-off data when setting the CEA, there could be a shortfall in collections, which might result in missed or delayed payments of principal and interest on the Notes	• True up mechanism may result in a delay, but will be corrected in next True up • Cash reserve and 35%-49% subordination which would first absorb any shortfalls • 6-month reference period • Any shortfall in collections are recoverable from all Specified Consumers
Reliance on IESO and LDCs	• During the Moratorium Period, the Trust is dependent on the IESO to pay for all Carrying Costs • Receipt of CEAs dependent on the performance of LDCs and IESO • Limited ability to enforce against or replace on LDC	• Highly regulated industry and LDC and IESO are required under law and regulation to perform duties under FHP • IESO has a very strong credit profile and very low losses and grants security over all of its accounts receivables as security during the Moratorium Period • IESO will provide a letter of credit/other security for the commingling of CEAs by non-rated or below investment grade rated LDCs until they are remitted to IESO • LDCs collect security deposits and, when permitted, have the ability to disconnect service for non-payment • $2 billion general credit facility from the OFA which can be used to pay the Carrying Costs
Size of Charge vs. Bill	• If the charge applied to bills becomes too high, there could be a consumer and/or political backlash	• 20-year repayment period allows for gradual rate increases • Max CEAs as a percent of the total bill is forecast to be ~10%

VIII. Investment Highlights

Investment Highlights

- Protection against political risk through the Change of Law Protection Agreement
- Irrevocable & non-bypassable rate payer charge, recoverable from Specified Consumers across the Province of Ontario
- Repayment risk spread across all Specified Consumers. Full cross-collateralization; collection shortfalls allocated among all Specified Consumers (Joint and Several Liability)
- Enhanced true-up mechanism
- Credit enhancement for senior debt provided via subordinated debt
- Highly regulated market with experienced operating agents (OPG, IESO, and LDCs)
- Strong service territory
- No large user industrial risk exposure

Ministry of Energy Overview

Deputy Minister (signature)

NOV 23, 2016
Date

Minister (signature)

NOV 23, 2016
Date

Confidential Advice to Cabinet

About the Ministry

- The Ministry of Energy is a policy development and implementation ministry. It delivers the government's top energy priority – providing Ontarians with a clean, reliable and affordable supply of energy through the implementation of the Long-Term Energy Plan (LTEP).

- With just over 200 FTEs, the Ministry oversees a complex energy portfolio with a $20 billion Electricity Sector, and a Natural Gas sector with about 3.5 million residential, commercial and industrial natural gas consumers.

- The Ministry delivers the majority of its energy policies and initiatives through its ratepayer funded agencies and entities.

Confidential Advice to Cabinet

Ministry Objectives and Activities

- The Ministry's commitment to the development of a diverse supply mix, including more renewable energy sources, and putting energy conservation first are cornerstones of Ontario's balanced plan to provide clean and reliable energy system for all Ontarians.

- The Ministry develops and advises on all aspects of energy policy for Ontario, including:
  - the development and implementation of the Long Term Energy Plan;
  - rate mitigation measures for residential electricity consumers, such as the Ontario Electricity Support Program and the Ontario Rebate for Electricity Consumers;
  - helping to support a dynamic and competitive business climate through industrial electricity rate mitigation programs and initiatives;
  - investing in conservation and energy efficiency before building new generation, transmission and distribution infrastructure, where cost-effective;
  - helping to develop a strong renewable energy sector, including over 30 solar and wind manufacturers;
  - modernizing the province's transmission and distribution grids;
  - upgrading and refurbishing existing nuclear generation assets;
  - working with other provinces to explore potential opportunities that meet Ontario system needs and provide ratepayer value;
  - supporting the expansion of natural gas infrastructure to service more communities;
  - engaging Indigenous communities to play an active role in the energy sector; and
  - facilitating future tranches of Hydro One shares.

- The Ministry also oversees the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO), and represents the shareholder, the provincial government, in dealings with Hydro One and Ontario Power Generation (OPG).

Confidential Advice to Cabinet

Ministry of Energy Revenue Contributions

The Ministry has also achieved significant revenue generation to contribute to the fiscal plan:

- In November 2015, the Province completed the Hydro One Ltd. IPO and raised approximately $1.83 billion in gross proceeds and approximately $116 million from related share sales.

- The secondary share offering of Hydro One was completed in April 2016, generating approximately $1.97 billion in gross proceeds.

- Net revenue gains from the offerings in April 2016 is credited to the Trillium Trust for infrastructure projects in the future. To date, the Trillium Trust has been credited with approximately $3.2 billion from transactions in 2015.

- Ontario remains on track to generate approximately $9 billion in gross proceeds and other revenue benefits. This includes $4 billion in net revenue gains that will be invested in infrastructure and $5 billion to reduce debt.

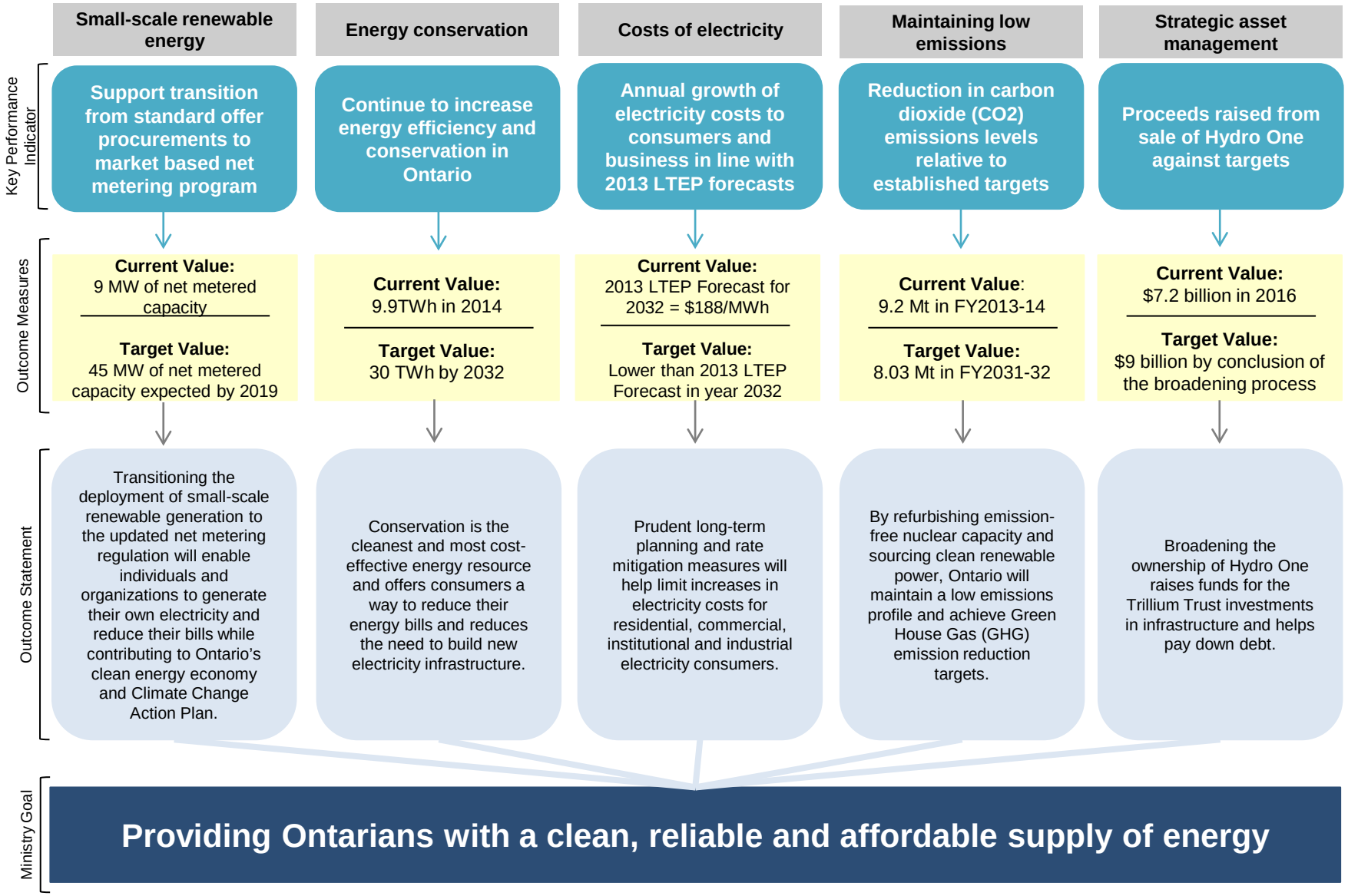
- $236 million of net income generated from Hydro One attributed to the Province in 2015-16*.

- $463 million of net income generated from OPG attributed to the Province in 2015-16.

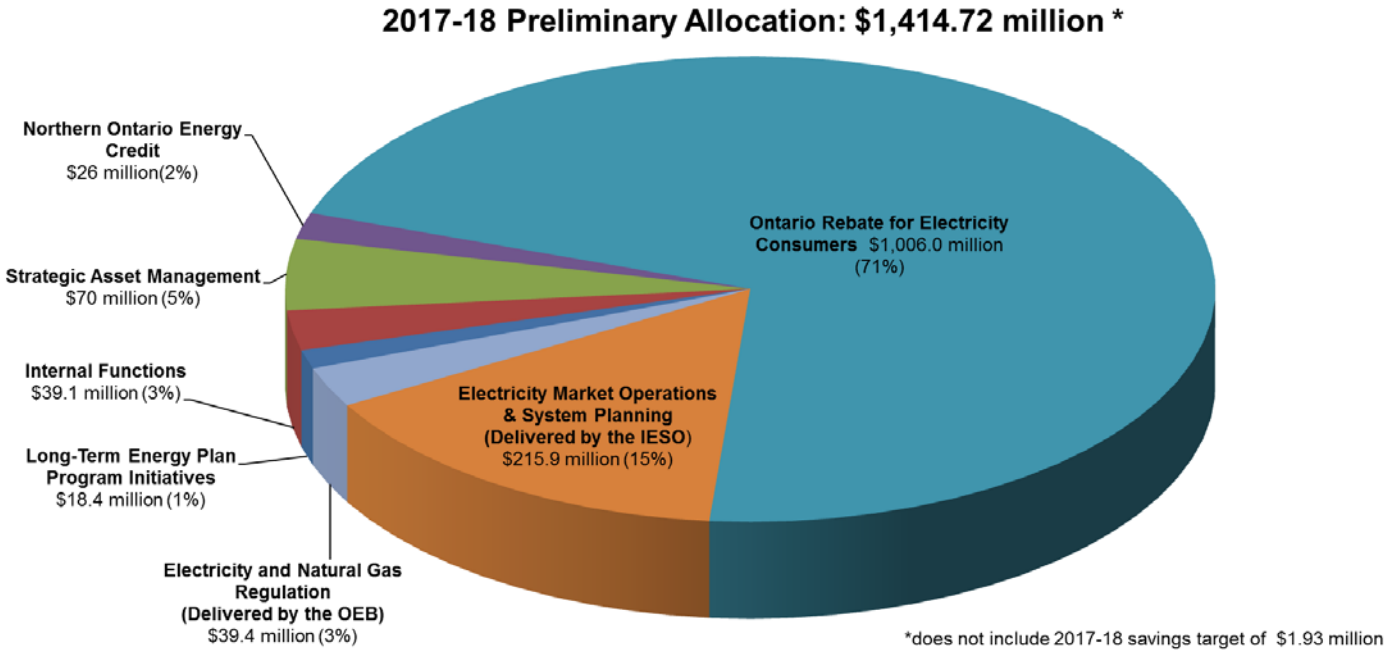
* Includes other elements including Provincial benefit from Deferred Tax Asset, payment of departure tax, etc.

Confidential Advice to Cabinet

Ministry-Level Key Performance Indicators



Current State of Ministry Preliminary Allocation (2017-18)



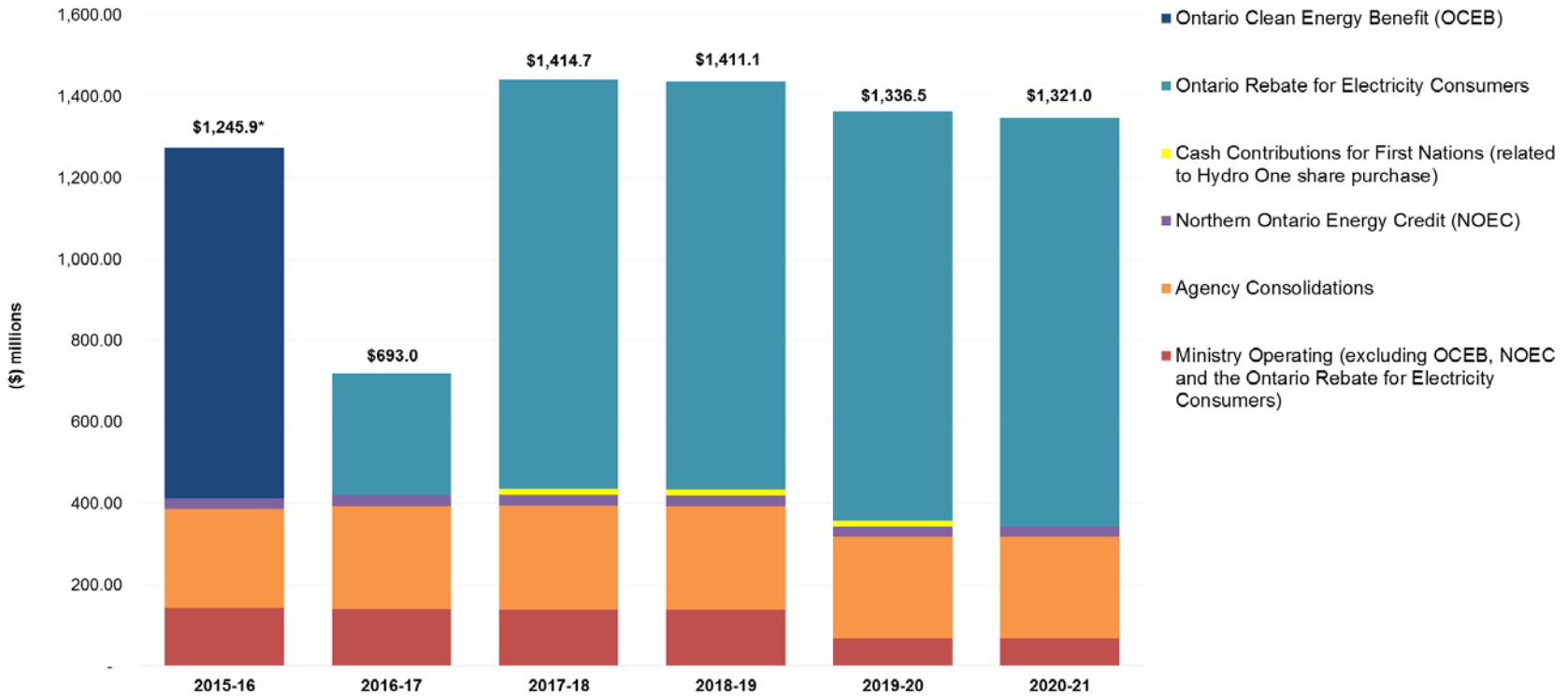
- Only 9% of the allocation is for the Ministry's own spending to deliver on its mandate and commitments. The Ministry is highly effective at running its activities on a small budget and with just over 200 FTEs.

- The largest component of the Ministry's allocation is its rate mitigation initiative for residential, farms and small business consumers – the Ontario Rebate for Electricity Consumers and Northern Ontario Energy Credit account for 73% of the Ministry's allocation. These programs are demand-driven entitlement programs and spending is non-discretionary; the Ministry does not have control over this allocation.

- The consolidation of fiscally neutral agencies – the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB) – account for 18% of the Ministry's allocation. Realizing operating savings on these entities would have no impact on the government's fiscal plan since expenses are fully cost recovered from the rate base.

Confidential Advice to Cabinet

Preliminary Multi-Year Allocation (2015-16 to 2020-21)



* The Ministry's 2015-16 allocation also included a $2.6 billion expense for a capital contribution to Hydro One Limited that is not shown here.

- The Ministry already received the following as part of its preliminary allocation:
  - Increase of $1,006 million for the implementation of the Ontario Rebate for Electricity Consumers; and
  - Increase of $45 million over three years to First Nations, as a cash contribution, related to Hydro One share purchase.
- These expenses are under executive control and as such, cannot be re-allocated to deliver Ministry spending to deliver its other mandates and commitments.

Confidential Advice to Cabinet

Achieving 2017-18 Savings Target

- The preliminary allocation for 2017-18 requires the Ministry to achieve a saving of $1.9 million.

- To meet the $1.9 million saving target, the Ministry will seek to achieve internal efficiencies within its allocation in Vote 2902, Energy Development and Management, through:

  – Prioritizing project delivery and implementation of certain Ministry initiatives;
  – Evaluating the delivery model on policy implementation; and
  – Reducing operating expenses by re-aligning Ministry resources.

- Historically, the Ministry has strategically managed underspending to:
  – offset additional pressures related to government priorities (e.g., the Ministry was directed to manage from within its existing allocation in 2015-16 for resources related to Hydro One);
  – fund pressures that are unforeseen and unavoidable (e.g., energy legal challenges including, NAFTA and Windstream); and
  – Reallocate to high priority program spending (e.g., the Ministry was able to fund Smart Grid Fund Round 3 using underspending in 2015-16).

Confidential Advice to Cabinet

Key Decision: Ontario Rebate for Electricity Consumers

Request: (1) Additional funding, based on updated forecast, for the Ontario Rebate for Electricity Consumers*;
(2) 4 permanent FTEs to support program administration; and
(3) Funding to support program delivery.

- In October 2016, legislation passed that would provide an 8% rebate, the provincial portion of the HST, from electricity bills as of January 1, 2017. This will result in an average savings of about $130 annually or $11 each month, for about five million residential consumers, farms and small businesses.

- The Ministry requires additional funding in 2017-18 to effectively deliver the Ontario Rebate for Electricity Consumers

- An increase of $94 million in operating expense for program delivery based on updated forecast; this will bring the total expenditure in 2017-18 to $1.1 billion for the program.

  – The initial forecast was subsequently revised based on updated methodology and improved data inputs, leading to an increase in the estimated cost of administering the program in all years.

Millions ($)	2017-18	2018-19	2019-20	2020-21
Preliminary Allocation	1,006	1,004	1,004	1,004
Updated Forecast	1,100	1,100	1,200	1,200

* The Ministry was directed to report back during the 2017-18 PRRT process on updated future year impacts.

Confidential Advice to Cabinet

Key Decision: Ontario Rebate for Electricity Consumers (con't)

- An increase of $3.11 million in operating expense for permanent staffing resources and operational costs, including $0.41 million in salary and wages and $2.5 million in program delivery costs in 2017-18 and onwards.
  - The Ministry is requesting 4 permanent FTEs that will cover a variety of positions critical to program delivery development of the Ontario Rebate for Electricity Consumers, including:
    - Policy and program development, providing direction to 72 local distribution companies (LDCs) and 10 Independent Power Authorities to develop specific payment and billing mechanisms, in addition to managing the relationships with service providers to ensure that any identified issues are addressed and resolved.
    - Financial support to track and monitor up to 400 data elements each month in order to know how much funding has been provided and to what entities, and tracking LDC payments and settlement statements based on information received from the IESO.
    - Communications support to handle internal and external program stakeholders.
- The Ontario Rebate for Electricity Rebate program does not have an end date and requires permanent resources (funding and staffing) in out-years.

Confidential Advice to Cabinet

Key Decision: Hydro One Report Back

Request: (1) Additional funding to support future share sales of Hydro One;
(2) Permanency of the 5 FTEs the Ministry received during the 2016-17 PRRT process to support the Investment and Governance Secretariat;
(3) Increase funding to provide full cash contributions to First Nations in 2017-18;
(4) Appropriation increase to book the conferred benefit amount to First Nations.

- In 2016, the Ministry successfully continued the broadening of Hydro One through a careful, staged approached, generating $1.83 billion in revenue for the government and increasing publically held shares to approximately 30%.

- The Ministry requires additional out-year funding to continue delivering on the Province's assets management and transformation strategy related to Hydro One, including;

Item	Request
Secondary offering costs (including underwriting costs, consulting costs and other services)	$70 million increase (the Ministry has an existing allocation of $70 million for 2017-18, this request brings the total allocation to $140 million for 2017-18)
Staffing and operational costs	Permanency of 5 FTES and associated costs of $0.93 million
Cash contributions for First Nations Note: Ministry will decrease its allocation for the cash contributions to First Nations in 2018-19 and 2019-20 by $15 million each year	$30 million increase in 2017-18
Conferred benefit to First Nations	$135 million increase in 2017-18

Confidential Advice to Cabinet

Key Decision: Hydro One Report Back (con't)

- $70 million expenditure increase in 2017-18 is required to provide the Ministry with flexibility related to its share sale strategy. This will bring the allocation in 2017-18 to $140 million for this program.
  - The government may be in a position to complete the broadening of Hydro One in 2017-18 and will require the appropriate allocation to support this effort, in the event of a larger sale.
  - Expenses related to the Ministry's share sale strategy is fiscally neutral and will be offset from the proceeds of future offerings of Hydro One.

- Permanency of the 5 FTEs the Ministry received during the 2016-17 PRRT process for 2017-18 and onwards to support the government's asset strategy.
  - The Secretariat was created in order to support the Minister on both financial and governance matters. While some of that role relates to temporary initiatives, such as facilitating the share sale strategy, the Secretariat is required to provide ongoing advice and support related to:
    - Exercising shareholder rights including participating in shareholder meetings, election of directors etc., ensuring the Province operates in accordance with its rights and obligations under the Governance Agreement;
    - Effective management of holdings; ensuring the Province operates in accordance with the Registration Rights Agreement;
    - Ongoing administration of any agreements relating to the broadening of ownership of Hydro One such as potential agreements with Chiefs of Ontario and/or Metis Nations of Ontario; and
    - The Province's role and responsibilities as the shareholder of OPG, including analysis of OPG's business plans, and conducting due diligence and analysis on new OPG initiatives (e.g., borrowing platform).
  - The Secretariat requires technical skill sets with specialized knowledge in areas such as capital markets, corporate finance and financial analysis. The Ministry requires permanent FTEs to be able to compete for talent.
  - The Ministry received funding for these FTEs until 2018-19, permanent funding of $0.93 million in operating expense for staffing and operational costs for the Investment and Governance Secretariat is being requested from 2019-20 and onwards.

Confidential Advice to Cabinet

Key Decision: Hydro One Report Back (con't)

- $30 million in operating expense in order to accelerate the full cash contribution of up to $45 million to First Nations in 2017-18.
  - As part of its 2017-18 preliminary allocation, the Ministry received a $45 million transfer payment over three years to First Nations, as a cash contribution. Timing of payments was recently renegotiated and the revised timing contemplates a one-time contribution of up to $45 million.

- $135 million in operating expense for conferred benefit amounts to First Nations.
  - The difference between the purchase price for First Nations ($18 per share) and the market value of shares at the time of closing. Treasury Board Secretariat is in the process of obtaining a regulation prescribing a new class of non-cash expense, intended to best serve public interest for transparency and accountability.

- The Ministry is creating new Transfer Payment lines to support these transactions.

Confidential Advice to Cabinet

Key Decision: Greenhouse Gas Reduction Account (GGRA)

Request: (1) Funding for the Cap and Trade Proceeds Recycling to Keep Electricity Prices Affordable Initiative; and
(2) Funding for the Electric Vehicle Overnight Charging Rebate Program.

- In September 2016, the Ministry completed, and submitted to MOECC, the GGRA Intake Form and Scorecard for its initiatives.

- These initiatives were included in Tranche 1 for approval by MOECC.

- The Ministry requires out-year funding, offset from GGRA, to deliver these initiatives:

  - **Cap and Trade Proceeds Recycling to Keep Electricity Prices Affordable Initiative**
    - Total CCAP funding requirement: $1,107 million (between 2017-18 to 2020-21)
    - Funding estimate for 2017-18: $249 million

  - **Electric Vehicle Overnight Charging Rebate Program**
    - Total CCAP funding requirement: $15 million (between 2017-18 to 2021-22)
    - Funding estimate for 2017-18: $2.15 million

- The Ministry will be creating Transfer Payment lines to support the above initiatives.

Confidential Advice to Cabinet

Key Decision: Other Housekeeping Items

Natural Gas Access Loans

- The Ministry of Energy requires the creation of the following Operating Asset and Operating Expense items, with $1,000 placeholders, for the establishment of the Natural Gas Loan program:
  - An Operating Asset items for Natural Gas Loan disbursements; and
  - An Operating Expense, and a new Transfer Payment line, for Natural Gas Loan interest incentives.
- The Ministry has an existing Bad Debt Expense item in Vote 2902, Energy Development and Management.
- Cost incurred by the Ministry of Energy for the Natural Gas Loan program will be offset by the Ministry of Infrastructure or the Contingency Fund.

Temporary FTE transfer to MAG

- The Ministry of Energy will continue with the temporary transfer of 1 FTE in 2017-18 to the Ministry of the Attorney General to provide legal services support.
- The FTE will return to the Ministry of Energy on April 1, 2018.

Temporary FTE transfer to MGCS

- The Ministry of Energy will temporarily transfer 2 FTEs to the Ministry of Government and Consumer Services to support the Energy and Water Reporting and Benchmarking Project.
- The FTEs will return to the Ministry of Energy on April 1, 2018.

IT-Rationalization Initiative transfer to MGCS

- The Ministry of Energy will transfer $9,700 in 2017-18 and ongoing to the Ministry of Government and Consumer Services for the IT-Rationalization Initiative.
- As a consumptive service, the IT-Rationalization Initiative recovers base budget from clients/partners to ensure cost reductions remain net neutral to all parties.

Confidential Advice to Cabinet

Stakeholder Management / Engagement Plans

Key Stakeholder Groups	Issues / Considerations	Stakeholder Engagement / Communications Strategy
Residential, Farms and Small Businesses Consumers	• Necessary investments in modernizing our electricity system have lead to increases in the cost of electricity service for residential, farm and small business electricity consumers. • Concerns about cost and safety of nuclear generation projects compared to other supply alternatives.	• Extensive province-wide consultations for the updated Long-Term Energy Plan. • Ensure engagement of stakeholders and communication regarding existing and new conservation initiatives as they are developed and implemented. • Communication about the implementation of new electricity price mitigation initiatives for all consumers; the new 8% rebate and expansion of existing programs will provide some relief.
Commercial and Industrial Consumers	• Necessary investments in modernizing our electricity system have lead to increases in the cost of electricity service for commercial and industrial electricity consumers.	• Extensive province-wide consultations for the updated Long-Term Energy Plan. • Existing programs provide some relief to large industrials. Recently announced ICI program expansion will extend relief to some smaller consumers. • One-off meetings with industry associations and large consumers.
General Public	• Conferred benefit amounts to First Nations, being able to purchase shares at a reduced price compared to market value. • Accelerating cash contributions to First Nations from up to three annual payments to one full payment.	• Conferred benefit amounts are disclosed to best serve public interest for transparency and accountability. • Purchase price is above the Province's book value for the shares as a result this has no fiscal impact. • Does not impact the Province's expectation to raise up to $9 billion to support infrastructure investment and pay down debt. • No changes to amounts have been contemplated, only timing of payments.
Shareholders / Investors	• Increases in costs associated with potentially accelerating share sales.	• The Ministry requires flexibility to maximize value.

Confidential Advice to Cabinet

OPG LOAN - 10-Year

STEP 1: Loan Details

OPG Debt Issue Details	
Pricing Date	21-Nov-16
Maturity	22-Nov-26
Original Issue Date	22-Nov-16
Term (yrs)	10
Original Issue Size	$50,000,000

General Corporate Requirements

STEP 2: DETERMINE CANADA CURVE ADJUSTMENT

Canada Bonds Used to Interpolate

Source: Bloomberg RBCB — *** Bid side of market

Settlement: 21-Nov-16

Coupon	Maturity	Yield	Price
2.25%	6/1/2025	1.486	106.093
1.50%	6/1/2026	1.583	99.270
1.00%	6/1/2027	1.691	93.368
5.75%	6/1/2029	1.851	143.392

Canada Curve Adjustment to Bond Maturity Date

Interp To	Interpolated CAD Yld	Curve Adj off first bond
22-Nov-2026	1.6345	0.0515

STEP 3: DETERMINE BASE RATE

Canada Bond Yield	1.5830
Curve Adjustment	0.0515
Adjusted Cda Bond Yield	1.6345
Commission	0.0525
Base Rate	1.6870
OPG Credit Spread	1.3500
OPG Interest Rate on Debt	3.0370

Commission Calculation

Price Method:		
Commission	0.450 cents	***based on Ontario's commissions
Hyp Coupon Rate	2.984	***coupon rate based on GOC + OPG credit spread
Price after commissions	99.550	
Yield	3.037%	
Commission in bps	0.053	
Modified Duration Method:		
	8.591	
Commission in bps	0.052	

OPG LOAN - 10-Year

DETERMINATION OF OPG CREDIT SPREAD

DEALER QUOTES FOR NOVEMBER 14, 2016

	BMO	CIBC	NBF	RBC	SC	TD
Benchmark Canada Bond (1.50% June 2026)	1.432%	1.534%	1.551%	1.581%	1.590%	1.542%
Curve Adjustment (bp)	4.1	4.1	4.0	3.9	0.0	4.1
OPG Credit Spread to GoC Curve (bp)	145	133	135	135	126	137
Re-Offered Yield	2.923%	2.905%	2.941%	2.970%	2.850%	2.952%
Commission (bp)	4.0	4.7	4.7	4.7	5.0	4.4
All-in Canada Yield	2.963%	2.952%	2.988%	3.017%	2.900%	2.996%
All-in Spread to GoC Curve (bp)	**149**	**138**	**140**	**140**	**131**	**141**
All-in Swapped to BA's (before credit charges)						

	10-Year	10-Year	10-Year	10-Year	10-Year	10-Year
Hydro One Inc. (A / A3 / A(H))	117	114	110	115	111	116
TransAlta Corp (BBB-/BBB)				640		
Nova Scotia Power (A(L)/BBB+)	134	131	125	128	135	134
Toronto Hydro (A/A)	118	114				
EPCOR Utilities (A(L)/A-)	119		120	119	113	124
FortisBC (Baa1/A(L))			125	129		
FortisAlberta (A- / Baa1 / A(l))		123	125	125		
TransCanada Pipelines (A(L)/A-)	155			160		

AVERAGE OPG CREDIT SPREAD:

1. Eliminate High and Low Spread

High Spread = 145
Low Spread = 126

2. Calculate Average of Remaining Spreads

Average Spread = 135.00

TPAM BOULDER – MINISTRY IMPACTS

A. Request:

As part of the Transfer Payment Administrative Modernization (TPAM) Boulder, ministries are contributing towards the 2017-18 savings target of $25M. In addition, ministries are contributing base funding for the Grants Ontario system and the Transfer Payment Common Registration System which support the TPAM initiative.

Docket #D0042340	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Total operating expense impact - TPAM Savings: Vote/Item 2902-01, ENERGY ($M)	0.516	0.516	0.516	0.516
Total operating expense impact: Grants Ontario Funding – Vote/Item 2902-01, ENERGY ($M)	(0.500)	(0.500)	(0.500)	(0.500)
Total financial impact: Vote/Item 2902-01, ENERGY ($M)	0.016	0.016	0.016	0.016
Total financial impact ($M):	0.016	0.016	0.016	0.016

B. Background:

The TPAM initiative has been assigned total savings targets of $25,000,000 in 2017-18, $50,000,000 in 2018-19, $75,000,000 in 2019-20 and $100,000,000 in 2020-21. Through 2016-17 PRRT, $25M in savings for 2017-18 was minuted, with each ministry absorbing a share of the savings target based on what was known about their transfer payment administration costs at the time. However, a third party review of ministry administrative costs undertaken by KPMG found that total administrative costs are less than had been assumed during the 2016-17 PRRT process, and that those costs are distributed proportionately differently across ministries than had been assumed. Therefore the 2017-18 savings targets have been adjusted in accordance with the findings. Ministries are required to increase or decrease their portion of the savings target as determined based on the review findings.

Also, as part of the TPAM initiative, the Grants Ontario system and the Transfer Payment Common Registration System have been developed for enterprise wide use. In order to provide ongoing sustainment funding for these technology solutions, funding will be transferred from ministries to Ministry of Government and Consumer Services (MGCS). MGCS will be the business owner these systems effective April 1, 2017.

C. Financial Analysis / Request

The Ministry of Energy 2017-18 savings target for TPAM was originally minuted at $51,600. The revised savings target for the Ministry of Energy for 2017-18 is $0.

The Ministry of Energy will contribute $50,000 in 2017-18 and ongoing to support Grants Ontario and the Transfer Payment Common Registration system.

D. Human Resource Implications

N/A

E. Proposed Minute

As part of the Transfer Payment Administrative Modernization Boulder, approve the increase of the Grants Ontario business line from Treasury Board Secretariat to Ministry of Government and Consumer Services to better align enterprise service responsibilities:

In this regard, the Board:

i) Approve decrease in savings of $51,600 for 2017-18 and ongoing.

ii) Approve a decrease of $50,000 in 2017-18 and ongoing in the Ministry of Energy's Vote/Item 2902-01, Energy Development and Management, to provide permanent base funding for Grants Ontario.

Ministry INTERNAL Working Template*

This is a template to assist ministries in collecting the KPI and program-level performance measures information to be submitted in ORBIT. It is intended to be an INTERNAL working document for ministries and will not be accepted as an attachment in ORBIT. The template has been designed to match the data specifications and requirements of the ORBIT submission, and facilitate internal information sharing and/or review. Ministries may choose not to use this template.

***ALL INFORMATION MUST BE ENTERED INTO ORBIT, IN ACCORDANCE WITH THE SUBMISSION GUIDELINES AND PRRT DUE DATES. THIS TEMPLATE WILL NOT BE ACCEPTED IN ORBIT.**

Please refer to the KEY PERFORMANCE INDICATORS AND PROGRAM OUTCOME AND EFFICIENCY MEASURES GUIDELINES FOR SUBMISSION for details pertaining to the submission requirements.

Ministry KPI Information

Ministry	Energy
Measure	Support transition from standard offer procurements to market based net metering program for customer sited renewables.
Outcome Statement	Transitioning the deployment of renewable generation to the updated net metering regulation will enable individuals and organizations to generate their own electricity and reduce their bills while contributing to Ontario's clean energy economy and Climate Change Action Plan.

Data Quality and Management

Data Ownership	Other organization
Frequency of Data Collection	
Data Sources	OEB
Statistical Methods	Total installed renewables capacity
Unit of Measurement Type	Cumulative installed capacity
Unit of Measurement	Megawatts

Results

Statement of Result: In 2015 a total of 9MW of net metered renewable energy generation capacity was installed in the province. Progress will be assessed in the next reporting cycle.

	Year	Value	Comment
Target	2019	45	As of 2019 a total of 45MW of cumulative net metered capacity is expected to be installed in the province.
Baseline Year	2005		Prior to 2005, LDCs offered Net Metering agreements at their option. Therefore, there were exisiting net metered facilities before the 2005 regulation was implemented.
Trend Value	2010	6.4	There was no reporting requirement for LDCs to the OEB until 2010 for net metering. Data to 2015 is as reported to the OEB by LDCs. Numbers in each year reflect total cumulative capapcity installed in the province. Numbers have declined in the past due to the ability to opt into microFIT and FIT programs beginning in 2009.
Trend Value	2011	4.7	
Trend Value	2012	4	
Trend Value	2013	6.8	
Trend Value	2014	7.1	
Trend Value	2015	9.1	In 2015 a total of 9MW of net metered capacity is installed in the province.
Trend Value	2016	14.1	Figures from 2016 on are projections based on best available data. Numbers could change based on a variety of factors including electricity prices, equipment prices and other government initiatives.
Trend Value	2017	21.1	
Trend Value	2018	32.1	
Trend Value	2019	45.3	

Ministry KPI Information

Ministry	Energy
Measure	Continue to increase energy efficiency and conservation in Ontario.
Outcome Statement	Conservation is the cleanest and most cost-effective energy resource and offers consumers a way to reduce their energy bills and reduces the need to build new electricity infrastructure.

Data Quality and Management

Data Ownership	Other organization
Frequency of Data Collection	Annual
Data Sources	Conservation data from the IESO and OEB
Statistical Methods	Cumulative reduction in electricity consumption (in reference to a forecasted baseline) due to the impact of electricity conservation programs and codes and standards
Unit of Measurement Type	Index
Unit of Measurement	Terawatt Hours (TWh)

Results

Statement of Result: From 2005 to 2014, Ontarians conserved 9.9 TWh of electricity - enough to power the cities of Ottawa and Windsor in 2014.

	Year	Value	Comment
Target	2031-2032	30	Note that these savings are expected to be achieved in 2032. Also note that the baseline for the forecast is 2005 (the excel spreadsheet does not allow an entry before 2007-08).
Baseline Year	2007-08		
Trend Value	2014	9.9	
Trend Value	2013	8.9	
Trend Value	2012	7.8	
Trend Value	2011	6.7	
Trend Value	2010	5.4	
Trend Value	2009	4.9	
Trend Value	2008	4	
Trend Value	2007	3.5	
Trend Value	2006	1.6	
Trend Value			

Ministry KPI Information

Ministry	Energy
Measure	Minimize annual growth of electricity costs to consumers and business.
Outcome Statement	Through energy conservation efforts and support from government regulation, citizens, particularly in rural and First Nation communities, will prosper when they are not burdened by rising electricity costs.

Data Quality and Management

Data Ownership	Other organization
Frequency of Data Collection	Annual
Data Sources	Independent Electricity System Operator
Statistical Methods	Average Energy Costs to consumers/business by Region / Demographic
Unit of Measurement Type	Index
Unit of Measurement	Dollars ($) spent by the average consumer in the electricity sector

Results

Statement of Result

Subject to changes to Long Term Energy Plan in 2017. Target value and metricis will be refined and progress will be assessed in the next reporting cycle.

	Year	Value	Comment
Target	2031-2032	188	Value = lower than 2013 LTEP Forecast in year 2032
Baseline Year	2015-16		
Trend Value	2015-16	141.5	Weighted average of actual 2015 and forecast 2016 (OPO B)
Trend Value	2014-15	132.5	
Trend Value	2013-14	126.2	
Trend Value	2012-13	116.3	
Trend Value	2011-12	111.8	
Trend Value	2010-11	108.7	
Trend Value	2009-10	104.3	
Trend Value	2008-09	96.6	
Trend Value	2007-08	91.3	

Ministry KPI Information

Ministry	Energy
Measure	Maintaining low electricity sector emissions in support of the province's climate change targets.
Outcome Statement	By refurbishing emission-free nuclear capacity and sourcing clean renewable power, Ontario will maintain a low emissions profile and help achieve the province's Greenhouse Gas (GHG) emission reduction targets

Data Quality and Management

Data Ownership	More than one source
Frequency of Data Collection	Annual
Data Sources	Environment Canada (EC), MOECC and IESO
Statistical Methods	Levels of CO2 emissions
Unit of Measurement Type	Count (i.e. number of)
Unit of Measurement	CO2 levels in Megatonnes (Mt)

Results

Statement of Result: Greenhouse gas emissions from Ontario's electricity sector is expected to be about 7.96Mt by 2032

	Year	Value	Comment
Target	2031-2032	8.03	7.96 Mt represents the forecast electricity sector emissions for 2032 under the 2013 LTEP; not weighted to reflect the fiscal year. Weighted average of 2031 (75%) and 2032 (25%) = 8.03 Mt
Baseline Year	2007-08		
Trend Value	2016-17		Note: Annual reports from EC typically revise historic numbers due to changes in methodology or updates in reported data. Most of these figures represent old EC reports and are for calendar year rather than fiscal year.
Trend Value	2015-16	7	Preliminary IESO estimate for calendar year 2015 is 7 Mt.
Trend Value	2014-15	6.4	Weighted average of actual 2014 from EC and preliminary IESO estimate
Trend Value	2013-14	9.2	Weighted average of 2013 (75%) and 2014 (25%)
Trend Value	2012-13	13.2	Weighted average of 2012 (75%) and 2011 (25%)
Trend Value	2011-12	14.2	Weighted average of 2011 (75%) and 2012 (25%)
Trend Value	2010-11	18.4	Weighted average of 2010 (75%) and 2011 (25%)
Trend Value	2009-10	16.7	Weighted average of 2009 (75%) and 2010 (25%)
Trend Value	2008-09	24.3	Weighted average of 2008 (75%) and 2009 (25%)
Trend Value	2007-08	31.2	Weighted average of 2007 (75%) and 2008 (25%)

Ministry KPI Information

Ministry	Energy
Measure	Proceeds raised from sale of Hydro One against targets
Outcome Statement	Broadening the ownership of Hydro One raises funds for the Trillium Trust investments in infrastructure and helps pay down debt.

Data Quality and Management

Data Ownership	Ministry
Frequency of Data Collection	More often than annual
Data Sources	Ministry
Statistical Methods	Proceeds calculated by the province = negotiated price * number of shares sold
Unit of Measurement Type	Rate/Ratio
Unit of Measurement	Dollar ($)

Results

Statement of Result: Ontario remains on track to generate approximately $9 billion in gross proceeds and other revenue benefits. This includes $4 billion in net revenue gains that will be invested in infrastructure and $5 billion to reduce debt.

	Year	Value	Comment
Target	2018-2019	9	cumulative number in billions
Baseline Year	2014-15		
Trend Value	2016-17	7.3	cumulative number in billions
Trend Value	2015-16	1.8	billions
Trend Value	2014-15	0	
Trend Value	2013-14	0	
Trend Value	2012-13	0	
Trend Value	2011-12	0	
Trend Value	2010-11	0	
Trend Value	2009-10	0	
Trend Value	2008-09	0	
Trend Value	2007-08	0	

MINISTRY OF ENERGY
External Programs

Ministry Acronym	Program Name	Issue/Need	Program Description	Major Program	Government Multi-Year Priority Outcome	Strategy	Ministry Linkages	Program Type	Delivery Mode (1st selection)	Delivery Mode (2nd selection)
ENERGY	**Long-Term Energy Plan Program Initiatives (TP)**	The successful implementation of the Long-Term Energy Plan requires the participation and engagement of a diverse group of energy stakeholders (e.g. energy consumers, Aboriginal communities, municipalities and other broader public sector organizations, businesses, industry associations, Broader Public Sector, etc.). Providing support and fostering innovation among the stakeholders is crucial for the advancement of Ontario's energy sector.	The group of Long-Term Energy Plan programs represent a small portion of the ministry's allocation but directly engages and impacts important ministry stakeholders. It is an important delivery mechanism to deliver on the Government's energy priorities, including: - Assisting community-based conservation planning and outreach, along with the delivery of conservation education initiatives to effect change in consumer behaviour. - Support and encourage Aboriginal community participation in the development of energy and conservation projects. - Engaging energy industry stakeholders and groups in knowledge sharing, helping the broader public sector develop and implement conservation plans, and supporting the development of energy efficiency standards to be adopted by regulation. - Support the grid connection of remote Northwestern Ontario First Nation communities or explore other options to reduce diesel use where connection isn't economical.	Long-Term Energy Plan Implementation	Leader on Environmental Sustainability & Climate Change Mitigation	N/A	N/A	Supporting	Direct-OPS	
ENERGY	**Ontario Clean Energy Benefit Program (TP) (Sunsets 2015-16)**	Residential electricity bills are forecasted to rise in future years at an annual average of 6.9% per year between 2014 and 2018, and 2.4% until 2032. Helping consumers manage their electricity cost is one of the key government priorities outlined in the 2014 Ontario Budget.	The program provides a benefit equal to 10% of the total cost of electricity on eligible consumers' bills, including tax, limited to the first 3,000 kWh of electricity consumed each month. The benefit helps over 4 million residential consumers and over 400,000 farms and small businesses with their electricity costs. The program is scheduled to end on December 31, 2015.		Reduced Poverty, Inequality and Exclusion	N/A	N/A	Supporting	For-profit business	
ENERGY	**Ontario Rebate for Electricity Consumers (TP) (Starts Jan. 1, 2017)**	Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure. Since 2010, electricity prices have risen considerably, particularly for households and small businesses. Prices are forecasted to continue to increase as additional generation comes online. Ontario has taken action to replace coal-fired generation with cleaner sources of energy. Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished clean generation, including nuclear, natural gas and renewables. This investment represents about 40% of our current supply and has helped decrease electricity sector emissions by approximately 80%. Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems	This program provides a rebate of 8% to consumers eligible for the Regulated Price Plan. Those ineligible to receive the 8% rebate will benefit from one or more of the other initiatives under this proposal (e.g., ICI expansion, proceeds recycling, etc).		Reduced Poverty, Inequality and Exclusion	N/A	N/A	Supporting	For-profit business	
ENERGY	**Northern Ontario Energy Credit Program (TP)**	Residential electricity bills are forecasted to rise in future years at an annual average of 6.9% per year between 2014 and 2018, and 2.4% until 2032. Helping consumers manage their electricity cost is one of key government priorities outlined in the 2014 Ontario Budget. Helping northern Ontarians with their home energy cost is especially important, as the costs are often higher in the North due to more severe winters.	Helps low-to-moderate income individuals and families living in northern Ontario with their home energy costs, which are often higher in the North due to more severe winters. For the 2014-15 benefit year, qualifying individuals can receive up to $141 and qualifying families (including single parents) can receive up to $216.		Reduced Poverty, Inequality and Exclusion	N/A	MOF	Assisting	Other level of government	
ENERGY	**Electricity and Natural Gas Sector Regulation (Delivered by the OEB)**	Protection of energy consumers and ensuring that reliable and affordable energy is delivered in the gas and electricity section requires the Province to oversee prices and regulate the conduct of energy utilities.	The Ontario Energy Board oversees the Province's electricity and natural gas sectors through effective, fair and transparent regulation and in accordance with the objectives set out in the governing statutory framework. Its mission is to promote a viable, sustainable and efficient energy sector that serves the public interest and assists consumers to obtain reliable energy services at reasonable cost. Key functions: • Setting gas and electricity rates and prices • Monitoring the financial and operating performance of natural gas and electrical utilities • Providing consumers with the information they need to better understand energy matters • Protecting energy consumers' interests • Developing regulatory policy to meet emerging energy trends and challenges		Modernized Infrastructure and Transportation Networks	N/A	N/A	Regulating	Classified Agency	
ENERGY	**Electricity Market Operations & System Planning (Delivered by the IESO)**	Ontarians demand that sufficient electricity is available whenever and wherever it's needed. Ensuring there is enough energy to meet the demand is an ongoing and highly complex process, requiring the close coordination of all parts of the electricity system. Ontario is transforming its electricity system to ensure a reliable, modern and sustainable power supply for the people of Ontario now and well into the future. Doing so requires significant, prudently managed investment in Ontario's electricity system. Electricity system planning requires Ontario's energy agencies, transmitters, local distribution companies and stakeholders to work together in this transformation by advising the government on electricity integrated regional resource plans (IRPPs), helping Ontarians to conserve energy and contracting for the various sources of supply.	The IESO balances the supply and demand for electricity in Ontario and then directs its flow across the province's transmission lines. Every five minutes, the IESO forecasts electricity demand throughout the province and directs generators to provide the required amount of electricity to meet that demand. It can also reduce demand by calling on large volume users to cut back on consumption. This process of balancing supply and demand repeats itself 24 hours a day, seven days a week. The IESO maintains reliability in real time and into the future, while supporting Ontario's green energy policies for the integration of renewable sources of energy. The IESO works at the heart of Ontario's power system, connecting all participants –generators that produce electricity, transmitters that send it across the province, retailers that buy and sell it, industries and business it that use it in large quantities, and local distribution companies that deliver it to people's homes. The IESO also is the agency that plans the power system and makes sure Ontario has enough electricity over the long term. It also coordinates conservation efforts across the province. The IESO is responsible for procuring new electricity resources, both generation and conservation. The IESO also provides advice to the government on province-wide electricity system plans, and works with transmitters and local distributors and other electricity agencies and stakeholders to develop integrated regional resource plans (IRRPs). The IESO signs contracts with power generators to ensure that long-term investments are made in generation facilities that otherwise would not get built. These contracts guarantee set prices to generators, enabling investors to finance and build these new projects in order to achieve government policy objectives. Coordinating province-wide conservation efforts is another key role of the IESO, including working with local distribution companies to help consumers manage their electricity use and costs		Leader on Environmental Sustainability & Climate Change Mitigation	N/A	N/A	Public Good	Other non-profit organization	
ENERGY	**Strategic Asset Management and Transformation**	In order to help support unprecedented investments in transit, transportation and other priority infrastructure projects, Ontario is broadening ownership of Hydro One, so that taxpayers would realize net proceeds. This approach could generate an estimated net gain of approximately $4 billion (gain amount will be subject to market conditions).	The Province is moving forward with the Premier's Advisory Council on Government Assets recommendations to broaden the ownership of Hydro One through an initial public offering (IPO) and the sale of Hydro One Brampton to a merged entity of three other large utilities – PowerStream, Enersource and Horizon. This approach could generate an estimated net gain of approximately $4 billion (gain amount will be subject to market conditions). Any net proceeds from the sale of shares in Hydro One would be set aside in the Trillium Trust to help fund the government's $31.5 billion Moving Ontario Forward plan to invest in infrastructure, transportation and transit across the province. The Ministry of Energy received approval in August 2015 from TB/MBC for a new program called Strategic Asset Management & Transformation. This program is required to facilitate the ministry and government objectives regarding its assets management and transformation strategy related to Hydro One.		Modernized Infrastructure and Transportation Networks	N/A	Finance	Public Good	For Profit Business	
SUBTOTAL EXTERNAL PROGRAMS										

Internal Functions

Ministry Acronym	Organizational Unit	Function Type
ENERGY	Ministry Admin (MO, DMO)	Policy
ENERGY	Energy Policy Development and Implementation	Policy
ENERGY	Ministry Admin (Corporate Services Division)	Service Mgmt/ Other
ENERGY	Ministry Admin (Legal Services Branch)	Legal
ENERGY	Ministry Admin (Communication Services Branch)	Communications
SUBTOTAL INTERNAL FUNCTIONS		
TOTAL PROGRAMS		

ADDITIONAL ADJUSTMENTS: INTER-MINISTRY TRANSFERS
Temporary Transfer of 1 FTE from ENERGY to MAG
Permanent Transfer of 10 FTEs and associated cost allocation from ENERGY to MEDEI

MINISTRY OF ENERGY
External Programs

Ministry Acronym	Program Name	End Beneficiary: Type	Age	Geographic	Demographic (1st selection)	Demographic (2nd selection)	Operating Expense, $M: 2013-14 (Actuals)	2014-15 (Actuals)	2014-15 (Estimates)	2015-16 (Estimates)	2016-17 (Estimates)	2017-18 (Estimates)	Capital Expense, $M: 2013-14 (Actuals)	2014-15 (Actuals)	2015-16 (Actuals)	2015-16 (Estimates)	2016-17 (Estimates)	2017-18 (Estimates)	Assets, $M: 2013-14 (Actuals)	2014-15 (Actuals)	2015-16 (Estimates)	2015-16 (Actuals)	2016-17 (Estimates)	2017-18 (Estimates)	Revenues, $M: 2013-14 (Actuals)	2014-15 (Estimates)	2014-15 (Actuals)	2015-16 (Estimates)	2016-17 (Estimates)	2017-18 (Estimates)
ENERGY	**Long-Term Energy Plan Program Initiatives (TP)**	Collective	All	All	All		11.4826	11.4279	15.5724	15.5724	3.4474	18.3958																		
ENERGY	**Ontario Clean Energy Benefit Program (TP) (Sunsets 2015-16)**	Individual - Persons/Families	All	All	All		1,006.2011	1,077.9607	1,100.0000	560.0000	0.0000	0.0000																		
ENERGY	**Ontario Rebate for Electricity Consumers (TP) (Starts Jan. 1, 2017)**	Individual - Persons/Families	All	All	All						300.0000	1,006.0000																		
ENERGY	**Northern Ontario Energy Credit Program (TP)**	Individual - Persons/Families	All	North	Low Income		25.2649	24.3339	25.5000	26.0000	26.0000	26.0000																		
ENERGY	**Electricity and Natural Gas Sector Regulation (Delivered by the OEB)**	Collective	All	All	All		32.9226	34.9850	32.1834	32.8942	33.5706	38.0141	1.1127	0.8906	0.7950	0.6218	0.4404	1.3841								34.4270		34.8690	35.3640	
ENERGY	**Electricity Market Operations & System Planning (Delivered by the IESO)**	Collective	All	All	All		186.4974	202.1153	194.1315	191.8636	192.8814	195.0209	21.4396	24.7200	21.9716	27.8263	30.1518	20.8321								235.5980		236.6150	239.4480	
ENERGY	**Strategic Asset Management and Transformation**	Collective	Adults & Seniors	All	All					2,663.0000		70.0000			44.1703															
SUBTOTAL EXTERNAL PROGRAMS							**1,262.3685**	**1,350.8227**	**1,367.3873**	**3,489.3302**	**555.8994**	**1,353.4308**	**22.5523**	**25.6106**	**66.9369**	**28.4481**	**30.5922**	**22.2162**	**0.0000**	**0.0000**	**0.0000**	**0.0000**			**0.0000**	**270.0250**		**271.4840**	**274.8120**	

Internal Functions

Ministry Acronym	Organizational Unit	Operating Expense, $M: 2013-14 (Actuals)	2014-15 (Actuals)	2014-15 (Estimates)	2015-16 (Estimates)	2016-17 (Estimates)	2017-18 (Estimates)	Capital Expense, $M: 2013-14 (Actuals)	2014-15 (Actuals)	2015-16 (Actuals)	2015-16 (Estimates)	2016-17 (Estimates)	2017-18 (Estimates)	Assets, $M: 2013-14 (Actuals)	2014-15 (Actuals)	2015-16 (Estimates)		2016-17 (Estimates)		Revenues, $M: 2013-14 (Actuals)	2014-15 (Estimates)		2015-16 (Estimates)	2016-17 (Estimates)	
ENERGY	Ministry Admin (MO, DMO)	2.7004	2.5504	2.5689	2.5689	2.5689	2.5689																		
ENERGY	Energy Policy Development and Implementation	17.6373	17.2103	23.3687	23.3687	22.9937	23.9237																		
ENERGY	Ministry Admin (Corporate Services Division)	5.9152	5.5776	6.4877	6.4877	6.4877	5.2065	0.0000	0.0020		0.0020	0.0020	0.0020	0.0000	0.0010	0.0010		0.0010							
ENERGY	Ministry Admin (Legal Services Branch)	3.2968	3.5362	3.2549	3.2549	3.2549	3.2549																		
ENERGY	Ministry Admin (Communication Services Branch)	3.8188	3.4029	4.1186	4.1186	4.1186	4.1186																		
SUBTOTAL INTERNAL FUNCTIONS		**33.3685**	**32.2775**	**39.7988**	**39.7988**	**39.4238**	**39.0726**	**0.0000**	**0.0020**	**0.0000**	**0.0020**	**0.0020**	**0.0020**	**0.0000**	**0.0010**	**0.0010**		**0.0010**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	
TOTAL PROGRAMS		**1,295.7370**	**1,383.1002**	**1,407.1861**	**3,529.1290**	**595.3232**	**1,392.5034**	**22.5523**	**25.6126**	**66.9369**	**28.4501**	**30.5942**	**22.2182**	**0.0000**	**0.0010**	**0.0010**		**0.0010**		**0.0000**	**270.0250**		**271.4840**	**274.8120**	
	Budget/Estimates/Public Accounts	**1,295.7370**		**1,407.1861**	**3,529.1290**	**321.3232**		**22.5523**	**25.6126**		**28.4501**	**30.5942**		**0.0000**	**0.0010**	**0.0010**		**0.0010**		**0.0000**	**270.0250**		**271.4840**	**274.8120**	
	Reconciles?	**YES**		**YES**	**YES**	**NO**	**NO**	**YES**	**YES**		**YES**	**YES**		**YES**	**YES**	**YES**		**YES**		**YES**	**YES**		**YES**	**YES**	

ADDITIONAL ADJUSTMENTS: INTER-MINIST
Temporary Transfer of 1 FTE from ENERGY to
Permanent Transfer of 10 FTEs and associate

					-1.2662	**-1.2662**																			

MINISTRY OF ENERGY
External Programs

Ministry Acronym	Program Name	FTEs, #				Operating Expense			Capital Expense			Assets			Revenues			FTEs		
		2013-14 (Actuals)	2014-15 (Allocation)	2015-16 (Allocation)	2016-17 (Allocation)	$ Change, $M (2014-15 Estimates Vs 2009-10 Actuals)	% Change	Avg Ann % Change	$ Change, $M	% Change	Avg Ann % Change	$ Change, $M	% Change	Avg Ann % Change	$ Change, $M	% Change	Avg Ann % Change	Change (2014-15 Estimates vs 2009-10 Actuals)	% Change	Avg Ann % Change
ENERGY	**Long-Term Energy Plan Program Initiatives (TP)**																			
ENERGY	**Ontario Clean Energy Benefit Program (TP) (Sunsets 2015-16)**																			
ENERGY	**Ontario Rebate for Electricity Consumers (TP) (Starts Jan. 1, 2017)**																			
ENERGY	**Northern Ontario Energy Credit Program (TP)**																			
ENERGY	**Electricity and Natural Gas Sector Regulation (Delivered by the OEB)**					3.0107	10.3%	2.1%	-1.0646	-54.5%	-14.0%									
ENERGY	**Electricity Market Operations & System Planning (Delivered by the IESO)**					1.6765	0.9%	0.2%	-0.3386	-9.0%	0.4%									
ENERGY	**Strategic Asset Management and Transformation**																			
SUBTOTAL EXTERNAL PROGRAMS		**0.00**	**0.00**	**0.00**	**0.00**															

Internal Functions

Ministry Acronym	Organizational Unit	FTEs, #				Operating Expense			Capital Expense			Assets			Revenues			FTEs		
		2013-14 (Actuals)	2014-15 (Allocation)	2015-16 (Allocation)	2016-17 (Allocation)	$ Change, $M (2014-15 Estimates Vs 2009-10 Actuals)	% Change	Avg Ann % Change	$ Change, $M	% Change	Avg Ann % Change	$ Change, $M	% Change	Avg Ann % Change	$ Change, $M	% Change	Avg Ann % Change	Change (2014-15 Estimates vs 2009-10 Actuals)	% Change	Avg Ann % Change
ENERGY	Ministry Admin (MO, DMO)	22.00	21.00	21.00	21.00	-1.2310	32.4%	6.5%	0.0000	0.0%	0.0%	0.0000	0.0%	0.0%	0.0000	0.0%	0.0%			
ENERGY	Energy Policy Development and Implementation	119.00	129.00	129.00	129.00	6.1339	35.6%	7.2%										23.00	21.7%	4.5%
ENERGY	Ministry Admin (Corporate Services Division)	35.00	35.61	36.61	36.61	1.4584	29.0%	5.8%	0.0000	0.0%	0.0%	0.0000	0.0%	0.0%	0.0000	0.0%	0.0%			
ENERGY	Ministry Admin (Legal Services Branch)	0.00	0.00	0.00	0.00	0.5472	20.2%	4.0%	0.0000	0.0%	0.0%	0.0000	0.0%	0.0%	0.0000	0.0%	0.0%			
ENERGY	Ministry Admin (Communication Services Branch)	28.00	28.00	28.00	28.00	0.0015	0.0%	0.0%	0.0000	0.0%	0.0%	0.0000	0.0%	0.0%	0.0000	0.0%	0.0%			
SUBTOTAL INTERNAL FUNCTIONS		**204.00**	**213.61**	**214.61**	**214.61**															
TOTAL PROGRAMS		**204.00**	**213.61**	**214.61**	**214.61**															
		204.00	**213.61**	**214.61**	**214.61**															
		YES	**YES**	**YES**	**YES**															
ADDITIONAL ADJUSTMENTS: INTER-MINIST																				
Temporary Transfer of 1 FTE from ENERGY t				**-1.0**																
Permanent Transfer of 10 FTEs and associate				**-10.0**	**-10.0**															

Program Review, Renewal & Transformation

MINISTRY OF ENERGY

ONTARIO REBATE FOR ELECTRICITY CONSUMERS

Assessment Workbook

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PROGRAM BACKGROUND

Program: Ontario Rebate for Electricity Consumers

Issue / Need

Since 2010, electricity prices have risen considerably, particularly for households and small businesses. Prices are forecast to continue to increase as additional generation comes online. Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50% and rates paid by commercial have increased by 56%.

Electricity costs have increased as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.

Ontario has taken action to replace coal-fired generation with cleaner sources of energy. Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished clean generation, including nuclear, natural gas and renewables. This investment represents about 40% of our current supply and has helped decrease electricity sector emissions by approximately 80%. Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.

Program Description

To mitigate electricity prices, the Ministry of Energy has implemented an 8% rebate, equal to the provincial portion of HST to consumers eligible for the Regulated Price Plan - this includes about five million residential consumers, small businesses and farms.

The Rebate is automatically be added to every eligible consumer's bill beginning January 1, 2017.

Section 1: PROGRAM ASSESSMENT

Relevance

	0	1	2	3	4	5	6	7	8	9	10	N/A
Supports Government Priority	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	
Addresses Specific Need	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	
Critical that Need be Addressed	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	
Clear and Stable Objectives	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	
Necessary Government Role	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	
Necessary Provincial Role	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	

In the box below, provide sufficient details to support the ratings assigned. Make sure the following considerations have also been addressed:

- **Which government multi-year priority outcome does the program support and why?**
- **How do we know there is 'need'? Who are the end-beneficiaries? How has the need been identified, verified and measured?**
- **What are the consequences of not addressing the need?**
- **What are the program's objectives/desired outcome(s) and how they have evolved in recent years?**
- **Is it necessary for any government, and in particular Ontario government, to fund this program and why?**

The ministry's deliverables are outlined in the 2013 Long-Term Energy Plan (LTEP), which includes: ensuring a clean, reliable and affordable electricity system; building a culture of conservation in Ontario; and building Ontario's clean energy economy. The Ministry's 2016 mandate letter from the Premier also tasks the Minister with taking further action to mitigate the impact of electricity prices on consumers and businesses.

In 2016, the Ministry introduced the Ontario Rebate for Electricity Consumers which provides an 8% rebate, equal to the provincial portion of HST, to eligible residential, small businesses and farms electricity bills. The Rebate is automatically be added to every eligible consumer's bill beginning January 1, 2017.

Since 2010, electricity prices have risen considerably, particularly for households and small businesses as the government has rebuilt and cleaned up Ontario's electricity system. Prices are forecast to continue to increase as additional generation comes online. Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50% and rates paid by commercial have increased by 56%.

Unlike the Ontario Electricity Support Program (OESP), which assists low-income residential

consumers, the Ontario Rebate for Electricity Consumers applies to all RPP-eligible consumers (residential, small businesses and farms) regardless of income, status or location.

The Ontario Rebate for Electricity Consumers is a legislative entitlement program.

Effectiveness

	0	1	2	3	4	5	6	7	8	9	10	N/A
Success Defined	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	
Plan in Place to Measure Success	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	
Effectiveness Assessed	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐
Progress in Achieving Outcomes	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐
Progress Benchmarked	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒

In the box below, provide sufficient details to support the ratings assigned. Make sure the following considerations have also been addressed:

- **What long-term outcome measures have been established for the program?**
- **What short-term and intermediate outcome measures have been established for the program and how they lead to the long-term outcome measures?**
- **What accountability systems are in place to monitor performance?**
- **Has the program undergone independent third party evaluations? What were the findings/recommendations and how they have been implemented?**
- **What evidence is available that demonstrates progress towards long-term outcomes?**
- **How is the program benchmarked against comparable programs? (What are comparable programs; what do the comparisons show?)**

The Ontario Rebate for Electricity Consumers is a legislated entitlement program. It was developed as a way to provide financial relief to Ontario families, small businesses and farms on their electricity bills.

The Ontario Rebate for Electricity Consumers applies to all RPP-eligible consumers (residential, small businesses and farms) regardless of income, status or location and will provide an 8% rebate, equal to the provincial portion of HST.

Electricity utilities provide eligible consumers with a rebate directly on their bills, making the payment timely, i.e., paid at the same time the expense is incurred.

Eligible electricity consumers receive the 8% benefit directly on their bill from their electricity vendor, making the payment timely (i.e., paid at the same time the expense is incurred).

Ontario currently provides rate mitigation to various electricity consumer classes through a combination of tax-based and rate-based programs, including the Northern Ontario Energy Credit and the Ontario Electricity Support Program. With the program set to begin January 1, 2017, the Ontario Rebate for Electricity Consumers complements existing programs to provide additional rate mitigation measures for all consumers.

The Ontario Rebate for Electricity Consumers is a $1 billion program expected to be effective in mitigating the impact of rising electricity prices for families, small businesses, and farms.

Efficiency

	0	1	2	3	4	5	6	7	8	9	10	N/A
Efficiency Defined	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	
Efficiencies Assessed	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐
Efficiencies Achieved	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒
No Overlap in Ontario Government	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	
No Overlap outside Government	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	

In the box below, provide sufficient details to support the ratings assigned. Make sure the following considerations have also been addressed:

- **What efficiency measures are in place for the program? What other programs, organizations, industry standards are identified for benchmarking?**
- **How is efficiency being evaluated/assessed/monitored? How regularly?**
- **What efficiencies/savings/service improvements have been achieved in recent years?**
- **Is this program unique or are there similar programs (i.e., addressing the same need and focusing on the same target group) delivered by the Ontario government, other levels of government, not-for-profit or private sector organizations?**
- **What are those programs, their target groups and ministries/agencies/ other organizations involved?**
- **What efforts have been undertaken to integrate similar programs, reduce duplication and increase efficiencies and outcomes? What has been achieved?**

Eligible electricity consumers receive the 8% benefit directly on their bill from their electricity vendor, making the payment timely.

The Ministry designed the flow of the Ontario Rebate for Electricity Consumers funds in an efficient manner.

- With a goal of providing an 8% credit per month for eligible consumers, the delivery of the Ontario Rebate for Electricity Consumers via customer bills is efficient and does not lag consumption and the incurrence of the electricity expense.
- Electricity utilities are reimbursed by submitting and receiving claims which are netted against their other monthly transactions from the IESO, and the IESO submits and receives one monthly amount from the Ontario Financing Authority on behalf of the Ministry of Energy – this process is streamlined and leverages an already existing reimbursement process, thereby minimizing costs.

The Ministry of Finance will audit the Ontario Rebate for Electricity Consumers as part of its other regularly scheduled audits. Any administration costs local distribution companies (LDC) incur related to adding the Ontario Rebate for Electricity Consumers to consumer bills would be recovered through the rate base. Any LDC administrative costs incurred as a result of the

Ontario Rebate for Electricity Consumers by the rate base are also subject to the review by the OEB, which is an open and public format.

The Ontario Rebate for Electricity Consumers is unique as it assists a large number of customers (this includes about five million residential consumers, small businesses and farms), and provides the benefit directly on the electricity bill. There are other programs that provide more targeted assistance, such as the Ontario Energy and Property Tax Credit, and the Northern Ontario Energy Credit, although they are delivered through the tax system, and eligibility for these programs is not associated directly with electricity consumption and the incurrence of electricity expenses.

As part of the 2017-18 PRRT process, Treasury Board Secretariat provided the Ministry of Energy with preliminary funding to deliver the Ontario Rebate for Electricity Consumers as legislated in 2016. Based on updated forecasts, the Ministry will be requesting additional out-year funding for this program.

Sustainability

	0	1	2	3	4	5	6	7	8	9	10	N/A
Rate of Expense Growth	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒
Ability to Control Expense Changes	0	1	2	3	4	5	6	7	8	9	10	N/A
	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Trends and Future Expense Growth	0	1	2	3	4	5	6	7	8	9	10	N/A
	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	
Ability to Cost Recover	0	1	2	3	4	5	6	7	8	9	10	N/A
	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒

In the box below, provide sufficient details to support the ratings assigned. Make sure the following considerations have also been addressed:

- **What are key cost drivers for the program and what is the relevant indicator (e.g. CPI)? Have the program's costs been growing faster or slower than the indicator?**
- **Is this a demand-driven/entitlement program? Which components of the program costs can be controlled?**
- **What are current/future trends that can impact the cost curve for the program?**
- **Is the program currently fully cost-recovered? If not, can full cost-recovery be achieved?**

This is a legislated entitlement program and spending is not discretionary. The program provides an 8% rebate, equal to the provincial portion of HST to consumers eligible for the Regulated Price Plan - this includes about five million residential consumers, small businesses and farms

The Ontario Rebate for Electricity Consumers program was created through the *Ontario Rebate for Electricity Consumers Act, 2016*. The key cost drivers for the program are electricity demand and price. The cost curve of this program will be determined by these two factors. Consumption can alter from estimates based on different causes, including weather (e.g., a cold winter or hot summer would increase consumption), economic factors, and population.

The program is funded by the tax base and is not cost recoverable. The program is scheduled to begin January 1, 2017, an complements existing tax-based and rate-based programs,

As part of the 2017-18 PRRT process, Treasury Board Secretariat provided the Ministry of Energy with preliminary funding to deliver the Ontario Rebate for Electricity Consumers as legislated in 2016. Based on updated forecasts, the Ministry will be requesting additional out-year funding for this program.

Section 2: PROGRAM SPECIFIC OPPORTUNITIES

Overview / Context	
In the space below, outline and describe in general the types of improvement opportunities which can be considered and that you have identified through the program assessment, as well as the overlaying context (e.g. transformation currently underway that is impacting this program, historical transformation, etc.).	
This is a new program. The Ministry revisit program opportunities once the program is underway.	
Relevance	This is a new program. The Ministry revisit program opportunities once the program is underway.
Effectiveness	This is a new program. The Ministry revisit program opportunities once the program is underway.
Efficiency	This is a new program. The Ministry revisit program opportunities once the program is underway.
Sustainability	This is a new program. The Ministry revisit program opportunities once the program is underway.

Opportunity Questions	Y/N	Opportunity #(s)
Relevance		
Is there an opportunity to discontinue the program (if no longer relevant)?	**N**	
Is there an opportunity to redesign the program to better achieve government priorities and program objectives?	**N/A**	
Is there an opportunity to transfer responsibility (funding) of the program in whole or in part to another level of government or non-government entity?	**N**	
Other…	**N**	
Effectiveness		
Are there opportunities to improve the effectiveness of the program for better outcomes?	**N**	
Is there additional data to be captured and/or analyzed to help assess the programs' effectiveness in achieving outcomes?	**N**	
Does further work need to be done to confirm desired outcomes, and to establish baselines, targets and performance measures?	**N**	
Other…	**N**	
Efficiency		
Are there efficiency opportunities to reduce costs or improve services (e.g., new technologies or digitization, procurement, etc.)?	**N**	
Are there opportunities to realign resources with other programs the government delivers to improve outcomes for Ontarians?	**N**	
Are there opportunities to generate efficiencies through partnerships (e.g., intergovernmental integration, public/private partnerships)?	**N**	
Are there opportunities to reduce overlap or duplication by increasing the coordination or integration of delivery with other Ontario ministries or agencies (e.g., horizontal opportunities)?	**N**	

Does the provincial government need to deliver the program and can it be provided more efficiently by alternative means?	**N**	
Other…	**N**	
Sustainability		
Are there any opportunities to add and/or increase revenues, for example, full cost recovery; user fees; loan recuperation; and income generation?	**N**	
Could this program be income tested to both increase equity and improve sustainability?	**N**	
Can program eligibility be redefined to provide more targeted benefits / shared costs?	**N**	
Other…	**N**	

Section 3: PROGRAM PERFORMANCE MEASURES

Available Data

The Ontario Rebate for Electricity Consumers is a legislated entitlement program that is delivered through customer bills.

On an annual basis, it provides about $1 billion dollars to residential consumers, small businesses, and farms in the form of an 8% rebate, equal to the provincial portion of HST.

The Ministry collects data from the IESO each month on the amount delivery agents, such as electricity utilities claim.

As with other Ministry tax-based programs, the Ministry of Finance will conduct audits of local distribution companies to ensure they are administering the Ontario Rebate for Electricity Consumers correctly and on a timely basis.

Efficiency Measures

Efficiency Measure #1: Transaction time (in days) to process claims and reimburse local distribution companies (LDC) and sub-metering providers.	Baseline	Target	Current
	0	5 business days per claim	0

Describe the measure

The IESO submits monthly reports to the Ministry which reflect total claims from LDCs and sub-metering providers of benefits that have been distributed to qualified electricity consumers. These reports are processed within 2 business days by the Ontario Financing Authority on behalf of the Ministry, and the IESO in turn reimburses the LDCs and sub-metering providers within the subsequent 2 business days.

Describe the data that is being collected to support this specific measure, how frequently it is collected, and opportunities to collect / use additional data in supporting the measure.

N/A

Describe the rationale for choosing this measure (i.e., how it is relevant), what it is capturing and how the measurement is conducted, when the measure/baseline was established and provide other applicable considerations.

The empirical measure chosen for this program ensure the entitlements reach the total number of eligible residential, farms and small business consumers in Ontario.

Processing claim application and providing re-imbursement within 5 business days minimizes interruptions to daily business for service providers.
Describe existing use of benchmarks and potential opportunities where benchmarking could be improved N/A

Short-Term Outcome Measures

Short-Term Outcome Measure #1: Number of Rebates applied to eligible electricity consumers including household, small business, and farms	Baseline	Target	Current
	0	5 Million	0
Describe the measure The empirical measure chosen for this program ensure the entitlements reach the total number of eligible residential, farms and small business consumers in Ontario. The total number of customers may fluctuate as it is possible that the final eligible customer number could be over/under the 5 million target through no fault of the program. The aim is to ensure all eligible customers in Ontario receive their respective entitlement.			
Describe the data that is being collected to support this specific measure, how frequently it is collected, and opportunities to collect / use additional data in supporting the measure. Monthly claims reflect the total number of consumers who are eligible for this Rebate.			
Describe the rationale for choosing this measure (i.e., how it is relevant), what it is capturing and how the measurement is conducted, when the measure/baseline was established and provide other applicable considerations. The outcome measures is the total number of residential, farms and small business consumers who will benefit from this Rebate, against estimated targets, if the program is delivered effectively by the Province, the IESO, LDCs and sub-metering providers.			
Describe existing use of benchmarks and potential opportunities where benchmarking could be improved N/A			

Intermediate-Term Outcome Measures

Intermediate-Term Outcome Measure #1: Average reduction to electricity bills to residential consumers, farms and small businesses	Baseline	Target	Current
	0% rebate	Min 8% savings	0% rebate

Describe the measure

The intermediate outcome measure for the Ontario Rebate for Electricity Consumers is the amount saved by eligible recipients each year. This amount will be an 8% rebate, equal to the provincial portion of HST, applied to consumers eligible for the Regulated Price Plan – this includes approximately five million residential consumers, small businesses and farms. The 8% rebate target applies to same year bill-to-rebate savings only.

Describe the data that is being collected to support this specific measure, how frequently it is collected, and opportunities to collect / use additional data in supporting the measure.

This data is collected monthly from the IESO.

Describe the rationale for choosing this measure (i.e., how it is relevant), what it is capturing and how the measurement is conducted, when the measure/baseline was established and provide other applicable considerations.

This outcome was chosen because it reflects that all eligible customers have received their entitlement from the Ontario Rebate for Electricity Consumers. This Rebate will help ensure consumers are able to manage electricity costs that have risen as Ontario transitioned to a cleaner, modern electricity system.

Describe existing use of benchmarks and potential opportunities where benchmarking could be improved

N/A

The OCEB is an entitlement program with a purpose of improving affordability of electricity for Ontarians January 2017.

Long-term Outcome Measures

Long-Term Outcome Measure #1: Successful program delivery limits increases in electricity costs to consumers relative prior years	Baseline	Target	Current
	$143.48/MWh in 2015 (average unit cost of delivered electricity)	Increases below the rate of inflation over the long-term	$143.48/MWh in 2015 (average unit cost of delivered electricity)

Describe the measure

The measure chosen is an index of the annual growth of electricity costs to all residential and industrial consumers Ontario.

Describe the data that is being collected to support this specific measure, how frequently it is collected, and opportunities to collect / use additional data in supporting the measure.

Data collected by the IESO for growth rate for average energy costs to residential and industrial consumers by region / demographic.

Describe the rationale for choosing this measure (i.e., how it is relevant), what it is capturing and how the measurement is conducted, when the measure/baseline was established and provide other applicable considerations.

The long-term outcome measures the impact of the Ontario Rebate for Electricity Consumers program on the cost of electricity in Ontario. Based on the current annual average cost growth, the program is expected to assist in reducing average growth in cost of electricity post 2016-17 levels, when no Rebate existed.

Describe existing use of benchmarks and potential opportunities where benchmarking could be improved

N/A

Opportunities in Performance Measurement

Measures
Understanding the current gaps in measurement (e.g., measures are not available, or measures which are currently in use not providing objective/quantifiable evidence of the performance of the program, etc.), outline what opportunities exist and what steps the ministry will take (with timelines) to improve the measures. **Address each type of measure (output, short-term outcome, intermediate outcome, long-term outcome).** **Identify new/additional measures where known.** N/A
Data
Identify opportunities to collect and use additional data sources to measure program effectiveness and efficiency. N/A

Reduced Poverty, Inequality and Exclusion

Ontario Rebate for Electricity Consumers – ENERGY

Issue/Need:

- Since 2010, electricity prices have risen considerably, particularly for households and small businesses. Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50% and rates paid by commercial have increased by 56%.
- Electricity costs have increased as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.

Program Description:

- To mitigate electricity prices, the Ministry of Energy has implemented an 8% rebate equal to the provincial portion of HST to consumers eligible for the Regulated Price Plan - this includes about five million residential consumers, small businesses and farms.
- The rebate is automatically be added to every eligible consumer's bill beginning January 1, 2017.

PROGRAM TYPE: Supporting

MAJOR PROGRAM: N/A

STRATEGY: None

DELIVERY MODE: For-profit | Choose an item.

MINISTRY LINKAGES: MOF

END BENEFICIARY:

Type:	Collective
Age:	All
Demographic 1:	All
Demographic 2:	All
Geographic:	All

$M	2015-16	2016-17	2017-18	2018-19	Last 5-Years		
	Prior Inputs	Current Inputs	Minuted Inputs		$ Change	% Change	Avg Ann % Change
Operating Expense	N/A	300.0	1,006.0	1,004.0	N/A	N/A	N/A
Capital Expense	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Assets (Op/Cap)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Revenues	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FTEs	N/A	N/A	N/A	N/A	N/A	N/A	N/A

	OUTPUTS			SHORT-TERM OUTCOMES			INTERMEDIATE OUTCOMES			LONG-TERM OUTCOMES		
Key Measure 1	Ontario Rebate for Electricity Consumers claims			Number of rebates applied to eligible electricity consumers including household, small business, and farms			Average reduction to electricity bills to residential consumers, farms and small businesses			Successful program delivery limits increases in electricity costs to consumers relative prior years		
	Baseline	Target	Current	Baseline	Target	Current	Baseline	Target	Current	Baseline	Target	Current
	8% rebate	8% rebate	8% rebate	0	5 million	0	0% rebate	Min 8% savings	0% rebate	$143.48/MWh in 2015 (average unit cost of delivered electricity)	Increases below the rate of inflation over the long-term	$143.48/MWh in 2015 (average unit cost of delivered electricity)
Key Measure 2												
	Baseline	Target	Current	Baseline	Target	Current	Baseline	Target	Current	Baseline	Target	Current
	XX%	XX%	XX%									

Reduced Poverty, Inequality and Exclusion

Ontario Rebate for Electricity Consumers – ENERGY

RELEVANT		EFFECTIVE		EFFICIENT		SUSTAINABLE	
Supports Government Priority	10	Success Defined	10	Efficiency Defined	10	Rate of Expense Growth	N/A
Addresses Specific Need	10	Plan in place to measure success	10	Efficiency Assessed	10	Ability to control Expense Changes	1
Critical that Need be Addressed	10	Effectiveness Assessed	10	Efficiencies Achieved	N/A	Trends and Future Expense Growth	8
Clear and Stable Objectives	10	Progress in achieving outcomes	10	No Overlap in Ont. Government	10		
Necessary Government Role	10	Benchmarked	N/A	No Overlap outside Government	10	Ability to Cost Recover	N/A
Necessary Provincial Role	10						

Addressing Gaps in Effectiveness	Opportunities to Improve Effectiveness
N/A	N/A

Opportunities – Relevance/Efficiency/Sustainability	Key Considerations	Desired Outcome
[Opportunity and brief description]	[Gaps, Feasibility, Timing, Decision Points]	[How would this opportunity improve outcomes]

		Risk Name	Description	Offset Code	Risk Type	Risk Classification	Vote Item	% Likelihood	Impact	2017-18		2018-19		2019-20		2020-21		Implications of Risk	Mitigating Strategies
	Division(s)	Provide a short name for the risk	Describe your risk in detail, and provide an explanation of what the risk is and its underlying source or cause	Available offset codes: VI: Vote/Item R: Revenue NOF: No Offset	See tab 'Risk Types' for available codes	A: New - One Time B: New - Ongoing C: Existing - One Time D: Existing - Ongoing	Identify the VOTE/ITEM that is affected by the risk	Determine the likelihood in percentage terms	Indicate if impact of risk is: H: high M: medium L: low	Min ($M)	Max ($M)	Min ($M)	Max ($M)	Min ($M)	Max ($M)	Min ($M)	Max ($M)	Describe the rationale for the likelihood and impact on government operations, services, strategic policy, and stakeholders if the initiative does not proceed or the financial risk is not funded.	Describe the strategy to reduce the impact of the identified risk.
001	**CRED**	Energy Demand Model	Energy demand model to develop independent, unbiased, and enhanced in-house analytical capability to aid conservation policy development in quick turn-around times within current staff levels and a modest increase in annual budget.	VI	SPD	Existing - Ongoing	290201	100%	H	0.4000	0.4000	0.1000	0.1000					If the Ministry does not proceed with procuring energy demand modelling software (multi-fuel), it would not have the necessary tools to: • Gain greater control and flexibility over planning analysis; • Ensure staff are adequately equipped to explain policy recommendations and analysis; • Ensure inputs are sufficiently precise to differentiate and evaluate the scenarios required to inform ministry decision-making; • Provide management with the information needed to make decisions in a timely manner; • Quickly make requested changes to scenario assumptions; and • Develop multi-fuel conservation and demand management policies based on analysis of alternative scenarios.	
002	**CRED**	Green Button Technical Adoption of Standard	Technical advisory services to develop/update a "Reference Architecture" and also update and develop a test-lab environment for Green Button in Ontario as well as provide additional technical advisory services as required.	VI	SPD	Existing - Ongoing	290201	100%	H	0.7300	0.7300							Lack of technical guidance documents and test lab would significantly reduce the likelihood of a successful roll out of Green Button in Ontario.	
003	**CRED**	Renewable Energy Legal Charges	Funding to support Ontario's defence of the Windstream NAFTA arbitration. Canada and Ontario will have to discuss arrangements for award of $28M owed to Windstream (it is possible that Ontario will have to pay 50% of the cost for a total of $14M). It is assumed that the $14 M in costs will be further equally split between MOE, MNRF and MOECC, that would bring it to approx. $4.7M from each Ministry. Risk identified is the ENERGY`s share. Also, Mesa is requesting a set aside of the NAFTA Tribunal's decision in favour of Canada and Ontario that will take place in early 2017. Funds are required for the US law firm that is defending the case in US court. If legal action to enforce award is necessary, it would take place next FY2017-18 with an estimated amount of $425,000.	VI	LCE	Existing - Ongoing	290201	100%	H	0.4250	0.4250							Without this funding, Ontario would not be able to defend against the allegations made against ENERGY, MNRF and MOECC under NAFTA. Ontario has a MOU with Canada whereby the two governments share the costs of the arbitration equally. Also, Mesa is requesting a set aside of the NAFTA Tribunal's decision in favour of Canada and Ontario. Funds are required for the US law firm that is defending the case in US court.	
004	**CRED**	Energy & Water Reporting and Benchmarking (EWRB) - Customer Relationship Management and Implementation Proposal	Procure customer relationship management software for the implementation of the EWRB Regulation as well as professional services to support implementation of the software technology solution(s), interface creation and go-live technical support for CRM software, database/analytics tools and other interfaces (e.g. to Portfolio Manager).	VI	SPD	New - Ongoing	290201	100%	H	3.2500	3.8000	1.2300	1.5300	0.9800	1.2800	0.9300	1.2300	Having funds available to select the right technology and to procure professional services to support implementation of the software technology solution(s) will be crucial for performing mandatory reporting under the proposed EWRB initiative that could require approximately 18,000 private buildings to report their building's energy and water use annually.	
005	**ESP**	Study on Default Emissions Factors for Electricity Imports	Report developed by expert third party that: (1) outlines a methodology to calculate factors to determine greenhouse gas emissions associated with electricity imports into Ontario and (2) provides factors to be applied to imports under Ontario's cap and trade program.	VI	SPD	New - Ongoing	290201	15%	M	0.0300	0.0900	0.0300	0.0900	0.0300	0.0900	0.0300	0.0900	Government has committed to providing updated emissions factors as per the environmental reporting guidelines.	Funds are not likely to be needed until FY 17-18. Beyond that, familiarity with the topic should bring down consultant costs to undertake the study.

		Risk Name	Description	Offset Code	Risk Type	Risk Classification	Vote Item	% Likelihood	Impact	2017-18		2018-19		2019-20		2020-21		Implications of Risk	Mitigating Strategies
	Division(s)	Provide a short name for the risk	Describe your risk in detail, and provide an explanation of what the risk is and its underlying source or cause	Available offset codes: VI: Vote/Item R: Revenue NOF: No Offset	See tab 'Risk Types' for available codes	A: New - One Time B: New - Ongoing C: Existing - One Time D: Existing - Ongoing	Identify the VOTE/ITEM that is affected by the risk	Determine the likelihood in percentage terms	Indicate if impact of risk is: H: high M: medium L: low	Min ($M)	Max ($M)	Min ($M)	Max ($M)	Min ($M)	Max ($M)	Min ($M)	Max ($M)	Describe the rationale for the likelihood and impact on government operations, services, strategic policy, and stakeholders if the initiative does not proceed or the financial risk is not funded.	Describe the strategy to reduce the impact of the identified risk.
006	**ESP**	Energy East	Procurement of 4 experts to support NEB hearings for the Energy East Project: • Expert Services on Pipeline Environmental Protection • Expert Services on Pipeline Safety • Expert Services on Natural Gas Prices, Tolls and Reliability • Expert Services on Economic Impact Analysis	VI	SPD & PCD	Existing - Ongoing	290201	100%	M	0.6210	0.6210								
007	**SNAP**	OEB Mandate Review	Costs related to the requirement for Ministry to complete a mandate review of the OEB in 2016-17. (The launching of the review is pending Ministry approval)	VI	GAOD/ SPD	New - One Time	290201	50%	L	0.3000	0.3000							Not proceeding with the review would impact the Minister's ability to meet the requirement of the Agencies and Appointment Directive for good agency governance as required by TBS. The review provides assurance that mandate of the OEB is being delivered fully and in alignment with government priorities.	If scope of the review is expanded and requires funding exceeding $100K, there is potential financial offset from other projects from SNAP.
008	**IGS**	Resources to Oversee investments in OPG and Hydro One	The Ministry is looking to secure permanent FTEs and support resources to continue to manage the Province's investment and governance responsibilities related to its interest in OPG and Hydro One	NOF	SPD	Existing - Ongoing	290201	100%	M					5.9300	5.9300	5.9300	5.9300	Without appropriate funding, the Ministry would lack the resources to continue to manage and oversee the government's investments in Hydro One and OPG.	Ministry is request funding during 2017-18 PRRT.
009	**IGS**	Flexibility for Share Sale Strategy	The Ministry is seeking additional funding to provide flexibility to the Province related to its share sale strategy. Most expenses will be offset by proceeds from the sale.	R	PCD	Existing - One Time	290601	100%	H	70.0000	70.0000							Without appropriate funding, the Ministry would be restricted in the timing of its share sale strategy.	Ministry is request funding during 2017-18 PRRT.
010	**IGS**	First Nation Agreement-in-Principle Seed Capital	The Ministry is providing First Nations a cash contribution of up to $45 million in 2017-18. The Ministry received $45 million over 3 year for this cash contribution, but the timing was accelerated.	NOF	PCD	New - One Time	290603	100%	H	45.0000	45.0000							The Ministry has committed through negotiations and opens itself up to risks if not funded.	Ministry is request funding during 2017-18 PRRT.
011	**IGS**	First Nation Agreement-in-Principle Conferred Benefit	The Ministry is required to determine a conferred benefit amounts for First Nations. This would be the difference between the purchase price for First Nations ($18 per share, above book value for the Province) and current market value.		PCD	New - One Time	290604	100%	H	135.0000	135.0000							The Ministry has obligations under a negotiation agreement and opens itself up to risks if not funded.	Ministry is request funding during 2017-18 PRRT.

Non-Financial Risks

Non-financial risks encompass a variety of risks, e.g. risks to the reputation of the government, ability to retain, sustain or develop an expert workforce, the level of employee engagement or quality of information.

Risk Name	Description	Mitigating Strategies
Provide a short name for the risk	Describe your risk in detail, including implications and/or impacts to areas such as government operations, services, strategic policy, stakeholders if the risk should materialize	Describe the strategy to reduce the impact of the identified risk.
First Nation Concerns	Risk that First Nations (FN) will not agree with subsequent share offerings.	Plan to mitigate by engaging with FN communities and working to facilitate FN ownership in Hydro One.
Métis Concerns	Risk that Métis will not agree with subsequent share offerings.	Plan to mitigate by engaging with Métis communities and working to facilitate Métis ownership in Hydro One.
Market Conditions	The Ministry's ability to meet financial targets, as set out by Treasury Board and/or the Ministry of Finance, will be largely impacted by the state of the market.	The Ministry will seek to develop share sale plans and maintain on-going relationships with key investors to maximize returns and minimize costs.
Public Concerns	There have been many public requests to stop the privatization of Hydro One. The Ministry will likely feel similar pressure with each subsequent share sale.	The Ministry will seek to ensure the public is aware of the protections in place (e.g., Ownership restrictions, OEB rate setting process, Hydro One Ombudsman, etc.).
Investor Concerns	Investors will want certainty that the Province will not interfere or attempt to manage Hydro One in any way.	The Ministry has put a Governance Agreement in place to ensure all parties are aware of their rights and to set out the Province's role as an investor rather than a manager. The Ministry will need to ensure that its messaging balances the need to ensure the public knows that protections are in place with ensuring investors don't perceive government interference as this would result in downward pressure on price and ultimately reduce value for the Province.

Risk Types (for completing Column E)

Category	Definition	Code
Strategic/Policy/Performance Risk	Risks related to implementing (or not implementing) new policies or changes to existing policies (e.g. delays in passing legislation). The risk that strategies and policies fail to achieve required/targeted results. The risk of not providing value for money or cost-effectiveness. – Discretionary Risk Note: in exceptional circumstances it could be an External Risk.	**SPD**
Political Commitment	Risk of not meeting publicly announced commitments made to meet/further the government's objectives. Could include platform and mandate letter commitments – Discretionary Risk. Note: In exceptional circumstances it could be an External Risk.	**PCD**
Governance/ Accountability/ Organizational	Risk that the organization structure, accountabilities, or responsibilities are not defined, designed, communicated or implemented to meet the organization's objectives, and/or that culture and management commitment do not support the formal structures. – Discretionary Risk.	**GAOD**
Legal/Contractual Compliance	Risk that a government initiative, or action, will contravene a statute, regulation, contract, and/or MOU – Discretionary Risk	**LCD**
	Risk related to potential cost of complying with a legal or contractual agreement or of litigation against government – External Risk	**LCE**
Controllership/Accounting	Any risks related to the reliability of reporting or a change in accounting (e.g. a change in definition of the threshold for capital accrual, amortization expenses related to Minor Tangible Capital Assets)– External Risk	**CA**
Program Caseload / Utilization	Increased claims/caseload that can be deferred, (e.g., increased caseload) – Discretionary Risk	**UWD**
	Change in demand for services or entitlements. (e.g., Higher utilization for drug program or increase in Social Assistance) Assumes no policy or legislative changes – External Risk	**UWE**
Service/ Operational Risk	The risk that products or services will not get completed or delivered to quality standards or in a timely manner, as expected for reasons not related to caseload. Includes business continuity risk.	**SO**
OPS Compensation/Pensions	Cost recognized from OPS anticipated settlements or future contracts – Discretionary Risk	**OCPD**
	Risk related to OPS binding wage settlement, existing contracts or minimum negotiation mandate – External Risk	**OCPE**
OPS Workforce/ Skill Shortage	Costs associated with changes in FTEs. Risk related to skill shortage – Discretionary Risk	**OCWD**
	Risk related to skill shortage; specialized staff skills not available – External	**OCWE**
BPS Compensation	BPS anticipated negotiation - Discretionary	**BCPD**
	Risk related to BPS binding wage settlements – External Risk	**BCPE**
BPS Workforce	Costs associated with changes in FTEs – Discretionary Risk	**BWD**
	Risk related to staff not available to complete tasks (e.g. skills shortage or inability to hire in a timely way) – External Risk	**BWE**
Information and Information Technology	The risk that information produced or used (e.g., performance data) is incomplete, out-of-date, inaccurate, irrelevant or inappropriate to disclose. Risk that information or other technology (e.g., architecture, hardware, software) does not support busine	**IT**
Capital Project Delays	Risk relating to new projects – Discretionary Risks	**CAPD**
	Risk relating to changes in construction costs and/or project delays – External Risks	**CAPE**
Other	Risk that does not fit any of the above categories but will only materialize with a discrete decision – Discretionary Risk	**OD**
	Risk that does not fit any of the above categories - External Risk	**OE**

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

OGO CONSOLIDATION FORMS

Ministry Contact: **David Chan, Accounting Lead (416-570-4862)**

Ministry: **MOI / Energy / MEDG / MRIS**

Other Government Organization(OGO) Name **220-Ontario Energy Board**

Address: 2300 Yonge Street, 27th Floor

Toronto, ON M4P 1E4

Tel: 416-440-7639 - Naresh Bharkhada

Fax: 416-440-7656

E-Mail: naresh.bharkhada@ontarioenergyboard.ca

Date Submitted: October 27, 2016

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

OGO CONSOLIDATION FORMS

1) FORM A - PROFORMA INCOME STATEMENT

Report on this form all revenue and expense amounts for each relevant line for each year

2) FORM A(i) - DETAILS OF EMPLOYEE BENEFITS EXPENSE

Report a detailed breakdown of employee benefits expense for the periods presented.

3) FORM B - PROFORMA BALANCE SHEET

Report on this form all assets and liabilities amounts for each relevant line for the periods presented.

4) FORM C - TANGIBLE CAPITAL ASSETS

For each category of TCA, report the continuity details for the asset class and related accumulated amortization for the periods presented.

5) FORM D - REVENUE FROM A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

Based on the amounts reported in the proforma income statement (Form A), report **by ministry or other government reporting entity (including hospitals, school boards and colleges by sector)** any revenues from related organizations (GRE); one table for each ministry or government organization; there is no materiality with respect to reporting these amounts

6) FORM E - EXPENSES INCURRED WITH OR ON BEHALF OF A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

Based on the amounts reported in the proforma income statement (Form A), report by ministry or other government reporting entity (including hospitals, school boards and colleges by sector) any expenses incurred with related organizations (GRE); one table for each ministry or government organization; there is no materiality with respect to reporting these amounts

7) FORM F - INTER-ORGANIZATION BALANCES WITH A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

Based on the amounts reported in the proforma balance sheet (Form B), report by ministry or other government reporting entity (including hospitals, school boards and colleges by sector) any year-end balances with related organizations (GRE); one table for each ministry or government organization; there is no materiality with respect to reporting these amounts

8) FORM G - DEFERRED BALANCE CONTINUITY

For amounts reported as DEFERRED REVENUE and DEFERRED CAPITAL CONTRIBUTIONS from related parties (GRE) in Form B, report a continuity of activity in the year **by ministry or other government entity (including hospitals, colleges and school boards by sector)**; one table for each ministry or government organization; there is no materiality with respect to reporting these amounts

9) FORM H - STATEMENT OF CHANGE IN ACCUMULATED SURPLUS/(DEFICIT)

To report the statement of change in accumulated surplus/(deficit) capturing unrealized remeasurement gains or losses.

10) FORM I - NEW LOANS RECEIVABLE

Report in Table 1 any NEW loans receivable that the other government organization (OGO) has entered into or is planning to enter during the current fiscal year and the planned fiscal years.
Report in Table 2 any inter-governmental new loans receivable listed in Table 1.

11) FORM J - NEW INVESTMENTS RECEIVABLE

Report in Table 1 any NEW investments that the OGO has entered into or is planning to enter during the current fiscal year and the planned fiscal years.
Report in Table 2 any inter-governmental NEW investments listed in Table 1.

NOTES

- ALL amounts should be reported in millions of dollars **to the nearest 4 decimals** (e.g. $2,734,588 reported as $2.7346)
- Interim to March 31 should reflect a **FULL YEAR** forecast
- **GRE** means Government Reporting Entity which comprises the Ministries and the organizations controlled by the government and consolidated in the Province's financial statements. Inter-organizational (GRE) balances will need to be reported in various forms. Please refer to schedule 8 in the 2015-16 Consolidated Financial Statements for a list of consolidated organizations.
- Please contact your respective OPCD Analysts if the forms need to be customized to meet your agency's requirements.

LEGEND

- Yellow cells require input by users.
- Light blue cells contain links to related forms, no input is required.

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM A - OTHER GOVERNMENT ORGANIZATION - PROFORMA INCOME STATEMENT

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Please complete yellow cells only, as all blue cells contain either links to other related forms or formulae.

Please report PROFORMA INCOME STATEMENT, on an accrual basis, under the following headings:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Grants/Subsidy from Province and other GRE's **(see Form D)**	-	-	-	-	-
Government of Canada					
Other non-provincial grants (municipal, etc.)					
Interest/Investment Income					
- from External Sources	0.1115	0.1115	0.1115	0.1115	0.1115
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
Deferred revenue recognized					
- from External Sources					
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
Deferred capital contribution amortized to revenue					
- from External Sources	0.7806	1.2238	1.3215	1.2861	0.7625
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
Fees and Licenses					
- from External Sources	0.3725	0.3725	0.3725	0.3725	0.3725
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
Royalties					
- from External Sources					
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
Fines and Penalties					
- from External Sources	0.1000	0.0150	0.0150	0.0150	0.0150
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
Sales and Rentals					
- from External Sources					
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
Other Revenue [1]					
- from External Sources	45.2180	45.5300	45.7200	45.7200	45.7200
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
TOTAL REVENUES	**46.5826**	**47.2528**	**47.5405**	**47.5051**	**46.9815**
Salaries and Wages	24.5339	25.1823	25.7901	25.7901	25.7901
Employee Benefits [2] **(see Form A(i))**	5.3363	5.5591	5.6882	5.6882	5.6882
Transportation and Communication	0.7492	0.7282	0.7252	0.7252	0.7252
Services					
- to External Sources	14.0888	13.5707	12.9768	12.9768	12.9768
- to a Ministry or other GRE **(see Form E)**	-	-	-	-	-
Supplies and Equipment	0.9938	0.9737	1.0237	1.0237	1.0237
Amortization **(See Form C)**	0.7806	1.2238	1.3215	1.2861	0.7625
Transfer Payments [2]					
- to External Sources					
- to a Ministry or other GRE **(see Form E)**	-	-	-	-	-
Interest on Debt					
- to External Sources					
- to a Ministry or other GRE **(see Form E)**	-	-	-	-	-
Realized (Gains)/Losses					
Expense for remediation of contaminated sites[3]					
- from External Sources					
- from a Ministry or other GRE **(see Form E)**	-	-	-	-	-
Other Expenses [1]					
- to External Sources					
- to a Ministry or other GRE **(see Form E)**	-	-	-	-	-
TOTAL EXPENSES	**46.4826**	**47.2378**	**47.5255**	**47.4901**	**46.9665**
SURPLUS/(DEFICIT)	**0.1000**	**0.0150**	**0.0150**	**0.0150**	**0.0150**

Notes:

[1] Also includes gain/loss on sale of assets.

[2] Transfer payments should include all amounts paid to other organizations for which it does not receive any goods or services directly in return (e.g. program delivery)

[3] A new accounting standard PS 3260 liability for contaminated sites became effective April 1, 2014. Additional liabilities identified subsequent to April 1, 2014 need to be reported in the year in which they are identified with an offsetting journal entry to expense for remediation of contaminated site.

ADDITIONAL COMMENTS:

Prepared by: Naresh Bharkhada — Telephone: 416-440-7639

Approved by: John Moon, Finance & Administration Manager (Name and Title) — Date: October 27, 2016

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM A(i) - OTHER GOVERNMENT ORGANIZATION EMPLOYEE BENEFITS EXPENSE

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Please complete yellow cells only, as blue cells contain formulae.

Please provide the following employee benefits expense that is included in your financial statements:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Pension Expense					
- PSPP	1.5000	1.5000	1.5000	1.5000	1.5000
- OPSEU					
- HOOPP					
- Other (please specify)					
Non-pension Retirement Benefits Expense					
Regular Severance or Termination Benefit Expense					
Workers' Compensation Benefit Expense					
Other employee benefit costs	3.8363	4.0591	4.1882	4.1882	4.1882
TOTAL [(1)]	**5.3363**	**5.5591**	**5.6882**	**5.6882**	**5.6882**

Notes:

[(1)] must agree to "Employee Benefits" in Form A.

ADDITIONAL COMMENTS:

Prepared by: Naresh Bharkhada Telephone: 416-440-7639

Approved by: John Moon, Finance & Administration Manager Date: October 27, 2016
(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM B - OTHER GOVERNMENT ORGANIZATION - PROFORMA BALANCE SHEET

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Please complete yellow cells only, as all blue cells contain either links to other related forms or formulae.

Please report PROFORMA BALANCE SHEET under the following headings:

(report in millions)	**Interim as at March 31, 2017**	**Plan as at March 31, 2018**
Cash and Cash Equivalents [1]	11.5831	11.5355
Temporary Investments [2]:		
From External Sources		
From the Province or other GRE **(see Form F)**	-	-
Long-Term Investments [2]:		
From External Sources		
From the Province or other GRE **(see Form F)**	-	-
Accounts Receivable:		
Due from the Province or other GRE **(see Form F)**	-	-
Due from External Sources	1.2500	1.3000
less: Provision for Doubtful Accounts (enter as negative values)		
Due from the Government of Canada		
Loans Receivable:		
- from External Sources		
- from a Ministry or other GRE **(see Form F)**	-	-
Other Assets[3]:		
- from External Sources	3.9250	3.9350
- from a Ministry or other GRE **(see Form F)**	-	-
Tangible Capital Assets *(net of Accumulated Amortization)* **(See Form C)**	3.7468	3.2360
TOTAL ASSETS	**20.5049**	**20.0065**
Accounts Payable & Accrued Liabilities:		
Accrued Transfer Payments:		
-from External Sources		
-from a Ministry or other GRE **(see Form F)**	-	-
Accrued Interest on Debt:		
-from External Sources		
-from a Ministry or other GRE **(see Form F)**	-	-
Accrued Salaries Wages and Benefits	3.6000	3.7000
Accrued Materials, Supplies and Other	3.4000	3.4000
Accounts Payable:		
-to External Sources		
-to a Ministry or other GRE **(see Form F)**	-	-
Debt		
- from External Sources		
- from a Ministry or other GRE **(see Form F)**	-	-
Obligations under Alternative Financing and Procurement		
- from External Sources		
- from a Ministry or other GRE **(see Form F)**	-	-
Deferred Revenue		
- from External Sources		
- from a Ministry or other GRE **(see Form F)**	-	-
Deferred Capital Contribution (DCC) [4]		
- DCC from External Sources [5]	3.0264	2.7776
- from a Ministry or other GRE **(see Form F)**	-	-
Liability for remediation of contaminated sites[6]		
- from External Sources		
- from a Ministry or other GRE **(see Form F)**	-	-
Other Liabilities[7] :		
- from External Sources	8.0502	7.6856
- from a Ministry or other GRE **(see Form F)**	-	-
TOTAL LIABILITIES	**18.0766**	**17.5632**
NET ASSETS	**2.4283**	**2.4433**

Notes:

[1] Cash comprises of cash on hand, demand deposits and bank indebtness. Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. An investment normally qualifies as a cash equivalent only when it has a short maturity of, for example, three months or less from the date of acquisition.

[2] Temporary investments include treasury bills or investments certificates, and are generally capable of reasonable prompt liquidation (i.e. within one year). If the maturity of the investment is three months or less, the investment normally qualifies as a cash and cash equivalent (refer to (1) above). Investments longer than one year to liquidation should be classified as long-term investments.
Investments include mark-to-market adjustments on financial instruments where appropriate **(See Form H)**.

[3] Include Non-TP prepaid expenses and inventory for consumption under other assets.

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM B - OTHER GOVERNMENT ORGANIZATION - PROFORMA BALANCE SHEET

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

(4) Deferred capital contributions (DCC) represents unamortized portion of tangible capital assets or liabilities to construct or acquire tangible capital assets from specific-purpose funding. Deferred capital contributions are recorded in revenue over the estimated useful life of the underlying tangible capital asset once constructed or acquired.

(5) External sources represent the funding received from Government of Canada, municipalities or third parties.

(6) A new accounting standard PS 3260 liability for contaminated sites became effective April 1, 2014. Additional liabilities identified subsequent to April 1, 2014 need to be reported in the year in which they are identified with an offsetting journal entry to expense for remediation of contaminated site.

(7) Other liabilities include mark-to-market adjustments on financial instruments reported as liabilities **(See Form H)**.

ADDITIONAL COMMENTS:

Prepared by: Naresh Bharkhada Telephone: 416-440-7639

Approved by: John Moon, Finance & Administration Manager Date: October 27, 2016
(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM C - OTHER GOVERNMENT ORGANIZATIONS - TANGIBLE CAPITAL ASSETS

GOVERNMENT ORGANIZATION NAME: 220-Ontario Energy Board

Please complete yellow cells only, as blue cells contain formulae.

Report all tangible capital assets in this schedule.

(Report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018	Outlook as at March 31, 2019	Outlook as at March 31, 2020	Outlook as at March 31, 2021
LAND [1]:					
Opening balance		-	-	-	-
Add: Additions					
Add: Transfer from CIP [5]	-	-	-	-	-
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write Offs (enter as negative values)					
TOTAL LAND - CLOSING	**-**	**-**	**-**	**-**	**-**
BUILDINGS [2]:					
Opening balance		-	-	-	-
Add: Additions					
Add: Transfer from CIP [5]	-	-	-	-	-
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write Offs (enter as negative values)					
Closing balance	-	-	-	-	-
Accumulated Amortization:					
Opening balance		-	-	-	-
Add: Amortization expense					
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write Offs (enter as negative values)					
Closing balance	-	-	-	-	-
BUILDINGS - NET BOOK VALUE	**-**	**-**	**-**	**-**	**-**
TRANSPORTATION INFRASTRUCTURE [3]					
Opening balance		-	-	-	-
Add: Additions					
Add: Transfer from CIP [5]	-	-	-	-	-
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write Offs (enter as negative values)					
Closing balance	-	-	-	-	-
Accumulated Amortization:					
Opening balance		-	-	-	-
Add: Amortization expense					
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write Offs (enter as negative values)					
Closing balance	-	-	-	-	-
TRANSPORTATION INRASTRUCTURE - NET BOOK VALUE	**-**	**-**	**-**	**-**	**-**
OTHER [4]:					
Opening balance	21.2301	23.2171	24.1921	24.8771	25.5621
Add: Additions	1.9870	0.9750	0.6850	0.6850	0.6850
Add: Transfer from CIP [5]	-	-	-	-	-
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write Offs (enter as negative values)					
Closing balance	23.2171	24.1921	24.8771	25.5621	26.2471
Accumulated Amortization:					
Opening balance	18.4277	19.4703	20.9561	22.5396	24.0877
Add: Amortization expense	0.7806	1.2238	1.3215	1.2861	0.7625
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write Offs (enter as negative values)	0.2620	0.2620	0.2620	0.2620	0.2620
Closing balance	19.4703	20.9561	22.5396	24.0877	25.1122
OTHER - NET BOOK VALUE	**3.7468**	**3.2360**	**2.3375**	**1.4744**	**1.1349**
CONSTRUCTION IN PROGRESS - LAND					
Opening balance		-	-	-	-
Add: Traditional Financed					
Add: AFP Projects					
Add: Interest capitalized					
Less: Transfers to in-service (enter as negative values)					
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write offs (enter as negative values)					
Closing balance	-	-	-	-	-

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM C - OTHER GOVERNMENT ORGANIZATIONS - TANGIBLE CAPITAL ASSETS

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Please complete yellow cells only, as blue cells contain formulae.

CONSTRUCTION IN PROGRESS - BUILDINGS					
Opening balance		-	-	-	-
Add: Traditional Financed					
Add: AFP Projects					
Add: Interest capitalized					
Less: Transfers to in-service (enter as negative values)					
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write offs (enter as negative values)					
Closing balance	-	-	-	-	-
CONSTRUCTION IN PROGRESS - TRANSPORTATION INFRASTRUCTURE					
Opening balance		-	-	-	-
Add: Traditional Financed					
Add: AFP Projects					
Add: Interest capitalized					
Less: Transfers to in-service (enter as negative values)					
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write offs (enter as negative values)					
Closing balance	-	-	-	-	-
CONSTRUCTION IN PROGRESS - OTHERS					
Opening balance		-	-	-	-
Add: Traditional Financed					
Add: AFP Projects					
Add: Interest capitalized					
Less: Transfers to in-service (enter as negative values)					
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write offs (enter as negative values)					
Closing balance	-	-	-	-	-
NET TANGIBLE CAPITAL ASSETS	3.7468	3.2360	2.3375	1.4744	1.1349

SUMMARY INFORMATION

Gross Additions (excluding Construction in Progress)		0.9750	0.6850	0.6850	0.6850
Gross Additions - Construction in Progress	-	-	-	-	-
TOTAL GROSS ADDITIONS	**-**	**0.9750**	**0.6850**	**0.6850**	**0.6850**
Disposals and Other adjustments / Write-offs (net)	(0.2620)	(0.2620)	(0.2620)	(0.2620)	(0.2620)
TOTAL ADDITIONS (NET OF DISPOSAL AND OTHER ADJUSTMENTS / WR	(0.2620)	0.7130	0.4230	0.4230	0.4230
TOTAL AMORTIZATION EXPENSE	0.7806	1.2238	1.3215	1.2861	0.7625

Notes:

(1) Land includes land acquired for transportation infrastructure, parks, buildings, and other program use and land improvements. Land excludes Crown lands acquired by right.

(2) Includes those acquired through capital leases and Construction in Progress.

(3) Transportation infrastructure includes highways, railway and track improvements, bridges and related structures and facilities, but excludes land and buildings.

(4) Other tangible capital assets include those capital assets not reported under Land, Buildings and Transportation Infrastructure. Examples include railway equipment, computer equipment, vehicles, aircrafts, furniture, and administrative & service equipment owned by government organizations.

(5) Assets Transferred from Construction-in-Progress (CIP) - This row tracks the cost of assets where construction has been completed during the current fiscal year and the related asset has been placed into service and therefore transferred into the appropriate asset category.

ADDITIONAL COMMENTS:

Prepared by: Naresh Bharkhada — Telephone: 416-440-7639

Approved by: John Moon, Finance & Administration Manager (Name and Title) — Date: October 27, 2016

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM D - REVENUE FROM A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as all blue cells contain either links to related forms or formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Revenue from a Ministry or other GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM D - REVENUE FROM A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as all blue cells contain either links to related forms or formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM D - REVENUE FROM A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as all blue cells contain either links to related forms or formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

Total Revenue from Ministries or other GREs:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue	-	-	-	-	-
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income	-	-	-	-	-
Fees and Licenses	-	-	-	-	-
Royalties	-	-	-	-	-
Fines and Penalties	-	-	-	-	-
Sales and Rentals	-	-	-	-	-
Other Revenue (please specify):	-	-	-	-	-
TOTAL REVENUE FROM RELATED ENTITIES	**-**	**-**	**-**	**-**	**-**

ADDITIONAL COMMENTS:

Prepared by: Naresh Bharkhada — Telephone: 416-440-7639

Approved by: John Moon, Finance & Administration Manager (Name and Title) — Date: October 27, 2016

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM E - EXPENSES INCURRED WITH OR ON BEHALF OF A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: 220-Ontario Energy Board

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as blue cells contain formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Expenses Incurred With or On Behalf of a Ministry or other GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt					
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	-	-	-	-	-

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt					
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	-	-	-	-	-

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt					
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	-	-	-	-	-

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt					
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	-	-	-	-	-

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM E - EXPENSES INCURRED WITH OR ON BEHALF OF A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: 220-Ontario Energy Board

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as blue cells contain formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt					
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	-	-	-	-	-

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt					
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	-	-	-	-	-

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt					
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	-	-	-	-	-

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt					
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	-	-	-	-	-

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM E - EXPENSES INCURRED WITH OR ON BEHALF OF A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as blue cells contain formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

Total Expenses Incurred With or On Behalf of Ministries or other GREs:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Transfer payments	-	-	-	-	-
Interest on debt	-	-	-	-	-
Services	-	-	-	-	-
Expense for remediation of contaminated sites	-	-	-	-	-
Other Expenses (please specify):	-	-	-	-	-
TOTAL EXPENSE FROM RELATED ENTITIES	**-**	**-**	**-**	**-**	**-**

ADDITIONAL COMMENTS:

Prepared by: Naresh Bharkhada — Telephone: 416-440-7639

Approved by: John Moon, Finance & Administration Manager (Name and Title) — Date: October 27, 2016

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM F - INTER-ORGANIZATION BALANCES WITH A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as all blue cells contain either links to related forms or formulae.

Please identify all balances arising from transactions with or for GRE's included in your statement of financial position as at March 31, and provide a brief description:

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt		
Payables to a Ministry or Government Organization		
Loans Payable (Debt)		
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt		
Payables to a Ministry or Government Organization		
Loans Payable (Debt)		
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt		
Payables to a Ministry or Government Organization		
Loans Payable (Debt)		
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM F - INTER-ORGANIZATION BALANCES WITH A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as all blue cells contain either links to related forms or formulae.

Please identify all balances arising from transactions with or for GRE's included in your statement of financial position as at March 31, and provide a brief description:

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt		
Payables to a Ministry or Government Organization		
Loans Payable (Debt)		
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt		
Payables to a Ministry or Government Organization		
Loans Payable (Debt)		
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt		
Payables to a Ministry or Government Organization		
Loans Payable (Debt)		
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM F - INTER-ORGANIZATION BALANCES WITH A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as all blue cells contain either links to related forms or formulae.

Please identify all balances arising from transactions with or for GRE's included in your statement of financial position as at March 31, and provide a brief description:

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt		
Payables to a Ministry or Government Organization		
Loans Payable (Debt)		
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt		
Payables to a Ministry or Government Organization		
Loans Payable (Debt)		
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

Total Assets and Liabilities Incurred With or On Behalf of Ministries or other GREs:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments	-	-
Long-Term Investments	-	-
Receivables from a Ministry or Government Organization	-	-
Loans Receivable	-	-
Other Assets(please specify):	-	-
Accrued Transfer Payments	-	-
Accrued Interest on Debt	-	-
Payables to a Ministry or Government Organization	-	-
Loans Payable (Debt)	-	-
Obligations under Alternative Financing and Procurement	-	-
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites	-	-
Other Liabilities(please specify):	-	-

ADDITIONAL COMMENTS:

Prepared by: Naresh Bharkhada Telephone: 416-440-7639

Approved by: John Moon, Finance & Administration Manager Date: October 27, 2016
(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM G -DEFERRED BALANCE CONTINUITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as blue cells formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Please provide a deferred balance continuity schedule under the following headings:

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred revenue	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED REVENUE [1]	-	-	-	-	-

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred capital contribution	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED CAPITAL CONTRIBUTION [2]	-	-	-	-	-

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Please provide a deferred balance continuity schedule under the following headings:

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred revenue	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED REVENUE [1]	-	-	-	-	-

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred capital contribution	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED CAPITAL CONTRIBUTION [2]	-	-	-	-	-

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM G -DEFERRED BALANCE CONTINUITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as blue cells formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Please provide a deferred balance continuity schedule under the following headings:

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred revenue	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED REVENUE [1]	-	-	-	-	-

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred capital contribution	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED CAPITAL CONTRIBUTION [2]	-	-	-	-	-

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Please provide a deferred balance continuity schedule under the following headings:

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred revenue	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED REVENUE [1]	-	-	-	-	-

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred capital contribution	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED CAPITAL CONTRIBUTION [2]	-	-	-	-	-

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM G -DEFERRED BALANCE CONTINUITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as blue cells formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Please provide a deferred balance continuity schedule under the following headings:

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred revenue	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED REVENUE [1]	-	-	-	-	-

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred capital contribution	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED CAPITAL CONTRIBUTION [2]	-	-	-	-	-

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Please provide a deferred balance continuity schedule under the following headings:

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred revenue	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED REVENUE [1]	-	-	-	-	-

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred capital contribution	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED CAPITAL CONTRIBUTION [2]	-	-	-	-	-

Notes:

[1] Must agree to "Deferred Revenue" on Form F.

[2] Must agree to "Deferred Capital Contribution" on Form F.

ADDITIONAL COMMENTS:

Prepared by: Naresh Bharkhada Telephone: 416-440-7639

Approved by: John Moon, Finance & Administration Manager Date: October 27, 2016
(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM H - STATEMENT OF CHANGE IN ACCUMULATED SURPLUS/(DEFICIT)

(To Be Completed by the Government Organization)

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Please complete yellow cells only, as blue cells contain formulae. Enter losses as negative values.

Fiscal year ended March 31 (report in millions)	Reference	March 31 2017	
Accumulated surplus (deficit) is comprised of:			
A. Accumulated operating surplus (deficit)	Table 1 A	2.4283	
B. Accumulated remeasurement gains (losses)	Table 1 B	-	
Accumulated surplus (deficit) at Year End		2.4283	
			Check
Net Assets as at March 31, 2017	Note 1, Note 4, Form B	2.4283	**OK**

Table 1: Please provide information required below

A. Accumulated operating surplus (deficit)	Reference	March 31 2017
Accumulated Operating Surplus/(Deficit) per final OGO forms as at March 31, 2016 (submitted for the 2015-16 Public Accounts)		2.3283
Add/(Less): Surplus/(Deficit)	Form A	0.1000
Other – please specify:	Note 2	
Accumulated Operating Surplus/(Deficit) at End of Year		**2.4283**
B. Accumulated remeasurement gains (losses) [3]	**Note 3**	
Accumulated remeasurement gains / (losses) Per Audited Financial Statements as at March 31, 2016		
Unrealized gains (losses) attributable to:		
Foreign exchange		
Derivatives		
Portfolio Investments		
Less: Amounts reclassified to the statement of operations	Form A	-
Accumulated remeasurement gains and losses at End of Year		**-**

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM H - STATEMENT OF CHANGE IN ACCUMULATED SURPLUS/(DEFICIT)

(To Be Completed by the Government Organization)

Notes

(1) Must agree to "Total Assets" in Form B less "Total Liabilities" in Form B.

(2) Please describe the nature of "other adjustments",

(i) ----------.
(ii) ----------.
(iii) ----------.
(iv) ----------.

(3) Remeasurement gains and losses - this statement is used to distinguish remeasurement gains and losses from the operating revenue and expenses. Remeasurement gains and losses include unrealized changes in fair value of instruments measured at fair value and unrealized foreign exchange gains and losses. Remeasurement gains and losses will be accumulated in the statement of remeasurement gains and losses until the financial instrument they are associated with is derecognized. Upon derecognition of the instrument, the remeasurement gains and losses are reclassified to the statement of operations.

(4) On the statement of financial position net assets will have to be reconciled to the accumulated operating surplus/deficit and the accumulated remeasurement gains and losses.

(5) Accumulated Operating Surplus/(Deficit) - equals to opening accumulated surplus/deficit less opening unrealized gains or losses attributable to foreign exchange, derivatives and portfolio investments.

ADDITIONAL COMMENTS:

Prepared by: Naresh Bharkhada

Telephone: 416-440-7639

Approved by: John Moon, Finance & Administration Manager
(Name and Title)

Date: October 27, 2016

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM I - NEW LOANS RECEIVABLE

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: 220-Ontario Energy Board

Table 1						Principal Repayment (Outstanding loan $000's)							Principal Repayment (Outstanding loan $000's)					Principal repayment	
		Loan Interest Rate																	
New Loans Receivable	Loan Amount	Fixed Interest Rate of Loan	Floating Rate (if interest rate will not be fixed)	Loan Start Date	Loan Maturity Date	2017	2018	2019	2020	2021	2022	Sub-total	2023-2028	2029-2034	2035-2040	2041 and thereafter	Sub-total	No fixed maturity	Total repayment
												-					-		-
												-					-		-
												-					-		-
												-					-		-
												-					-		-
												-					-		-
												-					-		-
												-					-		-
												-					-		-
												-					-		-
												-					-		-
Total	-					-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2 - Please specify new loans receivable(s) with Inter-Governmental Units (if applicable):						Principal Repayment (Outstanding loan $000's)					
		Loan Interest Rate									
Name of Government Reporting Entity (GRE)	Loan Amount	Fixed Interest Rate of Loan	Floating Rate (if interest rate will not be fixed)	Loan Start Date	Loan Maturity Date	2017	2018	2019	2020	2021	2022
TOTAL NEW LOANS RECEIVABLE WITH INTER-GOVERNMENTAL UNITS	-					-	-	-	-	-	-

Prepared by: Naresh Bharkhada

Telephone: 416-440-7639

Approved by: John Moon, Finance & Administration Manager
(Name and Title)

Date: October 27, 2016

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM J - NEW INVESTMENTS

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **220-Ontario Energy Board**

Table 1

New Investment(s)	Investment Amount	Investment Interest Rate		Investment Start Date	Investment Maturity Date
		Fixed Interest Rate of Investment	Floating Rate (if interest rate will not be fixed)		
Total	-				

Table 2 - Please specify new Investments with Inter-Governmental Units (if applicable):

Name of Government Reporting Entity (GRE)	Investment Amount	Investment Interest Rate		Investment Start Date	Investment Maturity Date
		Fixed Interest Rate of Investment	Floating Rate (if interest rate will not be fixed)		
TOTAL NEW INVESTMENTS WITH INTER-GOVERNMENTAL UNITS	-				

Prepared by: Naresh Bharkhada

Telephone: 416-440-7639

Approved by: John Moon, Finance & Administration Manager
(Name and Title)

Date: October 27, 2016

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM 1A - REVENUES FROM OTHER GOVERNMENT ORGANIZATIONS

(To Be Completed by the Ministry)

RESPONSIBLE MINISTRY: Energy

GOVERNMENT ORGANIZATION NAME *: Ontario Energy Board

(report in millions to the nearest 4 decimals)	2017	2018	2019	2020	2021
Revenues[1] from Other Government Organization recorded by the Ministry as:	**Interim**	**Plan**	**Forecast**	**Forecast**	**Forecast**
Fees and Licenses					
Royalties					
Fines and Penalties					
Utility Service Charges					
Sales and Rentals					
Recovery of Prior Year's Expenditures					
Miscellaneous					
Profits from Crown Corporations					
Dividends					
Total Revenues[1] from Other Government Organization	-	-	-	-	-

* Please complete a separate schedule for each Government Organization.

[1] Revenue on an accrual basis from the Other Government Organization as recorded by the Ministry.

Prepared by: _____ Telephone: _____

Approved by: _____ Date: _____
(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION
FORM 1B - EXPENSES INCURRED WITH OR ON BEHALF OF OTHER GOVERNMENT ORGANIZATIONS

(To Be Completed by the Ministry)

RESPONSIBLE MINISTRY: **Energy**

GOVERNMENT ORGANIZATION NAME *: **Ontario Energy Board**

(report in millions to the nearest 4 decimals)	2017	2018	2019	2020	2021
Expenses[(1)] Incurred With or On Behalf of Other Government Organization recorded by the Ministry as:	**Interim**	**Plan**	**Forecast**	**Forecast**	**Forecast**
Salaries and Wages					
Transportation and Communication					
Services					
Supplies and Equipment					
Transfer Payments (Operating)					
Transfer Payments (Capital)					
Other Transactions					
Less: Recoveries *(Please Specify)*					
Total Expenses[(1)] Incurred With or On Behalf of Other Government Organization	-	-	-	-	-

* Please complete a separate schedule for each Government Organization.

[(1)] Include expenses incurred with or on behalf of Other Government Organizations, such as transfer payments to the government organization and administrative expenses incurred by the Ministry on behalf of the government organization.

Prepared by: _____ Telephone: _____

Approved by: _____ Date: _____
(Name and Title)

TCA Supplementary Schedule - Infrastructure 10 Year Plan- Other Government Organizations

GOVERNMENT ORGANIZATION NAME: 220-Ontario Energy Board

Report in millions of dollars (4 decimal places)

	Interim 2016-17	Plan 2017-18	Outlook 2018-19	Outlook 2019-20	Outlook 2020-21	Outlook 2021-22	Outlook 2022-23	Outlook 2023-24	Outlook 2024-25	Outlook 2025-26	Outlook 2026-27
Land [1]											
Building [1]											
Transportation infrastructure [1]											
Construction in Progress [1]											
Others Assets [1]	1.9870	0.9750	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850
Interest capitalized											
Gross Additions [1] - A	1.9870	0.9750	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850
Provincial share [2]											
Third party contribution [3]	1.9870	0.9750	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850
Gross Additions - B (B must equal A above)	1.9870	0.9750	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850	0.6850
Ministry Capital Expense - Voted											
Provincial capital transfer payments [4] (enter as negative)											
Amortization expense [5] (enter as positive)	0.7806	1.2238	1.3215	1.2861	0.7625	0.7625	0.7625	0.7625	0.7625	0.7625	0.7625
Capital Consolidation Adjustment	0.7806	1.2238	1.3215	1.2861	0.7625	0.7625	0.7625	0.7625	0.7625	0.7625	0.7625

Plan over Plan Check (10-yr as of 2016-17 vs 10-yr as of 2017-18)	10-Yr Plan (2016-17)	10-Yr Plan (2017-18)	Change	Explanation [6]
Total Additions	7.3228	7.1400	(0.1828)	
Other Partner Funding	7.3228	7.1400	(0.1828)	
Provincial-Funded Expenditure		-	-	
Provincial Capital Grants	-	-	-	
Amortization Expense	8.4272	9.1689	0.7417	

[1] For periods up to 21-22, this balance can be taken directly from the "Additions" row in Form C of the OGO Reporting Templates

[2] Provincial funding used for acquiring capital in the current year. including any funding that was flowed to an agency in a prior period but used in the current period to acquire capital.

[3] Amounts funded (or to be funded) from non-provincial sources such as donations and grants from other levels of government, as well as the use of own resources such as own-source debt and reinvestment of internally generated surplus or reserves.

[4] Represents the voted ministry capital transfer payment to the agency for the fiscal year. May not equal the balance shown in the "Provincial Share" column above if the "Provincial Share" includes funds that were transferred to an agency in prior periods or funds that were appropriated for operating purposes, but used for capital. Otherwise the amounts should agree.

[5] For periods up to 21-22, this balance can be taken directly from the "Amortization" expense row in Form A of the OGO Reporting Templates

[6] Please provide variance explanations if the 10 year change is greater than $100M

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION (PRRT)
INSTRUCTIONS FOR COMPLETING THE CONSOLIDATION SUMMARY FORM

1) **THIS FORM IS TO BE COMPLETED BY THE MINISTRY.**

2) **ONLY INPUT DATA IN THE "YELLOW" SHADED CELLS OF THE FORM.**

3) **NUMBERS ARE INPUT "IN MILLIONS" WITH UP TO FOUR DECIMAL PLACES.**

4) **UNDER THE "DATA INPUT NOTES" SECTION OF THIS FORM, PLEASE ENSURE THAT THE DATA BEING INPUT IS TAKEN FROM THE SOURCE AS INSTRUCTED IN "GREEN" WITHIN EACH SECTION.**

5) **SUBMIT COMPLETED FORM TO OPCD FOR REVIEW.**

6) **UPON OPCD'S REVIEW AND APPROVAL, THE MINISTRY MUST USE THE COMPLETED FORM AS THE BASIS FOR POPULATING AGENCY CONSOLIDATION ADJUSTMENTS IN ORBIT.**

7) **MINISTRY MUST ATTACH THE COMPLETED FORM TO THE RELATED ORBIT DOCKET AS SUPPORT FOR CONSOLIDATION ADJUSTMENTS.**

2017-18 Program Review, Renewal and Transformation (PRRT) - Consolidation Summary Form

Please input data in yellow cells only.

Agency Name: **Ontario Energy Board**
Responsible Ministry **Energy**
Date Submitted:

	NOTES (See	In Millions 2016-17 Interim	2017-18 Plan	2018-19 Outlook	2019-20 Outlook	2020-21 Outlook
Agency Revenue - Input from Form A	1	46.5826	47.2528	47.5405	47.5051	46.9815
Less: Grants & Subsidies from Province	1	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Interest Income (to Provincial & External IOD)*	1	0.1115	0.1115	0.1115	0.1115	0.1115
Less: Amortization Revenue of Provincial DCC/DR	1	0.0000	0.0000	0.0000	0.0000	0.0000
Less: All remaining sources of revenues earned from Province / OGO	1	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Misc. Revenue (elimination of agency ODOE with the Ministries)	2	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Other Revenues *(Input additional breakdowns in note 5)*	5	0.0000	0.0000	0.0000	0.0000	0.0000
Adjustment to CRF Revenue		46.4711	47.1413	47.4290	47.3936	46.8700
Total Agency Expense - Input from Form A		46.4826	47.2378	47.5255	47.4901	46.9665
Less: Operating TP	3	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Capital TP	3	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Interest Expense - External + Provincial *(to Provincial IOD)**	2	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Other Expenses to Province (elimination of agency ODOE with Ministries)	2	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Other Transactions (elimination of agency Revenue from Province / OGO, other than TP & amort. of DCC/DR)	1	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Pension contributions paid to PSPP/OPSEU Pension Plan	4	1.5000	1.5000	1.5000	1.5000	1.5000
Less: Expenses for Contaminated Sites	2	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Other Expenses (*Input additional breakdowns in note 5)*	5	0.0000	0.0000	0.0000	0.0000	0.0000
Adjustment to CRF Expense		**44.9826**	**45.7378**	**46.0255**	**45.9901**	**45.4665**
Net Consolidated Surplus/(Deficit) agency pick-up		1.4885	1.4035	1.4035	1.4035	1.4035
Net Operating expense adjustment pick-up		**44.2020**	**44.5140**	**44.7040**	**44.7040**	**44.7040**
Net Capital expense adjustment pick-up		**0.7806**	**1.2238**	**1.3215**	**1.2861**	**0.7625**
Total CRF Expense Adjustment		**44.9826**	**45.7378**	**46.0255**	**45.9901**	**45.4665**
Check		**CORRECT**	**CORRECT**	**CORRECT**	**CORRECT**	**CORRECT**
Interest on Debt (IOD)*		**(0.1115)**	**(0.1115)**	**(0.1115)**	**(0.1115)**	**(0.1115)**

*Fiscal impacts do not include adjustment made to IOD which is reported separately under Province's Interest on Debt

DATA INPUT NOTES (corresponds to "NOTES" column above):

1 Pre-consolidated revenues per agency submission **(Form A)**:

REVENUE (in Millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Grants & Subsidies from Province					
Government of Canada					
Other non-provincial grants (Municipal , etc.)					
Interest/Investment Income (Internal + External sources)	0.1115	0.1115	0.1115	0.1115	0.1115
Recognition of Deferred Revenue:					
From External Sources					
From Province / Government Controlled Organization					
Amortization of Deferred Capital Contributions:					
From External Sources	0.7806	1.2238	1.3215	1.2861	0.7625
From Province / Government Controlled Organization					
Fees & Licenses:					
From External Sources	0.3725	0.3725	0.3725	0.3725	0.3725
From Province / Government Controlled Organization					
Royalties					
From External Sources					
From Province / Government Controlled Organization					
Fines and Penalties					
From External Sources	0.1000	0.0150	0.0150	0.0150	0.0150
From Province / Government Controlled Organization					
Sales & Rental:					
From External Sources					
From Province / Government Controlled Organization					
Other Revenue:					

From External Sources	45.2180	45.5300	45.7200	45.7200	45.7200
From Province / Government Controlled Organization					
Total Revenue	**46.5826**	**47.2528**	**47.5405**	**47.5051**	**46.9815**

Post-consolidated revenue breakdowns: *(For OPCD to complete)*	2016-17	2017-18	2018-19	2019-20	2020-21
Vehicle/Driver Registration Fees					
Brewer's Manufacturing Fees					
Other Fees, Licences and Permits					
Royalties					
Sales and Rentals					
Fines and Penalties					
Recoveries					
Reimbursements					
Other Federal Payment					
Miscellaneous Revenue					
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Check	**INCORRECT**	**INCORRECT**	**INCORRECT**	**INCORRECT**	**INCORRECT**

2 Pre-consolidated expenses per agency submission **(Form A)**:

EXPENSES (In Millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Salary and Wages	24.5339	25.1823	25.7901	25.7901	25.7901
Employee Benefits	5.3363	5.5591	5.6882	5.6882	5.6882
Transportation and Communication	0.7492	0.7282	0.7252	0.7252	0.7252
Services					
To External Sources	14.0888	13.5707	12.9768	12.9768	12.9768
To Ministry					
To Other Government Controlled Organization *(elimination done by receiving agency)*					
Supplies and Equipment	0.9938	0.9737	1.0237	1.0237	1.0237
Amortization	0.7806	1.2238	1.3215	1.2861	0.7625
Transfer Payments					
Interest on Debt (External + Provincial)					
Realized Gains and Losses					
Other Expenses					
To External Sources					
To Ministry					
To Other Government Controlled Organization *(elimination done by receiving agency)*					
Expenses for Contaminated Sites					
To External Sources					
To Ministry					
To Other Government Controlled Organization *(elimination done by receiving agency)*					
Total Expenses	**46.4826**	**47.2378**	**47.5255**	**47.4901**	**46.9665**

Agency Net Surplus/(Deficit) before eliminations **(Must Agree to Surplus/Deficit balan**	0.1000	0.0150	0.0150	0.0150	0.0150

3 **MINISTRY TRANSFER PAYMENTS** **(Per Ministry Form 1B; must tie into ORBIT submissi**

Transfer Payments (In Millions):	2016-17	2017-18	2018-19	2019-20	2020-21
Operating TP from Reporting Ministry	0.0000	0.0000	0.0000	0.0000	0.0000
Capital TP from Reporting Ministry (please specify)	0.0000	0.0000	0.0000	0.0000	0.0000
Total TP - Capital and Operating	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4 Pension contributions paid directly by the consolidated agency to Public Service Pension Plan (PSPP) and OPSEU Pension plan [**Form A (i)**] are eliminated upon consolidation. Please enter amounts in **Form A(i)** for PSPP and/ or OPSEU.

5 Please indicate the nature of other adjustments (i.e. reversal of unrealized gains/losses, gross-ups, other PSAB adjustments to conform to Province's accounting policy, tangible capital asset transfers out of agency at nominal value, etc.) below:

Breakdown of Other Revenues and Expenses	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Other Revenues:					
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Other Expenses:					
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Additional Comments:

Prepared By: _____
(Name, Title and Contact Number)

Approved By: _____
(Name, Title and Contact Number)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM 1A - REVENUES FROM OTHER GOVERNMENT ORGANIZATIONS

(To Be Completed by the Ministry)

RESPONSIBLE MINISTRY: **Energy**

GOVERNMENT ORGANIZATION NAME *: **Independent Electricity System Operator**

(report in millions to the nearest 4 decimals)	2017	2018	2019	2020	2021
Revenues[(1)] from Other Government Organization recorded by the Ministry as:	**Interim**	**Plan**	**Forecast**	**Forecast**	**Forecast**
Fees and Licenses					
Royalties					
Fines and Penalties					
Utility Service Charges					
Sales and Rentals					
Recovery of Prior Year's Expenditures					
Miscellaneous					
Profits from Crown Corporations					
Dividends					
Total Revenues[(1)] from Other Government Organization	-	-	-	-	-

* Please complete a separate schedule for each Government Organization.

(1) Revenue on an accrual basis from the Other Government Organization as recorded by the Ministry.

Prepared by: _____ Telephone: _____

Approved by: _____ Date: _____
(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION
FORM 1B - EXPENSES INCURRED WITH OR ON BEHALF OF OTHER GOVERNMENT ORGANIZATIONS

(To Be Completed by the Ministry)

RESPONSIBLE MINISTRY: **Energy**

GOVERNMENT ORGANIZATION NAME *: **Independent Electricity System Operator**

(report in millions to the nearest 4 decimals)	2017	2018	2019	2020	2021
Expenses[(1)] Incurred With or On Behalf of Other Government Organization recorded by the Ministry as:	**Interim**	**Plan**	**Forecast**	**Forecast**	**Forecast**
Salaries and Wages					
Transportation and Communication					
Services					
Supplies and Equipment					
Transfer Payments (Operating)					
Transfer Payments (Capital)					
Other Transactions					
Less: Recoveries *(Please Specify)*					
Total Expenses[(1)] Incurred With or On Behalf of Other Government Organization	-	-	-	-	-

* Please complete a separate schedule for each Government Organization.

(1) Include expenses incurred with or on behalf of Other Government Organizations, such as transfer payments to the government organization and administrative expenses incurred by the Ministry on behalf of the government organization.

Prepared by: _____ Telephone: _____

Approved by: _____ Date: _____
(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

OGO CONSOLIDATION FORMS

Ministry Contact: **David Chan, Accounting Lead (416-570-4862)**

Ministry: **MOI / Energy / MEDG / MRIS**

Other Government Organization(OGO) Name **219-Independent Electricity System Operator**

Address: 120 Adelaide Street West

Suite 1600 Toronto, Ontario M5H 1T1

Tel:

Fax:

E-Mail:

Date Submitted: November 4, 2016

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

OGO CONSOLIDATION FORMS

1) FORM A - PROFORMA INCOME STATEMENT

Report on this form all revenue and expense amounts for each relevant line for each year

2) FORM A(i) - DETAILS OF EMPLOYEE BENEFITS EXPENSE

Report a detailed breakdown of employee benefits expense for the periods presented.

3) FORM B - PROFORMA BALANCE SHEET

Report on this form all assets and liabilities amounts for each relevant line for the periods presented.

4) FORM C - TANGIBLE CAPITAL ASSETS

For each category of TCA, report the continuity details for the asset class and related accumulated amortization for the periods presented.

5) FORM D - REVENUE FROM A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

Based on the amounts reported in the proforma income statement (Form A), report **by ministry or other government reporting entity (including hospitals, school boards and colleges by sector)** any revenues from related organizations (GRE); one table for each ministry or government organization; there is no materiality with respect to reporting these amounts

6) FORM E - EXPENSES INCURRED WITH OR ON BEHALF OF A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

Based on the amounts reported in the proforma income statement (Form A), report by ministry or other government reporting entity (including hospitals, school boards and colleges by sector) any expenses incurred with related organizations (GRE); one table for each ministry or government organization; there is no materiality with respect to reporting these amounts

7) FORM F - INTER-ORGANIZATION BALANCES WITH A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

Based on the amounts reported in the proforma balance sheet (Form B), report by ministry or other government reporting entity (including hospitals, school boards and colleges by sector) any year-end balances with related organizations (GRE); one table for each ministry or government organization; there is no materiality with respect to reporting these amounts

8) FORM G - DEFERRED BALANCE CONTINUITY

For amounts reported as DEFERRED REVENUE and DEFERRED CAPITAL CONTRIBUTIONS from related parties (GRE) in Form B, report a continuity of activity in the year **by ministry or other government entity (including hospitals, colleges and school boards by sector)**; one table for each ministry or government organization; there is no materiality with respect to reporting these amounts

9) FORM H - STATEMENT OF CHANGE IN ACCUMULATED SURPLUS/(DEFICIT)

To report the statement of change in accumulated surplus/(deficit) capturing unrealized remeasurement gains or losses.

10) FORM I - NEW LOANS RECEIVABLE

Report in Table 1 any NEW loans receivable that the other government organization (OGO) has entered into or is planning to enter during the current fiscal year and the planned fiscal years.
Report in Table 2 any inter-governmental new loans receivable listed in Table 1.

11) FORM J - NEW INVESTMENTS RECEIVABLE

Report in Table 1 any NEW investments that the OGO has entered into or is planning to enter during the current fiscal year and the planned fiscal years.
Report in Table 2 any inter-governmental NEW investments listed in Table 1.

NOTES

- ALL amounts should be reported in millions of dollars **to the nearest 4 decimals** (e.g. $2,734,588 reported as $2.7346)
- Interim to March 31 should reflect a **FULL YEAR** forecast
- **GRE** means Government Reporting Entity which comprises the Ministries and the organizations controlled by the government and consolidated in the Province's financial statements. Inter-organizational (GRE) balances will need to be reported in various forms. Please refer to schedule 8 in the 2015-16 Consolidated Financial Statements for a list of consolidated organizations.
- Please contact your respective OPCD Analysts if the forms need to be customized to meet your agency's requirements.

LEGEND

- Yellow cells require input by users.
- Light blue cells contain links to related forms, no input is required.

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM A - OTHER GOVERNMENT ORGANIZATION - PROFORMA INCOME STATEMENT

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please complete yellow cells only, as all blue cells contain either links to other related forms or formulae.

Please report PROFORMA INCOME STATEMENT, on an accrual basis, under the following headings:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Grants/Subsidy from Province and other GRE's **(see Form D)**	-	-	-	-	-
Government of Canada					
Other non-provincial grants (municipal, etc.)					
Interest/Investment Income					
- from External Sources					
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
Deferred revenue recognized					
- from External Sources					
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
Deferred capital contribution amortized to revenue					
- from External Sources					
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
Fees and Licenses					
- from External Sources	235.4402	220.3991	225.0368	227.9126	227.9126
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
Royalties					
- from External Sources					
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
Fines and Penalties					
- from External Sources	2.0002				
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
Sales and Rentals					
- from External Sources					
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
Other Revenue [1]					
- from External Sources					
- from a Ministry or other GRE **(see Form D)**	-	-	-	-	-
TOTAL REVENUES	**237.4405**	**220.3991**	**225.0368**	**227.9126**	**227.9126**
Salaries and Wages	85.1765	92.9783	95.7375	97.4158	97.4158
Employee Benefits [2] **(see Form A(i))**	27.7650	26.0699	26.2551	26.5097	26.5097
Transportation and Communication	3.4880	3.4137	3.4147	3.4154	3.4154
Services					
- to External Sources	55.0182	57.6260	58.2408	58.6489	58.6489
- to a Ministry or other GRE **(see Form E)**	-	-	-	-	-
Supplies and Equipment	1.3233	1.2805	1.2808	1.2811	1.2811
Amortization **(See Form C)**	22.4723	22.0139	22.9235	23.3268	23.3268
Transfer Payments [2]					
- to External Sources					
- to a Ministry or other GRE **(see Form E)**	-	-	-	-	-
Interest on Debt					
- to External Sources					
- to a Ministry or other GRE **(see Form E)**	1.7498	2.0374	2.1063	2.1592	2.1592
Realized (Gains)/Losses	(0.1345)				
Expense for remediation of contaminated sites[3]					
- from External Sources					
- from a Ministry or other GRE **(see Form E)**	-	-	-	-	-
Other Expenses [1]					
- to External Sources	14.8134	14.9794	15.0779	15.1558	15.1558
- to a Ministry or other GRE **(see Form E)**	-	-	-	-	-
TOTAL EXPENSES	**211.6721**	**220.3991**	**225.0368**	**227.9126**	**227.9126**
SURPLUS/(DEFICIT)	**25.7684**	**-**	**-**	**-**	**-**

Notes:

[1] Also includes gain/loss on sale of assets.

[2] Transfer payments should include all amounts paid to other organizations for which it does not receive any goods or services directly in return (e.g. program delivery)

[3] A new accounting standard PS 3260 liability for contaminated sites became effective April 1, 2014. Additional liabilities identified subsequent to April 1, 2014 need to be reported in the year in which they are identified with an offsetting journal entry to expense for remediation of contaminated site.

ADDITIONAL COMMENTS:

Prepared by: ____Eddie Markovic_____ Telephone: _____() -_____

Approved by: ____Lia Kosic, Director FP&A_____ Date: _____November 4, 2016_____
(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM A(i) - OTHER GOVERNMENT ORGANIZATION EMPLOYEE BENEFITS EXPENSE

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please complete yellow cells only, as blue cells contain formulae.

Please provide the following employee benefits expense that is included in your financial statements:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Pension Expense					
- PSPP					
- OPSEU					
- HOOPP					
- Other (please specify)	10.8764	9.0284	8.5233	8.3288	8.3288
Non-pension Retirement Benefits Expense	8.2505	8.7505	9.2753	9.6840	9.6840
Regular Severance or Termination Benefit Expense					
Workers' Compensation Benefit Expense					
Other employee benefit costs	8.6382	8.2911	8.4566	8.4969	8.4969
TOTAL [(1)]	**27.7650**	**26.0699**	**26.2551**	**26.5097**	**26.5097**

Notes:

(1) must agree to "Employee Benefits" in Form A.

ADDITIONAL COMMENTS:

Prepared by: ____Eddie Markovic_____ Telephone: () -

Approved by: ____Lia Kosic, Director FP&A_____ Date: November 4, 2016
(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM B - OTHER GOVERNMENT ORGANIZATION - PROFORMA BALANCE SHEET

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please complete yellow cells only, as all blue cells contain either links to other related forms or formulae.

Please report PROFORMA BALANCE SHEET under the following headings:

(report in millions)	**Interim as at March 31, 2017**	**Plan as at March 31, 2018**
Cash and Cash Equivalents [1]	9.9700	10.0000
Temporary Investments [2]:		
From External Sources		
From the Province or other GRE **(see Form F)**	-	-
Long-Term Investments [2]:		
From External Sources	42.1694	44.7628
From the Province or other GRE **(see Form F)**	-	-
Accounts Receivable:		
Due from the Province or other GRE **(see Form F)**	-	-
Due from External Sources	21.1697	20.5197
less: Provision for Doubtful Accounts (enter as negative values)		
Due from the Government of Canada		
Loans Receivable:		
- from External Sources		
- from a Ministry or other GRE **(see Form F)**	-	-
Other Assets[3]:		
- from External Sources	6.8330	6.8330
- from a Ministry or other GRE **(see Form F)**	-	-
Tangible Capital Assets *(net of Accumulated Amortization)* **(See Form C)**	110.2765	115.0852
TOTAL ASSETS	**190.4186**	**197.2007**
Accounts Payable & Accrued Liabilities:		
Accrued Transfer Payments:		
-from External Sources		
-from a Ministry or other GRE **(see Form F)**	-	-
Accrued Interest on Debt:		
-from External Sources		
-from a Ministry or other GRE **(see Form F)**	0.7673	0.7673
Accrued Salaries Wages and Benefits		
Accrued Materials, Supplies and Other		
Accounts Payable:		
-to External Sources	31.8728	31.8757
-to a Ministry or other GRE **(see Form F)**	2.0412	2.0383
Debt		
- from External Sources		
- from a Ministry or other GRE **(see Form F)**	70.5653	67.0118
Obligations under Alternative Financing and Procurement		
- from External Sources		
- from a Ministry or other GRE **(see Form F)**	-	-
Deferred Revenue		
- from External Sources		
- from a Ministry or other GRE **(see Form F)**	-	-
Deferred Capital Contribution (DCC) [4]		
- DCC from External Sources [5]		
- from a Ministry or other GRE **(see Form F)**	-	-
Liability for remediation of contaminated sites[6]		
- from External Sources		
- from a Ministry or other GRE **(see Form F)**	-	-
Other Liabilities[7] :		
- from External Sources	121.7561	123.5726
- from a Ministry or other GRE **(see Form F)**	-	-
TOTAL LIABILITIES	**227.0027**	**225.2657**
NET ASSETS	**(36.5841)**	**(28.0650)**

Notes:

[1] Cash comprises of cash on hand, demand deposits and bank indebtness. Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. An investment normally qualifies as a cash equivalent only when it has a short maturity of, for example, three months or less from the date of acquisition.

[2] Temporary investments include treasury bills or investments certificates, and are generally capable of reasonable prompt liquidation (i.e. within one year). If the maturity of the investment is three months or less, the investment normally qualifies as a cash and cash equivalent (refer to (1) above). Investments longer than one year to liquidation should be classified as long-term investments.
Investments include mark-to-market adjustments on financial instruments where appropriate **(See Form H)**.

[3] Include Non-TP prepaid expenses and inventory for consumption under other assets.

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM B - OTHER GOVERNMENT ORGANIZATION - PROFORMA BALANCE SHEET

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

(4) Deferred capital contributions (DCC) represents unamortized portion of tangible capital assets or liabilities to construct or acquire tangible capital assets from specific-purpose funding. Deferred capital contributions are recorded in revenue over the estimated useful life of the underlying tangible capital asset once constructed or acquired.

(5) External sources represent the funding received from Government of Canada, municipalities or third parties.

(6) A new accounting standard PS 3260 liability for contaminated sites became effective April 1, 2014. Additional liabilities identified subsequent to April 1, 2014 need to be reported in the year in which they are identified with an offsetting journal entry to expense for remediation of contaminated site.

(7) Other liabilities include mark-to-market adjustments on financial instruments reported as liabilities **(See Form H)**.

ADDITIONAL COMMENTS:

Prepared by: ____Eddie Markovic_____ Telephone: _____() -_____

Approved by: ____Lia Kosic, Director FP&A_____

Approved by: ____Lia Kosic, Director FP&A_____ Date: November 4, 2016

(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM C - OTHER GOVERNMENT ORGANIZATIONS - TANGIBLE CAPITAL ASSETS

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please complete yellow cells only, as blue cells contain formulae.

Report all tangible capital assets in this schedule.

(Report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018	Outlook as at March 31, 2019	Outlook as at March 31, 2020	Outlook as at March 31, 2021
LAND [1]:					
Opening balance	0.3659	0.3659	0.3659	0.3659	0.3659
Add: Additions					
Add: Transfer from CIP [5]	-	-	-	-	-
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write Offs (enter as negative values)					
TOTAL LAND - CLOSING	**0.3659**	**0.3659**	**0.3659**	**0.3659**	**0.3659**
BUILDINGS [2]:					
Opening balance	51.9151	55.8062	55.8062	55.8062	55.8062
Add: Additions					
Add: Transfer from CIP [5]	3.8911	-	-	-	-
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write Offs (enter as negative values)					
Closing balance	55.8062	55.8062	55.8062	55.8062	55.8062
Accumulated Amortization:					
Opening balance	23.0130	24.6548	26.2634	27.5955	28.8902
Add: Amortization expense	1.6417	1.6087	1.3321	1.2947	1.2487
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write Offs (enter as negative values)					
Closing balance	24.6548	26.2634	27.5955	28.8902	30.1389
BUILDINGS - NET BOOK VALUE	**31.1514**	**29.5428**	**28.2107**	**26.9160**	**25.6673**
TRANSPORTATION INFRASTRUCTURE [3]					
Opening balance		-	-	-	-
Add: Additions					
Add: Transfer from CIP [5]	-	-	-	-	-
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write Offs (enter as negative values)					
Closing balance	-	-	-	-	-
Accumulated Amortization:					
Opening balance		-	-	-	-
Add: Amortization expense					
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write Offs (enter as negative values)					
Closing balance	-	-	-	-	-
TRANSPORTATION INRASTRUCTURE - NET BOOK VALUE	**-**	**-**	**-**	**-**	**-**
OTHER [4]:					
Opening balance	375.4034	411.0495	430.2995	453.2995	476.2995
Add: Additions					
Add: Transfer from CIP [5]	35.6462	19.2500	23.0000	23.0000	23.0000
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write Offs (enter as negative values)					
Closing balance	411.0495	430.2995	453.2995	476.2995	499.2995
Accumulated Amortization:					
Opening balance	328.8005	349.6310	370.0362	391.6277	413.6598
Add: Amortization expense	20.8305	20.4052	21.5915	22.0321	22.0781
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write Offs (enter as negative values)					
Closing balance	349.6310	370.0362	391.6277	413.6598	435.7378
OTHER - NET BOOK VALUE	**61.4185**	**60.2633**	**61.6719**	**62.6398**	**63.5617**
CONSTRUCTION IN PROGRESS - LAND					
Opening balance		-	-	-	-
Add: Traditional Financed					
Add: AFP Projects					
Add: Interest capitalized					
Less: Transfers to in-service (enter as negative values)					
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write offs (enter as negative values)					
Closing balance	-	-	-	-	-

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM C - OTHER GOVERNMENT ORGANIZATIONS - TANGIBLE CAPITAL ASSETS

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please complete yellow cells only, as blue cells contain formulae.

CONSTRUCTION IN PROGRESS - BUILDINGS					
Opening balance	0.9326	-	-	-	-
Add: Traditional Financed	2.9585				
Add: AFP Projects					
Add: Interest capitalized					
Less: Transfers to in-service (enter as negative values)	(3.8911)				
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write offs (enter as negative values)					
Closing balance	-	-	-	-	-
CONSTRUCTION IN PROGRESS - TRANSPORTATION INFRASTRUCTURE					
Opening balance		-	-	-	-
Add: Traditional Financed					
Add: AFP Projects					
Add: Interest capitalized					
Less: Transfers to in-service (enter as negative values)					
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write offs (enter as negative values)					
Closing balance	-	-	-	-	-
CONSTRUCTION IN PROGRESS - OTHERS					
Opening balance	26.8024	17.3406	24.9131	24.9131	24.9131
Add: Traditional Financed	26.1844	26.8225	23.0000	23.0000	23.0000
Add: AFP Projects					
Add: Interest capitalized					
Less: Transfers to in-service (enter as negative values)	(35.6462)	(19.2500)	(23.0000)	(23.0000)	(23.0000)
Less: Disposals/Retirements (enter as negative values)					
Less: Other adjustments/Write offs (enter as negative values)					
Closing balance	17.3406	24.9131	24.9131	24.9131	24.9131
NET TANGIBLE CAPITAL ASSETS	110.2765	115.0852	115.1616	114.8349	114.5081

SUMMARY INFORMATION

Gross Additions (excluding Construction in Progress)		-	-	-	-
Gross Additions - Construction in Progress	29.1429	26.8225	23.0000	23.0000	23.0000
TOTAL GROSS ADDITIONS	**29.1429**	**26.8225**	**23.0000**	**23.0000**	**23.0000**
Disposals and Other adjustments / Write-offs (net)	-	-	-	-	-
TOTAL ADDITIONS (NET OF DISPOSAL AND OTHER ADJUSTMENTS / WR	29.1429	26.8225	23.0000	23.0000	23.0000
TOTAL AMORTIZATION EXPENSE	22.4723	22.0139	22.9235	23.3268	23.3268

Notes:

(1) Land includes land acquired for transportation infrastructure, parks, buildings, and other program use and land improvements. Land excludes Crown lands acquired by right.

(2) Includes those acquired through capital leases and Construction in Progress.

(3) Transportation infrastructure includes highways, railway and track improvements, bridges and related structures and facilities, but excludes land and buildings.

(4) Other tangible capital assets include those capital assets not reported under Land, Buildings and Transportation Infrastructure. Examples include railway equipment, computer equipment, vehicles, aircrafts, furniture, and administrative & service equipment owned by government organizations.

(5) Assets Transferred from Construction-in-Progress (CIP) - This row tracks the cost of assets where construction has been completed during the current fiscal year and the related asset has been placed into service and therefore transferred into the appropriate asset category.

ADDITIONAL COMMENTS:

Prepared by: ____Eddie Markovic_____ Telephone: () -

Approved by: ____Lia Kosic, Director FP&A_____ Date: November 4, 2016
(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM D - REVENUE FROM A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as all blue cells contain either links to related forms or formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Revenue from a Ministry or other GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM D - REVENUE FROM A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as all blue cells contain either links to related forms or formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM D - REVENUE FROM A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as all blue cells contain either links to related forms or formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue					
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income					
Fees and Licenses					
Royalties					
Fines and Penalties					
Sales and Rentals					
Other Revenue (please specify):					
TOTAL REVENUE FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

Total Revenue from Ministries or other GREs:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Provincial Grants received in year reported as Revenue	-	-	-	-	-
Recognition of Deferred Revenue received from Province **(see Form G)**	-	-	-	-	-
Amortization of Deferred Capital Contributions received from Province **(Form G)**	-	-	-	-	-
Interest/Investment Income	-	-	-	-	-
Fees and Licenses	-	-	-	-	-
Royalties	-	-	-	-	-
Fines and Penalties	-	-	-	-	-
Sales and Rentals	-	-	-	-	-
Other Revenue (please specify):	-	-	-	-	-
TOTAL REVENUE FROM RELATED ENTITIES	**-**	**-**	**-**	**-**	**-**

ADDITIONAL COMMENTS:

Prepared by: ____Eddie Markovic_____ Telephone: _____() -_____

Approved by: ____Lia Kosic, Director FP&A_____ Date: _____November 4, 2016_____
(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM E - EXPENSES INCURRED WITH OR ON BEHALF OF A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: 219-Independent Electricity System Operator

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as blue cells contain formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Expenses Incurred With or On Behalf of a Ministry or other GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt	1.7498	2.0374	2.1063	2.1592	2.1592
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	**1.7498**	**2.0374**	**2.1063**	**2.1592**	**2.1592**

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt					
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt					
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt					
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	**-**	**-**	**-**	**-**	**-**

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM E - EXPENSES INCURRED WITH OR ON BEHALF OF A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: 219-Independent Electricity System Operator

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as blue cells contain formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt					
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	-	-	-	-	-

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt					
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	-	-	-	-	-

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt					
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	-	-	-	-	-

MINISTRY OR OTHER GRE:

Fiscal year ended March 31	2016-17	2017-18	2018-19	2019-20	2020-21
(report in millions)	Interim	Plan	Outlook	Outlook	Outlook
Transfer payments					
Interest on debt					
Services					
Expense for remediation of contaminated sites					
Other Expenses (please specify):					
TOTAL - EXPENSES FROM THIS MINISTRY OR OTHER GRE	-	-	-	-	-

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM E - EXPENSES INCURRED WITH OR ON BEHALF OF A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as blue cells contain formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

Total Expenses Incurred With or On Behalf of Ministries or other GREs:

Fiscal year ended March 31	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
(report in millions)	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Transfer payments	-	-	-	-	-
Interest on debt	1.7498	2.0374	2.1063	2.1592	2.1592
Services	-	-	-	-	-
Expense for remediation of contaminated sites	-	-	-	-	-
Other Expenses (please specify):	-	-	-	-	-
TOTAL EXPENSE FROM RELATED ENTITIES	**1.7498**	**2.0374**	**2.1063**	**2.1592**	**2.1592**

ADDITIONAL COMMENTS:

Prepared by: ____Eddie Markovic_____ Telephone: () -

Approved by: ____Lia Kosic, Director FP&A_____ Date: November 4, 2016
(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM F - INTER-ORGANIZATION BALANCES WITH A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as all blue cells contain either links to related forms or formulae.

Please identify all balances arising from transactions with or for GRE's included in your statement of financial position as at March 31, and provide a brief description:

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt	0.7673	0.7673
Payables to a Ministry or Government Organization	2.0412	2.0383
Loans Payable (Debt)		
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt		
Payables to a Ministry or Government Organization		
Loans Payable (Debt)	70.5653	67.0118
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt		
Payables to a Ministry or Government Organization		
Loans Payable (Debt)		
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM F - INTER-ORGANIZATION BALANCES WITH A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as all blue cells contain either links to related forms or formulae.

Please identify all balances arising from transactions with or for GRE's included in your statement of financial position as at March 31, and provide a brief description:

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt		
Payables to a Ministry or Government Organization		
Loans Payable (Debt)		
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt		
Payables to a Ministry or Government Organization		
Loans Payable (Debt)		
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt		
Payables to a Ministry or Government Organization		
Loans Payable (Debt)		
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM F - INTER-ORGANIZATION BALANCES WITH A MINISTRY OR OTHER GOVERNMENT REPORTING ENTITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as all blue cells contain either links to related forms or formulae.

Please identify all balances arising from transactions with or for GRE's included in your statement of financial position as at March 31, and provide a brief description:

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt		
Payables to a Ministry or Government Organization		
Loans Payable (Debt)		
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

MINISTRY OR OTHER GRE:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments		
Long-Term Investments		
Receivables from a Ministry or Government Organization		
Loans Receivable		
Other Assets(please specify):		
Accrued Transfer Payments		
Accrued Interest on Debt		
Payables to a Ministry or Government Organization		
Loans Payable (Debt)		
Obligations under Alternative Financing and Procurement		
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites		
Other Liabilities(please specify):		

Total Assets and Liabilities Incurred With or On Behalf of Ministries or other GREs:

(report in millions)	Interim as at March 31, 2017	Plan as at March 31, 2018
Temporary Investments	-	-
Long-Term Investments	-	-
Receivables from a Ministry or Government Organization	-	-
Loans Receivable	-	-
Other Assets(please specify):	-	-
Accrued Transfer Payments	-	-
Accrued Interest on Debt	0.7673	0.7673
Payables to a Ministry or Government Organization	2.0412	2.0383
Loans Payable (Debt)	70.5653	67.0118
Obligations under Alternative Financing and Procurement	-	-
Deferred Revenue **(Form G)**	-	-
Deferred Capital Contributions **(Form G)**	-	-
Liability for Remediation of Contaminated Sites	-	-
Other Liabilities(please specify):	-	-

ADDITIONAL COMMENTS:

Prepared by: ____Eddie Markovic_____ Telephone: _____

Approved by: ____Lia Kosic, Director FP&A_____ Date: November 4, 2016
(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM G -DEFERRED BALANCE CONTINUITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as blue cells formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Please provide a deferred balance continuity schedule under the following headings:

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred revenue	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED REVENUE [1]	-	-	-	-	-

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred capital contribution	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED CAPITAL CONTRIBUTION [2]	-	-	-	-	-

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Please provide a deferred balance continuity schedule under the following headings:

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred revenue	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED REVENUE [1]	-	-	-	-	-

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred capital contribution	**Interim**	**Plan**	**Outlook**	**Outlook**	**Outlook**
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED CAPITAL CONTRIBUTION [2]	-	-	-	-	-

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM G -DEFERRED BALANCE CONTINUITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as blue cells formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Please provide a deferred balance continuity schedule under the following headings:

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred revenue	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED REVENUE (1)	-	-	-	-	-

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred capital contribution	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED CAPITAL CONTRIBUTION (2)	-	-	-	-	-

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Please provide a deferred balance continuity schedule under the following headings:

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred revenue	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED REVENUE (1)	-	-	-	-	-

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred capital contribution	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED CAPITAL CONTRIBUTION (2)	-	-	-	-	-

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM G -DEFERRED BALANCE CONTINUITY

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please prepare a section for each Ministry or other GRE and complete yellow cells only, as blue cells formulae.

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Please provide a deferred balance continuity schedule under the following headings:

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred revenue	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED REVENUE [1]	-	-	-	-	-

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred capital contribution	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED CAPITAL CONTRIBUTION [2]	-	-	-	-	-

PLEASE IDENTIFY THE RELATED GOVERNMENT REPORTING ENTITY TRANSACTED WITH:

MINISTRY OR OTHER GRE:

Please provide a deferred balance continuity schedule under the following headings:

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred revenue	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED REVENUE [1]	-	-	-	-	-

Fiscal year ended March 31 (report in millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Deferred capital contribution	Interim	Plan	Outlook	Outlook	Outlook
Opening		-	-	-	-
Add: contributions					
Less: recognized (enter as negative values)					
Add: interest earned					
Add/(Less): adjustment & write offs					
CLOSING DEFERRED CAPITAL CONTRIBUTION [2]	-	-	-	-	-

Notes:

[1] Must agree to "Deferred Revenue" on Form F.

[2] Must agree to "Deferred Capital Contribution" on Form F.

ADDITIONAL COMMENTS:

Prepared by: ____Eddie Markovic_____ Telephone: _____() -_____

Approved by: ____Lia Kosic, Director FP&A_____ Date: __November 4, 2016_____
(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM H - STATEMENT OF CHANGE IN ACCUMULATED SURPLUS/(DEFICIT)

(To Be Completed by the Government Organization)

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Please complete yellow cells only, as blue cells contain formulae. Enter losses as negative values.

Fiscal year ended March 31 (report in millions)	Reference	March 31 2017	
Accumulated surplus (deficit) is comprised of:			
A. Accumulated operating surplus (deficit)	Table 1 A	- 46.0866	
B. Accumulated remeasurement gains (losses)	Table 1 B	9.5025	
Accumulated surplus (deficit) at Year End		- 36.5841	
			Check
Net Assets as at March 31, 2017	Note 1, Note 4, Form B	- 36.5841	**OK**

Table 1: Please provide information required below

A. Accumulated operating surplus (deficit)	Reference	March 31 2017
Accumulated Operating Surplus/(Deficit) per final OGO forms as at March 31, 2016 (submitted for the 2015-16 Public Accounts)		- 71.8550
Add/(Less): Surplus/(Deficit)	Form A	25.7684
Other – please specify:	Note 2	
Accumulated Operating Surplus/(Deficit) at End of Year		**- 46.0866**
B. Accumulated remeasurement gains (losses) [3]	**Note 3**	
Accumulated remeasurement gains / (losses) Per Audited Financial Statements as at March 31, 2016		6.9380
Unrealized gains (losses) attributable to:		
Foreign exchange		- 0.0030
Derivatives		
Portfolio Investments		2.4330
Less: Amounts reclassified to the statement of operations	Form A	- 0.1345
Accumulated remeasurement gains and losses at End of Year		**9.5025**

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM H - STATEMENT OF CHANGE IN ACCUMULATED SURPLUS/(DEFICIT)

(To Be Completed by the Government Organization)

Notes

(1) Must agree to "Total Assets" in Form B less "Total Liabilities" in Form B.

(2) Please describe the nature of "other adjustments",

(i) ----------.
(ii) ----------.
(iii) ----------.
(iv) ----------.

(3) Remeasurement gains and losses - this statement is used to distinguish remeasurement gains and losses from the operating revenue and expenses. Remeasurement gains and losses include unrealized changes in fair value of instruments measured at fair value and unrealized foreign exchange gains and losses. Remeasurement gains and losses will be accumulated in the statement of remeasurement gains and losses until the financial instrument they are associated with is derecognized. Upon derecognition of the instrument, the remeasurement gains and losses are reclassified to the statement of operations.

(4) On the statement of financial position net assets will have to be reconciled to the accumulated operating surplus/deficit and the accumulated remeasurement gains and losses.

(5) Accumulated Operating Surplus/(Deficit) - equals to opening accumulated surplus/deficit less opening unrealized gains or losses attributable to foreign exchange, derivatives and portfolio investments.

ADDITIONAL COMMENTS:

Prepared by: ____Eddie Markovic_____ Telephone: _____() -_____

Approved by: ____Lia Kosic, Director FP&A_____ Date: November 4, 2016
(Name and Title)

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM I - NEW LOANS RECEIVABLE

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: 219-Independent Electricity System Operator

Table 1						Principal Repayment (Outstanding loan $000's)							Principal Repayment (Outstanding loan $000's)					Principal repayment	
		Loan Interest Rate																	
New Loans Receivable	Loan Amount	Fixed Interest Rate of Loan	Floating Rate (if interest rate will not be fixed)	Loan Start Date	Loan Maturity Date	2017	2018	2019	2020	2021	2022	Sub-total	2023-2028	2029-2034	2035-2040	2041 and thereafter	Sub-total	No fixed maturity	Total repayment
												-					-		-
												-					-		-
												-					-		-
												-					-		-
												-					-		-
												-					-		-
												-					-		-
												-					-		-
												-					-		-
												-					-		-
												-					-		-
Total	-					-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2 - Please specify new loans receivable(s) with Inter-Governmental Units (if applicable):						Principal Repayment (Outstanding loan $000's)					
		Loan Interest Rate									
Name of Government Reporting Entity (GRE)	Loan Amount	Fixed Interest Rate of Loan	Floating Rate (if interest rate will not be fixed)	Loan Start Date	Loan Maturity Date	2017	2018	2019	2020	2021	2022
TOTAL NEW LOANS RECEIVABLE WITH INTER-GOVERNMENTAL UNITS	-					-	-	-	-	-	-

Prepared by: ____Eddie Markovic_____

Approved by: ____Lia Kosic, Director FP&A_____
(Name and Title)

Telephone: () -

Date: November 4, 2016

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION

FORM J - NEW INVESTMENTS

(To Be Completed by Government Organization)

GOVERNMENT ORGANIZATION NAME: **219-Independent Electricity System Operator**

Table 1

New Investment(s)	Investment Amount	Investment Interest Rate		Investment Start Date	Investment Maturity Date
		Fixed Interest Rate of Investment	Floating Rate (if interest rate will not be fixed)		
Total	-				

Table 2 - Please specify new Investments with Inter-Governmental Units (if applicable):

Name of Government Reporting Entity (GRE)	Investment Amount	Investment Interest Rate		Investment Start Date	Investment Maturity Date
		Fixed Interest Rate of Investment	Floating Rate (if interest rate will not be fixed)		
TOTAL NEW INVESTMENTS WITH INTER-GOVERNMENTAL UNITS	-				

Prepared by: ____Eddie Markovic_____ Telephone: () -

Approved by: ____Lia Kosic, Director FP&A_____ Date: November 4, 2016
(Name and Title)

TCA Supplementary Schedule - Infrastructure 10 Year Plan- Other Government Organizations

GOVERNMENT ORGANIZATION NAME: Independent Electricity System Operator

Report in millions of dollars (4 decimal places)

	Interim 2016-17	Plan 2017-18	Outlook 2018-19	Outlook 2019-20	Outlook 2020-21	Outlook 2021-22	Outlook 2022-23	Outlook 2023-24	Outlook 2024-25	Outlook 2025-26	Outlook 2026-27
Land [1]											
Building [1]	3.8911										
Transportation infrastructure [1]											
Construction in Progress [1]	(10.3944)	7.5725	-	-	-	-	-	-	-	-	-
Others Assets [1]	35.6462	19.2500	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000
Interest capitalized											
Gross Additions [1] - A	29.1429	26.8225	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000
Provincial share [2]											
Third party contribution [3]	29.1429	26.8225	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000
Gross Additions - B (B must equal A above)	29.1429	26.8225	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000	23.0000
Ministry Capital Expense - Voted											
Provincial capital transfer payments [4] (enter as negative)											
Amortization expense [5] (enter as positive)	22.4723	22.0139	22.9235	23.3268	23.3268	23.3268	23.3268	23.3268	23.3268	23.3268	23.3268
Capital Consolidation Adjustment	22.4723	22.0139	22.9235	23.3268	23.3268	23.3268	23.3268	23.3268	23.3268	23.3268	23.3268

Plan over Plan Check (10-yr as of 2016-17 vs 10-yr as of 2017-18)	10-Yr Plan (2016-17)	10-Yr Plan (2017-18)	Change	Explanation [6]
Total Additions	235.6145	233.8225	(1.7920)	
Other Partner Funding	0	233.8225	233.8225	
Provincial-Funded Expenditure	0	-	-	
Provincial Capital Grants	-	-	-	
Amortization Expense	175.4806	231.5516	56.0710	

[1] For periods up to 21-22, this balance can be taken directly from the "Additions" row in Form C of the OGO Reporting Templates

[2] Provincial funding used for acquiring capital in the current year. including any funding that was flowed to an agency in a prior period but used in the current period to acquire capital.

[3] Amounts funded (or to be funded) from non-provincial sources such as donations and grants from other levels of government, as well as the use of own resources such as own-source debt and reinvestment of internally generated surplus or reserves.

[4] Represents the voted ministry capital transfer payment to the agency for the fiscal year. May not equal the balance shown in the "Provincial Share" column above if the "Provincial Share" includes funds that were transferred to an agency in prior periods or funds that were appropriated for operating purposes, but used for capital. Otherwise the amounts should agree.

[5] For periods up to 21-22, this balance can be taken directly from the "Amortization" expense row in Form A of the OGO Reporting Templates

[6] Please provide variance explanations if the 10 year change is greater than $100M

2017-18 PROGRAM REVIEW, RENEWAL & TRANSFORMATION (PRRT)
INSTRUCTIONS FOR COMPLETING THE CONSOLIDATION SUMMARY FORM

1) **THIS FORM IS TO BE COMPLETED BY THE MINISTRY.**

2) **ONLY INPUT DATA IN THE "YELLOW" SHADED CELLS OF THE FORM.**

3) **NUMBERS ARE INPUT "IN MILLIONS" WITH UP TO FOUR DECIMAL PLACES.**

4) **UNDER THE "DATA INPUT NOTES" SECTION OF THIS FORM, PLEASE ENSURE THAT THE DATA BEING INPUT IS TAKEN FROM THE SOURCE AS INSTRUCTED IN "GREEN" WITHIN EACH SECTION.**

5) **SUBMIT COMPLETED FORM TO OPCD FOR REVIEW.**

6) **UPON OPCD'S REVIEW AND APPROVAL, THE MINISTRY MUST USE THE COMPLETED FORM AS THE BASIS FOR POPULATING AGENCY CONSOLIDATION ADJUSTMENTS IN ORBIT.**

7) **MINISTRY MUST ATTACH THE COMPLETED FORM TO THE RELATED ORBIT DOCKET AS SUPPORT FOR CONSOLIDATION ADJUSTMENTS.**

2017-18 Program Review, Renewal and Transformation (PRRT) - Consolidation Summary Form

Please input data in yellow cells only.

Agency Name: **Independent Electricity System Operator**
Responsible Ministry **Energy**
Date Submitted:

	NOTES (See	In Millions 2016-17 Interim	2017-18 Plan	2018-19 Outlook	2019-20 Outlook	2020-21 Outlook
Agency Revenue - Input from Form A	1	237.4404	220.3991	225.0368	227.9126	227.9126
Less: Grants & Subsidies from Province	1	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Interest Income (to Provincial & External IOD)*	1	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Amortization Revenue of Provincial DCC/DR	1	0.0000	0.0000	0.0000	0.0000	0.0000
Less: All remaining sources of revenues earned from Province / OGO	1	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Misc. Revenue (elimination of agency ODOE with the Ministries)	2	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Other Revenues *(Input additional breakdowns in note 5)*	5	0.0000	0.0000	0.0000	0.0000	0.0000
Adjustment to CRF Revenue		237.4404	220.3991	225.0368	227.9126	227.9126
Total Agency Expense - Input from Form A		211.6720	220.3991	225.0368	227.9126	227.9126
Less: Operating TP	3	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Capital TP	3	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Interest Expense - External + Provincial *(to Provincial IOD)**	2	1.7498	2.0374	2.1063	2.1592	2.1592
Less: Other Expenses to Province (elimination of agency ODOE with Ministries)	2	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Other Transactions (elimination of agency Revenue from Province / OGO, other than TP & amort. of DCC/DR)	1	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Pension contributions paid to PSPP/OPSEU Pension Plan	4					
Less: Expenses for Contaminated Sites	2	0.0000	0.0000	0.0000	0.0000	0.0000
Less: Other Expenses (*Input additional breakdowns in note 5)*	5	0.0000	0.0000	0.0000	0.0000	0.0000
Adjustment to CRF Expense		**209.9222**	**218.3617**	**222.9305**	**225.7534**	**225.7534**
Net Consolidated Surplus/(Deficit) agency pick-up		27.5182	2.0374	2.1063	2.1592	2.1592
Net Operating expense adjustment pick-up		**187.4499**	**196.3478**	**200.0070**	**202.4266**	**202.4266**
Net Capital expense adjustment pick-up		**22.4723**	**22.0139**	**22.9235**	**23.3268**	**23.3268**
Total CRF Expense Adjustment		**209.9222**	**218.3617**	**222.9305**	**225.7534**	**225.7534**
Check		**CORRECT**	**CORRECT**	**CORRECT**	**CORRECT**	**CORRECT**
Interest on Debt (IOD)*		**1.7498**	**2.0374**	**2.1063**	**2.1592**	**2.1592**

*Fiscal impacts do not include adjustment made to IOD which is reported separately under Province's Interest on Debt

DATA INPUT NOTES (corresponds to "NOTES" column above):

1 Pre-consolidated revenues per agency submission **(Form A)**:

REVENUE (in Millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Grants & Subsidies from Province					
Government of Canada					
Other non-provincial grants (Municipal , etc.)					
Interest/Investment Income (Internal + External sources)					
Recognition of Deferred Revenue:					
From External Sources					
From Province / Government Controlled Organization					
Amortization of Deferred Capital Contributions:					
From External Sources					
From Province / Government Controlled Organization					
Fees & Licenses:					
From External Sources	235.4402	220.3991	225.0368	227.9126	227.9126
From Province / Government Controlled Organization					
Royalties					
From External Sources					
From Province / Government Controlled Organization					
Fines and Penalties					
From External Sources	2.0002	0.0000	0.0000	0.0000	0.0000
From Province / Government Controlled Organization					
Sales & Rental:					
From External Sources					
From Province / Government Controlled Organization					
Other Revenue:					
From External Sources					
From Province / Government Controlled Organization					
Total Revenue	**237.4404**	**220.3991**	**225.0368**	**227.9126**	**227.9126**

Post-consolidated revenue breakdowns: *(For OPCD to complete)*	2016-17	2017-18	2018-19	2019-20	2020-21
Vehicle/Driver Registration Fees					
Brewer's Manufacturing Fees					
Other Fees, Licences and Permits					
Royalties					
Sales and Rentals					
Fines and Penalties					
Recoveries					
Reimbursements					
Other Federal Payment					
Miscellaneous Revenue					
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Check	**INCORRECT**	**INCORRECT**	**INCORRECT**	**INCORRECT**	**INCORRECT**

2 Pre-consolidated expenses per agency submission **(Form A)**:

EXPENSES (In Millions)	2016-17	2017-18	2018-19	2019-20	2020-21
Salary and Wages	85.1765	92.9783	95.7375	97.4158	97.4158
Employee Benefits	27.7650	26.0699	26.2551	26.5097	26.5097
Transportation and Communication	3.4880	3.4137	3.4147	3.4154	3.4154
Services					
To External Sources	55.0182	57.6260	58.2408	58.6489	58.6489
To Ministry					
To Other Government Controlled Organization *(elimination done by receiving agency)*					
Supplies and Equipment	1.3233	1.2805	1.2808	1.2811	1.2811
Amortization	22.4723	22.0139	22.9235	23.3268	23.3268
Transfer Payments					
Interest on Debt (External + Provincial)	1.7498	2.0374	2.1063	2.1592	2.1592
Realized Gains and Losses	(0.1345)				
Other Expenses					
To External Sources	14.8134	14.9794	15.0781	15.1557	15.1557
To Ministry					
To Other Government Controlled Organization *(elimination done by receiving agency)*					
Expenses for Contaminated Sites					
To External Sources					
To Ministry					
To Other Government Controlled Organization *(elimination done by receiving agency)*					
Total Expenses	**211.6720**	**220.3991**	**225.0368**	**227.9126**	**227.9126**

Agency Net Surplus/(Deficit) before eliminations (Must Agree to Surplus/Deficit balan	25.7684	0.0000	0.0000	0.0000	0.0000

3

MINISTRY TRANSFER PAYMENTS *(* **Per Ministry Form 1B; must tie into ORBIT submissi**	2016-17	2017-18	2018-19	2019-20	2020-21
Transfer Payments (In Millions):					
Operating TP from Reporting Ministry					
Capital TP from Reporting Ministry (please specify)					
Total TP - Capital and Operating	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4 Pension contributions paid directly by the consolidated agency to Public Service Pension Plan (PSPP) and OPSEU Pension plan **[Form A (i)]** are eliminated upon consolidation. Please enter amounts in **Form A(i)** for PSPP and/ or OPSEU.

5 Please indicate the nature of other adjustments (i.e. reversal of unrealized gains/losses, gross-ups, other PSAB adjustments to conform to Province's accounting policy, tangible capital asset transfers out of agency at nominal value, etc.) below:

Breakdown of Other Revenues and Expenses	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
Other Revenues:					
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Other Expenses:					
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Additional Comments:

Prepared By: _____
(Name, Title and Contact Number)

Approved By: _____
(Name, Title and Contact Number)

ORBIT Structure Change Request Form

Attach completed forms to your ***ORBIT Structure Change Request*** docket and change the workflow to ***Central Agency*** .

Email: **ORBIT@ontario.ca** to advise of the update.

Ministry Name (from dropdown)	Energy (29)
Requestor Name	Pratima Gounden
Requestor Phone Number	647-289-4932
Manager Name	Tai An
Manager Phone Number	416-807-4992

No.	Structure Change **(from dropdown)**	Vote Number	Item Number	Subitem Number	Account Number	Subaccount / TP Number	Description	Comment	Instruction	Check
1	Add Operating Expense Item	05	04				Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable		*Specify Vote, Item and Description*	OK
2	Add Transfer Payment	05	04		570001	NEW	Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative		*Specify Vote, Item, Account, Transfer Payment (TP) and Description*	OK
3	Add Transfer Payment	02	01		570001	NEW	Electric Vehicle Overnight Charging Rebate Program		*Specify Vote, Item, Account, Transfer Payment (TP) and Description*	OK
4	Add Transfer Payment	06	01		570001	NEW	Cash Contribution for First Nations		*Specify Vote, Item, Account, Transfer Payment (TP) and Description*	OK
5	Add Transfer Payment	06	01		570001	NEW	Conferred Benefit Amount		*Specify Vote, Item, Account, Transfer Payment (TP) and Description*	OK
6	Add Operating Assets Item	02	06				Natural Gas Loans		*Specify Vote, Item and Description*	OK
7	Add Operating Expense Item	02	07				Natural Gas Loan Interest		*Specify Vote, Item and Description*	OK
8	Add Transfer Payment	02	07		570001	NEW	Natural Gas Loan Interest Incentives		*Specify Vote, Item, Account, Transfer Payment (TP) and Description*	OK
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										

ORBIT Structure Change Request Form

Attach completed forms to your ***ORBIT Structure Change Request*** docket and change the workflow to ***Central Agency*** .

Email: **ORBIT@ontario.ca** to advise of the update.

Ministry Name (from dropdown)	Energy (29)
Requestor Name	Pratima Gounden
Requestor Phone Number	647-289-4932
Manager Name	Tai An
Manager Phone Number	416-807-4992

No.	Structure Change **(from dropdown)**	Vote Number	Item Number	Subitem Number	Account Number	Subaccount / TP Number	Description	Comment	Instruction	Check
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										

ORBIT Structure Change Request Form

Attach completed forms to your ***ORBIT Structure Change Request*** docket and change the workflow to ***Central Agency*** .

Email: **ORBIT@ontario.ca** to advise of the update.

Ministry Name (from dropdown)	Energy (29)
Requestor Name	Pratima Gounden
Requestor Phone Number	647-289-4932
Manager Name	Tai An
Manager Phone Number	416-807-4992

No.	Structure Change **(from dropdown)**	Vote Number	Item Number	Subitem Number	Account Number	Subaccount / TP Number	Description	Comment	Instruction	Check
43										
44										
45										
46										
47										
48										
49										

*** To finalize any de-activation requested, Ministries will be required to transfer all information recorded against organizational structure to another vote and item, sub-tem or sub-account within the ministry. Quantitative Management will provide the details of information to be transferred if this situation arise.**

LIST OF TB/MBC DECISIONS
Ministry of ENERGY

I. BOULDERS

Transfer Payment Administrative Modernization (TPAM) Boulder [D0042340]

As part of the Transfer Payment Administrative Modernization Boulder, approve the increase of the Grants Ontario business line from Treasury Board Secretariat to Ministry of Government and Consumer Services to better align enterprise service responsibilities:

In this regard, the Board:

i) Approve decrease in savings target of $51,600 for 2017-18 and ongoing.

ii) Approve a decrease of $50,000 in 2017-18 and ongoing in the Ministry of Energy's Vote/Item 2902-01, Energy Development and Management, to provide permanent base funding for Grants Ontario.

II. PROGRAM DECISIONS

i. Programs / Functions Requiring a Program Note

Program A – Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable [D0042330]

Proposed Minute
APPROVE the creation of a new Operating Expense item entitled "Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable" under Vote/Item 2905-04, Electricity Price Mitigation.
APPROVE the creation of a new transfer payment line entitled "Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative" under Vote/Item 2905-04, Electricity Price Mitigation.
APPROVE an expenditure increase of $249,000,000 in 2017-18, $263,000,000 in 2018-19, $276,000,000 in 2019-20, $319,000,000 in 2020-21 in the transfer payment line entitled "Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative" under Vote/Item 2905-04, Electricity Price Mitigation.

LIST OF TB/MBC DECISIONS
Ministry of ENERGY

Treasury Board/Management Board of Cabinet approve the following multi-year resources for the program:

Financial Decisions $M	2017-18	2018-19	2019-20	2020-21
Operating Expense	**249.0000**	**263.0000**	**276.0000**	**319.0000**
Capital Expense				
Total Expense	**249.0000**	**263.0000**	**276.0000**	**319.0000**
Operating Assets				
Capital Assets				

In this regard, the Board:

i)	APPROVE the creation of a new Operating Expense item entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable” under Vote/Item 2905-04, Electricity Price Mitigation.	D0042330
ii)	APPROVE the creation of a new transfer payment line entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative” under Vote/Item 2905-04, Electricity Price Mitigation.	D0042330
iii)	APPROVE an expenditure increase of $249,000,000 in 2017-18, $263,000,000 in 2018-19, $276,000,000 in 2019-20, $319,000,000 in 2020-21 in the transfer payment line entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative” under Vote/Item 2905-04, Electricity Price Mitigation.	D0042197

LIST OF TB/MBC DECISIONS
Ministry of ENERGY

Program B - Electric Vehicle Overnight Charging Rebate Program [D0042331]

Proposed Minute
APPROVE the creation of a new transfer payment line entitled “Electric Vehicle Overnight Charging Rebate Program” under Vote/Item 2902-01, Energy Development and Management.
APPROVE an expenditure increase of $2,150,000 in 2017-18, $2,700,000 in 2018-19, $3,700,000 in 2019-20, and $5,000,000 2020-21 in the transfer payment line entitled “Electric Vehicle Overnight Charging Rebate Program” under Vote/Item 2902-01, Energy Development and Management.
NOTE a funding requirement of $1,450,000 in 2021-22.
NOTE the Ministry will report back to Treasury Board/Management Board of Cabinet on staffing requirements and further program design in 2017.

Treasury Board/Management Board of Cabinet approve the following multi-year resources for the program:

Financial Decisions $M	2017-18	2018-19	2019-20	2020-21
Operating Expense	**2.1500**	**2.7000**	**3.7000**	**5.0000**
Capital Expense				
Total Expense	**2.1500**	**2.7000**	**3.7000**	**5.0000**
Operating Assets				
Capital Assets				

In this regard, the Board:

i) APPROVE the creation of a new transfer payment line entitled “Electric Vehicle Overnight Charging Rebate Program” under Vote/Item 2902-01, Energy Development and Management.	D0042331
i) APPROVE an expenditure increase of $2,150,000 in 2017-18, $2,700,000 in 2018-19, $3,700,000 in 2019-20, and $5,000,000 2020-21 in the transfer payment line entitled “Electric Vehicle Overnight Charging Rebate Program” under Vote/Item 2902-01, Energy Development and	D0042201

LIST OF TB/MBC DECISIONS
Ministry of ENERGY

	Management.	
ii)	NOTE a funding requirement of $1,450,000 in 2021-22.	D0042201
iii)	NOTE the Ministry will report back to Treasury Board/ Management Board of Cabinet on staffing requirements and further program design in 2017.	D0042331

Program C – Strategic Asset Management [D0042434]

Proposed Minute
APPROVE an expenditure increase of $70,000,000 in 2017-18 and $5,000,000 in 2019-20 and onwards under Vote/Item 2906-01, Strategic Asset Management and Transformation.
APPROVE 5 FTEs the Ministry of Energy received during the 2016-17 PRRT for the establishment of the Investment and Governance Secretariat on a permanent basis.
APPROVE an expenditure increase in the amount of $930,000, including $580,000 in salary and wages to support the Investment and Governance Secretariat in 2019-20 and onwards under Vote/Item 2902-01, Energy Development and Management.
APPROVE the creation of a new transfer payment line entitled “Cash Contribution for First Nations” under Vote/Item 2906-01, Strategic Asset Management and Transformation.
APPROVE an expenditure decrease of $15,000,000 in 2017-18 to 2019-20 under Vote/Item 2902-01, Energy Development and Management and an expenditure increase of $45,000,000 in 2017-18 in the transfer payment line entitled “Cash Contribution for First Nations” under Vote/Item 2906-01, Strategic Asset Management and Transformation.
APPROVE the creation of a new transfer payment line entitled “Conferred Benefit Amount” under Vote/Item 2906-01, Strategic Asset Management and Transformation.
APPROVE an expenditure increase of $135,000,000 in 2017-18 in the Transfer Payment line entitled “Conferred Benefit Amount” under Vote/Item 2906-01, Strategic Asset Management and Transformation.

LIST OF TB/MBC DECISIONS
Ministry of ENERGY

Treasury Board/Management Board of Cabinet approve the following multi-year resources for the program:

Financial Decisions $M	2017-18	2018-19	2019-20	2020-21
Operating Expense Vote 2902-01	**-15.0000**	**-15.0000**	**-15.0000**	
Operating Expense Vote 2906-01	**250.0000**		**5.9300**	**5.9300**
Capital Expense				
Total Expense	**235.0000**	**-15.0000**	**-9.0700**	**5.9300**
Operating Assets				
Capital Assets				

In this regard, the Board:

i)	APPROVE an expenditure increase of $70,000,000 in 2017-18 and $5,000,000 in 2019-20 and onwards under Vote/Item 2906-01, Strategic Asset Management and Transformation.	D0042437
ii)	APPROVE 5 FTEs the Ministry of Energy received during the 2016-17 PRRT for the establishment of the Investment and Governance Secretariat on a permanent basis.	D0042454
iii)	APPROVE an expenditure increase in the amount of $930,000, including $580,000 in salary and wages to support the Investment and Governance Secretariat in 2019-20 and onwards under Vote/Item 2902-01, Energy Development and Management.	D0042454
iv)	APPROVE the creation of a new transfer payment line entitled “Cash Contribution for First Nations” under Vote/Item 2906-01, Strategic Asset Management and Transformation.	D0042437
v)	APPROVE an expenditure decrease of $15,000,000 in 2017-18 to 2019-20 under Vote/Item 2902-01, Energy Development and Management and an expenditure increase of $45,000,000 in 2017-18 in the transfer payment line entitled “Cash Contribution for First Nations” under Vote/Item 2906-01, Strategic Asset Management and Transformation.	D0042460

LIST OF TB/MBC DECISIONS
Ministry of ENERGY

vi)	APPROVE the creation of a new transfer payment line entitled “Conferred Benefit Amount” under Vote/Item 2906-01, Strategic Asset Management and Transformation.	D0042437
vii)	APPROVE an expenditure increase of $135,000,000 in 2017-18 in the Transfer Payment line entitled “Conferred Benefit Amount” under Vote/Item 2906-01, Strategic Asset Management and Transformation.	D0042465

Program D - Ontario Rebate for Electricity Consumers [D0042466]

Proposed Minute
APPROVE an expenditure increase of $94,000,000 in 2017-18, $96,000,000 in 2018-19, $196,000,000 in 2019-20, and $196,000,000 in 2020-21, under Vote/Item 2905-03 Ontario Rebate for Electricity Consumers.
APPROVE 4 new permanent FTEs starting in 2017-18 and onwards to support policy and operational responsibilities related to the Ontario Rebate for Electricity Consumers.
APPROVE an expenditure increase of $610,000, including $410,000 in salary and wages in 2017-18 and onwards under Vote/Item 2902-01, Energy Development and Management.
APPROVE an expenditure increase of $2,500,000 for program delivery in 2017-18 and onwards under Vote/Item 2902-01, Energy Development and Management.

Treasury Board/Management Board of Cabinet approve the following multi-year resources for the program:

Financial Decisions $M	2017-18	2018-19	2019-20	2020-21
Operating Expense	**97.1100**	**99.1100**	**199.1100**	**199.1100**
Capital Expense				
Total Expense	**97.1100**	**99.1100**	**199.1100**	**199.1100**
Operating Assets				
Capital Assets				

In this regard, the Board:

i)	APPROVE an expenditure increase of $94,000,000 in 2017-18, $96,000,000 in 2018-19, $196,000,000 in 2019-20, and $196,000,000 in 2020-21, under Vote/Item 2905-03 Ontario Rebate for Electricity Consumers.	D0042468
ii)	APPROVE 4 new permanent FTEs starting in 2017-18 and onwards to support policy and operational responsibilities related to the Ontario Rebate for Electricity Consumers.	D0042470
iii)	APPROVE an expenditure increase of $610,000, including $410,000 in salary and wages in 2017-18 and onwards under Vote/Item 2902-01, Energy Development and Management.	D0042470
iv)	APPROVE an expenditure increase of $2,500,000 for program delivery in 2017-18 and onwards under Vote/Item 2902-01, Energy Development and Management.	D0042470

ii. Programs / Functions Not Requiring a Program Note

Natural Gas Access Loan [D0042660]

Technical Decisions $M	2017-18	2018-19	2019-20	2020-21
Operating Expense	**0.0010**	**0.0010**	**0.0010**	**0.0010**
Capital Expense				
Total Expense	**0.0010**	**0.0010**	**0.0010**	**0.0010**
Operating Assets	**0.0010**	**0.0010**	**0.0010**	**0.0010**
Capital Assets				

In this regard, the Board:

i) APPROVE the creation of a new Operating Asset item entitled “Natural Gas Loans” under Vote/Item 2902-06, Energy Development and Management with a $1,000 placeholder for Natural Gas Loan disbursements.

LIST OF TB/MBC DECISIONS
Ministry of ENERGY

ii) Approve the creation of a new Operating Expense item entitled “Natural Gas Loan Interest” under Vote/Item 2902-07, Energy Development and Management.

iii) Approve the creation of Transfer Payment line entitled “Natural Gas Loan Interest Incentive” in Vote/Item 2902-07, Energy Development and Management with a $1,000 placeholder to record borrowing cost to the province for providing an interest free loan. Note that expense impact will be offset from the Ministry of Infrastructure’s Natural Gas Loan Interest Incentives transfer payment line (Vote/Item 902-30).

iv) Note that bad debt expense incurred by ENERGY will be offset from the Ministry of Infrastructure’s bad debt expense allocation established for the Natural Gas Access Loan Program.

Ministry Savings Target [D0042979]

Approve a expenditure decrease of $1,930,600 in 2017-18 and onwards for the Ministry’s savings target under Vote/Item 2902-01, Energy Development and Management.

Technical Decisions $M	2017-18	2018-19	2019-20	2020-21
Operating Expense	-1.9306	-1.9306	-1.9306	-1.9306
Capital Expense				
Total Expense	-1.9306	-1.9306	-1.9306	-1.9306
Operating Assets				
Capital Assets				

In this regard, the Board:

i) APPROVE a expenditure decrease of $1,930,600 in 2017-18 and onwards for the Ministry’s savings target under Vote/Item 2902-01, Energy Development and Management.

LIST OF TB/MBC DECISIONS
Ministry of ENERGY

Inter-ministry transfers

Temporary FTE Transfer to MAG [D0042590]

In this regard, the Board:

i) APPROVE a temporary transfer of one FTE from the ENERGY to MAG (Vote-Item 304-2) to support ongoing energy related work for 2017-2018 only.

Temporary FTE Transfer to GSIC [D0041897]

In this regard, the Board:

i) APPROVE a temporary transfer of 2 FTEs from ENERGY (Vote/Item 2902-01 Energy Development and Management) to MGCS (Vote/Item 1817-01), to support the Energy and Water Reporting and Benchmarking Project for 2017-18 only.

ENERGY Transfer to MGCS for IT-Rationalization Initiatives [D0041166]

In this regard, the Board:

i) APPROVE a decrease in Recoveries of $148,800 in 2017-18 and ongoing in GSIC Vote-Item 1817-01 offset by decreases in Services of $24,300 in MEDEI/MRI Vote-Item 0901-01, $9,700 in ENERGY Vote-Item 2901-01, $56,300 in ServiceOntario Vote-Item 1814-01, and $58,500 in Ontario Shared Services Vote-Item 1811-05 pertaining to User Seat services.

iii. Report Backs

Report Backs	Proposed Minute
Annual GIF Report Back	RECEIVED the report back providing the outcomes achieved, including an estimate of reduction in GHG emissions

Question/Answer
Electricity Price Mitigation

Is it possible to cap the rebate for residential consumers within the Regulated Price Plan?

"Capping" refers to limiting the calculation of the 8% rebate to the amount of fixed and volumetric charges calculated using only the first 3,000 kWh per month of consumption. Charges related to consumption over 3,000kWh would not receive the 8% rebate.

Implementing a cap on residential consumers only is likely technically possible, however the Ministry would need to consult with local distribution companies to confirm. Adding such complexity to program delivery would increase the cost of upgrades to LDC billing systems, costs that are ultimately passed on to consumers through distribution rates. The inclusion of a cap would also require additional communication with all customers that would be reflected on electricity bills which already are required to convey a significant amount of information. LDCs could expect to experience communication challenges with consumers confused about the limitations on their rebate.

In addition, placing a cap on residential consumers only may present a significant issue for local distribution companies as they may have limitations in their ability to clearly distinguish or identify residential consumers from within rate classes for billing purposes. LDCs would need to incur additional administration costs to address these limitations.

The 3,000 kWh per month cap for the OCEB program created an inequity amongst some multi-unit residential complexes with respect to common area electricity consumption. For buildings that were suite metered by LDCs, their common area meter was limited to 3,000 kWh per month.

Conversely, bulk or unit sub-metered buildings, were required to submit self-declaration forms to their LDC identifying the number of units in the building, creating a building cap (3,000 kWh * # units). Since average consumption for residential units is much less than the cap, a significant residual amount of cap space was available to offset common area electricity consumption.

For example, a 100 unit building with average unit consumption of 1,000 kWh per month, had 200,000 kWh per month (3,000 – 1,000) * 100) to devote to the common area consumption.

What is the potential impact of capping residential consumers within the Regulated Price Plan?

If residential consumers were capped within the RPP, it is expected that the main impact would be that customers who rely on electricity for heating (one of the subgroups of residential consumers most affected by rising electricity costs) would not receive the full 8% rebate. The exact fiscal impact of not capping residential customers is unknown as the Ministry of Energy does not have data on the number of residential consumers who exceed 3,000kWh.

If a 3,000kWh cap was placed on residential consumers, potential savings may be minimal given that a typical residential customer consumes 750 kWh per month on average.

Given that the benefit is believed to be small, the potential administrative complexity and the potential for an impact on some that heat electrically, ministry staff believe that a cap on residential consumers is not warranted.

Is it possible to target proceeds recycling to Class A consumers that existed prior to the pending expansion of the Industrial Conservation Initiative (ICI)?

Yes, it is likely possible to target proceeds recycling to consumers within a rate class, including the Class A consumers that existed prior to expansion of ICI.

Currently there are about 300 Class A consumers –70 are billed directly by IESO and the remainder are billed by LDCs. In order to target proceeds recycling for these 300 consumers, IESO and LDCs would need to distinguish consumers from within rate classes for billing purposes and bill them accordingly.

The Ministry has identified the following key considerations with respect to targeting proceeds recycling to existing Class A consumers:

1. IESO and LDCs currently do not track consumers within Class A. Consequently, this would represent a new administrative/billing process which would add to the administrative complexities associated with IESO/LDC billing practices. Further consultation with LDCs/IESO would be needed to better understand the potential administrative complexities/issues related to pursuing targeted recycling.

2. The primary goal of proceeds recycling is to incent consumers to continue to use electricity or fuel switch to electricity, over more greenhouse gas (GHG) emissions intensive fuels. Targeting recycling to specific consumers segments may call into question whether the goal of proceeds recycling is emissions reduction or strictly rate mitigation for specific consumers. Put another way, it could be difficult to justify recycling to some Class A consumers but not others, if the purpose of the recycling is to incent fuel switching and greenhouse gas reductions for all consumers.

Given the considerations outlined above, the Ministry would advise against the pursuit of targeted proceeds recycling.

Q&A's
ONTARIO REBATE FOR ELECTRICITY CONSUMERS

Q. How would the Ontario Rebate for Electricity Consumers impact Ontario's plans for a balanced budget?

A. The proposed Ontario Rebate for Electricity Consumers would help make everyday life easier for Ontario families, small businesses and farms with their electricity costs by providing a rebate that is equal to the eight per cent provincial portion of HST. This eight per cent rebate would appear directly on the consumer's electricity bill.

The government remains committed to balancing the budget by 2017-18 while continuing to invest in the economy, our people and a healthy, clean and prosperous low-carbon future. These investments will help enhance the public services that Ontarians rely on, as well as stimulate economic growth.

Commented [RK1]: Not sure this is an "investment" -- suggest omitting.

Q: Do ~~other~~ any provinces provide harmonized sales tax (HST) rebates related to energy?

Commented [LL2]: "other" implies that Ontario is providing a HST rebate. We're providing a rebate equal to the amount of the provincial portion of the HST. An actual HST rebate means something else.

A: Currently, there are no federally-administered point-of-sale rebates for electricity in any of the ~~other~~ provinces participating in the HST.

Nova Scotia is the only province with a provincially administered home energy rebate program that is equal to the provincial portion of the HST, and applies to all sources of residential use energy, including electricity.

Newfoundland and Labrador had a "Residential Energy Rebate" that was eliminated, effective July 1, 2015. The rebate, which came into effect October 11, 2011, was a provincially administered energy rebate equal to the provincial portion of the HST on energy used for residential purposes, including electricity.

Q: Would the rebate affect HST paid by consumers?

Commented [LP3]: Please use this instead of, "The 8% rebate essentially removes the HST from hydro bills. Where are the funds for this rebate coming from."

A: No. The HST on electricity costs remains at 13 per cent. The relief being provided by Ontario does not impact the HST calculation on a customer's bill.

Commented [LL4]: This would help clarify that the rebate does not reduce the bill before HST is calculated.

The proposed Ontario Rebate for Electricity Consumers would provide a rebate that is equal to the eight per cent provincial portion of HST. This eight per cent rebate would appear directly on the consumer's electricity bill.

Commented [RK5]: Suggest this addition as positive messaging.

Q: What happens to input tax credits claimed by businesses?

A: Most businesses engaged in commercial activities can claim input tax credits to recover the HST they pay to operate their business.

Q&A's
ONTARIO REBATE FOR ELECTRICITY CONSUMERS

Following the introduction of the eight per cent rebate, small businesses that receive the rebate would continue to be able to claim ~~the~~ input tax credits as usual. Generally, this means the business would claim input tax credits for the 13% HST they pay on their electricity costs and not reduce that amount by the provincial rebate.

With this rebate, small businesses across Ontario would have even more opportunity to be competitive and manage their energy costs.

Q: How is Ontario helping to lower electricity costs for residential consumers?

A: Ontario has a number of programs in place to help low-to-moderate income individuals and families with energy costs, including the Ontario Energy and Property Tax Credit, the Ontario Electricity Support Program, the Ontario Sales Tax Credit.

The Ontario Rebate for Electricity Consumers would be another program that would help eligible Ontario families, small businesses and farms with electricity costs in addition to the above mentioned programs~~, if consumers were eligible~~.

Q. Will the federal government be removing tax from electricity bills? ~~rebating its portion of the HST?~~

A. The federal government has not shared any plans to mitigate electricity costs for Canadians.

The Province continues to work with the federal government when there is an opportunity to partner or consult ~~as it relates to~~on regulatory and emerging issues.

Ontario remains committed to making everyday life easier for people across the province by lowering costs and enhancing convenience and choice.

Q&A's
ONTARIO REBATE FOR ELECTRICITY CONSUMERS

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With this rebate, small businesses across Ontario would have even more opportunity to be competitive and manage their energy costs.

Q: How is Ontario helping to lower electricity costs for residential consumers?

A: Ontario has a number of programs in place to help low-to-moderate income individuals and families with energy costs, including the Ontario Energy and Property Tax Credit, the Ontario Electricity Support Program, the Ontario Sales Tax Credit and the Northern Ontario Energy Credit.

Commented [SK27]: Just a suggestion. Maybe I'm misreading something. Unclear if this was intentionally omitted.

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Ontario

BACKGROUNDER

Ministry of Energy

Rate Relief for Families, Farms and Small Businesses

Provincial Tax Rebate

Ontario is introducing legislation which would rebate an amount equivalent to the provincial portion of taxes from the electricity bills for residential consumers, small businesses and farms eligible for the Regulated Rate Plan (RPP) starting January 1, 2017. This rebate is intended to offset the provincial share of the Harmonized Sales Tax (HST).

The RPP is a blended electricity rate set by the Ontario Energy Board (OEB) for the province's five million residential consumers, small businesses and farms.

The list below gives details of which electricity consumers would be eligible to receive the benefit:

- Residential Regulated Price Plan eligible consumers
- Residential retail consumers
- Multi-unit residential buildings and other facilities used as residential rental units such as long-term care homes and school residences
- Residential Regulated Price Plan eligible farms
- Many small businesses, for example, most coffee and snack retailers, convenience stores, apparel stores, hair salons and small offices.

Modernizing the Rural or Remote Electricity Rate Protection Program (RRRP)

While many Ontario electricity consumers are unaware, for the last 15 years the Rural or Remote Electricity Rate Protection (RRRP) program has reduced electricity delivery costs for eligible customers located in remote, rural and northern areas. The cost of providing electricity service for customers in these low density regions is higher than to customers in more urban or more dense communities.

For most recipients, RRRP funding has been frozen at its current level since 2004. As a result, the impact of its assistance has reduced over time as electricity costs have increased to rebuild Ontario's electricity system and close coal-fired power plants.

Today, RRRP is an approximately $175-million program. Each year, the Ontario Energy Board (OEB) approves an RRRP benefit amount to be collected from all electricity distributors by the Independent Electricity System Operator (IESO). Electricity distributors in turn pass the small Board-approved retail RRRP charge on to their customers to recover the RRRP amount paid to IESO.

Through regulation the government intends to introduce further funding for the program that would increase it by $110 million, which would result in a reduced bill of approximately $45 per month for affected customers when combined with the proposed 8% rebate. With existing and proposed rebates, average bills would likely be reduced by about $76.

The RRRP is paid to some electricity distributors serving rural or remote customers to allow them to reduce the amount they would otherwise have to charge their customers to deliver electricity to them. For an average residential customer, the cost of supporting RRRP is roughly $1 per month.

R2 Customers

The RRRP is provided to a number of rural residential customers and some of those residential customers are classified as R2 customers. These are customers with low density and are not in urban or moderately

urban areas in the Province. R2 customers face some of the highest electricity costs in the province. There are approximately 330,000 R2 customers in Ontario.

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For most recipients, RRRP funding has been frozen at its current level since 2004. As a result, the relative impact of its assistance has reduced over time as electricity costs have increased to rebuild Ontario's electricity system and close coal-fired power plants.

Today, RRRP is an approximately $175-million program. Each year, the Ontario Energy Board (OEB) approves an RRRP benefit amount to be collected from all electricity distributors by the Independent Electricity System Operator (IESO). Electricity distributors in turn pass the small, ~~Board~~OEB-approved, retail RRRP charge on to their customers to recover the RRRP amount paid to the IESO.

Through regulation, the government intends to introduce further funding for the program that would increase it by $110 million, which would result in a reduced bill of approximately $45 per month for affected customers when combined with the proposed 8% rebate. With existing and planned RRRP funding and the proposed rebate~~s~~, average bills would likely be reduced by about $76 per month.

The RRRP is paid to some electricity distributors serving rural or remote customers to allow them to reduce the amount they would otherwise have to charge their customers to deliver electricity to them. For an average residential customer, the cost of supporting RRRP is roughly $1 per month.

R2 Customers

The RRRP is provided to a number of rural residential customers and some of those residential customers are classified as R2 customers. These are customers in an area with a low density of customers and are

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Ministry of Energy

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Today, RRRP is an approximately $175-million program. Each year, the Ontario Energy Board (OEB) approves an RRRP benefit amount to be collected from all electricity distributors by the Independent Electricity System Operator (IESO). Electricity distributors in turn pass the small, ~~Board~~OEB-approved, retail RRRP charge on to their customers to recover the RRRP amount paid to the IESO.

Through regulation, the government intends to introduce further funding for the program that would increase it by $110 million, which would result in a reduced bill of approximately $45 per month for affected customers when combined with the proposed 8% rebate. With existing and planned RRRP funding and the proposed rebate~~s~~, average bills would likely be reduced by about $76 per month.

The RRRP is paid to some electricity distributors serving rural or remote customers to allow them to reduce the amount they would otherwise have to charge their customers to deliver electricity to them. For an average residential customer, the cost of supporting RRRP is roughly $1 per month.

R2 Customers

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Ontario

BACKGROUNDER

Ministry of Energy

Ontario's Industrial Conservation Initiative (ICI)

The Industrial Conservation Initiative (ICI) provides a strong incentive for industrial electricity consumers to shift their electricity consumption to off-peak hours to reduce their bills by about one-third. By reducing the province's peak demand, the Industrial Conservation Initiative has the added benefit of reducing cost pressures on electricity prices by deferring the need to build peaking generation. Eligible ICI participants include those consumers with monthly peak demand exceeding three megawatts, subject to eligibility requirements. Under ICI, these consumers are charged Global Adjustment on the basis of their share of the total system demand during the highest five peak hours of the year. Currently there are about 300 particpating consumers who collectively have reduced Ontario's peak demand by about 1,000 MW.

Ontario is proposing to expand the ICI program to include more than one thousand newly eligible customers with monthly peak demand greater than one megawatt, down from the current threshold of three megawatts. In addition, sector restrictions would be removed and smaller industrial, institutional and commercial businesses would be eligible to participate.

Expanding participation in the ICI program would:

- Reduce cost pressures on the electricity system by empowering more consumers to lower their electricity demand during peak periods; and
- Reduce electricity bills for new ICI participants who are able to reduce their electricity demand during peak demand periods.

Newly eligible customers would have the opportunity to opt-in to the ICI program.

Case Study

With more than a thousand new businesses soon eligible for ICI, cost impact across sectors and industries will varry. As an illisutraive example of the impact, a plastics manufacturer with an average peak demand of 2 MW that participates in the ICI program could see its electricity costs reduced from $154 per MWh to as low as $102 per MWh. This would result in energy cost savings of up to $42,000 per month.

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BACKGROUNDER

Ministry of Energy

Ontario's Industrial Conservation Initiative (ICI)

The Industrial Conservation Initiative (ICI) provides a strong incentive for industrial electricity consumers to shift their electricity consumption to off-peak hours ~~to~~ and reduce their bills by about one-third. By reducing the province's peak demand, the Industrial Conservation Initiative has the added benefit of reducing cost pressures on electricity prices by ~~deferr~~reducing the need to build peaking generation. Eligible ICI participants include those consumers with monthly peak demand exceeding three megawatts, subject to eligibility requirements. Under ICI, these consumers are charged the Global Adjustment on the basis of their share of the total system demand during the highest five peak hours of the year. Currently there are about 300 particpating consumers who collectively have reduced Ontario's peak demand by about 1,000 MW.

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Ontario is proposing to expand the ICI program by removing sectoral restrictions and ~~to~~ include more than one thousand newly eligible customers with monthly peak demand greater than one megawatt, down from the current threshold of three megawatts. ~~In addition, sector restrictions would be removed and~~Through the proposed expansion, smaller industrial as well as~~,~~ institutional and commercial businesses would be eligible to participate.

Expanding participation in the ICI program would:

- Reduce cost pressures on the electricity system by empowering more consumers to lower their electricity demand during peak periods; and
- Reduce electricity bills for new ICI participants who are able to reduce their electricity demand during peak demand periods.

Newly eligible customers would have the opportunity to opt-in to the ICI program.

Case Study

With more than a thousand new businesses and other customers soon eligible for ICI, cost impacts across sectors and industries will va~~r~~ry. As an illisutraive example of the impact, ~~-~~a plastics manufacturer with an average peak demand of 2 MW that participates in the ICI program could see its electricity costs reduced from $154 per MWh to as low as $102 per MWh. This would result in energy cost savings of up to $42,000 per month.

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Ontario

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Fact Sheet

Ministry of Energy

Three Things You Need To Know

1) We're rebating provincial taxes on electricity bills for families, farms, and small businesses

If passed, proposed legislation would provide an eight per cent (8%) rebate to five million electricity consumers eligible for the Regulated Price Plan (RPP), including:

- Residential consumers;
- Multi-unit residential buildings and other facilities used as residential rental units such as long-term care homes and school residences; and
- Small businesses; and
- Farms.

2) We're reducing remote and rural delivery charges by 20%

The Rural or Remote Rate Protection (RPPP) program reduces electricity costs for approximately 330,000 customers located in rural or remote areas.

Ontario is proposing increasing program funding by $110 million, bringing total program funding up to approximately $285 million for eligible customers.

This proposed funding increase to the RRRP and the eight percent rebate would result in electricity relief for eligible consumers of approximately $45 per month

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Ministry of Energy

Existing Programs To Reduce Rates

Residential:

Ontario Electricity Support Program

- Provides up to $75 in assistance directly on the bills of eligible low-income electricity consumers.

Ontario Energy and Property Tax Credit

- Delivered as part of the Ontario Trillium Benefit. Provides up to $1,008 per year for low-to moderate-income individuals and families and up to $1,148 for qualifying seniors.

Northern Ontario Energy Credit

- Delivered as part of the Ontario Trillium Benefit, provides individuals living in northern Ontario with a credit of up to $146 per year for the 2016 benefit year, and families up to $224.

SaveONenergy for Home Conservation Programs (including Home Assistance Program for low income customers)

- Offered by local distribution companies (LDCs), these programs provide financial incentives for electricity-saving measures like LEDs, ENERGYSTAR certified ceiling fans, baseboard programmable thermostats, clotheslines, and advanced powerbars.

Commercial:

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- Offered by LDCs, these programs provide financial incentives to help businesses save energy and better manage their electricity bills.

Industrial:

Industrial Conservation Initiative

- Encourages Ontario's largest consumers to reduce consumption during peak periods to save up to one-third on their electricity bills.

Industrial Accelerator Program

Offered by the Independent Electricity System Operator, this program provides financial incentives to transmission-connected electricity companies to help them fast track capital investment in major energy conservation projects to help them become more competitive.

Industrial Electricity Incentive

- Provides reduced electricity rates for qualified companies starting or expanding operations in Ontario.

Northern Industrial Electricity Rate Program

- Provides a $20 per megawatt hour rebate, up to a maximum of $20 million, for qualifying large northern industrial consumers.

Demand Response Auction

- Provides contractual incentives to businesses and industry to reduce electricity consumption when called upon to do so. This lowers costs and enhances the reliability of the electricity system.

Ontario

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Ministry of Energy

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Rural or Remote Rate Electricity Rate Protection Program (RRRP)

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8% Rebate for Residential, Small Businesses and Small Farms

If passed, proposed legislation would provide an eight per cent (8%) rebate to approximately 5 million electricity consumers, including:

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Rural or Remote Rate Protection (RRRP)

The Rural or Remote Rate Protection (RPPP) program reduces electricity costs for customers located in rural or remote areas, including 330,000 low-density customers paying R2 rates.

Ontario is proposing increasing program funding by $110 million, bringing total program funding up to approximately $285 million for eligible customers.

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As outlined in the 2016 Budget and the Climate Change Action Plan, the government intends to recycle a portion of the cap and trade auction proceeds to offset the impact of cap and trade on industrial and commercial electricity consumers to keep rates affordable

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NEWS

Ministry of Energy

Government Introduces Legislation to Reduce Electricity Costs

Families, Farms and Small Businesses Will See Bill Reductions

NEWS September 15, 2016

Today, Ontario introduced the *Ontario Rebate for Electricity Consumers Act, 2016*. This proposed legislation would provide an eight per cent rebate equal to the provincial portion of the HST from residential, farms and small businesses' ~~the~~ electricity bills ~~of residential small businesses and farms consumers~~ starting January 1, 2017. ~~Additionally~~As well, the government intends to introduce new measures to further reduce bills for rural families, and introduce expanded relief programs for commercial and industrial electricity consumers.

This bill and other new measures would provide a benefit to all electricity consumers in Ontario, including:

- Providing residential customers with an eight per cent rebate equal to the provincial portion of the HST, totaling about $130 on average per year for the typical household. ~~Reducing the average Ontario residential electricity bill by 8 per cent (8%) on the amount before tax or $11 each month~~
- Decreasing total bills for eligible rural customers by $45 each month
- Empowering more than 1,000 businesses to reduce bills by up to one-third by expanding ~~through the~~ the Industrial Conservation Initiative (ICI). This would reduce cost pressures on the electricity system by ~~incenting~~ enabling ~~more~~ consumers to lower their electricity demand during peak periods.

Through these initiatives, ~~about~~ more than five million residential consumers and more than 1,000 ~~industrial customers~~ICI eligible businesses could see a reduction in their electricity bills. Eligible rural electricity consumers would be provided an additional $110 million in support by modernizing the Rural or Remote Electricity Rate Protection program ~~(RRRP)~~.

Helping Ontarians with the cost of everyday ~~living~~ life and helping businesses compete are part of the government's plan to build Ontario up. The government's four-part economic plan includes investing in talent and skills, ~~including~~ by helping more people get and create the jobs of the future by expanding access to high-quality college and university education. Ontario ~~The plan~~ is making a historic investment ~~the largest investment~~ in public infrastructure ~~in Ontario's history~~ and investing in a low-carbon economy driven by innovative, high-growth, export-oriented businesses. The plan is also helping working Ontarians achieve a more secure retirement.

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NEWS

Ministry of Energy

Government Introduces Legislation to Reduce Electricity Costs

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This bill and other new measures would provide a benefit to all electricity consumers in Ontario, including:

- Providing residential customers with an eight per cent rebate equal to the provincial portion of the HST, totaling about $130 on average per year for the typical household. ~~Reducing the average Ontario residential electricity bill by 8 per cent (8%) on the amount before tax or $11 each month~~
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Ontario

BACKGROUNDER

Ministry of Energy

Rate Relief for Families, Farms and Small Businesses

Provincial ~~Tax~~ Rebate

Ontario is introducing legislation which would rebate an amount equivalent to the provincial portion of ~~taxes~~ the Harmonized Sales Tax (HST) from the electricity bills for residential consumers, small businesses and farms eligible for the Regulated Rate Plan (RPP) starting January 1, 2017. ~~This rebate is intended to offset the provincial share of the Harmonized Sales Tax (HST~~).

The RPP is a blended electricity rate set by the Ontario Energy Board (OEB) for the province's five million residential consumers, small businesses and farms.

The list below gives details of which electricity consumers would be eligible to receive the benefit:

- Residential Regulated Price Plan eligible consumers
- Residential retail consumers
- Multi-unit residential buildings and other facilities used as residential rental units such as long-term care homes and school residences
- Residential Regulated Price Plan eligible farms
- Many small businesses, for example, most coffee and snack retailers, convenience stores, apparel stores, hair salons and small offices.

Modernizing the Rural or Remote Electricity Rate Protection Program (RRRP)

While many Ontario electricity consumers are unaware, for the last 15 years the Rural or Remote Electricity Rate Protection (RRRP) program has reduced electricity delivery costs for eligible customers located in remote, rural and northern areas. The cost of providing electricity service for customers in these low density regions is higher than to customers in more urban or more dense communities.

For most recipients, RRRP funding has been frozen at its current level since 2004. As a result, the impact of its assistance has reduced over time as electricity costs have increased to rebuild Ontario's electricity system and close coal-fired power plants.

Today, RRRP is an approximately $175-million program. Each year, the Ontario Energy Board (OEB) approves an RRRP benefit amount to be collected from all electricity distributors by the Independent Electricity System Operator (IESO). Electricity distributors in turn pass the small Board-approved retail RRRP charge on to their customers to recover the RRRP amount paid to IESO.

Through regulation the government intends to introduce further funding for the program that would increase it by $110 million, which would result in a reduced bill of approximately $45 per month for affected customers when combined with the proposed 8% rebate. With existing and proposed rebates, average bills would likely be reduced by about $76.

The RRRP is paid to some electricity distributors serving rural or remote customers to allow them to reduce the amount they would otherwise have to charge their customers to deliver electricity to them. For an average residential customer, the cost of supporting RRRP is roughly $1 per month.

R2 Customers

The RRRP is provided to a number of rural residential customers and some of those residential customers are classified as R2 customers. These are customers with low density and are not in urban or moderately

Commented [LL1]: A "tax rebate" is something different, from a tax perspective, than the proposed rebate. It is expected to confuse businesses who need to know what part of their bills are tax in order to claim input tax credits.

Commented [LL2]: There is only one tax on electricity bills and that's the HST. "Taxes" should not be used in the plural

Commented [LL3]: This is new messaging not seen in the materials we received today and is in some ways redundant considering the first sentence of the paragraph. More importantly, it appears the government thinks provincial portion of the HST is too high and requires offsetting regardless of income level. This is not in keeping with tax policy and raises the question "why doesn't the government simply lower the rate of the provincial portion of the HST?"

urban areas in the Province. R2 customers face some of the highest electricity costs in the province. There are approximately 330,000 R2 customers in Ontario.

For media inquiries only call:

Katrina Xavier, Minister's Office, 416-325-2690
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Ontario

Fact Sheet

Ministry of Energy

Three Things You Need To Know

1) **We're rebating an amount equal to the provincial portion of the HST~~taxes~~ on electricity bills for families, farms, and small businesses**

If passed, proposed legislation would provide an eight per cent (8%) rebate, equal to the provincial portion of the HST, to five million electricity consumers eligible for the Regulated Price Plan (RPP), including:

- Residential consumers;
- Multi-unit residential buildings and other facilities used as residential rental units such as long-term care homes and school residences; and
- Small businesses; and
- Farms.

2) **We're reducing remote and rural delivery charges by 20%**

The Rural or Remote Rate Protection (RPPP) program reduces electricity costs for approximately 330,000 customers located in rural or remote areas.

Ontario is proposing increasing program funding by $110 million, bringing total program funding up to approximately $285 million for eligible customers.

This proposed funding increase to the RRRP and the eight percent rebate would result in electricity relief for eligible consumers of approximately $45 per month

3) **We're empowering more than one thousand new manufactures to reduce their bills by one third**

The Industrial Conservation Initiative (ICI) provides a strong incentive for large electricity consumers to reduce their electricity consumption during peak hours to lower their bills by up to one-third. By reducing the province's peak demand, the Industrial Conservation Initiative reduces electricity system costs by deferring the need to build peaking generation

Currently, electricity consumers with monthly peak demand exceeding 3 megawatts (MW) are eligible to participate. Ontario is proposing to expand the ICI program to include customers with monthly peak greater than 1 MW.

Ontario is also proposing to remove sector specific restrictions, meaning consumers in all commercial, institutional and industrial sectors would now be eligible.

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Commented [LL2]: The HST is not a provincial tax.

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Ontario

Fact Sheet

Ministry of Energy

Key Facts

8% Rebate for Residential, Small Businesses and Small Farms

If passed, proposed legislation would provide an eight per cent (8%) rebate, equal to the provincial portion of the HST, to approximately 5 million electricity consumers, including:

- Residential consumers;
- Multi-unit residential buildings and other facilities used as residential rental units such as long-term care homes and school residences;
- Small businesses; and
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Rural or Remote Rate Protection (RRRP)

The Rural or Remote Rate Protection (RPPP) program reduces electricity costs for customers located in rural or remote areas, including 330,000 low-density customers paying R2 rates.

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Redirected Cap and Trade Proceeds Recycling

As outlined in the 2016 Budget and the Climate Change Action Plan, the government intends to recycle a portion of the cap and trade auction proceeds to offset the impact of cap and trade on industrial and commercial electricity consumers to keep rates affordable

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Ontario

BACKGROUNDER

Ministry of Energy

Electricity Rate Relief fFor Ontario Consumers

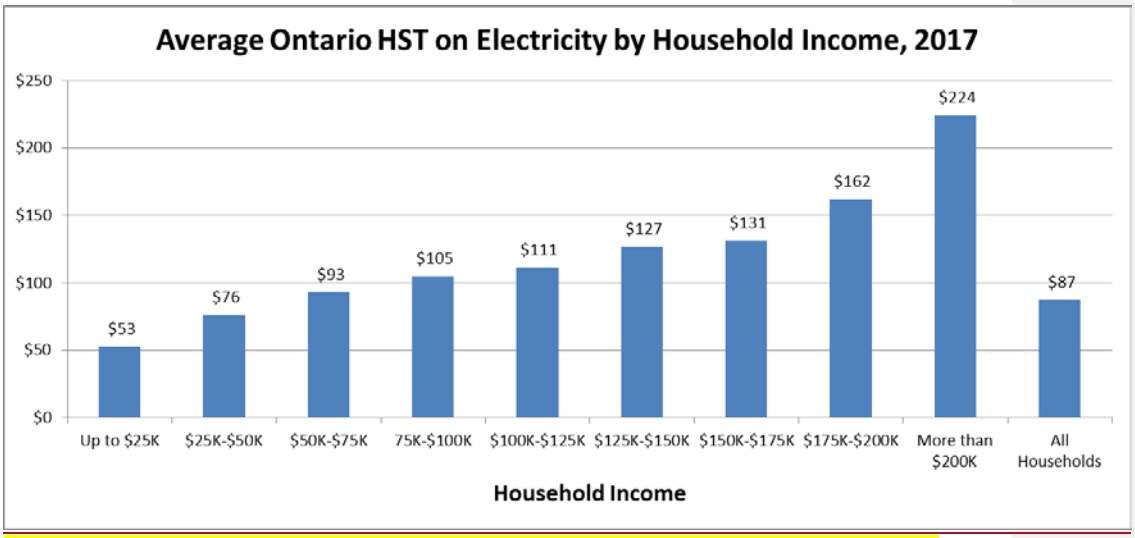
Rebating provincial taxes on electricity bills for families, farms, and small businesses

If passed, proposed legislation would provide an eight per cent rebate, equal to the provincial portion of the HST, to five million electricity consumers, including:

- Residential consumers;
- Multi-unit residential buildings and other facilities used as residential rental units such as long-term care homes and school residences;
- Small businesses; and
- Farms.

This eight per cent savings would go into effect as of January 1, 2017 and would result in savings of about $130 87 in 2017a year for an average typical Ontario residential consumer.

Commented [PL1]: Is this language correct, based on the chart. Or can we still use the $130?



FINANCE PLACEHOLDER: illustration of savings as a proportion of household income, by income decile

Source: SPSD/M v22.0, Statistics Canada, MOF Calculations

Commented [JK2]: Is this from Energy or MOF??? Why is the source the MOF calculations for Energy's Key Facts?

Formatted: English (United States)

Reducing rural bills by 20 per cent – about $45 a month or $540 a year

The Rural or Remote Electricity Rate Protection (RPPP) program reduces electricity delivery costs for approximately 330,000 customers located in rural or remote areas.

This proposed funding increase to the RRRP and the eight percent rebate would result in electricity relief for eligible consumers of approximately $45 per month.

Commented [SK23]: Are there customers serviced by the existing RRRP program that do not benefit from this expansion. ie. Current RRRP but not R2?

If so this would need to be deleted.

Commented [JK4R3]: 330k represented R2 customers in the Cabinet submission.

Empowering more than one thousand new businesses to reduce their bills by one third

The Industrial Conservation Initiative (ICI) provides a strong incentive for large electricity consumers to reduce their electricity consumption during peak hours to lower their bills by up to one-third. By reducing the province's peak electricity demand, ~~the Industrial Conservation Initiative~~ICI reduces electricity system costs by ~~deferring~~ reducing the need to build new generation and helps reduce greenhouse gas emissions.

Currently, electricity consumers with monthly peak demand exceeding ~~3~~ three megawatts (MW) are eligible to participate. Ontario is proposing to expand the ICI program to include customers with monthly peak greater than ~~1~~ one MW.

Ontario is also proposing to remove sector specific restrictions, meaning ~~large~~ electricity consumers in all commercial, institutional and industrial sectors and over the newly lowered threshold would now be eligible to participate.

Commented [SK25]: If there's a threshold, is there still a need to mention 'large' electricity consumers?

Eligible industrial customers will be able to find cost savings of up to 34 per cent, depending on their ability to reduce peak electricity consumption.

With more than a thousand new businesses soon eligible for the ICI, ~~cost impact~~ benefit across sectors and industries will vary. For example, a plastics manufacturer with an average peak demand of ~~2~~ two MW that participates in the ICI program could see its electricity costs reduced from $154 per MW to as low as $102 per MW. This would result in energy cost savings of up to $42,000 per month.

Commented [SK26]: Characterize ICI as a benefit, rather than a 'cost impact'.

Ontario

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Ministry of Energy

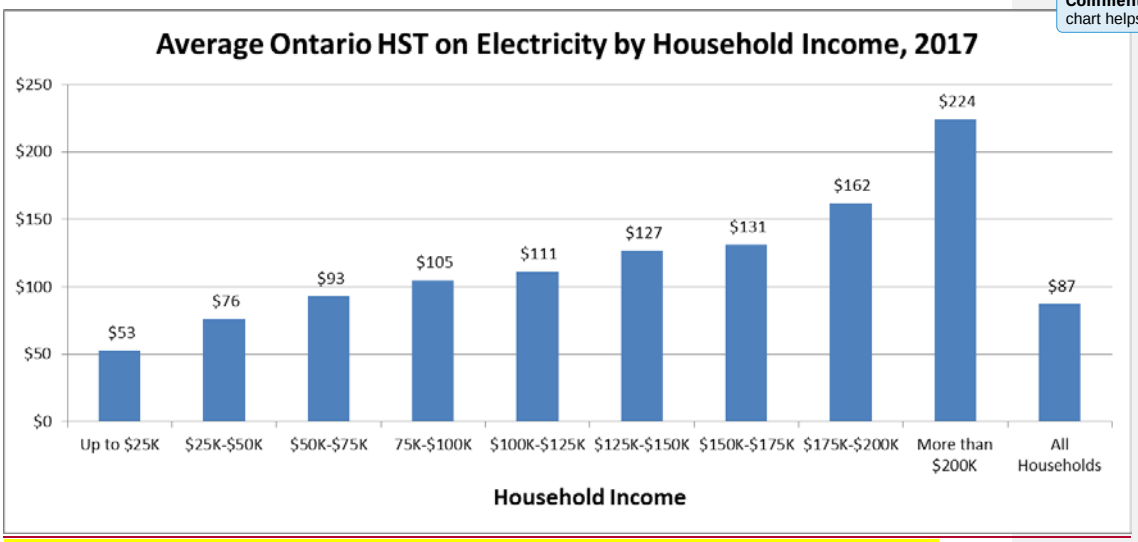
Electricity Rate Relief fFor Ontario Consumers

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Commented [RK2R1]: As shown, it doesn't seem as if the chart helps.

Commented [JK3]: Is this from Energy or MOF??? Why is the source the MOF calculations for Energy's Key Facts?

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Commented [SK24]: Are there customers serviced by the existing RRRP program that do not benefit from this expansion. ie. Current RRRP but not R2?

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Ontario is also proposing to remove sector specific restrictions, meaning larger electricity consumers in all commercial, institutional and industrial sectors over the newly lowered threshold would now be eligible to participate.

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With more than a thousand new businesses soon eligible for the ICI, ~~cost impact~~ the benefit across sectors and industries will vary. For example, a plastics manufacturer with an average peak demand of ~~2~~ two MW that participates in the ICI program could see its electricity costs reduced from $154 per MWh to as low as $102 per MWh. This would result in energy cost savings of up to $42,000 per month.

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Ontario

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Ministry of Energy

Electricity Cost Relief for Ontario Consumers

Providing an eight per cent rebate on electricity bills for families, farms, and small businesses

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Reducing rural bills by 20 per cent – about $45 a month or $540 a year

The Rural or Remote Electricity Rate Protection (RPPP) program reduces electricity delivery costs for approximately 330,000 customers located in rural or remote areas.

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This proposed funding increase to the RRRP and the eight percent rebate would result in electricity relief for eligible consumers of approximately $45 per month.

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BACKGROUNDER

Ministry of Energy

Electricity ~~Rate~~ Cost Relief ~~f~~For Ontario Consumers

~~Rebating provincial taxes~~ Providing an eight per cent rebate on electricity bills for families, farms, and small businesses

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Name	1 Record type	2 Charge type	3 Trading date	4 Trading hour	5 Trading interval	6 Adjustment amount	7 Zone id	8 Location id	9 Settlement type	10 MP ID	11 Price	12 Tax rate	13 Tax amount	14 Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
WASAGA DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-103258.77	ONZN		P	104278		0	0	OREC licensed distributor claim, current month balancing amount
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-20241.06	ONZN		P	102049		0	0	OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	31-Dec-17	0	0	-610363.12	ONZN		P	102110		0	0	OREC licensed distributor claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	31-Dec-17	0	0	-174927.75	ONZN		P	110073		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-60850.82	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-04
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1669.69	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-04
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-64908.49	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1070.33	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-7.54	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-9.91	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-66491.47	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1310.68	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1546.64	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-57235.76	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-15.36	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	0.04	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	1.1	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-11.72	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-56859.73	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1199.33	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-50822.85	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-10.91	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1350.99	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-1.38	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
CENTRE WELLINGTON HYDRO LTD.	MP	1467	31-Dec-17	0	0	0.01	ONZN		P	104468		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-7.41	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-Dec-17	0	0	19207.32	ONZN		P	104422		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1433.8	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
ATTAWAPISKAT POWER CORPORATION	MP	1467	31-Dec-17	0	0	-4467.5	ONZN		P	105834		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-3276.17	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-55033.4	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-47546.9	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-47454.37	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
WESTARIO POWER INC	MP	1467	31-Dec-17	0	0	-14103.53	ONZN		P	104421		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
ATTAWAPISKAT POWER CORPORATION	MP	1467	31-Dec-17	0	0	-11573.65	ONZN		P	105834		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
ENTEGRUS POWERLINES INC.	MP	1467	31-Dec-17	0	0	-8471.93	ONZN		P	102140		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
WATERLOO NORTH HYDRO INC.	MP	1467	31-Dec-17	0	0	22238	ONZN		P	102004		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
CANADIAN NIAGARA POWER INC.	MP	1467	31-Dec-17	0	0	42199.56	ONZN		P	102110		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
FESTIVAL HYDRO INC.	MP	1467	31-Dec-17	0	0	143.88	ONZN		P	102340		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
HYDRO ONE NETWORKS INC.	MP	1467	31-Dec-17	0	0	2351.95	ONZN		P	102007		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
O.N.TEL INC.	MP	1467	31-Dec-17	0	0	-56.79	ONZN		P	107810		0	0	Ontario Rebate for Electricity Consumers for the invoice of 2017/12
GREATER SUDBURY HYDRO INC.	MP	1467	31-Dec-17	0	0	-559250	ONZN		P	102009		0	0	OREC licensed distributor claim, current month balancing amount
MIDLAND POWER UTILITY CORPORATION	MP	1467	31-Dec-17	0	0	-84197.22	ONZN		P	104363		0	0	OREC licensed distributor claim, current month balancing amount
KENORA HYDRO ELECTRIC CORPORATION LTD.	MP	1467	31-Dec-17	0	0	-56804.13	ONZN		P	104269		0	0	OREC licensed distributor claim, current month balancing amount
ST. THOMAS ENERGY INC.	MP	1467	31-Dec-17	0	0	-154168	ONZN		P	102100		0	0	OREC licensed distributor claim, current month balancing amount
ATIKOKAN HYDRO INC.	MP	1467	31-Dec-17	0	0	-18157.25	ONZN		P	104277		0	0	OREC licensed distributor claim, current month balancing amount
ORANGEVILLE HYDRO LIMITED	MP	1467	31-Dec-17	0	0	-140073.04	ONZN		P	104480		0	0	OREC licensed distributor claim, current month balancing amount
ENERGY + INC.	MP	1467	31-Dec-17	0	0	-450906.64	ONZN		P	102299		0	0	OREC licensed distributor claim, current month balancing amount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
ENERGY + INC. (SETL)	MP	1467	31-Dec-17	0	0	-117242.68	ONZN		P	104290		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	MP	1467	31-Dec-17	0	0	-61779.4	ONZN		P	104339		0	0	OREC licensed distributor claim, current month balancing amount
INNPOWER CORPORATION	MP	1467	31-Dec-17	0	0	-186149.34	ONZN		P	104299		0	0	OREC licensed distributor claim, current month balancing amount
ERIE THAMES POWERLINES CORPORATION	MP	1467	31-Dec-17	0	0	-189639.36	ONZN		P	104323		0	0	OREC licensed distributor claim, current month balancing amount
GRIMSBY POWER INCORPORATED	MP	1467	31-Dec-17	0	0	-105447.22	ONZN		P	104471		0	0	OREC licensed distributor claim, current month balancing amount
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-Dec-17	0	0	-200489.18	ONZN		P	104248		0	0	OREC licensed distributor claim, current month balancing amount
FORT FRANCES POWER CORPORATION	MP	1467	31-Dec-17	0	0	-46796.91	ONZN		P	104313		0	0	OREC licensed distributor claim, current month balancing amount
COLLUS POWERSTREAM CORP.	MP	1467	31-Dec-17	0	0	-160037.62	ONZN		P	104281		0	0	OREC licensed distributor claim, current month balancing amount
MILTON HYDRO DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-369482.63	ONZN		P	102743		0	0	OREC licensed distributor claim, current month balancing amount
HEARST POWER DISTRIBUTION COMPANY LIMITED	MP	1467	31-Dec-17	0	0	-34315.18	ONZN		P	104249		0	0	OREC licensed distributor claim, current month balancing amount
TILLSONBURG HYDRO INCORPORATED	MP	1467	31-Dec-17	0	0	-55266.76	ONZN		P	102673		0	0	OREC licensed distributor claim, current month balancing amount
ESSEX POWERLINES CORPORATION	MP	1467	31-Dec-17	0	0	-314409.14	ONZN		P	102217		0	0	OREC licensed distributor claim, current month balancing amount
ESSEX POWERLINES CORPORATION	MP	1467	31-Dec-17	0	0	13757.88	ONZN		P	102217		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
E. L. K. ENERGY INC.	MP	1467	31-Dec-17	0	0	-85991.25	ONZN		P	102006		0	0	OREC embedded distributor claim, current month balancing amount
NIAGARA PENINSULA ENERGY INC.	MP	1467	31-Dec-17	0	0	-585507.51	ONZN		P	102102		0	0	OREC licensed distributor claim, current month balancing amount
ENWIN UTILITIES LTD.	MP	1467	31-Dec-17	0	0	-742869.75	ONZN		P	106085		0	0	OREC licensed distributor claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	31-Dec-17	0	0	16691.2	ONZN		P	110073		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1000.68	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-64.65	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
ORANGEVILLE HYDRO LIMITED	MP	1467	31-Dec-17	0	0	-38.08	ONZN		P	104480		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
GREATER SUDBURY HYDRO INC.	MP	1467	31-Dec-17	0	0	83.39	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	31-Dec-17	0	0	-9041.25	ONZN		P	102089		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
WESTARIO POWER INC	MP	1467	31-Dec-17	0	0	-301594.82	ONZN		P	104421		0	0	OREC licensed distributor claim, current month balancing amount
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Dec-17	0	0	-538185.89	ONZN		P	104276		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	31-Dec-17	0	0	-632135	ONZN		P	102004		0	0	OREC licensed distributor claim, current month balancing amount
KINGSTON HYDRO CORPORATION	MP	1467	31-Dec-17	0	0	-262326.93	ONZN		P	104322		0	0	OREC licensed distributor claim, current month balancing amount
PUC DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-379643.53	ONZN		P	102316		0	0	OREC licensed distributor claim, current month balancing amount
NORTHERN ONTARIO WIRES, INC.	MP	1467	31-Dec-17	0	0	-67934.02	ONZN		P	102042		0	0	OREC licensed distributor claim, current month balancing amount
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	1467	31-Dec-17	0	0	-320612.84	ONZN		P	104271		0	0	OREC licensed distributor claim, current month balancing amount
POWERSTREAM INC.	MP	1467	31-Dec-17	0	0	-4239521.57	ONZN		P	108825		0	0	OREC licensed distributor claim, current month balancing amount
WEST COAST HURON ENERGY INC.	MP	1467	31-Dec-17	0	0	-41075.24	ONZN		P	104297		0	0	OREC licensed distributor claim, current month balancing amount
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-863101.16	ONZN		P	102366		0	0	OREC licensed distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-Dec-17	0	0	-130813.1	ONZN		P	113624		0	0	OREC embedded distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-Dec-17	0	0	-60218.05	ONZN		P	113624		0	0	OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-386669.77	ONZN		P	102321		0	0	OREC licensed distributor claim, current month balancing amount
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	31-Dec-17	0	0	-2629543.88	ONZN		P	102089		0	0	OREC licensed distributor claim, current month balancing amount
HORIZON UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-2420926.79	ONZN		P	102084		0	0	OREC licensed distributor claim, current month balancing amount
CENTRE WELLINGTON HYDRO LTD.	MP	1467	31-Dec-17	0	0	-71246.39	ONZN		P	104468		0	0	OREC licensed distributor claim, current month balancing amount
GUELPH HYDRO ELECTRIC SYSTEMS INC.	MP	1467	31-Dec-17	0	0	-495664.42	ONZN		P	104325		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-Dec-17	0	0	-149559.42	ONZN		P	104422		0	0	OREC licensed distributor claim, current month balancing amount
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-523750.97	ONZN		P	102741		0	0	OREC licensed distributor claim, current month balancing amount
KITCHENER-WILMOT HYDRO INC.	MP	1467	31-Dec-17	0	0	-905346.42	ONZN		P	104267		0	0	OREC licensed distributor claim, current month balancing amount
PETERBOROUGH DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-386713.91	ONZN		P	102082		0	0	OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-12047.03	ONZN		P	105232		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-3979799.5	ONZN		P	102070		0	0	OREC licensed distributor claim, current month balancing amount
LONDON HYDRO INC.	MP	1467	31-Dec-17	0	0	-1469170.22	ONZN		P	104282		0	0	OREC licensed distributor claim, current month balancing amount
ORILLIA POWER DISTRIBUTION CORPORATION	MP	1467	31-Dec-17	0	0	-169152.23	ONZN		P	104319		0	0	OREC licensed distributor claim, current month balancing amount
VERIDIAN CONNECTIONS INC.	MP	1467	31-Dec-17	0	0	-1056296.46	ONZN		P	102120		0	0	OREC licensed distributor claim, current month balancing amount
ENTEGRUS POWERLINES INC.	MP	1467	31-Dec-17	0	0	-377354.61	ONZN		P	102140		0	0	OREC licensed distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-Dec-17	0	0	-30629	ONZN		P	102105		0	0	OREC embedded distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-Dec-17	0	0	-297536	ONZN		P	102105		0	0	OREC licensed distributor claim, current month balancing amount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	MP	1467	31-Dec-17	0	0	-9652081.15	ONZN		P	102329		0	0	OREC licensed distributor claim, current month balancing amount
WELLINGTON NORTH POWER INC.	MP	1467	31-Dec-17	0	0	-41666.79	ONZN		P	105222		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-Dec-17	0	0	-304637.72	ONZN		P	102007		0	0	OREC embedded distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-Dec-17	0	0	-15118286.51	ONZN		P	102007		0	0	OREC licensed distributor claim, current month balancing amount
FESTIVAL HYDRO INC.	MP	1467	31-Dec-17	0	0	-178286.09	ONZN		P	102340		0	0	OREC licensed distributor claim, current month balancing amount
OSHAWA PUC NETWORKS INCORPORATED	MP	1467	31-Dec-17	0	0	-631709.2	ONZN		P	104481		0	0	OREC licensed distributor claim, current month balancing amount
NORTH BAY HYDRO DISTRIBUTION LIMITED	MP	1467	31-Dec-17	0	0	-297456.08	ONZN		P	102099		0	0	OREC licensed distributor claim, current month balancing amount
ATTAWAPISKAT POWER CORPORATION	MP	1467	31-Dec-17	0	0	-19987.8	ONZN		P	105834		0	0	OREC licensed distributor claim, current month balancing amount
KASHECHEWAN POWER CORPORATION	MP	1467	31-Dec-17	0	0	-21859.54	ONZN		P	105833		0	0	OREC licensed distributor claim, current month balancing amount
FORT ALBANY POWER CORPORATION	MP	1467	31-Dec-17	0	0	-15000	ONZN		P	105832		0	0	OREC licensed distributor claim, current month balancing amount
HALTON HILLS HYDRO INC.	MP	1467	31-Dec-17	0	0	-198325.03	ONZN		P	104284		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE BRAMPTON NETWORKS INC.	MP	1467	31-Dec-17	0	0	-1777955.4	ONZN		P	104279		0	0	OREC licensed distributor claim, current month balancing amount
PROVIDENT ENERGY MANAGEMENT INC.	MP	1467	31-Dec-17	0	0	-14481.61	ONZN		P	110330		0	0	OREC unit sub-meter provider claim, current month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	31-Dec-17	0	0	-2917.9	ONZN		P	112232		0	0	OREC unit sub-meter provider claim, current month balancing amount
PRIORITY SUBMETERING SOLUTIONS INC.	MP	1467	31-Dec-17	0	0	-22257.31	ONZN		P	110334		0	0	OREC unit sub-meter provider claim, current month balancing amount
WYSE METER SOLUTIONS INC.	MP	1467	31-Dec-17	0	0	-60368.5	ONZN		P	110494		0	0	OREC unit sub-meter provider claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	31-Dec-17	0	0	-39454.21	ONZN		P	110345		0	0	OREC unit sub-meter provider claim, current month balancing amount
PIKE LAKE GOLF CENTRE LIMITED	MP	1467	31-Dec-17	0	0	-135.14	ONZN		P	145734		0	0	OREC unit sub-meter provider claim, current month balancing amount
ENERCARE CONNECTIONS INC.	MP	1467	31-Dec-17	0	0	-223486.49	ONZN		P	110332		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM ENERGY SERVICES INC.	MP	1467	31-Dec-17	0	0	-20934.81	ONZN		P	114461		0	0	OREC unit sub-meter provider claim, current month balancing amount
BURLINGTON HYDRO INC.	MP	1467	31-Dec-17	0	0	-663475.54	ONZN		P	102298		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-63560.58	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-01
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1519.64	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-02
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-58393.89	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-02
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1741.45	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-03
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-58934.2	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-03

IESO Settlement Report - October Total	**(58,767,522.04)**

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES

107810 O.N.TEL INC.

Participation Name
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Name

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	billable quantity	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
McMaster University	MP	1465	31-Dec-17	0	0	-91044.86	ONZN		P	104357		0	0	Issue-796 OCEB (-10%) retroactive claim balancing amount
Total						-91044.86								

Name

1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	billable quantity	price	tax rate	tax amount	adjustment comment
MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X

Name

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	billable quantity	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Invoice Total for June 2013						**(182,089.72)**								

Ministry of Energy Settlement Statment

Bill Qty Name

1	2	3	4	5	6	7	8	9	10	11	12	13	14
record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	billable quantity	price	tax rate	tax amount	adjustment comment
MP	1465	01/31/11	0	0	$	ONZN	null	P	MP ID	null	0	0	X

107,810 O.N.TEL INC.
104,489 VERIDIAN CONNECTIONS INC. - GRAVENHURST
104,424 GUELPH HYDRO ELECTRIC SYSTEMS INC. - ROCKWOOD DIV.
102,743 MILTON HYDRO DISTRIBUTION INC.
102,140 CHATHAM-KENT HYDRO INC.
102,007 HYDRO ONE NETWORKS INC.
102,070 HYDRO OTTAWA LIMITED
108,825 POWERSTREAM INC.
102,089 ENERSOURCE HYDRO MISSISSAUGA INC.
104,279 HYDRO ONE BRAMPTON NETWORKS INC.
102,120 VERIDIAN CONNECTIONS INC.
104,296 MIDDLESEX POWER DISTRIBUTION CORPORATION
102,105 NEWMARKET - TAY POWER DISTRIBUTION LTD.
104,271 BLUEWATER POWER DISTRIBUTION CORPORATION
104,290 BRANT COUNTY POWER INC.
102,321 BRANTFORD POWER INC.
102,298 BURLINGTON HYDRO INC.
102,299 CAMBRIDGE AND NORTH DUMFRIES HYDRO INC.
104,468 CENTRE WELLINGTON HYDRO LTD.
104,281 COLLUS POWER CORP
106,085 ENWIN UTILITIES LTD.
102,340 FESTIVAL HYDRO INC.
104,313 FORT FRANCES POWER CORPORATION
104,471 GRIMSBY POWER INCORPORATED
104,325 GUELPH HYDRO ELECTRIC SYSTEMS INC.
102,207 HALDIMAND COUNTY HYDRO INC.
104,284 HALTON HILLS HYDRO INC.
104,339 HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.
104,249 HEARST POWER DISTRIBUTION COMPANY LIMITED

104,297 WEST COAST HURON ENERGY INC.
104,299 INNISFIL HYDRO DISTRIBUTION SYSTEMS LIMITED
104,269 KENORA HYDRO ELECTRIC CORPORATION LTD.
104,322 KINGSTON HYDRO CORPORATION
104,267 KITCHENER-WILMOT HYDRO INC.
104,267 KITCHENER-WILMOT HYDRO INC.
104,487 LAKEFRONT UTILITIES INC
104,363 MIDLAND POWER UTILITY CORPORATION
102,102 NIAGARA PENINSULA ENERGY INC.
102,099 NORTH BAY HYDRO DISTRIBUTION LIMITED
102,366 OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.
104,480 ORANGEVILLE HYDRO LIMITED
104,481 OSHAWA PUC NETWORKS INCORPORATED
105,232 RIDEAU ST.LAWRENCE DISTRIBUTION INC.
102,316 PUC DISTRIBUTION INC.
102,741 THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.
102,741 THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.
104,278 WASAGA DISTRIBUTION INC.
102,004 WATERLOO NORTH HYDRO INC.
105,222 WELLINGTON NORTH POWER INC.
104,277 ATIKOKAN HYDRO INC.
104,277 ATIKOKAN HYDRO INC.
102,082 PETERBOROUGH DISTRIBUTION INC.
104,276 WHITBY HYDRO ELECTRIC CORPORATION
105,216 NORFOLK POWER DISTRIBUTION INC.
105,834 ATTAWAPISKAT POWER CORPORATION
102,049 CHAPLEAU PUBLIC UTILITIES CORPORATION
102,049 CHAPLEAU PUBLIC UTILITIES CORPORATION
102,110 CANADIAN NIAGARA POWER INC.
102,006 E. L. K. ENERGY INC.
105,832 FORT ALBANY POWER CORPORATION
105,832 FORT ALBANY POWER CORPORATION
102,009 GREATER SUDBURY HYDRO INC.
102,009 GREATER SUDBURY HYDRO INC.
105,833 KASHECHEWAN POWER CORPORATION
105,833 KASHECHEWAN POWER CORPORATION
104,282 LONDON HYDRO INC.
104,422 NIAGARA-ON-THE-LAKE HYDRO INC.
102,042 NORTHERN ONTARIO WIRES, INC.

104,319 ORILLIA POWER DISTRIBUTION CORPORATION
102,673 TILLSONBURG HYDRO INCORPORATED
104,248 WELLAND HYDRO ELECTRIC SYSTEM CORP.
104,421 WESTARIO POWER INC
102,329 TORONTO HYDRO-ELECTRIC SYSTEM LIMITED
102,329 TORONTO HYDRO-ELECTRIC SYSTEM LIMITED
102,100 ST. THOMAS ENERGY INC.
102,246 WOODSTOCK HYDRO SERVICES INC.
104,306 PORT COLBORNE HYDRO INC.
110,073 ALGOMA POWER INC.
102,084 HORIZON UTILITIES CORPORATION
110,328 STRATACON INC.
110,330 PROVIDENT ENERGY MANAGEMENT INC.
110,334 PRIORITY SUBMETERING SOLUTIONS INC.
110,334 PRIORITY SUBMETERING SOLUTIONS INC.
110,343 ODEM ELECTRIC BILLING SERVICES INC.
110,345 CARMA BILLING SERVICES INC.
110,332 ENERCARE CONNECTIONS INC.
104323 ERIE THAMES POWERLINES CORPORATION
102217 Essex Powerlines Corporation
110329 TRILLIANT ENERGY SERVICES INC.
104323 ERIE THAMES POWERLINES CORPORATION
105361 Parry Sound Power Corporation
110401 Enercan Energy Management
110,494 WYSE METER SOLUTIONS INC.
112,232 YES Energy Management, Inc.

MP	1465	30-Nov-17	0	0	9835.54	ONZN	P

102329	0	0	OCEB (-10%) licensed distributor claim, previous month b

alancing amount

From: Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]
To: Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Mark Bergman (ENERGY) [Mark.Bergman@ontario.ca]; Tracy Flindall (MOF) [Tracy.Flindall@ontario.ca]; Anil Sharma (MOF) [Anil.Sharma@ontario.ca]; Dev Ram (MOF) [Dev.Ram@ontario.ca]; Naomi Morita (MOF) [Naomi.Morita@ontario.ca]; Gavin He [Gavin.He@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]
CC: Tai An (ENERGY) [Tai.An@ontario.ca]; Pratima Gounden (ENERGY) [Pratima.Gounden@ontario.ca]; Janet Lim (ENERGY) [Janet.Lim@ontario.ca]; Zheng, Sean (ENERGY) [Sean.Zheng@ontario.ca]; Chander, Sunita (ENERGY) [SOM.Sunita.Chander@ontario.ca]; Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]; Kwasny, Anna (MEDG/MRIS) [Anna.Kwasny@ontario.ca]
Subject: December 2017 OREC Settlement Statement
Date: Tuesday, January 16, 2018 16:56:16
Attachment 1: image001.jpg
Attachment 2: December 2017 IESO OREC Settlement Statement.xlsx

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Hi,

Please see the attached OREC Settlement Statement for the month of December 2017, which shows the OREC amount of $58,767,522.04.

Kindly note that the following amounts are also included on the December IESO invoice but are not listed in the attached settlement statement:

- $1,583,754.44 related to the On-Reserve First Nations Delivery Credit
- $15,236,332.89 related to Distribution Rate Protection
- $91,044.86 related to the Ontario Clean Energy Benefit
- $18,175,530.62 related to Rural and Remote Rate Protection

Thank you,

Ryan Lim
Financial Analyst
56 Wellesley Street West, 4th Floor
Toronto, ON M7A 2E7
Phone: (416) 561-9361

Ministry of Economic Development & Growth
Ministry of Energy
Ministry of Infrastructure
Ministry of Research, Innovation & Science


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Name	1 Record type	2 Charge type	3 Trading date	4 Trading hour	5 Trading interval	6 Adjustment amount	7 Zone id	8 Location id	9 Settlement type	10 MP ID	11 Price	12 Tax rate	13 Tax amount	14 Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
WASAGA DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-103258.77	ONZN		P	104278		0	0	OREC licensed distributor claim, current month balancing amount
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-20241.06	ONZN		P	102049		0	0	OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	31-Dec-17	0	0	-610363.12	ONZN		P	102110		0	0	OREC licensed distributor claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	31-Dec-17	0	0	-174927.75	ONZN		P	110073		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-60850.82	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-04
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1669.69	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-04
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-64908.49	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1070.33	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-7.54	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-9.91	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-66491.47	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1310.68	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1546.64	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-57235.76	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-15.36	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	0.04	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	1.1	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-11.72	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-56859.73	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1199.33	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-50822.85	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-10.91	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1350.99	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-1.38	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
CENTRE WELLINGTON HYDRO LTD.	MP	1467	31-Dec-17	0	0	0.01	ONZN		P	104468		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-7.41	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-Dec-17	0	0	19207.32	ONZN		P	104422		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1433.8	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
ATTAWAPISKAT POWER CORPORATION	MP	1467	31-Dec-17	0	0	-4467.5	ONZN		P	105834		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-3276.17	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-55033.4	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-47546.9	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-47454.37	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
WESTARIO POWER INC	MP	1467	31-Dec-17	0	0	-14103.53	ONZN		P	104421		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
ATTAWAPISKAT POWER CORPORATION	MP	1467	31-Dec-17	0	0	-11573.65	ONZN		P	105834		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
ENTEGRUS POWERLINES INC.	MP	1467	31-Dec-17	0	0	-8471.93	ONZN		P	102140		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
WATERLOO NORTH HYDRO INC.	MP	1467	31-Dec-17	0	0	22238	ONZN		P	102004		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
CANADIAN NIAGARA POWER INC.	MP	1467	31-Dec-17	0	0	42199.56	ONZN		P	102110		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
FESTIVAL HYDRO INC.	MP	1467	31-Dec-17	0	0	143.88	ONZN		P	102340		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
HYDRO ONE NETWORKS INC.	MP	1467	31-Dec-17	0	0	2351.95	ONZN		P	102007		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
O.N.TEL INC.	MP	1467	31-Dec-17	0	0	-56.79	ONZN		P	107810		0	0	Ontario Rebate for Electricity Consumers for the invoice of 2017/12
GREATER SUDBURY HYDRO INC.	MP	1467	31-Dec-17	0	0	-559250	ONZN		P	102009		0	0	OREC licensed distributor claim, current month balancing amount
MIDLAND POWER UTILITY CORPORATION	MP	1467	31-Dec-17	0	0	-84197.22	ONZN		P	104363		0	0	OREC licensed distributor claim, current month balancing amount
KENORA HYDRO ELECTRIC CORPORATION LTD.	MP	1467	31-Dec-17	0	0	-56804.13	ONZN		P	104269		0	0	OREC licensed distributor claim, current month balancing amount
ST. THOMAS ENERGY INC.	MP	1467	31-Dec-17	0	0	-154168	ONZN		P	102100		0	0	OREC licensed distributor claim, current month balancing amount
ATIKOKAN HYDRO INC.	MP	1467	31-Dec-17	0	0	-18157.25	ONZN		P	104277		0	0	OREC licensed distributor claim, current month balancing amount
ORANGEVILLE HYDRO LIMITED	MP	1467	31-Dec-17	0	0	-140073.04	ONZN		P	104480		0	0	OREC licensed distributor claim, current month balancing amount
ENERGY + INC.	MP	1467	31-Dec-17	0	0	-450906.64	ONZN		P	102299		0	0	OREC licensed distributor claim, current month balancing amount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
ENERGY + INC. (SETL)	MP	1467	31-Dec-17	0	0	-117242.68	ONZN		P	104290		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	MP	1467	31-Dec-17	0	0	-61779.4	ONZN		P	104339		0	0	OREC licensed distributor claim, current month balancing amount
INNPOWER CORPORATION	MP	1467	31-Dec-17	0	0	-186149.34	ONZN		P	104299		0	0	OREC licensed distributor claim, current month balancing amount
ERIE THAMES POWERLINES CORPORATION	MP	1467	31-Dec-17	0	0	-189639.36	ONZN		P	104323		0	0	OREC licensed distributor claim, current month balancing amount
GRIMSBY POWER INCORPORATED	MP	1467	31-Dec-17	0	0	-105447.22	ONZN		P	104471		0	0	OREC licensed distributor claim, current month balancing amount
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-Dec-17	0	0	-200489.18	ONZN		P	104248		0	0	OREC licensed distributor claim, current month balancing amount
FORT FRANCES POWER CORPORATION	MP	1467	31-Dec-17	0	0	-46796.91	ONZN		P	104313		0	0	OREC licensed distributor claim, current month balancing amount
COLLUS POWERSTREAM CORP.	MP	1467	31-Dec-17	0	0	-160037.62	ONZN		P	104281		0	0	OREC licensed distributor claim, current month balancing amount
MILTON HYDRO DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-369482.63	ONZN		P	102743		0	0	OREC licensed distributor claim, current month balancing amount
HEARST POWER DISTRIBUTION COMPANY LIMITED	MP	1467	31-Dec-17	0	0	-34315.18	ONZN		P	104249		0	0	OREC licensed distributor claim, current month balancing amount
TILLSONBURG HYDRO INCORPORATED	MP	1467	31-Dec-17	0	0	-55266.76	ONZN		P	102673		0	0	OREC licensed distributor claim, current month balancing amount
ESSEX POWERLINES CORPORATION	MP	1467	31-Dec-17	0	0	-314409.14	ONZN		P	102217		0	0	OREC licensed distributor claim, current month balancing amount
ESSEX POWERLINES CORPORATION	MP	1467	31-Dec-17	0	0	13757.88	ONZN		P	102217		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
E. L. K. ENERGY INC.	MP	1467	31-Dec-17	0	0	-85991.25	ONZN		P	102006		0	0	OREC embedded distributor claim, current month balancing amount
NIAGARA PENINSULA ENERGY INC.	MP	1467	31-Dec-17	0	0	-585507.51	ONZN		P	102102		0	0	OREC licensed distributor claim, current month balancing amount
ENWIN UTILITIES LTD.	MP	1467	31-Dec-17	0	0	-742869.75	ONZN		P	106085		0	0	OREC licensed distributor claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	31-Dec-17	0	0	16691.2	ONZN		P	110073		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1000.68	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-64.65	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
ORANGEVILLE HYDRO LIMITED	MP	1467	31-Dec-17	0	0	-38.08	ONZN		P	104480		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
GREATER SUDBURY HYDRO INC.	MP	1467	31-Dec-17	0	0	83.39	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	31-Dec-17	0	0	-9041.25	ONZN		P	102089		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
WESTARIO POWER INC	MP	1467	31-Dec-17	0	0	-301594.82	ONZN		P	104421		0	0	OREC licensed distributor claim, current month balancing amount
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Dec-17	0	0	-538185.89	ONZN		P	104276		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	31-Dec-17	0	0	-632135	ONZN		P	102004		0	0	OREC licensed distributor claim, current month balancing amount
KINGSTON HYDRO CORPORATION	MP	1467	31-Dec-17	0	0	-262326.93	ONZN		P	104322		0	0	OREC licensed distributor claim, current month balancing amount
PUC DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-379643.53	ONZN		P	102316		0	0	OREC licensed distributor claim, current month balancing amount
NORTHERN ONTARIO WIRES, INC.	MP	1467	31-Dec-17	0	0	-67934.02	ONZN		P	102042		0	0	OREC licensed distributor claim, current month balancing amount
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	1467	31-Dec-17	0	0	-320612.84	ONZN		P	104271		0	0	OREC licensed distributor claim, current month balancing amount
POWERSTREAM INC.	MP	1467	31-Dec-17	0	0	-4239521.57	ONZN		P	108825		0	0	OREC licensed distributor claim, current month balancing amount
WEST COAST HURON ENERGY INC.	MP	1467	31-Dec-17	0	0	-41075.24	ONZN		P	104297		0	0	OREC licensed distributor claim, current month balancing amount
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-863101.16	ONZN		P	102366		0	0	OREC licensed distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-Dec-17	0	0	-130813.1	ONZN		P	113624		0	0	OREC embedded distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-Dec-17	0	0	-60218.05	ONZN		P	113624		0	0	OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	31-Dec-17	0	0	-386669.77	ONZN		P	102321		0	0	OREC licensed distributor claim, current month balancing amount
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	31-Dec-17	0	0	-2629543.88	ONZN		P	102089		0	0	OREC licensed distributor claim, current month balancing amount
HORIZON UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-2420926.79	ONZN		P	102084		0	0	OREC licensed distributor claim, current month balancing amount
CENTRE WELLINGTON HYDRO LTD.	MP	1467	31-Dec-17	0	0	-71246.39	ONZN		P	104468		0	0	OREC licensed distributor claim, current month balancing amount
GUELPH HYDRO ELECTRIC SYSTEMS INC.	MP	1467	31-Dec-17	0	0	-495664.42	ONZN		P	104325		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-Dec-17	0	0	-149559.42	ONZN		P	104422		0	0	OREC licensed distributor claim, current month balancing amount
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-523750.97	ONZN		P	102741		0	0	OREC licensed distributor claim, current month balancing amount
KITCHENER-WILMOT HYDRO INC.	MP	1467	31-Dec-17	0	0	-905346.42	ONZN		P	104267		0	0	OREC licensed distributor claim, current month balancing amount
PETERBOROUGH DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-386713.91	ONZN		P	102082		0	0	OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Dec-17	0	0	-12047.03	ONZN		P	105232		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-3979799.5	ONZN		P	102070		0	0	OREC licensed distributor claim, current month balancing amount
LONDON HYDRO INC.	MP	1467	31-Dec-17	0	0	-1469170.22	ONZN		P	104282		0	0	OREC licensed distributor claim, current month balancing amount
ORILLIA POWER DISTRIBUTION CORPORATION	MP	1467	31-Dec-17	0	0	-169152.23	ONZN		P	104319		0	0	OREC licensed distributor claim, current month balancing amount
VERIDIAN CONNECTIONS INC.	MP	1467	31-Dec-17	0	0	-1056296.46	ONZN		P	102120		0	0	OREC licensed distributor claim, current month balancing amount
ENTEGRUS POWERLINES INC.	MP	1467	31-Dec-17	0	0	-377354.61	ONZN		P	102140		0	0	OREC licensed distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-Dec-17	0	0	-30629	ONZN		P	102105		0	0	OREC embedded distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-Dec-17	0	0	-297536	ONZN		P	102105		0	0	OREC licensed distributor claim, current month balancing amount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	MP	1467	31-Dec-17	0	0	-9652081.15	ONZN		P	102329		0	0	OREC licensed distributor claim, current month balancing amount
WELLINGTON NORTH POWER INC.	MP	1467	31-Dec-17	0	0	-41666.79	ONZN		P	105222		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-Dec-17	0	0	-304637.72	ONZN		P	102007		0	0	OREC embedded distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-Dec-17	0	0	-15118286.51	ONZN		P	102007		0	0	OREC licensed distributor claim, current month balancing amount
FESTIVAL HYDRO INC.	MP	1467	31-Dec-17	0	0	-178286.09	ONZN		P	102340		0	0	OREC licensed distributor claim, current month balancing amount
OSHAWA PUC NETWORKS INCORPORATED	MP	1467	31-Dec-17	0	0	-631709.2	ONZN		P	104481		0	0	OREC licensed distributor claim, current month balancing amount
NORTH BAY HYDRO DISTRIBUTION LIMITED	MP	1467	31-Dec-17	0	0	-297456.08	ONZN		P	102099		0	0	OREC licensed distributor claim, current month balancing amount
ATTAWAPISKAT POWER CORPORATION	MP	1467	31-Dec-17	0	0	-19987.8	ONZN		P	105834		0	0	OREC licensed distributor claim, current month balancing amount
KASHECHEWAN POWER CORPORATION	MP	1467	31-Dec-17	0	0	-21859.54	ONZN		P	105833		0	0	OREC licensed distributor claim, current month balancing amount
FORT ALBANY POWER CORPORATION	MP	1467	31-Dec-17	0	0	-15000	ONZN		P	105832		0	0	OREC licensed distributor claim, current month balancing amount
HALTON HILLS HYDRO INC.	MP	1467	31-Dec-17	0	0	-198325.03	ONZN		P	104284		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE BRAMPTON NETWORKS INC.	MP	1467	31-Dec-17	0	0	-1777955.4	ONZN		P	104279		0	0	OREC licensed distributor claim, current month balancing amount
PROVIDENT ENERGY MANAGEMENT INC.	MP	1467	31-Dec-17	0	0	-14481.61	ONZN		P	110330		0	0	OREC unit sub-meter provider claim, current month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	31-Dec-17	0	0	-2917.9	ONZN		P	112232		0	0	OREC unit sub-meter provider claim, current month balancing amount
PRIORITY SUBMETERING SOLUTIONS INC.	MP	1467	31-Dec-17	0	0	-22257.31	ONZN		P	110334		0	0	OREC unit sub-meter provider claim, current month balancing amount
WYSE METER SOLUTIONS INC.	MP	1467	31-Dec-17	0	0	-60368.5	ONZN		P	110494		0	0	OREC unit sub-meter provider claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	31-Dec-17	0	0	-39454.21	ONZN		P	110345		0	0	OREC unit sub-meter provider claim, current month balancing amount
PIKE LAKE GOLF CENTRE LIMITED	MP	1467	31-Dec-17	0	0	-135.14	ONZN		P	145734		0	0	OREC unit sub-meter provider claim, current month balancing amount
ENERCARE CONNECTIONS INC.	MP	1467	31-Dec-17	0	0	-223486.49	ONZN		P	110332		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM ENERGY SERVICES INC.	MP	1467	31-Dec-17	0	0	-20934.81	ONZN		P	114461		0	0	OREC unit sub-meter provider claim, current month balancing amount
BURLINGTON HYDRO INC.	MP	1467	31-Dec-17	0	0	-663475.54	ONZN		P	102298		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-63560.58	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-01
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1519.64	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-02
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-58393.89	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-02
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Dec-17	0	0	-1741.45	ONZN		P	102049		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-03
HYDRO OTTAWA LIMITED	MP	1467	31-Dec-17	0	0	-58934.2	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-03

IESO Settlement Report - October Total	**(58,767,522.04)**

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES

107810 O.N.TEL INC.

Participation Name
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From: Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]
To: Risa Thau [Risa.Thau@ofina.on.ca]; Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]; George Sakura [George.Sakura@ofina.on.ca]; Kevin Hwang [Kevin.Hwang@ofina.on.ca]
CC: Dade, Christine (ENERGY) [Christine.Dade@ontario.ca]; Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Mike Smith (ENERGY) [Mike.Smith@ontario.ca]; Pratima Gounden (ENERGY) [Pratima.Gounden@ontario.ca]; Tai An (ENERGY) [Tai.An@ontario.ca]
Subject: December 2017 Social Program Payment
Date: Tuesday, January 16, 2018 16:40:46
Attachment 1: December 2017 IESO Invoice.pdf
Attachment 2: December 2017 IESO Invoice - Correction.pdf
Attachment 3: OFHP IESO Settlement Statement December 2017.xlsx

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Hello Risa,

Happy New Year! Sorry for the delay in sending this. Please find below the payment information for the attached invoice for the Fair Hydro Plan programs. Please let me know if you require any additional information to process these payments. OREC and OCEB payment approval will be shared separately.

Note that there is an additional line item "Ontario Fair Hydro Plan Financing Entity Balancing Amount". This was invoiced in error and should not be paid. The IESO has issued a credit invoice (also attached).

Program	Payment Amount	TP Line	IFIS Account String
On-Reserve First Nations Delivery Credit	$1,583,754.44	TP_On-Reserved First Nations Delivery Credit	029-290501-0000-981653-5772 10
Distribution Rate Protection	$15,236,332.89	TP_Rural or Remote Rate Protection Program	029-290501-0000-981658-5772 10
Rural and Remote Rate Protection	$18,175,530.62	TP_Rural or Remote Rate Protection Program	029-290501-0000-981658-5772 10
Total	$34,995,617.95		

*It is intentional that the DRP and RRRP come from the same TP line

Thanks!

Robert Hunter
Senior Policy Advisor

Ministry of Energy: Distribution and Agency Policy Branch
77 Grenville Street, 6th Floor
Toronto, ON M7A 2C1
Phone: (416) 325-6899
Email: robert.a.hunter@ontario.ca

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002

Issue / Re-Issue Date: 15-JAN-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00021567
Invoice Date: 15-JAN-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**

Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-DEC-2017 To 31-DEC-2017

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$1,583,754.44
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$15,236,332.89
1194	ONTARIO FAIR HYDRO PLAN FINANCING ENTITY BALANCING AMOUNT	$3,620,000.00
1465	ONTARIO CLEAN ENERGY BENEFIT (-10%) PROGRAM BALANCING AMOUNT	$91,044.86
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$58,767,522.04
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$18,175,530.62
Invoice Total:	$CAD	97,474,184.85

Payment Due Date 17-JAN-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002

Issue / Re-Issue Date: 16-JAN-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PC00000028
Invoice Date: 16-JAN-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**

Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments: To adjust invoice PI00021567

Charges for settlement statements issued:

Charge Type	Description		Amount
1194	ONTARIO FAIR HYDRO PLAN FINANCING ENTITY BALANCING AMOUNT		($3,620,000.00)
Invoice Total:		$CAD	(3,620,000.00)

Do Not Send Payment

This invoice also constitutes a debit/credit note for GST/HST purposes

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
HYDRO ONE NETWORKS INC.	MP	1753	31-Dec-17	0	0	-18175530.62	ONZN		P	102007		0	0	MOE - Rural and Remote Settlement Debit, current month balancing amount
Total						**(18,175,530.62)**								

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Dec-17	0	0	-8137.32	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
HYDRO ONE NETWORKS INC.	MP	756	31-Dec-17	0	0	-14979105.48	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Dec-17	0	0	-14040.33	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
LAKELAND POWER DISTRIBUTION LTD.	MP	756	31-Dec-17	0	0	-15258.7	ONZN		P	113624		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Dec-17	0	0	655.66	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Dec-17	0	0	1337.24	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Dec-17	0	0	162.13	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Dec-17	0	0	-4434.78	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
ATIKOKAN HYDRO INC.	MP	756	31-Dec-17	0	0	-1128.87	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Dec-17	0	0	-55.9	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
ATIKOKAN HYDRO INC.	MP	756	31-Dec-17	0	0	-14171.93	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
INNPOWER CORPORATION	MP	756	31-Dec-17	0	0	-42124.58	ONZN		P	104299		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	31-Dec-17	0	0	-139665.52	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
SIOUX LOOKOUT HYDRO INC.	MP	756	31-Dec-17	0	0	-20364.51	ONZN		P	113601		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
Total						**(15,236,332.89)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
ATTAWAPISKAT POWER CORPORATION	MP	755	31-Dec-17	0	0	-7052.59	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
ALGOMA POWER INC.	MP	755	31-Dec-17	0	0	-38918.81	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
ATTAWAPISKAT POWER CORPORATION	MP	755	31-Dec-17	0	0	-34958.51	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
KASHECHEWAN POWER CORPORATION	MP	755	31-Dec-17	0	0	-39641.75	ONZN		P	105833		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
FORT ALBANY POWER CORPORATION	MP	755	31-Dec-17	0	0	-25000	ONZN		P	105832		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	755	31-Dec-17	0	0	-10371.78	ONZN		P	104271		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
ATTAWAPISKAT POWER CORPORATION	MP	755	31-Dec-17	0	0	-17287.05	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
PUC DISTRIBUTION INC.	MP	755	31-Dec-17	0	0	-1900.99	ONZN		P	102316		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
HYDRO ONE NETWORKS INC.	MP	755	31-Dec-17	0	0	-1350866.51	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
HYDRO ONE NETWORKS INC.	MP	755	31-Dec-17	0	0	-44904.03	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
HYDRO ONE NETWORKS INC.	MP	755	31-Dec-17	0	0	-870.92	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
CANADIAN NIAGARA POWER INC.	MP	755	31-Dec-17	0	0	-120.8	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	755	31-Dec-17	0	0	-11860.7	ONZN		P	102741		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
Total						**(1,583,754.44)**								

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Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	
113601	SIOUX LOOKOUT HYDRO INC.	

Participation Name
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From: Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]
To: Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Sandy Roberts [Sandy.Roberts@ofina.on.ca]; Mark Bergman (ENERGY) [Mark.Bergman@ontario.ca]; Tracy Flindall (MOF) [Tracy.Flindall@ontario.ca]; Anil Sharma (MOF) [Anil.Sharma@ontario.ca]; Dev Ram (MOF) [Dev.Ram@ontario.ca]; Naomi Morita (MOF) [Naomi.Morita@ontario.ca]; Gavin He [Gavin.He@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]; Kevin Hwang [Kevin.Hwang@ofina.on.ca]
CC: Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Pratima Gounden (ENERGY) [Pratima.Gounden@ontario.ca]; Zheng, Sean (ENERGY) [Sean.Zheng@ontario.ca]; Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]
Subject: OCEB December 2017 IESO Payment
Date: Tuesday, January 16, 2018 16:52:47
Attachment 1: December 2017 OCEB Settlement Statement.xlsx

Hello,

Please find attached the OCEB settlement statement and invoice for the Month of December 2017. The settlement statement for the OREC will be sent separately along with the combined invoice for payment. Please move forward with processing the OCEB payment for the amount of $91,044.86.

Kindly note that in order to limit confusion, the Fair Hydro Plan payment email has been sent separately.

Thank you,

Robert Hunter
Senior Policy Advisor

Ministry of Energy: Distribution and Agency Policy Branch
77 Grenville Street, 6th Floor
Toronto, ON M7A 2C1
Phone: (416) 325-6899
Email: robert.a.hunter@ontario.ca

Name

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	billable quantity	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
McMaster University	MP	1465	31-Dec-17	0	0	-91044.86	ONZN		P	104357		0	0	Issue-796 OCEB (-10%) retroactive claim balancing amount
Total						-91044.86								

Name

1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	billable quantity	price	tax rate	tax amount	adjustment comment
MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X

Name

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	billable quantity	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Invoice Total for June 2013						**(182,089.72)**								

Ministry of Energy Settlement Statment

Bill Qty Name

1	2	3	4	5	6	7	8	9	10	11	12	13	14
record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	billable quantity	price	tax rate	tax amount	adjustment comment
MP	1465	01/31/11	0	0	$	ONZN	null	P	MP ID	null	0	0	X

107,810 O.N.TEL INC.
104,489 VERIDIAN CONNECTIONS INC. - GRAVENHURST
104,424 GUELPH HYDRO ELECTRIC SYSTEMS INC. - ROCKWOOD DIV.
102,743 MILTON HYDRO DISTRIBUTION INC.
102,140 CHATHAM-KENT HYDRO INC.
102,007 HYDRO ONE NETWORKS INC.
102,070 HYDRO OTTAWA LIMITED
108,825 POWERSTREAM INC.
102,089 ENERSOURCE HYDRO MISSISSAUGA INC.
104,279 HYDRO ONE BRAMPTON NETWORKS INC.
102,120 VERIDIAN CONNECTIONS INC.
104,296 MIDDLESEX POWER DISTRIBUTION CORPORATION
102,105 NEWMARKET - TAY POWER DISTRIBUTION LTD.
104,271 BLUEWATER POWER DISTRIBUTION CORPORATION
104,290 BRANT COUNTY POWER INC.
102,321 BRANTFORD POWER INC.
102,298 BURLINGTON HYDRO INC.
102,299 CAMBRIDGE AND NORTH DUMFRIES HYDRO INC.
104,468 CENTRE WELLINGTON HYDRO LTD.
104,281 COLLUS POWER CORP
106,085 ENWIN UTILITIES LTD.
102,340 FESTIVAL HYDRO INC.
104,313 FORT FRANCES POWER CORPORATION
104,471 GRIMSBY POWER INCORPORATED
104,325 GUELPH HYDRO ELECTRIC SYSTEMS INC.
102,207 HALDIMAND COUNTY HYDRO INC.
104,284 HALTON HILLS HYDRO INC.
104,339 HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.
104,249 HEARST POWER DISTRIBUTION COMPANY LIMITED

104,297 WEST COAST HURON ENERGY INC.
104,299 INNISFIL HYDRO DISTRIBUTION SYSTEMS LIMITED
104,269 KENORA HYDRO ELECTRIC CORPORATION LTD.
104,322 KINGSTON HYDRO CORPORATION
104,267 KITCHENER-WILMOT HYDRO INC.
104,267 KITCHENER-WILMOT HYDRO INC.
104,487 LAKEFRONT UTILITIES INC
104,363 MIDLAND POWER UTILITY CORPORATION
102,102 NIAGARA PENINSULA ENERGY INC.
102,099 NORTH BAY HYDRO DISTRIBUTION LIMITED
102,366 OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.
104,480 ORANGEVILLE HYDRO LIMITED
104,481 OSHAWA PUC NETWORKS INCORPORATED
105,232 RIDEAU ST.LAWRENCE DISTRIBUTION INC.
102,316 PUC DISTRIBUTION INC.
102,741 THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.
102,741 THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.
104,278 WASAGA DISTRIBUTION INC.
102,004 WATERLOO NORTH HYDRO INC.
105,222 WELLINGTON NORTH POWER INC.
104,277 ATIKOKAN HYDRO INC.
104,277 ATIKOKAN HYDRO INC.
102,082 PETERBOROUGH DISTRIBUTION INC.
104,276 WHITBY HYDRO ELECTRIC CORPORATION
105,216 NORFOLK POWER DISTRIBUTION INC.
105,834 ATTAWAPISKAT POWER CORPORATION
102,049 CHAPLEAU PUBLIC UTILITIES CORPORATION
102,049 CHAPLEAU PUBLIC UTILITIES CORPORATION
102,110 CANADIAN NIAGARA POWER INC.
102,006 E. L. K. ENERGY INC.
105,832 FORT ALBANY POWER CORPORATION
105,832 FORT ALBANY POWER CORPORATION
102,009 GREATER SUDBURY HYDRO INC.
102,009 GREATER SUDBURY HYDRO INC.
105,833 KASHECHEWAN POWER CORPORATION
105,833 KASHECHEWAN POWER CORPORATION
104,282 LONDON HYDRO INC.
104,422 NIAGARA-ON-THE-LAKE HYDRO INC.
102,042 NORTHERN ONTARIO WIRES, INC.

104,319 ORILLIA POWER DISTRIBUTION CORPORATION
102,673 TILLSONBURG HYDRO INCORPORATED
104,248 WELLAND HYDRO ELECTRIC SYSTEM CORP.
104,421 WESTARIO POWER INC
102,329 TORONTO HYDRO-ELECTRIC SYSTEM LIMITED
102,329 TORONTO HYDRO-ELECTRIC SYSTEM LIMITED
102,100 ST. THOMAS ENERGY INC.
102,246 WOODSTOCK HYDRO SERVICES INC.
104,306 PORT COLBORNE HYDRO INC.
110,073 ALGOMA POWER INC.
102,084 HORIZON UTILITIES CORPORATION
110,328 STRATACON INC.
110,330 PROVIDENT ENERGY MANAGEMENT INC.
110,334 PRIORITY SUBMETERING SOLUTIONS INC.
110,334 PRIORITY SUBMETERING SOLUTIONS INC.
110,343 ODEM ELECTRIC BILLING SERVICES INC.
110,345 CARMA BILLING SERVICES INC.
110,332 ENERCARE CONNECTIONS INC.
104323 ERIE THAMES POWERLINES CORPORATION
102217 Essex Powerlines Corporation
110329 TRILLIANT ENERGY SERVICES INC.
104323 ERIE THAMES POWERLINES CORPORATION
105361 Parry Sound Power Corporation
110401 Enercan Energy Management
110,494 WYSE METER SOLUTIONS INC.
112,232 YES Energy Management, Inc.

MP	1465	30-Nov-17	0	0	9835.54	ONZN	P

102329	0	0	OCEB (-10%) licensed distributor claim, previous month b

alancing amount

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
HYDRO ONE NETWORKS INC.	MP	1753	31-Dec-17	0	0	-18175530.62	ONZN		P	102007		0	0	MOE - Rural and Remote Settlement Debit, current month balancing amount
Total						**(18,175,530.62)**								

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Dec-17	0	0	-8137.32	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
HYDRO ONE NETWORKS INC.	MP	756	31-Dec-17	0	0	-14979105.48	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Dec-17	0	0	-14040.33	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
LAKELAND POWER DISTRIBUTION LTD.	MP	756	31-Dec-17	0	0	-15258.7	ONZN		P	113624		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Dec-17	0	0	655.66	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Dec-17	0	0	1337.24	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Dec-17	0	0	162.13	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Dec-17	0	0	-4434.78	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
ATIKOKAN HYDRO INC.	MP	756	31-Dec-17	0	0	-1128.87	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Dec-17	0	0	-55.9	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
ATIKOKAN HYDRO INC.	MP	756	31-Dec-17	0	0	-14171.93	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
INNPOWER CORPORATION	MP	756	31-Dec-17	0	0	-42124.58	ONZN		P	104299		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	31-Dec-17	0	0	-139665.52	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
SIOUX LOOKOUT HYDRO INC.	MP	756	31-Dec-17	0	0	-20364.51	ONZN		P	113601		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
Total						**(15,236,332.89)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
ATTAWAPISKAT POWER CORPORATION	MP	755	31-Dec-17	0	0	-7052.59	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
ALGOMA POWER INC.	MP	755	31-Dec-17	0	0	-38918.81	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
ATTAWAPISKAT POWER CORPORATION	MP	755	31-Dec-17	0	0	-34958.51	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
KASHECHEWAN POWER CORPORATION	MP	755	31-Dec-17	0	0	-39641.75	ONZN		P	105833		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
FORT ALBANY POWER CORPORATION	MP	755	31-Dec-17	0	0	-25000	ONZN		P	105832		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	755	31-Dec-17	0	0	-10371.78	ONZN		P	104271		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
ATTAWAPISKAT POWER CORPORATION	MP	755	31-Dec-17	0	0	-17287.05	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
PUC DISTRIBUTION INC.	MP	755	31-Dec-17	0	0	-1900.99	ONZN		P	102316		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
HYDRO ONE NETWORKS INC.	MP	755	31-Dec-17	0	0	-1350866.51	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
HYDRO ONE NETWORKS INC.	MP	755	31-Dec-17	0	0	-44904.03	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
HYDRO ONE NETWORKS INC.	MP	755	31-Dec-17	0	0	-870.92	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
CANADIAN NIAGARA POWER INC.	MP	755	31-Dec-17	0	0	-120.8	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	755	31-Dec-17	0	0	-11860.7	ONZN		P	102741		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
Total						**(1,583,754.44)**								

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Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	
113601	SIOUX LOOKOUT HYDRO INC.	

Participation Name
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Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002

Issue / Re-Issue Date: 14-FEB-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00021883
Invoice Date: 14-FEB-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**

Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-JAN-2018 To 31-JAN-2018

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$2,194,765.96
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$29,085,843.72
1194	ONTARIO FAIR HYDRO PLAN FINANCING ENTITY BALANCING AMOUNT	($3,620,000.00)
1194	ONTARIO FAIR HYDRO PLAN FINANCING ENTITY BALANCING AMOUNT	$3,620,000.00
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$77,613,791.68
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$21,152,052.80
Invoice Total:	$CAD	130,046,454.16

Payment Due Date 16-FEB-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

From: Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]
To: Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Ken Kandeepan [Ken.Kandeepan@ofina.on.ca]; George Sakura [George.Sakura@ofina.on.ca]; Asokan Sadasivan (MEDTE/MRI) [Asokan.Sadasivan@ontario.ca]; Kamala Sinnadurai (ENERGY) [Kamala.Sinnadurai@ontario.ca]; Gregor Schoenebeck [Gregor.Schoenebeck@ofina.on.ca]; John Psinas [John.Psinas@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]; Gavin He [Gavin.He@ofina.on.ca]; John Kim [John.Kim@ofina.on.ca]; Kevin Hwang [Kevin.Hwang@ofina.on.ca]
CC: Tai An (ENERGY) [Tai.An@ontario.ca]; Pratima Gounden (ENERGY) [Pratima.Gounden@ontario.ca]; Janet Lim (ENERGY) [Janet.Lim@ontario.ca]; Zheng, Sean (ENERGY) [Sean.Zheng@ontario.ca]; Chander, Sunita (ENERGY) [SOM.Sunita.Chander@ontario.ca]; Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]; Kwasny, Anna (MEDG/MRIS) [Anna.Kwasny@ontario.ca]
Subject: January 2018 IESO Invoice - OREC
Date: Thursday, February 15, 2018 15:38:39
Attachment 1: image001.jpg
Attachment 2: January 2018 IESO Invoice (Feb 14).pdf

Hi,

Please see the attached IESO Invoice for the month of January 2018. Please proceed with processing the OREC payment for the amount of $77,613,791.68.

Kindly note that the following programs are also included on the January IESO invoice, and a separate email will be sent regarding information and payment approval for these:

- On-Reserve First Nations Delivery Credit
- Distribution Rate Protection
- Rural and Remote Rate Protection

Also note that offsetting amounts of $3,620,000 are included on this month's invoice due to the correction in the December's invoice for "Ontario Fair Hydro Plan Financing Entity Balancing Amount". The IESO included these so that the charges run through the settlement system and reverse the amounts on the December original and credit invoices.

Thank you,

Ryan Lim
Financial Analyst
56 Wellesley Street West, 4th Floor
Toronto, ON M7A 2E7
Phone: (416) 561-9361

Ministry of Economic Development & Growth
Ministry of Energy
Ministry of Infrastructure
Ministry of Research, Innovation & Science


CSD
Corporate
Services
Division
Expertise | Collaboration | Respect | Service Excellence | Integrity

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002

Issue / Re-Issue Date: 14-FEB-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00021883
Invoice Date: 14-FEB-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**

Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-JAN-2018 To 31-JAN-2018

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1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$77,613,791.68
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$21,152,052.80
Invoice Total:	$CAD	130,046,454.16

Payment Due Date 16-FEB-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002

Issue / Re-Issue Date: 14-FEB-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00021883
Invoice Date: 14-FEB-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
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Comments:

Charges for settlement statements issued: From 01-JAN-2018 To 31-JAN-2018

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Payment Due Date 16-FEB-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X

Name													
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-Jan-18	0	0	-35466.95	ONZN		P	102105		0	0 OREC embedded distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-Jan-18	0	0	-313682.38	ONZN		P	102105		0	0 OREC licensed distributor claim, current month balancing amount
ENERGY + INC. (SETL)	MP	1467	31-Jan-18	0	0	-121607.84	ONZN		P	104290		0	0 OREC licensed distributor claim, current month balancing amount
WASAGA DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-122525.43	ONZN		P	104278		0	0 OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-Jan-18	0	0	-239.32	ONZN		P	102007		0	0 OREC embedded distributor claim, previous month balancing amount for 2017-12
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-852.81	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-01
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-2.05	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-01
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-14.99	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-02
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-976.88	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-02
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-927.09	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-03
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-14.35	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-03
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-11.99	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-04
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-670.56	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-04
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-7.06	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-05
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-1052.44	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-05
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-1236.35	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-06
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-5.46	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-06
INNPOWER CORPORATION	MP	1467	31-Jan-18	0	0	-218708.86	ONZN		P	104299		0	0 OREC licensed distributor claim, current month balancing amount
ENWIN UTILITIES LTD.	MP	1467	31-Jan-18	0	0	-1087073.63	ONZN		P	106085		0	0 OREC licensed distributor claim, current month balancing amount
COLLUS POWERSTREAM CORP.	MP	1467	31-Jan-18	0	0	-194351.25	ONZN		P	104281		0	0 OREC licensed distributor claim, current month balancing amount
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-Jan-18	0	0	-145233.69	ONZN		P	104422		0	0 OREC licensed distributor claim, current month balancing amount
HEARST POWER DISTRIBUTION COMPANY LIMITED	MP	1467	31-Jan-18	0	0	-41238.07	ONZN		P	104249		0	0 OREC licensed distributor claim, current month balancing amount
E. L. K. ENERGY INC.	MP	1467	31-Jan-18	0	0	-101607.23	ONZN		P	102006		0	0 OREC licensed distributor claim, current month balancing amount
VERIDIAN CONNECTIONS INC.	MP	1467	31-Jan-18	0	0	-1592756.14	ONZN		P	102120		0	0 OREC licensed distributor claim, current month balancing amount
KENORA HYDRO ELECTRIC CORPORATION LTD.	MP	1467	31-Jan-18	0	0	-71907.59	ONZN		P	104269		0	0 OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	31-Jan-18	0	0	-328851.45	ONZN		P	104421		0	0 OREC licensed distributor claim, current month balancing amount
ESSEX POWERLINES CORPORATION	MP	1467	31-Jan-18	0	0	-394702.43	ONZN		P	102217		0	0 OREC licensed distributor claim, current month balancing amount
FESTIVAL HYDRO INC.	MP	1467	31-Jan-18	0	0	-252588.83	ONZN		P	102340		0	0 OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-13978.01	ONZN		P	105232		0	0 OREC licensed distributor claim, current month balancing amount
ERIE THAMES POWERLINES CORPORATION	MP	1467	31-Jan-18	0	0	-213024.41	ONZN		P	104323		0	0 OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	31-Jan-18	0	0	-601790	ONZN		P	102004		0	0 OREC licensed distributor claim, current month balancing amount
PETERBOROUGH DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-528220.43	ONZN		P	102082		0	0 OREC licensed distributor claim, current month balancing amount
KITCHENER-WILMOT HYDRO INC.	MP	1467	31-Jan-18	0	0	-903211.53	ONZN		P	104267		0	0 OREC licensed distributor claim, current month balancing amount
GUELPH HYDRO ELECTRIC SYSTEMS INC.	MP	1467	31-Jan-18	0	0	-1326881.84	ONZN		P	104325		0	0 OREC licensed distributor claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	31-Jan-18	0	0	-167442.85	ONZN		P	110073		0	0 OREC licensed distributor claim, current month balancing amount
ORILLIA POWER DISTRIBUTION CORPORATION	MP	1467	31-Jan-18	0	0	-192071.04	ONZN		P	104319		0	0 OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-20.35	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-07
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-1038.84	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-07
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-1099.69	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-08
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-30.02	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-08
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-34.2	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-09
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-2.99	ONZN		P	105232		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-09
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-1213.69	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-09
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-16.53	ONZN		P	105232		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-10
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-53.76	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-10
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-723.74	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-10
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-69.76	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-11
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-857.48	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-11

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-4885.52	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-Jan-18	0	0	-3854.22	ONZN		P	104422		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-2183.17	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	31-Jan-18	0	0	-1879.69	ONZN		P	102089		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
WATERLOO NORTH HYDRO INC.	MP	1467	31-Jan-18	0	0	-179089	ONZN		P	102004		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
CANADIAN NIAGARA POWER INC.	MP	1467	31-Jan-18	0	0	-87237.85	ONZN		P	102110		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-60876.78	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
ENTEGRUS POWERLINES INC.	MP	1467	31-Jan-18	0	0	-35097.73	ONZN		P	102140		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
WESTARIO POWER INC	MP	1467	31-Jan-18	0	0	-9306.32	ONZN		P	104421		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
FESTIVAL HYDRO INC.	MP	1467	31-Jan-18	0	0	268.55	ONZN		P	102340		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
ESSEX POWERLINES CORPORATION	MP	1467	31-Jan-18	0	0	3117.57	ONZN		P	102217		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
ALGOMA POWER INC.	MP	1467	31-Jan-18	0	0	10768.09	ONZN		P	110073		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
GREATER SUDBURY HYDRO INC.	MP	1467	31-Jan-18	0	0	157.91	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
PROVIDENT ENERGY MANAGEMENT INC.	MP	1467	31-Jan-18	0	0	-19017.21	ONZN		P	110330		0	0	OREC unit sub-meter provider claim, previous month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	31-Jan-18	0	0	0.01	ONZN		P	112232		0	0	OREC unit sub-meter provider claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-427138.6	ONZN		P	102321		0	0	OREC licensed distributor claim, current month balancing amount
ST. THOMAS ENERGY INC.	MP	1467	31-Jan-18	0	0	-170389.22	ONZN		P	102100		0	0	OREC licensed distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-Jan-18	0	0	-153615.88	ONZN		P	113624		0	0	OREC embedded distributor claim, current month balancing amount
PIKE LAKE GOLF CENTRE LIMITED	MP	1467	31-Jan-18	0	0	-137.54	ONZN		P	145734		0	0	OREC unit sub-meter provider claim, current month balancing amount
WYSE METER SOLUTIONS INC.	MP	1467	31-Jan-18	0	0	-62533.3	ONZN		P	110494		0	0	OREC unit sub-meter provider claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	31-Jan-18	0	0	-39592.39	ONZN		P	110345		0	0	OREC unit sub-meter provider claim, current month balancing amount
ENERCARE CONNECTIONS INC.	MP	1467	31-Jan-18	0	0	-161462.03	ONZN		P	110332		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM ENERGY SERVICES INC.	MP	1467	31-Jan-18	0	0	-21295.03	ONZN		P	114461		0	0	OREC unit sub-meter provider claim, current month balancing amount
PRIORITY SUBMETERING SOLUTIONS INC.	MP	1467	31-Jan-18	0	0	-22452.98	ONZN		P	110334		0	0	OREC unit sub-meter provider claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-Jan-18	0	0	-72532.98	ONZN		P	113624		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE BRAMPTON NETWORKS INC.	MP	1467	31-Jan-18	0	0	-1652740.85	ONZN		P	104279		0	0	OREC licensed distributor claim, current month balancing amount
KINGSTON HYDRO CORPORATION	MP	1467	31-Jan-18	0	0	-440452.8	ONZN		P	104322		0	0	OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	31-Jan-18	0	0	-748540.13	ONZN		P	102110		0	0	OREC licensed distributor claim, current month balancing amount
WEST COAST HURON ENERGY INC.	MP	1467	31-Jan-18	0	0	-46593.87	ONZN		P	104297		0	0	OREC licensed distributor claim, current month balancing amount
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	MP	1467	31-Jan-18	0	0	-15322868.43	ONZN		P	102329		0	0	OREC licensed distributor claim, current month balancing amount
LONDON HYDRO INC.	MP	1467	31-Jan-18	0	0	-1958691.18	ONZN		P	104282		0	0	OREC licensed distributor claim, current month balancing amount
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-934972.44	ONZN		P	102366		0	0	OREC licensed distributor claim, current month balancing amount
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jan-18	0	0	-554047.19	ONZN		P	104276		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO OTTAWA LIMITED	MP	1467	31-Jan-18	0	0	-4718324.13	ONZN		P	102070		0	0	OREC licensed distributor claim, current month balancing amount
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	31-Jan-18	0	0	-2901467.17	ONZN		P	102089		0	0	OREC licensed distributor claim, current month balancing amount
GREATER SUDBURY HYDRO INC.	MP	1467	31-Jan-18	0	0	-650384.59	ONZN		P	102009		0	0	OREC licensed distributor claim, current month balancing amount
HORIZON UTILITIES CORPORATION	MP	1467	31-Jan-18	0	0	-2586138.2	ONZN		P	102084		0	0	OREC licensed distributor claim, current month balancing amount
ENTEGRUS POWERLINES INC.	MP	1467	31-Jan-18	0	0	-412452.34	ONZN		P	102140		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-Jan-18	0	0	-22658072.58	ONZN		P	102007		0	0	OREC licensed distributor claim, current month balancing amount
MIDLAND POWER UTILITY CORPORATION	MP	1467	31-Jan-18	0	0	-96625.2	ONZN		P	104363		0	0	OREC licensed distributor claim, current month balancing amount
POWERSTREAM INC.	MP	1467	31-Jan-18	0	0	-4605451.66	ONZN		P	108825		0	0	OREC licensed distributor claim, current month balancing amount
WELLINGTON NORTH POWER INC.	MP	1467	31-Jan-18	0	0	-46410.35	ONZN		P	105222		0	0	OREC licensed distributor claim, current month balancing amount
CENTRE WELLINGTON HYDRO LTD.	MP	1467	31-Jan-18	0	0	-78331.06	ONZN		P	104468		0	0	OREC licensed distributor claim, current month balancing amount
ORANGEVILLE HYDRO LIMITED	MP	1467	31-Jan-18	0	0	-221618.13	ONZN		P	104480		0	0	OREC licensed distributor claim, current month balancing amount
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-615871.42	ONZN		P	102741		0	0	OREC licensed distributor claim, current month balancing amount
LAKEFRONT UTILITIES INC	MP	1467	31-Jan-18	0	0	-241831.97	ONZN		P	104487		0	0	OREC licensed distributor claim, current month balancing amount
HALTON HILLS HYDRO INC.	MP	1467	31-Jan-18	0	0	-327344.49	ONZN		P	104284		0	0	OREC licensed distributor claim, current month balancing amount
TILLSONBURG HYDRO INCORPORATED	MP	1467	31-Jan-18	0	0	-101037	ONZN		P	102673		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	MP	1467	31-Jan-18	0	0	-78379.61	ONZN		P	104339		0	0	OREC licensed distributor claim, current month balancing amount
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-19902.67	ONZN		P	104277		0	0	OREC licensed distributor claim, current month balancing amount
MILTON HYDRO DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-376325.35	ONZN		P	102743		0	0	OREC licensed distributor claim, current month balancing amount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Jan-18	0	0	-25025.49	ONZN		P	102049		0	0	OREC licensed distributor claim, current month balancing amount
GRIMSBY POWER INCORPORATED	MP	1467	31-Jan-18	0	0	-125745.45	ONZN		P	104471		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA PENINSULA ENERGY INC.	MP	1467	31-Jan-18	0	0	-683858.42	ONZN		P	102102		0	0	OREC licensed distributor claim, current month balancing amount
PUC DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-498020.33	ONZN		P	102316		0	0	OREC licensed distributor claim, current month balancing amount
FORT FRANCES POWER CORPORATION	MP	1467	31-Jan-18	0	0	-54556.73	ONZN		P	104313		0	0	OREC licensed distributor claim, current month balancing amount
NORTHERN ONTARIO WIRES, INC.	MP	1467	31-Jan-18	0	0	-77857.86	ONZN		P	102042		0	0	OREC licensed distributor claim, current month balancing amount
NORTH BAY HYDRO DISTRIBUTION LIMITED	MP	1467	31-Jan-18	0	0	-362246.35	ONZN		P	102099		0	0	OREC licensed distributor claim, current month balancing amount
OSHAWA PUC NETWORKS INCORPORATED	MP	1467	31-Jan-18	0	0	-499430.11	ONZN		P	104481		0	0	OREC licensed distributor claim, current month balancing amount
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-Jan-18	0	0	-215381.67	ONZN		P	104248		0	0	OREC licensed distributor claim, current month balancing amount
ENERGY + INC.	MP	1467	31-Jan-18	0	0	-572947.84	ONZN		P	102299		0	0	OREC licensed distributor claim, current month balancing amount
BURLINGTON HYDRO INC.	MP	1467	31-Jan-18	0	0	-729489.7	ONZN		P	102298		0	0	OREC licensed distributor claim, current month balancing amount
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	1467	31-Jan-18	0	0	-465464.49	ONZN		P	104271		0	0	OREC licensed distributor claim, current month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	31-Jan-18	0	0	-2897.6	ONZN		P	112232		0	0	OREC unit sub-meter provider claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-Jan-18	0	0	-405579.53	ONZN		P	102007		0	0	OREC embedded distributor claim, current month balancing amount
O.N.TEL INC.	MP	1467	31-Jan-18	0	0	-55.71	ONZN		P	107810		0	0	Ontario Rebate for Electricity Consumers for the invoice of 2018/01
IESO Settlement Report - January Total						**(77,613,791.68)**								

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES

107810 O.N.TEL INC.

Participation Name
Distributor-Metered Market Participant
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From: Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]
To: Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Mark Bergman (ENERGY) [Mark.Bergman@ontario.ca]; Tracy Flindall (MOF) [Tracy.Flindall@ontario.ca]; Anil Sharma (MOF) [Anil.Sharma@ontario.ca]; Dev Ram (MOF) [Dev.Ram@ontario.ca]; Naomi Morita (MOF) [Naomi.Morita@ontario.ca]; Gavin He [Gavin.He@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]
CC: Tai An (ENERGY) [Tai.An@ontario.ca]; Pratima Gounden (ENERGY) [Pratima.Gounden@ontario.ca]; Janet Lim (ENERGY) [Janet.Lim@ontario.ca]; Zheng, Sean (ENERGY) [Sean.Zheng@ontario.ca]; Chander, Sunita (ENERGY) [SOM.Sunita.Chander@ontario.ca]; Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]; Kwasny, Anna (MEDG/MRIS) [Anna.Kwasny@ontario.ca]
Subject: January 2018 OREC Settlement Statement
Date: Thursday, February 15, 2018 15:38:42
Attachment 1: image001.jpg
Attachment 2: January 2018 IESO OREC Settlement Statement.xlsx

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Hi,

Please see the attached OREC Settlement Statement for the month of January 2018, which shows the OREC amount of $77,613,791.68.

Kindly note that the following amounts are also included on the January IESO invoice but are not listed in the attached settlement statement:

- $2,194,765.96 related to the On-Reserve First Nations Delivery Credit
- $29,085,843.72 related to Distribution Rate Protection
- $21,152,052.80 related to Rural and Remote Rate Protection

Thank you,

Ryan Lim
Financial Analyst
56 Wellesley Street West, 4th Floor
Toronto, ON M7A 2E7
Phone: (416) 561-9361

Ministry of Economic Development & Growth
Ministry of Energy
Ministry of Infrastructure
Ministry of Research, Innovation & Science


CSD
Corporate
Services
Division
Expertise | Collaboration | Respect | Service Excellence | Integrity

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X

Name													
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-Jan-18	0	0	-35466.95	ONZN		P	102105		0	0 OREC embedded distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-Jan-18	0	0	-313682.38	ONZN		P	102105		0	0 OREC licensed distributor claim, current month balancing amount
ENERGY + INC. (SETL)	MP	1467	31-Jan-18	0	0	-121607.84	ONZN		P	104290		0	0 OREC licensed distributor claim, current month balancing amount
WASAGA DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-122525.43	ONZN		P	104278		0	0 OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-Jan-18	0	0	-239.32	ONZN		P	102007		0	0 OREC embedded distributor claim, previous month balancing amount for 2017-12
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-852.81	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-01
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-2.05	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-01
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-14.99	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-02
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-976.88	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-02
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-927.09	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-03
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-14.35	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-03
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-11.99	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-04
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-670.56	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-04
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-7.06	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-05
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-1052.44	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-05
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-1236.35	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-06
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-5.46	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-06
INNPOWER CORPORATION	MP	1467	31-Jan-18	0	0	-218708.86	ONZN		P	104299		0	0 OREC licensed distributor claim, current month balancing amount
ENWIN UTILITIES LTD.	MP	1467	31-Jan-18	0	0	-1087073.63	ONZN		P	106085		0	0 OREC licensed distributor claim, current month balancing amount
COLLUS POWERSTREAM CORP.	MP	1467	31-Jan-18	0	0	-194351.25	ONZN		P	104281		0	0 OREC licensed distributor claim, current month balancing amount
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-Jan-18	0	0	-145233.69	ONZN		P	104422		0	0 OREC licensed distributor claim, current month balancing amount
HEARST POWER DISTRIBUTION COMPANY LIMITED	MP	1467	31-Jan-18	0	0	-41238.07	ONZN		P	104249		0	0 OREC licensed distributor claim, current month balancing amount
E. L. K. ENERGY INC.	MP	1467	31-Jan-18	0	0	-101607.23	ONZN		P	102006		0	0 OREC licensed distributor claim, current month balancing amount
VERIDIAN CONNECTIONS INC.	MP	1467	31-Jan-18	0	0	-1592756.14	ONZN		P	102120		0	0 OREC licensed distributor claim, current month balancing amount
KENORA HYDRO ELECTRIC CORPORATION LTD.	MP	1467	31-Jan-18	0	0	-71907.59	ONZN		P	104269		0	0 OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	31-Jan-18	0	0	-328851.45	ONZN		P	104421		0	0 OREC licensed distributor claim, current month balancing amount
ESSEX POWERLINES CORPORATION	MP	1467	31-Jan-18	0	0	-394702.43	ONZN		P	102217		0	0 OREC licensed distributor claim, current month balancing amount
FESTIVAL HYDRO INC.	MP	1467	31-Jan-18	0	0	-252588.83	ONZN		P	102340		0	0 OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-13978.01	ONZN		P	105232		0	0 OREC licensed distributor claim, current month balancing amount
ERIE THAMES POWERLINES CORPORATION	MP	1467	31-Jan-18	0	0	-213024.41	ONZN		P	104323		0	0 OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	31-Jan-18	0	0	-601790	ONZN		P	102004		0	0 OREC licensed distributor claim, current month balancing amount
PETERBOROUGH DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-528220.43	ONZN		P	102082		0	0 OREC licensed distributor claim, current month balancing amount
KITCHENER-WILMOT HYDRO INC.	MP	1467	31-Jan-18	0	0	-903211.53	ONZN		P	104267		0	0 OREC licensed distributor claim, current month balancing amount
GUELPH HYDRO ELECTRIC SYSTEMS INC.	MP	1467	31-Jan-18	0	0	-1326881.84	ONZN		P	104325		0	0 OREC licensed distributor claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	31-Jan-18	0	0	-167442.85	ONZN		P	110073		0	0 OREC licensed distributor claim, current month balancing amount
ORILLIA POWER DISTRIBUTION CORPORATION	MP	1467	31-Jan-18	0	0	-192071.04	ONZN		P	104319		0	0 OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-20.35	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-07
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-1038.84	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-07
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-1099.69	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-08
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-30.02	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-08
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-34.2	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-09
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-2.99	ONZN		P	105232		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-09
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-1213.69	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-09
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-16.53	ONZN		P	105232		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-10
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-53.76	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-10
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-723.74	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-10
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-69.76	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-11
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-857.48	ONZN		P	104277		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-11

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-4885.52	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-Jan-18	0	0	-3854.22	ONZN		P	104422		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-2183.17	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	31-Jan-18	0	0	-1879.69	ONZN		P	102089		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
WATERLOO NORTH HYDRO INC.	MP	1467	31-Jan-18	0	0	-179089	ONZN		P	102004		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
CANADIAN NIAGARA POWER INC.	MP	1467	31-Jan-18	0	0	-87237.85	ONZN		P	102110		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-60876.78	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
ENTEGRUS POWERLINES INC.	MP	1467	31-Jan-18	0	0	-35097.73	ONZN		P	102140		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
WESTARIO POWER INC	MP	1467	31-Jan-18	0	0	-9306.32	ONZN		P	104421		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
FESTIVAL HYDRO INC.	MP	1467	31-Jan-18	0	0	268.55	ONZN		P	102340		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
ESSEX POWERLINES CORPORATION	MP	1467	31-Jan-18	0	0	3117.57	ONZN		P	102217		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
ALGOMA POWER INC.	MP	1467	31-Jan-18	0	0	10768.09	ONZN		P	110073		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
GREATER SUDBURY HYDRO INC.	MP	1467	31-Jan-18	0	0	157.91	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
PROVIDENT ENERGY MANAGEMENT INC.	MP	1467	31-Jan-18	0	0	-19017.21	ONZN		P	110330		0	0	OREC unit sub-meter provider claim, previous month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	31-Jan-18	0	0	0.01	ONZN		P	112232		0	0	OREC unit sub-meter provider claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	31-Jan-18	0	0	-427138.6	ONZN		P	102321		0	0	OREC licensed distributor claim, current month balancing amount
ST. THOMAS ENERGY INC.	MP	1467	31-Jan-18	0	0	-170389.22	ONZN		P	102100		0	0	OREC licensed distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-Jan-18	0	0	-153615.88	ONZN		P	113624		0	0	OREC embedded distributor claim, current month balancing amount
PIKE LAKE GOLF CENTRE LIMITED	MP	1467	31-Jan-18	0	0	-137.54	ONZN		P	145734		0	0	OREC unit sub-meter provider claim, current month balancing amount
WYSE METER SOLUTIONS INC.	MP	1467	31-Jan-18	0	0	-62533.3	ONZN		P	110494		0	0	OREC unit sub-meter provider claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	31-Jan-18	0	0	-39592.39	ONZN		P	110345		0	0	OREC unit sub-meter provider claim, current month balancing amount
ENERCARE CONNECTIONS INC.	MP	1467	31-Jan-18	0	0	-161462.03	ONZN		P	110332		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM ENERGY SERVICES INC.	MP	1467	31-Jan-18	0	0	-21295.03	ONZN		P	114461		0	0	OREC unit sub-meter provider claim, current month balancing amount
PRIORITY SUBMETERING SOLUTIONS INC.	MP	1467	31-Jan-18	0	0	-22452.98	ONZN		P	110334		0	0	OREC unit sub-meter provider claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-Jan-18	0	0	-72532.98	ONZN		P	113624		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE BRAMPTON NETWORKS INC.	MP	1467	31-Jan-18	0	0	-1652740.85	ONZN		P	104279		0	0	OREC licensed distributor claim, current month balancing amount
KINGSTON HYDRO CORPORATION	MP	1467	31-Jan-18	0	0	-440452.8	ONZN		P	104322		0	0	OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	31-Jan-18	0	0	-748540.13	ONZN		P	102110		0	0	OREC licensed distributor claim, current month balancing amount
WEST COAST HURON ENERGY INC.	MP	1467	31-Jan-18	0	0	-46593.87	ONZN		P	104297		0	0	OREC licensed distributor claim, current month balancing amount
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	MP	1467	31-Jan-18	0	0	-15322868.43	ONZN		P	102329		0	0	OREC licensed distributor claim, current month balancing amount
LONDON HYDRO INC.	MP	1467	31-Jan-18	0	0	-1958691.18	ONZN		P	104282		0	0	OREC licensed distributor claim, current month balancing amount
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-934972.44	ONZN		P	102366		0	0	OREC licensed distributor claim, current month balancing amount
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jan-18	0	0	-554047.19	ONZN		P	104276		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO OTTAWA LIMITED	MP	1467	31-Jan-18	0	0	-4718324.13	ONZN		P	102070		0	0	OREC licensed distributor claim, current month balancing amount
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	31-Jan-18	0	0	-2901467.17	ONZN		P	102089		0	0	OREC licensed distributor claim, current month balancing amount
GREATER SUDBURY HYDRO INC.	MP	1467	31-Jan-18	0	0	-650384.59	ONZN		P	102009		0	0	OREC licensed distributor claim, current month balancing amount
HORIZON UTILITIES CORPORATION	MP	1467	31-Jan-18	0	0	-2586138.2	ONZN		P	102084		0	0	OREC licensed distributor claim, current month balancing amount
ENTEGRUS POWERLINES INC.	MP	1467	31-Jan-18	0	0	-412452.34	ONZN		P	102140		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-Jan-18	0	0	-22658072.58	ONZN		P	102007		0	0	OREC licensed distributor claim, current month balancing amount
MIDLAND POWER UTILITY CORPORATION	MP	1467	31-Jan-18	0	0	-96625.2	ONZN		P	104363		0	0	OREC licensed distributor claim, current month balancing amount
POWERSTREAM INC.	MP	1467	31-Jan-18	0	0	-4605451.66	ONZN		P	108825		0	0	OREC licensed distributor claim, current month balancing amount
WELLINGTON NORTH POWER INC.	MP	1467	31-Jan-18	0	0	-46410.35	ONZN		P	105222		0	0	OREC licensed distributor claim, current month balancing amount
CENTRE WELLINGTON HYDRO LTD.	MP	1467	31-Jan-18	0	0	-78331.06	ONZN		P	104468		0	0	OREC licensed distributor claim, current month balancing amount
ORANGEVILLE HYDRO LIMITED	MP	1467	31-Jan-18	0	0	-221618.13	ONZN		P	104480		0	0	OREC licensed distributor claim, current month balancing amount
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-615871.42	ONZN		P	102741		0	0	OREC licensed distributor claim, current month balancing amount
LAKEFRONT UTILITIES INC	MP	1467	31-Jan-18	0	0	-241831.97	ONZN		P	104487		0	0	OREC licensed distributor claim, current month balancing amount
HALTON HILLS HYDRO INC.	MP	1467	31-Jan-18	0	0	-327344.49	ONZN		P	104284		0	0	OREC licensed distributor claim, current month balancing amount
TILLSONBURG HYDRO INCORPORATED	MP	1467	31-Jan-18	0	0	-101037	ONZN		P	102673		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	MP	1467	31-Jan-18	0	0	-78379.61	ONZN		P	104339		0	0	OREC licensed distributor claim, current month balancing amount
ATIKOKAN HYDRO INC.	MP	1467	31-Jan-18	0	0	-19902.67	ONZN		P	104277		0	0	OREC licensed distributor claim, current month balancing amount
MILTON HYDRO DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-376325.35	ONZN		P	102743		0	0	OREC licensed distributor claim, current month balancing amount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Jan-18	0	0	-25025.49	ONZN		P	102049		0	0	OREC licensed distributor claim, current month balancing amount
GRIMSBY POWER INCORPORATED	MP	1467	31-Jan-18	0	0	-125745.45	ONZN		P	104471		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA PENINSULA ENERGY INC.	MP	1467	31-Jan-18	0	0	-683858.42	ONZN		P	102102		0	0	OREC licensed distributor claim, current month balancing amount
PUC DISTRIBUTION INC.	MP	1467	31-Jan-18	0	0	-498020.33	ONZN		P	102316		0	0	OREC licensed distributor claim, current month balancing amount
FORT FRANCES POWER CORPORATION	MP	1467	31-Jan-18	0	0	-54556.73	ONZN		P	104313		0	0	OREC licensed distributor claim, current month balancing amount
NORTHERN ONTARIO WIRES, INC.	MP	1467	31-Jan-18	0	0	-77857.86	ONZN		P	102042		0	0	OREC licensed distributor claim, current month balancing amount
NORTH BAY HYDRO DISTRIBUTION LIMITED	MP	1467	31-Jan-18	0	0	-362246.35	ONZN		P	102099		0	0	OREC licensed distributor claim, current month balancing amount
OSHAWA PUC NETWORKS INCORPORATED	MP	1467	31-Jan-18	0	0	-499430.11	ONZN		P	104481		0	0	OREC licensed distributor claim, current month balancing amount
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-Jan-18	0	0	-215381.67	ONZN		P	104248		0	0	OREC licensed distributor claim, current month balancing amount
ENERGY + INC.	MP	1467	31-Jan-18	0	0	-572947.84	ONZN		P	102299		0	0	OREC licensed distributor claim, current month balancing amount
BURLINGTON HYDRO INC.	MP	1467	31-Jan-18	0	0	-729489.7	ONZN		P	102298		0	0	OREC licensed distributor claim, current month balancing amount
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	1467	31-Jan-18	0	0	-465464.49	ONZN		P	104271		0	0	OREC licensed distributor claim, current month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	31-Jan-18	0	0	-2897.6	ONZN		P	112232		0	0	OREC unit sub-meter provider claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-Jan-18	0	0	-405579.53	ONZN		P	102007		0	0	OREC embedded distributor claim, current month balancing amount
O.N.TEL INC.	MP	1467	31-Jan-18	0	0	-55.71	ONZN		P	107810		0	0	Ontario Rebate for Electricity Consumers for the invoice of 2018/01
IESO Settlement Report - January Total						**(77,613,791.68)**								

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES

107810 O.N.TEL INC.

Participation Name
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From: Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]
To: Risa Thau [Risa.Thau@ofina.on.ca]; Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]; George Sakura [George.Sakura@ofina.on.ca]; Kevin Hwang [Kevin.Hwang@ofina.on.ca]
CC: Dade, Christine (ENERGY) [Christine.Dade@ontario.ca]; Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Mike Smith (ENERGY) [Mike.Smith@ontario.ca]; Pratima Gounden (ENERGY) [Pratima.Gounden@ontario.ca]; Tai An (ENERGY) [Tai.An@ontario.ca]; Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]
Subject: January 2018 Social Program Payment
Date: Friday, February 16, 2018 10:25:53
Attachment 1: January 2018 IESO Invoice.pdf
Attachment 2: OFHP IESO Settlement Statement January 2018.xlsx

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Hello Risa,

Apologies for the delay. Please find below the payment information for the attached invoice for the Fair Hydro Plan programs. Please let me know if you require any additional information to process these payments. OREC payment approval will be shared separately.

Note that there are additional line items titled "Ontario Fair Hydro Plan Financing Entity Balancing Amount". This is a correction by the IESO for their accounting system. It nets to $0 and should not involve any payment.

Program	Payment Amount	TP Line	IFIS Account String
On-Reserve First Nations Delivery Credit	$2,194,765.96	TP_On-Reserved First Nations Delivery Credit	029-290501-0000-981653-577210
Distribution Rate Protection	$29,085,843.72	TP_Rural or Remote Rate Protection Program	029-290501-0000-981658-577210
Rural and Remote Rate Protection	$21,152,052.80	TP_Rural or Remote Rate Protection Program	029-290501-0000-981658-577210
Total	$52,432,662.48		

*It is intentional that the DRP and RRRP come from the same TP line

Thanks!

Robert Hunter
Senior Policy Advisor

Ministry of Energy: Distribution and Agency Policy Branch
77 Grenville Street, 6th Floor
Toronto, ON M7A 2C1
Phone: (416) 325-6899
Email: robert.a.hunter@ontario.ca

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002

Issue / Re-Issue Date: 14-FEB-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00021883
Invoice Date: 14-FEB-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**

Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-JAN-2018 To 31-JAN-2018

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$2,194,765.96
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$29,085,843.72
1194	ONTARIO FAIR HYDRO PLAN FINANCING ENTITY BALANCING AMOUNT	($3,620,000.00)
1194	ONTARIO FAIR HYDRO PLAN FINANCING ENTITY BALANCING AMOUNT	$3,620,000.00
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$77,613,791.68
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$21,152,052.80
Invoice Total:	$CAD	130,046,454.16

Payment Due Date 16-FEB-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
HYDRO ONE NETWORKS INC.	MP	1753	31-Jan-18	0	0	-21152052.8	ONZN		P	102007		0	0	MOE - Rural and Remote Settlement Debit, current month balancing amount
Total						**(21,152,052.80)**								

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Jan-18	0	0	-14951.63	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	31-Jan-18	0	0	-205739.71	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
HYDRO ONE NETWORKS INC.	MP	756	31-Jan-18	0	0	-28492927.47	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Jan-18	0	0	-14339.63	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ATIKOKAN HYDRO INC.	MP	756	31-Jan-18	0	0	-15473.11	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
INNPOWER CORPORATION	MP	756	31-Jan-18	0	0	-78579.56	ONZN		P	104299		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Jan-18	0	0	-6814.31	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
SIOUX LOOKOUT HYDRO INC.	MP	756	31-Jan-18	0	0	-27726.16	ONZN		P	113601		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
LAKELAND POWER DISTRIBUTION LTD.	MP	756	31-Jan-18	0	0	-26501.9	ONZN		P	113624		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	31-Jan-18	0	0	-201705.6	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Jan-18	0	0	175.36	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
ATIKOKAN HYDRO INC.	MP	756	31-Jan-18	0	0	-1260	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
Total						**(29,085,843.72)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
CANADIAN NIAGARA POWER INC.	MP	755	31-Jan-18	0	0	-13668.19	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
CANADIAN NIAGARA POWER INC.	MP	755	31-Jan-18	0	0	-12528.13	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
ALGOMA POWER INC.	MP	755	31-Jan-18	0	0	-44549.95	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
HYDRO ONE NETWORKS INC.	MP	755	31-Jan-18	0	0	-1115.96	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
HYDRO ONE NETWORKS INC.	MP	755	31-Jan-18	0	0	-47964.37	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
HYDRO ONE NETWORKS INC.	MP	755	31-Jan-18	0	0	-1985331.34	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
PUC DISTRIBUTION INC.	MP	755	31-Jan-18	0	0	-10608.78	ONZN		P	102316		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	755	31-Jan-18	0	0	-13503.7	ONZN		P	102741		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	755	31-Jan-18	0	0	-20054.59	ONZN		P	104271		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
ALGOMA POWER INC.	MP	755	31-Jan-18	0	0	-45440.95	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
Total						**(2,194,765.96)**								

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Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
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104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
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145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
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110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
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110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	
113601	SIOUX LOOKOUT HYDRO INC.	

Participation Name
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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
HYDRO ONE NETWORKS INC.	MP	1753	31-Jan-18	0	0	-21152052.8	ONZN		P	102007		0	0	MOE - Rural and Remote Settlement Debit, current month balancing amount
Total						**(21,152,052.80)**								

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Jan-18	0	0	-14951.63	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	31-Jan-18	0	0	-205739.71	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
HYDRO ONE NETWORKS INC.	MP	756	31-Jan-18	0	0	-28492927.47	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Jan-18	0	0	-14339.63	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ATIKOKAN HYDRO INC.	MP	756	31-Jan-18	0	0	-15473.11	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
INNPOWER CORPORATION	MP	756	31-Jan-18	0	0	-78579.56	ONZN		P	104299		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Jan-18	0	0	-6814.31	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
SIOUX LOOKOUT HYDRO INC.	MP	756	31-Jan-18	0	0	-27726.16	ONZN		P	113601		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
LAKELAND POWER DISTRIBUTION LTD.	MP	756	31-Jan-18	0	0	-26501.9	ONZN		P	113624		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	31-Jan-18	0	0	-201705.6	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Jan-18	0	0	175.36	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
ATIKOKAN HYDRO INC.	MP	756	31-Jan-18	0	0	-1260	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
Total						**(29,085,843.72)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
CANADIAN NIAGARA POWER INC.	MP	755	31-Jan-18	0	0	-13668.19	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
CANADIAN NIAGARA POWER INC.	MP	755	31-Jan-18	0	0	-12528.13	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
ALGOMA POWER INC.	MP	755	31-Jan-18	0	0	-44549.95	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
HYDRO ONE NETWORKS INC.	MP	755	31-Jan-18	0	0	-1115.96	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
HYDRO ONE NETWORKS INC.	MP	755	31-Jan-18	0	0	-47964.37	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
HYDRO ONE NETWORKS INC.	MP	755	31-Jan-18	0	0	-1985331.34	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
PUC DISTRIBUTION INC.	MP	755	31-Jan-18	0	0	-10608.78	ONZN		P	102316		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	755	31-Jan-18	0	0	-13503.7	ONZN		P	102741		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	755	31-Jan-18	0	0	-20054.59	ONZN		P	104271		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
ALGOMA POWER INC.	MP	755	31-Jan-18	0	0	-45440.95	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
Total						**(2,194,765.96)**								

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Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	
113601	SIOUX LOOKOUT HYDRO INC.	

Participation Name
Distributor-Metered Market Participant
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Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002
Issue / Re-Issue Date: 15-MAR-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PC00000029
Invoice Date: 15-MAR-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: TD Bank
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**

Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments: To adjust Invoice PI00022192.

Charges for settlement statements issued:

Charge Type	Description		Amount
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT		($1,184,062.42)
Invoice Total:		$CAD	(1,184,062.42)

Do Not Send Payment

This invoice also constitutes a debit/credit note for GST/HST purposes

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002
Issue / Re-Issue Date: 14-MAR-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00022192
Invoice Date: 14-MAR-2018
MP ID: 110354
MP GST/HST: N/A

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Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**
Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

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Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-FEB-2018 To 28-FEB-2018

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$1,993,334.28
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$22,064,268.38
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$67,166,855.25
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$18,896,773.32
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT	$3,210,681.10
Invoice Total:	$CAD	113,331,912.33

Payment Due Date 16-MAR-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002

Issue / Re-Issue Date: 15-MAR-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PC00000029
Invoice Date: 15-MAR-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**

Bank Acc Type: **Settlement Clearing**
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Toll Free: 1-888-448-7777

Comments: To adjust Invoice PI00022192.

Charges for settlement statements issued:

Charge Type	Description		Amount
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT		($1,184,062.42)
Invoice Total:		$CAD	(1,184,062.42)

Do Not Send Payment

This invoice also constitutes a debit/credit note for GST/HST purposes

From: Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]
To: Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Ken Kandeepan [Ken.Kandeepan@ofina.on.ca]; George Sakura [George.Sakura@ofina.on.ca]; Asokan Sadasivan (MEDTE/MRI) [Asokan.Sadasivan@ontario.ca]; Kamala Sinnadurai (ENERGY) [Kamala.Sinnadurai@ontario.ca]; Gregor Schoenebeck [Gregor.Schoenebeck@ofina.on.ca]; John Psinas [John.Psinas@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]; Gavin He [Gavin.He@ofina.on.ca]; John Kim [John.Kim@ofina.on.ca]; Kevin Hwang [Kevin.Hwang@ofina.on.ca]
CC: Tai An (ENERGY) [Tai.An@ontario.ca]; Pratima Gounden (ENERGY) [Pratima.Gounden@ontario.ca]; Janet Lim (ENERGY) [Janet.Lim@ontario.ca]; Kwasny, Anna (MEDG/MRIS) [Anna.Kwasny@ontario.ca]; Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Dade, Christine (ENERGY) [Christine.Dade@ontario.ca]; Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]
Subject: February 2018 IESO Invoice - OREC
Date: Thursday, March 15, 2018 15:17:16
Attachment 1: February 2018 IESO Credit Invoice (Mar 15).pdf
Attachment 2: February 2018 IESO Invoice (Mar 14).pdf
Attachment 3: image001.jpg

Good Afternoon,

Please see the attached IESO Invoice for the month of February 2018. Please proceed with processing the OREC payment for the amount of $67,166,855.25.

Kindly note that the following programs are also included on the February invoice, and a separate email will be sent regarding information and payment approval for these:

- On-Reserve First Nations Delivery Credit
- Distribution Rate Protection
- Rural and Remote Rate Protection
- Ontario Electricity Support Program

Also note that a credit invoice was issued by the IESO to correct the additional line for “Ontario Electricity Support Program”, and the net of the two invoices will need to be paid. The credit invoice is attached for reference.

Thank you,

Ryan Lim
Financial Analyst
56 Wellesley Street West, 4th Floor
Toronto, ON M7A 2E7
Phone: (416) 561-9361

Ministry of Economic Development & Growth
Ministry of Energy
Ministry of Infrastructure
Ministry of Research, Innovation & Science

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002
Issue / Re-Issue Date: 15-MAR-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PC00000029
Invoice Date: 15-MAR-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

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Bank ID Number: **0004**
Bank Account Number: **0690-0458762**

Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments: To adjust Invoice PI00022192.

Charges for settlement statements issued:

Charge Type	Description		Amount
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT		($1,184,062.42)
Invoice Total:		$CAD	(1,184,062.42)

Do Not Send Payment

This invoice also constitutes a debit/credit note for GST/HST purposes

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002
Issue / Re-Issue Date: 14-MAR-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00022192
Invoice Date: 14-MAR-2018
MP ID: 110354
MP GST/HST: N/A

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Bank Account Number: **0690-0458762**
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Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-FEB-2018 To 28-FEB-2018

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756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$22,064,268.38
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Invoice Total:	$CAD	113,331,912.33

Payment Due Date 16-MAR-2018

This invoice also constitutes a debit/credit note for GST/HST purposes


CSD
Corporate
Services
Division
Expertise | Collaboration | Respect | Service Excellence | Integrity

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X

Name													
PRIORITY SUBMETERING SOLUTIONS INC.	MP	1467	28-Feb-18	0	0	-22760.4	ONZN	P	110334		0	0	OREC unit sub-meter provider claim, current month balancing amount
FORT FRANCES POWER CORPORATION	MP	1467	28-Feb-18	0	0	-57295	ONZN	P	104313		0	0	OREC licensed distributor claim, current month balancing amount
HEARST POWER DISTRIBUTION COMPANY LIMITED	MP	1467	28-Feb-18	0	0	-41970.9	ONZN	P	104249		0	0	OREC licensed distributor claim, current month balancing amount
COLLUS POWERSTREAM CORP.	MP	1467	28-Feb-18	0	0	-221779.63	ONZN	P	104281		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA PENINSULA ENERGY INC.	MP	1467	28-Feb-18	0	0	-681118.15	ONZN	P	102102		0	0	OREC licensed distributor claim, current month balancing amount
KINGSTON HYDRO CORPORATION	MP	1467	28-Feb-18	0	0	-233094.94	ONZN	P	104322		0	0	OREC licensed distributor claim, current month balancing amount
WASAGA DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-128012.34	ONZN	P	104278		0	0	OREC licensed distributor claim, current month balancing amount
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	1467	28-Feb-18	0	0	-378127.5	ONZN	P	104271		0	0	OREC licensed distributor claim, current month balancing amount
ENWIN UTILITIES LTD.	MP	1467	28-Feb-18	0	0	-938821.13	ONZN	P	106085		0	0	OREC licensed distributor claim, current month balancing amount
PUC DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-490511	ONZN	P	102316		0	0	OREC licensed distributor claim, current month balancing amount
HORIZON UTILITIES CORPORATION	MP	1467	28-Feb-18	0	0	-2030751.02	ONZN	P	102084		0	0	OREC licensed distributor claim, current month balancing amount
NORTHERN ONTARIO WIRES, INC.	MP	1467	28-Feb-18	0	0	-80233.96	ONZN	P	102042		0	0	OREC licensed distributor claim, current month balancing amount
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	10429.9	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-01
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	9073.07	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-02
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	10331.48	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-03
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	7906.25	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-04
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	8226.58	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	8881.92	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	9626.08	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	9253.15	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	8453.25	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
ENERGY + INC. (SETL)	MP	1467	28-Feb-18	0	0	106.17	ONZN	P	104290		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	7388.74	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-0.78	ONZN	P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-25.47	ONZN	P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	28-Feb-18	0	0	35279.35	ONZN	P	104422		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
BRANTFORD POWER INC.	MP	1467	28-Feb-18	0	0	2.99	ONZN	P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	28-Feb-18	0	0	23028.57	ONZN	P	104422		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-3432.91	ONZN	P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
FORT ALBANY POWER CORPORATION	MP	1467	28-Feb-18	0	0	-3367.21	ONZN	P	105832		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	28-Feb-18	0	0	-1159.76	ONZN	P	102089		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
ENERGY + INC. (SETL)	MP	1467	28-Feb-18	0	0	-137914.76	ONZN	P	104290		0	0	OREC licensed distributor claim, current month balancing amount
ST. THOMAS ENERGY INC.	MP	1467	28-Feb-18	0	0	-180385.04	ONZN	P	102100		0	0	OREC licensed distributor claim, current month balancing amount
HALTON HILLS HYDRO INC.	MP	1467	28-Feb-18	0	0	-257764.18	ONZN	P	104284		0	0	OREC licensed distributor claim, current month balancing amount
TILLSONBURG HYDRO INCORPORATED	MP	1467	28-Feb-18	0	0	-71172.71	ONZN	P	102673		0	0	OREC licensed distributor claim, current month balancing amount
ENERGY + INC.	MP	1467	28-Feb-18	0	0	-616883.08	ONZN	P	102299		0	0	OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	28-Feb-18	0	0	-260387.95	ONZN	P	104421		0	0	OREC licensed distributor claim, current month balancing amount
MILTON HYDRO DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-437564.06	ONZN	P	102743		0	0	OREC licensed distributor claim, current month balancing amount
GRIMSBY POWER INCORPORATED	MP	1467	28-Feb-18	0	0	-128154.01	ONZN	P	104471		0	0	OREC licensed distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	28-Feb-18	0	0	-164538.41	ONZN	P	113624		0	0	OREC embedded distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	28-Feb-18	0	0	-77860.83	ONZN	P	113624		0	0	OREC licensed distributor claim, current month balancing amount
INNPOWER CORPORATION	MP	1467	28-Feb-18	0	0	-240231.83	ONZN	P	104299		0	0	OREC licensed distributor claim, current month balancing amount
MIDLAND POWER UTILITY CORPORATION	MP	1467	28-Feb-18	0	0	-101721.04	ONZN	P	104363		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE BRAMPTON NETWORKS INC.	MP	1467	28-Feb-18	0	0	-1545989.45	ONZN	P	104279		0	0	OREC licensed distributor claim, current month balancing amount
ESSEX POWERLINES CORPORATION	MP	1467	28-Feb-18	0	0	-406556.2	ONZN	P	102217		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	28-Feb-18	0	0	-65167	ONZN	P	102004		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-56648.53	ONZN	P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
ENTEGRUS POWERLINES INC.	MP	1467	28-Feb-18	0	0	-34686.05	ONZN	P	102140		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
KASHECHEWAN POWER CORPORATION	MP	1467	28-Feb-18	0	0	-27002.06	ONZN		P	105833		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
ATTAWAPISKAT POWER CORPORATION	MP	1467	28-Feb-18	0	0	-25712.64	ONZN		P	105834		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
HYDRO ONE NETWORKS INC.	MP	1467	28-Feb-18	0	0	-21616.13	ONZN		P	102007		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
FORT ALBANY POWER CORPORATION	MP	1467	28-Feb-18	0	0	-14771.21	ONZN		P	105832		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
ALGOMA POWER INC.	MP	1467	28-Feb-18	0	0	-13915.17	ONZN		P	110073		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
FESTIVAL HYDRO INC.	MP	1467	28-Feb-18	0	0	6.57	ONZN		P	102340		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
BRANTFORD POWER INC.	MP	1467	28-Feb-18	0	0	-64.49	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
WESTARIO POWER INC	MP	1467	28-Feb-18	0	0	7871.06	ONZN		P	104421		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
CANADIAN NIAGARA POWER INC.	MP	1467	28-Feb-18	0	0	36265.84	ONZN		P	102110		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
ESSEX POWERLINES CORPORATION	MP	1467	28-Feb-18	0	0	65109.37	ONZN		P	102217		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
GREATER SUDBURY HYDRO INC.	MP	1467	28-Feb-18	0	0	2791.55	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
CLEAN CUT ENERGY CORP.	MP	1467	28-Feb-18	0	0	-355.42	ONZN		P	145763		0	0	OREC Sub-Meter Provider claim, previous month balancing amount for 2017-11
CLEAN CUT ENERGY CORP.	MP	1467	28-Feb-18	0	0	-362.97	ONZN		P	145763		0	0	OREC Sub-Meter Provider claim, previous month balancing amount for 2017-12
O.N.TEL INC.	MP	1467	28-Feb-18	0	0	-50.55	ONZN		P	107810		0	0	Ontario Rebate for Electricity Consumers for the invoice of 2018/02
ENTEGRUS POWERLINES INC.	MP	1467	28-Feb-18	0	0	-447138.39	ONZN		P	102140		0	0	OREC licensed distributor claim, current month balancing amount
ERIE THAMES POWERLINES CORPORATION	MP	1467	28-Feb-18	0	0	-226346.28	ONZN		P	104323		0	0	OREC licensed distributor claim, current month balancing amount
OSHAWA PUC NETWORKS INCORPORATED	MP	1467	28-Feb-18	0	0	-947490.57	ONZN		P	104481		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	28-Feb-18	0	0	-661215	ONZN		P	102004		0	0	OREC licensed distributor claim, current month balancing amount
KENORA HYDRO ELECTRIC CORPORATION LTD.	MP	1467	28-Feb-18	0	0	-69656.16	ONZN		P	104269		0	0	OREC licensed distributor claim, current month balancing amount
NORTH BAY HYDRO DISTRIBUTION LIMITED	MP	1467	28-Feb-18	0	0	-371804.41	ONZN		P	102099		0	0	OREC licensed distributor claim, current month balancing amount
PETERBOROUGH DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-449220.03	ONZN		P	102082		0	0	OREC licensed distributor claim, current month balancing amount
ORILLIA POWER DISTRIBUTION CORPORATION	MP	1467	28-Feb-18	0	0	-207893.79	ONZN		P	104319		0	0	OREC licensed distributor claim, current month balancing amount
GREATER SUDBURY HYDRO INC.	MP	1467	28-Feb-18	0	0	-726003.69	ONZN		P	102009		0	0	OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	28-Feb-18	0	0	-647052.33	ONZN		P	102110		0	0	OREC licensed distributor claim, current month balancing amount
WEST COAST HURON ENERGY INC.	MP	1467	28-Feb-18	0	0	-48597.83	ONZN		P	104297		0	0	OREC licensed distributor claim, current month balancing amount
KITCHENER-WILMOT HYDRO INC.	MP	1467	28-Feb-18	0	0	-1116413.31	ONZN		P	104267		0	0	OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	28-Feb-18	0	0	-469030.52	ONZN		P	102321		0	0	OREC licensed distributor claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	28-Feb-18	0	0	-177730.86	ONZN		P	110073		0	0	OREC licensed distributor claim, current month balancing amount
GUELPH HYDRO ELECTRIC SYSTEMS INC.	MP	1467	28-Feb-18	0	0	-540761.27	ONZN		P	104325		0	0	OREC licensed distributor claim, current month balancing amount
E. L. K. ENERGY INC.	MP	1467	28-Feb-18	0	0	-94450.3	ONZN		P	102006		0	0	OREC licensed distributor claim, current month balancing amount
POWERSTREAM INC.	MP	1467	28-Feb-18	0	0	-3893898.42	ONZN		P	108825		0	0	OREC licensed distributor claim, current month balancing amount
ORANGEVILLE HYDRO LIMITED	MP	1467	28-Feb-18	0	0	-50660.76	ONZN		P	104480		0	0	OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-9887.13	ONZN		P	105232		0	0	OREC licensed distributor claim, current month balancing amount
PROVIDENT ENERGY MANAGEMENT INC.	MP	1467	28-Feb-18	0	0	-18865.9	ONZN		P	110330		0	0	OREC unit sub-meter provider claim, current month balancing amount
PIKE LAKE GOLF CENTRE LIMITED	MP	1467	28-Feb-18	0	0	-138.73	ONZN		P	145734		0	0	OREC unit sub-meter provider claim, current month balancing amount
CLEAN CUT ENERGY CORP.	MP	1467	28-Feb-18	0	0	-361.4	ONZN		P	145763		0	0	OREC unit sub-meter provider claim, current month balancing amount
WYSE METER SOLUTIONS INC.	MP	1467	28-Feb-18	0	0	-63599.53	ONZN		P	110494		0	0	OREC unit sub-meter provider claim, current month balancing amount
ENERCARE CONNECTIONS INC.	MP	1467	28-Feb-18	0	0	-307433.2	ONZN		P	110332		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM ENERGY SERVICES INC.	MP	1467	28-Feb-18	0	0	-21020.06	ONZN		P	114461		0	0	OREC unit sub-meter provider claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	28-Feb-18	0	0	-39729.1	ONZN		P	110345		0	0	OREC unit sub-meter provider claim, current month balancing amount
HYDRO OTTAWA LIMITED	MP	1467	28-Feb-18	0	0	-3526596.52	ONZN		P	102070		0	0	OREC licensed distributor claim, current month balancing amount
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-778706.27	ONZN		P	102366		0	0	OREC licensed distributor claim, current month balancing amount
LONDON HYDRO INC.	MP	1467	28-Feb-18	0	0	-1652928.46	ONZN		P	104282		0	0	OREC licensed distributor claim, current month balancing amount
VERIDIAN CONNECTIONS INC.	MP	1467	28-Feb-18	0	0	-1241979.68	ONZN		P	102120		0	0	OREC licensed distributor claim, current month balancing amount
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	MP	1467	28-Feb-18	0	0	-12624572.62	ONZN		P	102329		0	0	OREC licensed distributor claim, current month balancing amount
WELLINGTON NORTH POWER INC.	MP	1467	28-Feb-18	0	0	-50390.3	ONZN		P	105222		0	0	OREC licensed distributor claim, current month balancing amount
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	-457591.2	ONZN		P	104276		0	0	OREC licensed distributor claim, current month balancing amount
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	28-Feb-18	0	0	-2739770.71	ONZN		P	102089		0	0	OREC licensed distributor claim, current month balancing amount
CENTRE WELLINGTON HYDRO LTD.	MP	1467	28-Feb-18	0	0	-85160.89	ONZN		P	104468		0	0	OREC licensed distributor claim, current month balancing amount
FESTIVAL HYDRO INC.	MP	1467	28-Feb-18	0	0	-245092.27	ONZN		P	102340		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	28-Feb-18	0	0	-422002.76	ONZN		P	102007		0	0	OREC embedded distributor claim, current month balancing amount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
HYDRO ONE NETWORKS INC.	MP	1467	28-Feb-18	0	0	-19256405.34	ONZN		P	102007		0	0	OREC licensed distributor claim, current month balancing amount
ATTAWAPISKAT POWER CORPORATION	MP	1467	28-Feb-18	0	0	-20000	ONZN		P	105834		0	0	OREC licensed distributor claim, current month balancing amount
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-576121.71	ONZN		P	102741		0	0	OREC licensed distributor claim, current month balancing amount
KASHECHEWAN POWER CORPORATION	MP	1467	28-Feb-18	0	0	-23000	ONZN		P	105833		0	0	OREC licensed distributor claim, current month balancing amount
FORT ALBANY POWER CORPORATION	MP	1467	28-Feb-18	0	0	-13000	ONZN		P	105832		0	0	OREC licensed distributor claim, current month balancing amount
LAKEFRONT UTILITIES INC	MP	1467	28-Feb-18	0	0	-130741.1	ONZN		P	104487		0	0	OREC licensed distributor claim, current month balancing amount
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	28-Feb-18	0	0	-25889.05	ONZN		P	102049		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	MP	1467	28-Feb-18	0	0	-85458.25	ONZN		P	104339		0	0	OREC licensed distributor claim, current month balancing amount
BURLINGTON HYDRO INC.	MP	1467	28-Feb-18	0	0	-883680	ONZN		P	102298		0	0	OREC licensed distributor claim, current month balancing amount
ATIKOKAN HYDRO INC.	MP	1467	28-Feb-18	0	0	-21858.09	ONZN		P	104277		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	28-Feb-18	0	0	-134170.35	ONZN		P	104422		0	0	OREC licensed distributor claim, current month balancing amount
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	28-Feb-18	0	0	-243679.73	ONZN		P	104248		0	0	OREC licensed distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	28-Feb-18	0	0	-42085	ONZN		P	102105		0	0	OREC embedded distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	28-Feb-18	0	0	-339670	ONZN		P	102105		0	0	OREC licensed distributor claim, current month balancing amount

IESO Settlement Report - February Total **(67,166,855.25)**

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES

107810 O.N.TEL INC.

Participation Name
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Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5
HST: 870513959RT0002

Issue / Re-Issue Date: **14-MAR-2018**

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00022192
Invoice Date: 14-MAR-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: TD Bank
Bank Acc Type: **Settlement Clearing**
Bank ID Number: **0004**
Bank Transit Number: **10202**
Bank Account Number: **0690-0458762**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-FEB-2018 To 28-FEB-2018

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$1,993,334.28
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$22,064,268.38
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$67,166,855.25
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$18,896,773.32
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT	$3,210,681.10
Invoice Total:	$CAD	113,331,912.33

Payment Due Date 16-MAR-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

From: Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]
To: Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Mark Bergman (ENERGY) [Mark.Bergman@ontario.ca]; Tracy Flindall (MOF) [Tracy.Flindall@ontario.ca]; Anil Sharma (MOF) [Anil.Sharma@ontario.ca]; Dev Ram (MOF) [Dev.Ram@ontario.ca]; Naomi Morita (MOF) [Naomi.Morita@ontario.ca]; Gavin He [Gavin.He@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]
CC: Tai An (ENERGY) [Tai.An@ontario.ca]; Pratima Gounden (ENERGY) [Pratima.Gounden@ontario.ca]; Janet Lim (ENERGY) [Janet.Lim@ontario.ca]; Kwasny, Anna (MEDG/MRIS) [Anna.Kwasny@ontario.ca]; Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Dade, Christine (ENERGY) [Christine.Dade@ontario.ca]; Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]
Subject: February 2018 OREC Settlement Statement
Date: Thursday, March 15, 2018 15:17:55
Attachment 1: image001.jpg
Attachment 2: February 2018 IESO OREC Settlement Statement.xlsx

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Good Afternoon,

Please see the attached OREC Settlement Statement for the month of February 2018, which shows the OREC amount of $67,166,855.25.

Kindly note that the following programs are also included on the February invoice but are not listed in the attached settlement statement:

- On-Reserve First Nations Delivery Credit
- Distribution Rate Protection
- Rural and Remote Rate Protection
- Ontario Electricity Support Program

Thank you,

Ryan Lim
Financial Analyst
56 Wellesley Street West, 4th Floor
Toronto, ON M7A 2E7
Phone: (416) 561-9361

Ministry of Economic Development & Growth
Ministry of Energy
Ministry of Infrastructure
Ministry of Research, Innovation & Science


CSD
Corporate
Services
Division
Expertise | Collaboration | Respect | Service Excellence | Integrity

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X

Name													
PRIORITY SUBMETERING SOLUTIONS INC.	MP	1467	28-Feb-18	0	0	-22760.4	ONZN	P	110334		0	0	OREC unit sub-meter provider claim, current month balancing amount
FORT FRANCES POWER CORPORATION	MP	1467	28-Feb-18	0	0	-57295	ONZN	P	104313		0	0	OREC licensed distributor claim, current month balancing amount
HEARST POWER DISTRIBUTION COMPANY LIMITED	MP	1467	28-Feb-18	0	0	-41970.9	ONZN	P	104249		0	0	OREC licensed distributor claim, current month balancing amount
COLLUS POWERSTREAM CORP.	MP	1467	28-Feb-18	0	0	-221779.63	ONZN	P	104281		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA PENINSULA ENERGY INC.	MP	1467	28-Feb-18	0	0	-681118.15	ONZN	P	102102		0	0	OREC licensed distributor claim, current month balancing amount
KINGSTON HYDRO CORPORATION	MP	1467	28-Feb-18	0	0	-233094.94	ONZN	P	104322		0	0	OREC licensed distributor claim, current month balancing amount
WASAGA DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-128012.34	ONZN	P	104278		0	0	OREC licensed distributor claim, current month balancing amount
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	1467	28-Feb-18	0	0	-378127.5	ONZN	P	104271		0	0	OREC licensed distributor claim, current month balancing amount
ENWIN UTILITIES LTD.	MP	1467	28-Feb-18	0	0	-938821.13	ONZN	P	106085		0	0	OREC licensed distributor claim, current month balancing amount
PUC DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-490511	ONZN	P	102316		0	0	OREC licensed distributor claim, current month balancing amount
HORIZON UTILITIES CORPORATION	MP	1467	28-Feb-18	0	0	-2030751.02	ONZN	P	102084		0	0	OREC licensed distributor claim, current month balancing amount
NORTHERN ONTARIO WIRES, INC.	MP	1467	28-Feb-18	0	0	-80233.96	ONZN	P	102042		0	0	OREC licensed distributor claim, current month balancing amount
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	10429.9	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-01
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	9073.07	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-02
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	10331.48	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-03
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	7906.25	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-04
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	8226.58	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	8881.92	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	9626.08	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	9253.15	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	8453.25	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
ENERGY + INC. (SETL)	MP	1467	28-Feb-18	0	0	106.17	ONZN	P	104290		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	7388.74	ONZN	P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-0.78	ONZN	P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-25.47	ONZN	P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	28-Feb-18	0	0	35279.35	ONZN	P	104422		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
BRANTFORD POWER INC.	MP	1467	28-Feb-18	0	0	2.99	ONZN	P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	28-Feb-18	0	0	23028.57	ONZN	P	104422		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-3432.91	ONZN	P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
FORT ALBANY POWER CORPORATION	MP	1467	28-Feb-18	0	0	-3367.21	ONZN	P	105832		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	28-Feb-18	0	0	-1159.76	ONZN	P	102089		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
ENERGY + INC. (SETL)	MP	1467	28-Feb-18	0	0	-137914.76	ONZN	P	104290		0	0	OREC licensed distributor claim, current month balancing amount
ST. THOMAS ENERGY INC.	MP	1467	28-Feb-18	0	0	-180385.04	ONZN	P	102100		0	0	OREC licensed distributor claim, current month balancing amount
HALTON HILLS HYDRO INC.	MP	1467	28-Feb-18	0	0	-257764.18	ONZN	P	104284		0	0	OREC licensed distributor claim, current month balancing amount
TILLSONBURG HYDRO INCORPORATED	MP	1467	28-Feb-18	0	0	-71172.71	ONZN	P	102673		0	0	OREC licensed distributor claim, current month balancing amount
ENERGY + INC.	MP	1467	28-Feb-18	0	0	-616883.08	ONZN	P	102299		0	0	OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	28-Feb-18	0	0	-260387.95	ONZN	P	104421		0	0	OREC licensed distributor claim, current month balancing amount
MILTON HYDRO DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-437564.06	ONZN	P	102743		0	0	OREC licensed distributor claim, current month balancing amount
GRIMSBY POWER INCORPORATED	MP	1467	28-Feb-18	0	0	-128154.01	ONZN	P	104471		0	0	OREC licensed distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	28-Feb-18	0	0	-164538.41	ONZN	P	113624		0	0	OREC embedded distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	28-Feb-18	0	0	-77860.83	ONZN	P	113624		0	0	OREC licensed distributor claim, current month balancing amount
INNPOWER CORPORATION	MP	1467	28-Feb-18	0	0	-240231.83	ONZN	P	104299		0	0	OREC licensed distributor claim, current month balancing amount
MIDLAND POWER UTILITY CORPORATION	MP	1467	28-Feb-18	0	0	-101721.04	ONZN	P	104363		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE BRAMPTON NETWORKS INC.	MP	1467	28-Feb-18	0	0	-1545989.45	ONZN	P	104279		0	0	OREC licensed distributor claim, current month balancing amount
ESSEX POWERLINES CORPORATION	MP	1467	28-Feb-18	0	0	-406556.2	ONZN	P	102217		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	28-Feb-18	0	0	-65167	ONZN	P	102004		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-56648.53	ONZN	P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
ENTEGRUS POWERLINES INC.	MP	1467	28-Feb-18	0	0	-34686.05	ONZN	P	102140		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01

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	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
KASHECHEWAN POWER CORPORATION	MP	1467	28-Feb-18	0	0	-27002.06	ONZN		P	105833		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
ATTAWAPISKAT POWER CORPORATION	MP	1467	28-Feb-18	0	0	-25712.64	ONZN		P	105834		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
HYDRO ONE NETWORKS INC.	MP	1467	28-Feb-18	0	0	-21616.13	ONZN		P	102007		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
FORT ALBANY POWER CORPORATION	MP	1467	28-Feb-18	0	0	-14771.21	ONZN		P	105832		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
ALGOMA POWER INC.	MP	1467	28-Feb-18	0	0	-13915.17	ONZN		P	110073		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
FESTIVAL HYDRO INC.	MP	1467	28-Feb-18	0	0	6.57	ONZN		P	102340		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
BRANTFORD POWER INC.	MP	1467	28-Feb-18	0	0	-64.49	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
WESTARIO POWER INC	MP	1467	28-Feb-18	0	0	7871.06	ONZN		P	104421		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
CANADIAN NIAGARA POWER INC.	MP	1467	28-Feb-18	0	0	36265.84	ONZN		P	102110		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
ESSEX POWERLINES CORPORATION	MP	1467	28-Feb-18	0	0	65109.37	ONZN		P	102217		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
GREATER SUDBURY HYDRO INC.	MP	1467	28-Feb-18	0	0	2791.55	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
CLEAN CUT ENERGY CORP.	MP	1467	28-Feb-18	0	0	-355.42	ONZN		P	145763		0	0	OREC Sub-Meter Provider claim, previous month balancing amount for 2017-11
CLEAN CUT ENERGY CORP.	MP	1467	28-Feb-18	0	0	-362.97	ONZN		P	145763		0	0	OREC Sub-Meter Provider claim, previous month balancing amount for 2017-12
O.N.TEL INC.	MP	1467	28-Feb-18	0	0	-50.55	ONZN		P	107810		0	0	Ontario Rebate for Electricity Consumers for the invoice of 2018/02
ENTEGRUS POWERLINES INC.	MP	1467	28-Feb-18	0	0	-447138.39	ONZN		P	102140		0	0	OREC licensed distributor claim, current month balancing amount
ERIE THAMES POWERLINES CORPORATION	MP	1467	28-Feb-18	0	0	-226346.28	ONZN		P	104323		0	0	OREC licensed distributor claim, current month balancing amount
OSHAWA PUC NETWORKS INCORPORATED	MP	1467	28-Feb-18	0	0	-947490.57	ONZN		P	104481		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	28-Feb-18	0	0	-661215	ONZN		P	102004		0	0	OREC licensed distributor claim, current month balancing amount
KENORA HYDRO ELECTRIC CORPORATION LTD.	MP	1467	28-Feb-18	0	0	-69656.16	ONZN		P	104269		0	0	OREC licensed distributor claim, current month balancing amount
NORTH BAY HYDRO DISTRIBUTION LIMITED	MP	1467	28-Feb-18	0	0	-371804.41	ONZN		P	102099		0	0	OREC licensed distributor claim, current month balancing amount
PETERBOROUGH DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-449220.03	ONZN		P	102082		0	0	OREC licensed distributor claim, current month balancing amount
ORILLIA POWER DISTRIBUTION CORPORATION	MP	1467	28-Feb-18	0	0	-207893.79	ONZN		P	104319		0	0	OREC licensed distributor claim, current month balancing amount
GREATER SUDBURY HYDRO INC.	MP	1467	28-Feb-18	0	0	-726003.69	ONZN		P	102009		0	0	OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	28-Feb-18	0	0	-647052.33	ONZN		P	102110		0	0	OREC licensed distributor claim, current month balancing amount
WEST COAST HURON ENERGY INC.	MP	1467	28-Feb-18	0	0	-48597.83	ONZN		P	104297		0	0	OREC licensed distributor claim, current month balancing amount
KITCHENER-WILMOT HYDRO INC.	MP	1467	28-Feb-18	0	0	-1116413.31	ONZN		P	104267		0	0	OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	28-Feb-18	0	0	-469030.52	ONZN		P	102321		0	0	OREC licensed distributor claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	28-Feb-18	0	0	-177730.86	ONZN		P	110073		0	0	OREC licensed distributor claim, current month balancing amount
GUELPH HYDRO ELECTRIC SYSTEMS INC.	MP	1467	28-Feb-18	0	0	-540761.27	ONZN		P	104325		0	0	OREC licensed distributor claim, current month balancing amount
E. L. K. ENERGY INC.	MP	1467	28-Feb-18	0	0	-94450.3	ONZN		P	102006		0	0	OREC licensed distributor claim, current month balancing amount
POWERSTREAM INC.	MP	1467	28-Feb-18	0	0	-3893898.42	ONZN		P	108825		0	0	OREC licensed distributor claim, current month balancing amount
ORANGEVILLE HYDRO LIMITED	MP	1467	28-Feb-18	0	0	-50660.76	ONZN		P	104480		0	0	OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-9887.13	ONZN		P	105232		0	0	OREC licensed distributor claim, current month balancing amount
PROVIDENT ENERGY MANAGEMENT INC.	MP	1467	28-Feb-18	0	0	-18865.9	ONZN		P	110330		0	0	OREC unit sub-meter provider claim, current month balancing amount
PIKE LAKE GOLF CENTRE LIMITED	MP	1467	28-Feb-18	0	0	-138.73	ONZN		P	145734		0	0	OREC unit sub-meter provider claim, current month balancing amount
CLEAN CUT ENERGY CORP.	MP	1467	28-Feb-18	0	0	-361.4	ONZN		P	145763		0	0	OREC unit sub-meter provider claim, current month balancing amount
WYSE METER SOLUTIONS INC.	MP	1467	28-Feb-18	0	0	-63599.53	ONZN		P	110494		0	0	OREC unit sub-meter provider claim, current month balancing amount
ENERCARE CONNECTIONS INC.	MP	1467	28-Feb-18	0	0	-307433.2	ONZN		P	110332		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM ENERGY SERVICES INC.	MP	1467	28-Feb-18	0	0	-21020.06	ONZN		P	114461		0	0	OREC unit sub-meter provider claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	28-Feb-18	0	0	-39729.1	ONZN		P	110345		0	0	OREC unit sub-meter provider claim, current month balancing amount
HYDRO OTTAWA LIMITED	MP	1467	28-Feb-18	0	0	-3526596.52	ONZN		P	102070		0	0	OREC licensed distributor claim, current month balancing amount
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-778706.27	ONZN		P	102366		0	0	OREC licensed distributor claim, current month balancing amount
LONDON HYDRO INC.	MP	1467	28-Feb-18	0	0	-1652928.46	ONZN		P	104282		0	0	OREC licensed distributor claim, current month balancing amount
VERIDIAN CONNECTIONS INC.	MP	1467	28-Feb-18	0	0	-1241979.68	ONZN		P	102120		0	0	OREC licensed distributor claim, current month balancing amount
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	MP	1467	28-Feb-18	0	0	-12624572.62	ONZN		P	102329		0	0	OREC licensed distributor claim, current month balancing amount
WELLINGTON NORTH POWER INC.	MP	1467	28-Feb-18	0	0	-50390.3	ONZN		P	105222		0	0	OREC licensed distributor claim, current month balancing amount
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	28-Feb-18	0	0	-457591.2	ONZN		P	104276		0	0	OREC licensed distributor claim, current month balancing amount
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	28-Feb-18	0	0	-2739770.71	ONZN		P	102089		0	0	OREC licensed distributor claim, current month balancing amount
CENTRE WELLINGTON HYDRO LTD.	MP	1467	28-Feb-18	0	0	-85160.89	ONZN		P	104468		0	0	OREC licensed distributor claim, current month balancing amount
FESTIVAL HYDRO INC.	MP	1467	28-Feb-18	0	0	-245092.27	ONZN		P	102340		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	28-Feb-18	0	0	-422002.76	ONZN		P	102007		0	0	OREC embedded distributor claim, current month balancing amount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
HYDRO ONE NETWORKS INC.	MP	1467	28-Feb-18	0	0	-19256405.34	ONZN		P	102007		0	0	OREC licensed distributor claim, current month balancing amount
ATTAWAPISKAT POWER CORPORATION	MP	1467	28-Feb-18	0	0	-20000	ONZN		P	105834		0	0	OREC licensed distributor claim, current month balancing amount
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	28-Feb-18	0	0	-576121.71	ONZN		P	102741		0	0	OREC licensed distributor claim, current month balancing amount
KASHECHEWAN POWER CORPORATION	MP	1467	28-Feb-18	0	0	-23000	ONZN		P	105833		0	0	OREC licensed distributor claim, current month balancing amount
FORT ALBANY POWER CORPORATION	MP	1467	28-Feb-18	0	0	-13000	ONZN		P	105832		0	0	OREC licensed distributor claim, current month balancing amount
LAKEFRONT UTILITIES INC	MP	1467	28-Feb-18	0	0	-130741.1	ONZN		P	104487		0	0	OREC licensed distributor claim, current month balancing amount
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	28-Feb-18	0	0	-25889.05	ONZN		P	102049		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	MP	1467	28-Feb-18	0	0	-85458.25	ONZN		P	104339		0	0	OREC licensed distributor claim, current month balancing amount
BURLINGTON HYDRO INC.	MP	1467	28-Feb-18	0	0	-883680	ONZN		P	102298		0	0	OREC licensed distributor claim, current month balancing amount
ATIKOKAN HYDRO INC.	MP	1467	28-Feb-18	0	0	-21858.09	ONZN		P	104277		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	28-Feb-18	0	0	-134170.35	ONZN		P	104422		0	0	OREC licensed distributor claim, current month balancing amount
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	28-Feb-18	0	0	-243679.73	ONZN		P	104248		0	0	OREC licensed distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	28-Feb-18	0	0	-42085	ONZN		P	102105		0	0	OREC embedded distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	28-Feb-18	0	0	-339670	ONZN		P	102105		0	0	OREC licensed distributor claim, current month balancing amount

IESO Settlement Report - February Total **(67,166,855.25)**

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES

107810 O.N.TEL INC.

Participation Name
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From: Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]
To: Risa Thau [Risa.Thau@ofina.on.ca]; Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]; George Sakura [George.Sakura@ofina.on.ca]; Kevin Hwang [Kevin.Hwang@ofina.on.ca]
CC: Dade, Christine (ENERGY) [Christine.Dade@ontario.ca]; Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Mike Smith (ENERGY) [Mike.Smith@ontario.ca]; Pratima Gounden (ENERGY) [Pratima.Gounden@ontario.ca]; Tai An (ENERGY) [Tai.An@ontario.ca]; Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]; Zade, Ryan (ENERGY) [Ryan.Zade@ontario.ca]
Subject: February 2018 Social Program Payment
Date: Thursday, March 15, 2018 15:06:31
Attachment 1: February 2018 IESO invoice.pdf
Attachment 2: February 2018 IESO Invoice - Correction.pdf
Attachment 3: OFHP IESO Settlement Statement February 2018.xlsx

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Hello Risa,

Please find below the payment information for the attached invoice for the Fair Hydro Plan programs. Please let me know if you require any additional information to process these payments. OREC payment approval will be shared separately.

Note that there is an additional line for the OESP. This TP line and IFIS string have been provided below. The amount that is included on the original invoice for OESP has been adjusted through a correcting invoice. Both documents are attached as well as the settlement statement. Please pay the net for the OESP.

Program	Payment Amount	TP Line	IFIS Account String
On-Reserve First Nations Delivery Credit	$1,993,334.28	TP_On-Reserved First Nations Delivery Credit	029-290501-0000-981653-57710
Distribution Rate Protection	$22,064,268.38	TP_Rural or Remote Rate Protection Program	029-290501-0000-981658-57710
Rural and Remote Rate Protection	$18,896,773.32	TP_Rural or Remote Rate Protection Program	029-290501-0000-981658-57710
Ontario Electricity Support Program	**$2,026,618.68** ($3,210,681.10 - $1,184,062.42)	TP_Ontario Electricity Support Program	029-290501-0000-981654-57710
Total	$44,980,994.66		

*It is intentional that the DRP and RRRP come from the same TP line

Thanks!

Robert Hunter
Senior Policy Advisor

Ministry of Energy: Distribution and Agency Policy Branch
77 Grenville Street, 6th Floor
Toronto, ON M7A 2C1
Phone: (416) 325-6899
Email: robert.a.hunter@ontario.ca

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5
HST: 870513959RT0002

Issue / Re-Issue Date: **14-MAR-2018**

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00022192
Invoice Date: 14-MAR-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: TD Bank
Bank Acc Type: **Settlement Clearing**
Bank ID Number: **0004**
Bank Transit Number: **10202**
Bank Account Number: **0690-0458762**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-FEB-2018 To 28-FEB-2018

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$1,993,334.28
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$22,064,268.38
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$67,166,855.25
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$18,896,773.32
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT	$3,210,681.10
Invoice Total:	$CAD	113,331,912.33

Payment Due Date 16-MAR-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002

Issue / Re-Issue Date: 15-MAR-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PC00000029
Invoice Date: 15-MAR-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**

Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments: To adjust Invoice PI00022192.

Charges for settlement statements issued:

Charge Type	Description		Amount
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT		($1,184,062.42)
Invoice Total:		$CAD	(1,184,062.42)

Do Not Send Payment

This invoice also constitutes a debit/credit note for GST/HST purposes

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
HYDRO ONE NETWORKS INC.	MP	1753	28-Feb-18	0	0	-18896773.32	ONZN		P	102007		0	0	MOE - Rural and Remote Settlement Debit, current month balancing amount
Total						**(18,896,773.32)**								

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
ALGOMA POWER INC.	MP	756	28-Feb-18	0	0	2647.15	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	28-Feb-18	0	0	159.92	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
NORTHERN ONTARIO WIRES, INC.	MP	756	28-Feb-18	0	0	-15090.33	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	28-Feb-18	0	0	-10894.96	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ATIKOKAN HYDRO INC.	MP	756	28-Feb-18	0	0	-15925.79	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
INNPOWER CORPORATION	MP	756	28-Feb-18	0	0	-86369.91	ONZN		P	104299		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	28-Feb-18	0	0	-199030.71	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
SIOUX LOOKOUT HYDRO INC.	MP	756	28-Feb-18	0	0	-28448.95	ONZN		P	113601		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
LAKELAND POWER DISTRIBUTION LTD.	MP	756	28-Feb-18	0	0	-24903.07	ONZN		P	113624		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ATIKOKAN HYDRO INC.	MP	756	28-Feb-18	0	0	-391.95	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
NORTHERN ONTARIO WIRES, INC.	MP	756	28-Feb-18	0	0	-138.7	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
HYDRO ONE NETWORKS INC.	MP	756	28-Feb-18	0	0	-21685881.08	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
Total						**(22,064,268.38)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
ATTAWAPISKAT POWER CORPORATION	MP	755	28-Feb-18	0	0	-30000	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
HYDRO ONE NETWORKS INC.	MP	755	28-Feb-18	0	0	-48411.04	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
CANADIAN NIAGARA POWER INC.	MP	755	28-Feb-18	0	0	13550.67	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
FORT ALBANY POWER CORPORATION	MP	755	28-Feb-18	0	0	-26077.55	ONZN		P	105832		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
KASHECHEWAN POWER CORPORATION	MP	755	28-Feb-18	0	0	-39511.45	ONZN		P	105833		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
ATTAWAPISKAT POWER CORPORATION	MP	755	28-Feb-18	0	0	-42249.56	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
ALGOMA POWER INC.	MP	755	28-Feb-18	0	0	-3307.96	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
FORT ALBANY POWER CORPORATION	MP	755	28-Feb-18	0	0	-6472.99	ONZN		P	105832		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
KASHECHEWAN POWER CORPORATION	MP	755	28-Feb-18	0	0	-87.27	ONZN		P	105833		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
CANADIAN NIAGARA POWER INC.	MP	755	28-Feb-18	0	0	-105.18	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
HYDRO ONE NETWORKS INC.	MP	755	28-Feb-18	0	0	-614.71	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
KASHECHEWAN POWER CORPORATION	MP	755	28-Feb-18	0	0	-30000	ONZN		P	105833		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
FORT ALBANY POWER CORPORATION	MP	755	28-Feb-18	0	0	-20000	ONZN		P	105832		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	755	28-Feb-18	0	0	-1140.36	ONZN		P	104271		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	755	28-Feb-18	0	0	-13755.45	ONZN		P	102741		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
PUC DISTRIBUTION INC.	MP	755	28-Feb-18	0	0	-11962.12	ONZN		P	102316		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
HYDRO ONE NETWORKS INC.	MP	755	28-Feb-18	0	0	-1685415.38	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
ALGOMA POWER INC.	MP	755	28-Feb-18	0	0	-47773.93	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
Total						**(1,993,334.28)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
IESO	MP	2470	28-Feb-18	0	0	-3210681.1	ONZN		P			0	0	OESP Balancing Amount for 2018/02
Total						**(3,210,681.10)**								

*Note there is a correction invoice for this amount. (A reduction of $1,184,062.42)

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO
102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD

104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	
113601	SIOUX LOOKOUT HYDRO INC.	

Participation Name
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Ontario Rebate for Electricity Consumers for the invoice of 2017/01

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
HYDRO ONE NETWORKS INC.	MP	1753	28-Feb-18	0	0	-18896773.32	ONZN		P	102007		0	0	MOE - Rural and Remote Settlement Debit, current month balancing amount
Total						**(18,896,773.32)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
ALGOMA POWER INC.	MP	756	28-Feb-18	0	0	2647.15	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	28-Feb-18	0	0	159.92	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
NORTHERN ONTARIO WIRES, INC.	MP	756	28-Feb-18	0	0	-15090.33	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	28-Feb-18	0	0	-10894.96	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ATIKOKAN HYDRO INC.	MP	756	28-Feb-18	0	0	-15925.79	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
INNPOWER CORPORATION	MP	756	28-Feb-18	0	0	-86369.91	ONZN		P	104299		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	28-Feb-18	0	0	-199030.71	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
SIOUX LOOKOUT HYDRO INC.	MP	756	28-Feb-18	0	0	-28448.95	ONZN		P	113601		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
LAKELAND POWER DISTRIBUTION LTD.	MP	756	28-Feb-18	0	0	-24903.07	ONZN		P	113624		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ATIKOKAN HYDRO INC.	MP	756	28-Feb-18	0	0	-391.95	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
NORTHERN ONTARIO WIRES, INC.	MP	756	28-Feb-18	0	0	-138.7	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
HYDRO ONE NETWORKS INC.	MP	756	28-Feb-18	0	0	-21685881.08	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
Total						**(22,064,268.38)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
ATTAWAPISKAT POWER CORPORATION	MP	755	28-Feb-18	0	0	-30000	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
HYDRO ONE NETWORKS INC.	MP	755	28-Feb-18	0	0	-48411.04	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
CANADIAN NIAGARA POWER INC.	MP	755	28-Feb-18	0	0	13550.67	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
FORT ALBANY POWER CORPORATION	MP	755	28-Feb-18	0	0	-26077.55	ONZN		P	105832		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
KASHECHEWAN POWER CORPORATION	MP	755	28-Feb-18	0	0	-39511.45	ONZN		P	105833		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
ATTAWAPISKAT POWER CORPORATION	MP	755	28-Feb-18	0	0	-42249.56	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
ALGOMA POWER INC.	MP	755	28-Feb-18	0	0	-3307.96	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
FORT ALBANY POWER CORPORATION	MP	755	28-Feb-18	0	0	-6472.99	ONZN		P	105832		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
KASHECHEWAN POWER CORPORATION	MP	755	28-Feb-18	0	0	-87.27	ONZN		P	105833		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
CANADIAN NIAGARA POWER INC.	MP	755	28-Feb-18	0	0	-105.18	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
HYDRO ONE NETWORKS INC.	MP	755	28-Feb-18	0	0	-614.71	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
KASHECHEWAN POWER CORPORATION	MP	755	28-Feb-18	0	0	-30000	ONZN		P	105833		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
FORT ALBANY POWER CORPORATION	MP	755	28-Feb-18	0	0	-20000	ONZN		P	105832		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	755	28-Feb-18	0	0	-1140.36	ONZN		P	104271		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	755	28-Feb-18	0	0	-13755.45	ONZN		P	102741		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
PUC DISTRIBUTION INC.	MP	755	28-Feb-18	0	0	-11962.12	ONZN		P	102316		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
HYDRO ONE NETWORKS INC.	MP	755	28-Feb-18	0	0	-1685415.38	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
ALGOMA POWER INC.	MP	755	28-Feb-18	0	0	-47773.93	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
Total						**(1,993,334.28)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
IESO	MP	2470	28-Feb-18	0	0	-3210681.1	ONZN		P			0	0	OESP Balancing Amount for 2018/02
Total						**(3,210,681.10)**								

*Note there is a correction invoice for this amount. (A reduction of $1,184,062.42)

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110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO
102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD

104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	
113601	SIOUX LOOKOUT HYDRO INC.	

Participation Name
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Ontario Rebate for Electricity Consumers for the invoice of 2017/01

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5
HST: 870513959RT0002

Issue / Re-Issue Date: 14-JUN-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00023133
Invoice Date: 14-JUN-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: TD Bank
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**
Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-MAY-2018 To 31-MAY-2018

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$1,697,691.55
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$14,942,022.97
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$60,272,292.64
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$20,917,843.44
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT	$14,014,835.82
Invoice Total:	$CAD	111,844,686.42

Payment Due Date 18-JUN-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

From: Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]
To: Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Ken Kandeepan [Ken.Kandeepan@ofina.on.ca]; George Sakura [George.Sakura@ofina.on.ca]; Asokan Sadasivan (MEDTE/MRI) [Asokan.Sadasivan@ontario.ca]; Kamala Sinnadurai (ENERGY) [Kamala.Sinnadurai@ontario.ca]; Gregor Schoenebeck [Gregor.Schoenebeck@ofina.on.ca]; John Psinas [John.Psinas@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]; Gavin He [Gavin.He@ofina.on.ca]; John Kim [John.Kim@ofina.on.ca]; Kevin Hwang [Kevin.Hwang@ofina.on.ca]
CC: Tai An (ENERGY) [Tai.An@ontario.ca]; Jose Yee (MEDTE/MRI) [Jose.Yee@ontario.ca]; Janet Lim (ENERGY) [Janet.Lim@ontario.ca]; Kwasny, Anna (MEDG/MRIS) [Anna.Kwasny@ontario.ca]; Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Dade, Christine (ENERGY) [Christine.Dade@ontario.ca]; Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]
Subject: May 2018 IESO Invoice - OREC
Date: Friday, June 15, 2018 14:34:34
Attachment 1: image001.jpg
Attachment 2: May 2018 IESO Invoice (Jun 14).pdf

Good Afternoon,

Please see the attached IESO Invoice for the month of May 2018, and proceed with processing the Ontario Rebate for Electricity Consumers (OREC) payment for the amount of $60,272,292.64.

Kindly note that the following programs are also included on the May invoice, and a separate email has been sent regarding information and payment approval for these:

- On-Reserve First Nations Delivery Credit
- Distribution Rate Protection
- Rural and Remote Rate Protection
- Ontario Electricity Support Program

Thank you,

Ryan Lim
Financial Analyst
56 Wellesley Street West, 4th Floor
Toronto, ON M7A 2E7
Phone: (416) 561-9361

Ministry of Energy
Ministry of Economic Development & Growth
Ministry of Infrastructure
Ministry of Research, Innovation & Science


CSD
Corporate
Services
Division
Expertise | Collaboration | Respect | Service Excellence | Integrity

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5
HST: 870513959RT0002

Issue / Re-Issue Date: 14-JUN-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00023133
Invoice Date: 14-JUN-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: TD Bank
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Comments:

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Invoice Total:	$CAD	111,844,686.42

Payment Due Date 18-JUN-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X

Name													
ALEXIAN ENERGY SERVICES INC.	MP	1467	31-May-18	0	0	-855.98	ONZN		P	145752		0	0 OREC unit sub-meter provider claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	31-May-18	0	0	-103377.88	ONZN		P	110073		0	0 OREC licensed distributor claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	31-May-18	0	0	-2083.28	ONZN		P	110073		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-04
ATIKOKAN HYDRO INC.	MP	1467	31-May-18	0	0	-16370.25	ONZN		P	104277		0	0 OREC licensed distributor claim, current month balancing amount
ATTAWAPISKAT POWER CORPORATION	MP	1467	31-May-18	0	0	-15859.75	ONZN		P	105834		0	0 OREC licensed distributor claim, current month balancing amount
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	1467	31-May-18	0	0	-402943.63	ONZN		P	104271		0	0 OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	291.13	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-02
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	351.22	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-03
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	316.8	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-04
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	160.82	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-05
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	336.21	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-06
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	313.73	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-07
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	318.92	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-08
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	343.52	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-09
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	332.48	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-10
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	156.77	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-11
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	346.27	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-12
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	330.28	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-01
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	399.49	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-02
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	389.84	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-03
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	270.51	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-04
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	-397761.34	ONZN		P	102321		0	0 OREC licensed distributor claim, current month balancing amount
BURLINGTON HYDRO INC.	MP	1467	31-May-18	0	0	-685779.5	ONZN		P	102298		0	0 OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	31-May-18	0	0	-451565.09	ONZN		P	102110		0	0 OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	31-May-18	0	0	13562.96	ONZN		P	102110		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-04
CARMA BILLING SERVICES INC.	MP	1467	31-May-18	0	0	-42265.45	ONZN		P	110345		0	0 OREC unit sub-meter provider claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	31-May-18	0	0	10976.49	ONZN		P	110345		0	0 OREC unit sub-meter provider claim, current month balancing amount
CENTRE WELLINGTON HYDRO LTD.	MP	1467	31-May-18	0	0	-70730.92	ONZN		P	104468		0	0 OREC licensed distributor claim, current month balancing amount
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-May-18	0	0	-18640.04	ONZN		P	102049		0	0 OREC licensed distributor claim, current month balancing amount
CLEAN CUT ENERGY CORP.	MP	1467	31-May-18	0	0	-368.41	ONZN		P	145763		0	0 OREC unit sub-meter provider claim, current month balancing amount
CLEAN CUT ENERGY CORP.	MP	1467	31-May-18	0	0	-354.46	ONZN		P	145763		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-03
CLEAN CUT ENERGY CORP.	MP	1467	31-May-18	0	0	-367.57	ONZN		P	145763		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-04
COLLUS POWERSTREAM CORP.	MP	1467	31-May-18	0	0	-174394.76	ONZN		P	104281		0	0 OREC licensed distributor claim, current month balancing amount
E. L. K. ENERGY INC.	MP	1467	31-May-18	0	0	-102794.82	ONZN		P	102006		0	0 OREC licensed distributor claim, current month balancing amount
ENERCARE CONNECTIONS INC.	MP	1467	31-May-18	0	0	-229847.96	ONZN		P	110332		0	0 OREC unit sub-meter provider claim, current month balancing amount
ENERGY + INC.	MP	1467	31-May-18	0	0	-520433.6	ONZN		P	102299		0	0 OREC licensed distributor claim, current month balancing amount
ENERGY + INC. (SETL)	MP	1467	31-May-18	0	0	-118099.43	ONZN		P	104290		0	0 OREC licensed distributor claim, current month balancing amount
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	31-May-18	0	0	-2862.18	ONZN		P	102089		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-04
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	31-May-18	0	0	-2311422.95	ONZN		P	102089		0	0 OREC licensed distributor claim, current month balancing amount
ENTEGRUS POWERLINES INC.	MP	1467	31-May-18	0	0	-378809.48	ONZN		P	102140		0	0 OREC licensed distributor claim, current month balancing amount
ENWIN UTILITIES LTD.	MP	1467	31-May-18	0	0	-882215.95	ONZN		P	106085		0	0 OREC licensed distributor claim, current month balancing amount
ERIE THAMES POWERLINES CORPORATION	MP	1467	31-May-18	0	0	-180516.95	ONZN		P	104323		0	0 OREC licensed distributor claim, current month balancing amount
ESSEX POWERLINES CORPORATION	MP	1467	31-May-18	0	0	74215.55	ONZN		P	102217		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-04
ESSEX POWERLINES CORPORATION	MP	1467	31-May-18	0	0	-350372.2	ONZN		P	102217		0	0 OREC licensed distributor claim, current month balancing amount
FESTIVAL HYDRO INC.	MP	1467	31-May-18	0	0	258.56	ONZN		P	102340		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-04
FESTIVAL HYDRO INC.	MP	1467	31-May-18	0	0	-201213.72	ONZN		P	102340		0	0 OREC licensed distributor claim, current month balancing amount
FORT ALBANY POWER CORPORATION	MP	1467	31-May-18	0	0	-4249.66	ONZN		P	105832		0	0 OREC licensed distributor claim, current month balancing amount
FORT ALBANY POWER CORPORATION	MP	1467	31-May-18	0	0	-10090.91	ONZN		P	105832		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-04
FORT FRANCES POWER CORPORATION	MP	1467	31-May-18	0	0	-40366.49	ONZN		P	104313		0	0 OREC licensed distributor claim, current month balancing amount
GREATER SUDBURY HYDRO INC.	MP	1467	31-May-18	0	0	-547176.66	ONZN		P	102009		0	0 OREC licensed distributor claim, current month balancing amount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
GREATER SUDBURY HYDRO INC.	MP	1467	31-May-18	0	0	287.66	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
GRIMSBY POWER INCORPORATED	MP	1467	31-May-18	0	0	-109102.45	ONZN		P	104471		0	0	OREC licensed distributor claim, current month balancing amount
GUELPH HYDRO ELECTRIC SYSTEMS INC.	MP	1467	31-May-18	0	0	-692089.97	ONZN		P	104325		0	0	OREC licensed distributor claim, current month balancing amount
HALTON HILLS HYDRO INC.	MP	1467	31-May-18	0	0	-258827.78	ONZN		P	104284		0	0	OREC licensed distributor claim, current month balancing amount
HEARST POWER DISTRIBUTION COMPANY LIMITED	MP	1467	31-May-18	0	0	-30709.75	ONZN		P	104249		0	0	OREC licensed distributor claim, current month balancing amount
HORIZON UTILITIES CORPORATION	MP	1467	31-May-18	0	0	-2077132.36	ONZN		P	102084		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	MP	1467	31-May-18	0	0	-57718.07	ONZN		P	104339		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE BRAMPTON NETWORKS INC.	MP	1467	31-May-18	0	0	-1575040.24	ONZN		P	104279		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-May-18	0	0	-330170.01	ONZN		P	102007		0	0	OREC embedded distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-May-18	0	0	-16382140.9	ONZN		P	102007		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-May-18	0	0	-112833.2	ONZN		P	102007		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
HYDRO ONE NETWORKS INC.	MP	1467	31-May-18	0	0	574.19	ONZN		P	102007		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
HYDRO OTTAWA LIMITED	MP	1467	31-May-18	0	0	-3197298.25	ONZN		P	102070		0	0	OREC licensed distributor claim, current month balancing amount
INNPOWER CORPORATION	MP	1467	31-May-18	0	0	-189602.84	ONZN		P	104299		0	0	OREC licensed distributor claim, current month balancing amount
KASHECHEWAN POWER CORPORATION	MP	1467	31-May-18	0	0	-11057.05	ONZN		P	105833		0	0	OREC licensed distributor claim, current month balancing amount
KENORA HYDRO ELECTRIC CORPORATION LTD.	MP	1467	31-May-18	0	0	-62402.13	ONZN		P	104269		0	0	OREC licensed distributor claim, current month balancing amount
KINGSTON HYDRO CORPORATION	MP	1467	31-May-18	0	0	-301755.14	ONZN		P	104322		0	0	OREC licensed distributor claim, current month balancing amount
KITCHENER-WILMOT HYDRO INC.	MP	1467	31-May-18	0	0	-877565.88	ONZN		P	104267		0	0	OREC licensed distributor claim, current month balancing amount
LAKEFRONT UTILITIES INC	MP	1467	31-May-18	0	0	-104121.94	ONZN		P	104487		0	0	OREC licensed distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-May-18	0	0	-127172.24	ONZN		P	113624		0	0	OREC embedded distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-May-18	0	0	-61109.14	ONZN		P	113624		0	0	OREC licensed distributor claim, current month balancing amount
LONDON HYDRO INC.	MP	1467	31-May-18	0	0	-1561938.71	ONZN		P	104282		0	0	OREC licensed distributor claim, current month balancing amount
MIDLAND POWER UTILITY CORPORATION	MP	1467	31-May-18	0	0	-79971.61	ONZN		P	104363		0	0	OREC licensed distributor claim, current month balancing amount
MILTON HYDRO DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-348671.22	ONZN		P	102743		0	0	OREC licensed distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-May-18	0	0	-36129	ONZN		P	102105		0	0	OREC embedded distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-May-18	0	0	-286749	ONZN		P	102105		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA PENINSULA ENERGY INC.	MP	1467	31-May-18	0	0	-606022.63	ONZN		P	102102		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-May-18	0	0	18657.45	ONZN		P	104422		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-May-18	0	0	-125017.58	ONZN		P	104422		0	0	OREC licensed distributor claim, current month balancing amount
NORTH BAY HYDRO DISTRIBUTION LIMITED	MP	1467	31-May-18	0	0	-281807.66	ONZN		P	102099		0	0	OREC licensed distributor claim, current month balancing amount
NORTHERN ONTARIO WIRES, INC.	MP	1467	31-May-18	0	0	-60912.61	ONZN		P	102042		0	0	OREC licensed distributor claim, current month balancing amount
O.N.TEL INC.	MP	1467	31-May-18	0	0	-47.61	ONZN		P	107810		0	0	Ontario Rebate for Electricity Consumers for the invoice of 2018/05
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-797117.92	ONZN		P	102366		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
ORANGEVILLE HYDRO LIMITED	MP	1467	31-May-18	0	0	-129042.46	ONZN		P	104480		0	0	OREC licensed distributor claim, current month balancing amount
ORILLIA POWER DISTRIBUTION CORPORATION	MP	1467	31-May-18	0	0	-163723.2	ONZN		P	104319		0	0	OREC licensed distributor claim, current month balancing amount
OSHAWA PUC NETWORKS INCORPORATED	MP	1467	31-May-18	0	0	-1127895.02	ONZN		P	104481		0	0	OREC licensed distributor claim, current month balancing amount
PETERBOROUGH DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-354660.08	ONZN		P	102082		0	0	OREC licensed distributor claim, current month balancing amount
PIKE LAKE GOLF CENTRE LIMITED	MP	1467	31-May-18	0	0	-138.73	ONZN		P	145734		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM ENERGY SERVICES INC.	MP	1467	31-May-18	0	0	-22461.68	ONZN		P	114461		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM INC.	MP	1467	31-May-18	0	0	-3529235.69	ONZN		P	108825		0	0	OREC licensed distributor claim, current month balancing amount
PRIORITY SUBMETERING SOLUTIONS INC.	MP	1467	31-May-18	0	0	-23442.8	ONZN		P	110334		0	0	OREC unit sub-meter provider claim, current month balancing amount
PROVIDENT ENERGY MANAGEMENT INC.	MP	1467	31-May-18	0	0	-19923.91	ONZN		P	110330		0	0	OREC unit sub-meter provider claim, current month balancing amount
PUC DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-425750.9	ONZN		P	102316		0	0	OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-7.2	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-22.99	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-3709.39	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-50109.37	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-9924.88	ONZN		P	105232		0	0	OREC licensed distributor claim, current month balancing amount
ST. THOMAS ENERGY INC.	MP	1467	31-May-18	0	0	-151046.05	ONZN		P	102100		0	0	OREC licensed distributor claim, current month balancing amount
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-616197.21	ONZN		P	102741		0	0	OREC licensed distributor claim, current month balancing amount
TILLSONBURG HYDRO INCORPORATED	MP	1467	31-May-18	0	0	-71067.34	ONZN		P	102673		0	0	OREC licensed distributor claim, current month balancing amount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	MP	1467	31-May-18	0	0	-10206837.64	ONZN		P	102329		0	0	OREC licensed distributor claim, current month balancing amount
VERIDIAN CONNECTIONS INC.	MP	1467	31-May-18	0	0	-1173730.47	ONZN		P	102120		0	0	OREC licensed distributor claim, current month balancing amount
WASAGA DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-102360.02	ONZN		P	104278		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	31-May-18	0	0	-1210146	ONZN		P	102004		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
WATERLOO NORTH HYDRO INC.	MP	1467	31-May-18	0	0	-783436	ONZN		P	102004		0	0	OREC licensed distributor claim, current month balancing amount
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-11692.63	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-01
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-14221.4	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-02
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-13846.9	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-03
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-10471.12	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-04
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-14284.54	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-17363.48	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-13933	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-15034.22	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-17587.91	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-11241.06	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-11414.72	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-9804.53	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-11977.3	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-8211.8	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-9301.17	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-11421.65	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-206693.56	ONZN		P	104248		0	0	OREC licensed distributor claim, current month balancing amount
WELLINGTON NORTH POWER INC.	MP	1467	31-May-18	0	0	-41308.89	ONZN		P	105222		0	0	OREC licensed distributor claim, current month balancing amount
WEST COAST HURON ENERGY INC.	MP	1467	31-May-18	0	0	-40018.29	ONZN		P	104297		0	0	OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	31-May-18	0	0	-234614.5	ONZN		P	104421		0	0	OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	31-May-18	0	0	40435.42	ONZN		P	104421		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-May-18	0	0	-460350.55	ONZN		P	104276		0	0	OREC licensed distributor claim, current month balancing amount
WYSE METER SOLUTIONS INC.	MP	1467	31-May-18	0	0	-69830.5	ONZN		P	110494		0	0	OREC unit sub-meter provider claim, current month balancing amount
IESO Settlement Report - May Total						**(60,272,292.64)**								

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	
145752	ALEXIAN ENERGY SERVICES INC.	ALEXIAN

Participation Name
Distributor-Metered Market Participant
Distributor-Metered Market Participant
Distributor-Metered Market Participant

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Smart Submetering Provider
Ontario Rebate for Electricity Consumers for the invoice of 2017/01
Smart Submetering Provider

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002

Issue / Re-Issue Date: 16-APR-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00022505
Invoice Date: 16-APR-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**

Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-MAR-2018 To 31-MAR-2018

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$2,072,677.42
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$19,969,958.50
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$63,614,917.06
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$19,784,410.32
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT	$12,904,453.50
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT	$1,184,062.42
Invoice Total:	$CAD	119,530,479.22

Payment Due Date 18-APR-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

From: Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]
To: Risa Thau [Risa.Thau@ofina.on.ca]; Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]; George Sakura [George.Sakura@ofina.on.ca]; Kevin Hwang [Kevin.Hwang@ofina.on.ca]
CC: Dade, Christine (ENERGY) [Christine.Dade@ontario.ca]; Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Mike Smith (ENERGY) [Mike.Smith@ontario.ca]; Tai An (ENERGY) [Tai.An@ontario.ca]; Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]; Zade, Ryan (ENERGY) [Ryan.Zade@ontario.ca]; Jose Yee (MEDTE/MRI) [Jose.Yee@ontario.ca]; Karen Clark (ENE) [Karen.Clark2@ontario.ca]; Barre, Amanda (ENERGY) [Amanda.Barre@ontario.ca]
Subject: March 2018 Social Program Payment
Date: Tuesday, April 17, 2018 14:31:21
Attachment 1: OFHP IESO Settlement Statement March 2018.xlsx
Attachment 2: March 2018 IESO Invoice.pdf

Hello Risa,

Please find below the payment information for the attached invoice for the Fair Hydro Plan programs. Please let me know if you require any additional information to process these payments. OREC payment approval has been shared separately.

Note that there is an additional line for the OESP. This TP line and IFIS string have been provided below. Please pay both OESP line items.
Note that there is also a split between the RRRP program line and the DRP program line. This is reflected in the chart below.

Program	Payment Amount	TP Line	IFIS Account String
On-Reserve First Nations Delivery Credit	$2,072,677.42	TP_On-Reserved First Nations Delivery Credit	029-290501-0000-981653-577210
Distribution Rate Protection	$19,969,958.50	TP_Distribution Rate Protection	***NEW** 029-290501-0000-981655-577210
Rural and Remote Rate Protection	$19,784,410.32	TP_Rural or Remote Rate Protection Program	029-290501-0000-981658-577210
Ontario Electricity Support Program	**$14,088,515.92** ($12,904,453.50 + $1,184,062.42)	TP_Ontario Electricity Support Program	029-290501-0000-981654-577210
Total	$55,915,562.16		

Thanks!

Robert Hunter
Senior Policy Advisor

Ministry of Energy: Distribution and Agency Policy Branch
77 Grenville Street, 6th Floor

Toronto, ON M7A 2C1
Phone: (416) 325-6899
Email: robert.a.hunter@ontario.ca

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
HYDRO ONE NETWORKS INC.	MP	1753	31-Mar-18	0	0	-19784410.32	ONZN		P	102007		0	0	MOE - Rural and Remote Settlement Debit, current month balancing amount
Total						**(19,784,410.32)**								

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Mar-18	0	0	-9885.86	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ATIKOKAN HYDRO INC.	MP	756	31-Mar-18	0	0	-14604.52	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
INNPOWER CORPORATION	MP	756	31-Mar-18	0	0	-56964.67	ONZN		P	104299		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	31-Mar-18	0	0	-154295.88	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ATIKOKAN HYDRO INC.	MP	756	31-Mar-18	0	0	1343.13	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Mar-18	0	0	-10496.45	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	31-Mar-18	0	0	19616.9	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Mar-18	0	0	4593.88	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
SIOUX LOOKOUT HYDRO INC.	MP	756	31-Mar-18	0	0	-24844.16	ONZN		P	113601		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
LAKELAND POWER DISTRIBUTION LTD.	MP	756	31-Mar-18	0	0	-19535.26	ONZN		P	113624		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
HYDRO ONE NETWORKS INC.	MP	756	31-Mar-18	0	0	-19704284.1	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Mar-18	0	0	-601.51	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
Total						**(19,969,958.50)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
KASHECHEWAN POWER CORPORATION	MP	755	31-Mar-18	0	0	-25116.45	ONZN		P	105833		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
ATTAWAPISKAT POWER CORPORATION	MP	755	31-Mar-18	0	0	-12682.19	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
CANADIAN NIAGARA POWER INC.	MP	755	31-Mar-18	0	0	-10220.22	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
HYDRO ONE NETWORKS INC.	MP	755	31-Mar-18	0	0	-893.33	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
HYDRO ONE NETWORKS INC.	MP	755	31-Mar-18	0	0	-48425.97	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
HYDRO ONE NETWORKS INC.	MP	755	31-Mar-18	0	0	-1803136.14	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
PUC DISTRIBUTION INC.	MP	755	31-Mar-18	0	0	-10839.88	ONZN		P	102316		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	755	31-Mar-18	0	0	-13353.75	ONZN		P	102741		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	755	31-Mar-18	0	0	-11468.05	ONZN		P	104271		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
FORT ALBANY POWER CORPORATION	MP	755	31-Mar-18	0	0	-22260.62	ONZN		P	105832		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
KASHECHEWAN POWER CORPORATION	MP	755	31-Mar-18	0	0	-33118.17	ONZN		P	105833		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
ATTAWAPISKAT POWER CORPORATION	MP	755	31-Mar-18	0	0	-31610.67	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
ALGOMA POWER INC.	MP	755	31-Mar-18	0	0	-37256.26	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
CANADIAN NIAGARA POWER INC.	MP	755	31-Mar-18	0	0	-10919.87	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
FORT ALBANY POWER CORPORATION	MP	755	31-Mar-18	0	0	-5828.55	ONZN		P	105832		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
ALGOMA POWER INC.	MP	755	31-Mar-18	0	0	4452.7	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
Total						**(2,072,677.42)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
#N/A	MP	2470	31-Mar-18	0	0	8304.28	ONZN		P			0	0	OESP Balancing Amount for 2018/03
#N/A	MP	2470	31-Mar-18	0	0	-2026618.68	ONZN		P			0	0	Correction - OESP Balancing Amount for 2018/02
#N/A	MP	2470	31-Mar-18	0	0	3210681.1	ONZN		P			0	0	Reverse - OESP Balancing Amount for 2018/02
#N/A	MP	2470	31-Mar-18	0	0	-14096820.2	ONZN		P			0	0	OESP Balancing Amount for 2018/03
Total						**(12,904,453.50)**								

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	
113601	SIOUX LOOKOUT HYDRO INC.	

Participation Name
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Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002

Issue / Re-Issue Date: 16-APR-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00022505
Invoice Date: 16-APR-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**

Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-MAR-2018 To 31-MAR-2018

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$2,072,677.42
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$19,969,958.50
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$63,614,917.06
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$19,784,410.32
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT	$12,904,453.50
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT	$1,184,062.42
Invoice Total:	$CAD	119,530,479.22

Payment Due Date 18-APR-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
HYDRO ONE NETWORKS INC.	MP	1753	31-Mar-18	0	0	-19784410.32	ONZN		P	102007		0	0	MOE - Rural and Remote Settlement Debit, current month balancing amount
Total						**(19,784,410.32)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Mar-18	0	0	-9885.86	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ATIKOKAN HYDRO INC.	MP	756	31-Mar-18	0	0	-14604.52	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
INNPOWER CORPORATION	MP	756	31-Mar-18	0	0	-56964.67	ONZN		P	104299		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	31-Mar-18	0	0	-154295.88	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ATIKOKAN HYDRO INC.	MP	756	31-Mar-18	0	0	1343.13	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Mar-18	0	0	-10496.45	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	31-Mar-18	0	0	19616.9	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Mar-18	0	0	4593.88	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
SIOUX LOOKOUT HYDRO INC.	MP	756	31-Mar-18	0	0	-24844.16	ONZN		P	113601		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
LAKELAND POWER DISTRIBUTION LTD.	MP	756	31-Mar-18	0	0	-19535.26	ONZN		P	113624		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
HYDRO ONE NETWORKS INC.	MP	756	31-Mar-18	0	0	-19704284.1	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Mar-18	0	0	-601.51	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
Total						**(19,969,958.50)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
KASHECHEWAN POWER CORPORATION	MP	755	31-Mar-18	0	0	-25116.45	ONZN		P	105833		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
ATTAWAPISKAT POWER CORPORATION	MP	755	31-Mar-18	0	0	-12682.19	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
CANADIAN NIAGARA POWER INC.	MP	755	31-Mar-18	0	0	-10220.22	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
HYDRO ONE NETWORKS INC.	MP	755	31-Mar-18	0	0	-893.33	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
HYDRO ONE NETWORKS INC.	MP	755	31-Mar-18	0	0	-48425.97	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
HYDRO ONE NETWORKS INC.	MP	755	31-Mar-18	0	0	-1803136.14	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
PUC DISTRIBUTION INC.	MP	755	31-Mar-18	0	0	-10839.88	ONZN		P	102316		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	755	31-Mar-18	0	0	-13353.75	ONZN		P	102741		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	755	31-Mar-18	0	0	-11468.05	ONZN		P	104271		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
FORT ALBANY POWER CORPORATION	MP	755	31-Mar-18	0	0	-22260.62	ONZN		P	105832		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
KASHECHEWAN POWER CORPORATION	MP	755	31-Mar-18	0	0	-33118.17	ONZN		P	105833		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
ATTAWAPISKAT POWER CORPORATION	MP	755	31-Mar-18	0	0	-31610.67	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
ALGOMA POWER INC.	MP	755	31-Mar-18	0	0	-37256.26	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current montl
CANADIAN NIAGARA POWER INC.	MP	755	31-Mar-18	0	0	-10919.87	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
FORT ALBANY POWER CORPORATION	MP	755	31-Mar-18	0	0	-5828.55	ONZN		P	105832		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
ALGOMA POWER INC.	MP	755	31-Mar-18	0	0	4452.7	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
Total						**(2,072,677.42)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
#N/A	MP	2470	31-Mar-18	0	0	8304.28	ONZN		P			0	0	OESP Balancing Amount for 2018/03
#N/A	MP	2470	31-Mar-18	0	0	-2026618.68	ONZN		P			0	0	Correction - OESP Balancing Amount for 2018/02
#N/A	MP	2470	31-Mar-18	0	0	3210681.1	ONZN		P			0	0	Reverse - OESP Balancing Amount for 2018/02
#N/A	MP	2470	31-Mar-18	0	0	-14096820.2	ONZN		P			0	0	OESP Balancing Amount for 2018/03
Total						**(12,904,453.50)**								

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	
113601	SIOUX LOOKOUT HYDRO INC.	

Participation Name
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From: Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]
To: Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Mark Bergman (ENERGY) [Mark.Bergman@ontario.ca]; Tracy Flindall (MOF) [Tracy.Flindall@ontario.ca]; Anil Sharma (MOF) [Anil.Sharma@ontario.ca]; Dev Ram (MOF) [Dev.Ram@ontario.ca]; Naomi Morita (MOF) [Naomi.Morita@ontario.ca]; Gavin He [Gavin.He@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]
CC: Tai An (ENERGY) [Tai.An@ontario.ca]; Jose Yee (MEDTE/MRI) [Jose.Yee@ontario.ca]; Janet Lim (ENERGY) [Janet.Lim@ontario.ca]; Kwasny, Anna (MEDG/MRIS) [Anna.Kwasny@ontario.ca]; Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Dade, Christine (ENERGY) [Christine.Dade@ontario.ca]; Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]
Subject: May 2018 OREC Settlement Statement
Date: Friday, June 15, 2018 14:34:43
Attachment 1: image001.jpg
Attachment 2: May 2018 IESO OREC Settlement Statement.xlsx

Good Afternoon,

Please see the attached OREC Settlement Statement for the month of May 2018, which shows the OREC amount of $60,272,292.64.

Kindly note that the following programs are also included on the May invoice but are not listed in the attached settlement statement. A separate email has been sent for these programs:

- On-Reserve First Nations Delivery Credit
- Distribution Rate Protection
- Rural and Remote Rate Protection
- Ontario Electricity Support Program

Thank you,

Ryan Lim
Financial Analyst
56 Wellesley Street West, 4th Floor
Toronto, ON M7A 2E7
Phone: (416) 561-9361

Ministry of Energy
Ministry of Economic Development & Growth
Ministry of Infrastructure
Ministry of Research, Innovation & Science


CSD
Corporate
Services
Division
Expertise | Collaboration | Respect | Service Excellence | Integrity

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Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X

Name													
ALEXIAN ENERGY SERVICES INC.	MP	1467	31-May-18	0	0	-855.98	ONZN		P	145752		0	0 OREC unit sub-meter provider claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	31-May-18	0	0	-103377.88	ONZN		P	110073		0	0 OREC licensed distributor claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	31-May-18	0	0	-2083.28	ONZN		P	110073		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-04
ATIKOKAN HYDRO INC.	MP	1467	31-May-18	0	0	-16370.25	ONZN		P	104277		0	0 OREC licensed distributor claim, current month balancing amount
ATTAWAPISKAT POWER CORPORATION	MP	1467	31-May-18	0	0	-15859.75	ONZN		P	105834		0	0 OREC licensed distributor claim, current month balancing amount
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	1467	31-May-18	0	0	-402943.63	ONZN		P	104271		0	0 OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	291.13	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-02
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	351.22	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-03
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	316.8	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-04
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	160.82	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-05
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	336.21	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-06
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	313.73	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-07
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	318.92	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-08
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	343.52	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-09
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	332.48	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-10
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	156.77	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-11
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	346.27	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-12
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	330.28	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-01
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	399.49	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-02
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	389.84	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-03
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	270.51	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-04
BRANTFORD POWER INC.	MP	1467	31-May-18	0	0	-397761.34	ONZN		P	102321		0	0 OREC licensed distributor claim, current month balancing amount
BURLINGTON HYDRO INC.	MP	1467	31-May-18	0	0	-685779.5	ONZN		P	102298		0	0 OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	31-May-18	0	0	-451565.09	ONZN		P	102110		0	0 OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	31-May-18	0	0	13562.96	ONZN		P	102110		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-04
CARMA BILLING SERVICES INC.	MP	1467	31-May-18	0	0	-42265.45	ONZN		P	110345		0	0 OREC unit sub-meter provider claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	31-May-18	0	0	10976.49	ONZN		P	110345		0	0 OREC unit sub-meter provider claim, current month balancing amount
CENTRE WELLINGTON HYDRO LTD.	MP	1467	31-May-18	0	0	-70730.92	ONZN		P	104468		0	0 OREC licensed distributor claim, current month balancing amount
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-May-18	0	0	-18640.04	ONZN		P	102049		0	0 OREC licensed distributor claim, current month balancing amount
CLEAN CUT ENERGY CORP.	MP	1467	31-May-18	0	0	-368.41	ONZN		P	145763		0	0 OREC unit sub-meter provider claim, current month balancing amount
CLEAN CUT ENERGY CORP.	MP	1467	31-May-18	0	0	-354.46	ONZN		P	145763		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-03
CLEAN CUT ENERGY CORP.	MP	1467	31-May-18	0	0	-367.57	ONZN		P	145763		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-04
COLLUS POWERSTREAM CORP.	MP	1467	31-May-18	0	0	-174394.76	ONZN		P	104281		0	0 OREC licensed distributor claim, current month balancing amount
E. L. K. ENERGY INC.	MP	1467	31-May-18	0	0	-102794.82	ONZN		P	102006		0	0 OREC licensed distributor claim, current month balancing amount
ENERCARE CONNECTIONS INC.	MP	1467	31-May-18	0	0	-229847.96	ONZN		P	110332		0	0 OREC unit sub-meter provider claim, current month balancing amount
ENERGY + INC.	MP	1467	31-May-18	0	0	-520433.6	ONZN		P	102299		0	0 OREC licensed distributor claim, current month balancing amount
ENERGY + INC. (SETL)	MP	1467	31-May-18	0	0	-118099.43	ONZN		P	104290		0	0 OREC licensed distributor claim, current month balancing amount
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	31-May-18	0	0	-2862.18	ONZN		P	102089		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-04
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	31-May-18	0	0	-2311422.95	ONZN		P	102089		0	0 OREC licensed distributor claim, current month balancing amount
ENTEGRUS POWERLINES INC.	MP	1467	31-May-18	0	0	-378809.48	ONZN		P	102140		0	0 OREC licensed distributor claim, current month balancing amount
ENWIN UTILITIES LTD.	MP	1467	31-May-18	0	0	-882215.95	ONZN		P	106085		0	0 OREC licensed distributor claim, current month balancing amount
ERIE THAMES POWERLINES CORPORATION	MP	1467	31-May-18	0	0	-180516.95	ONZN		P	104323		0	0 OREC licensed distributor claim, current month balancing amount
ESSEX POWERLINES CORPORATION	MP	1467	31-May-18	0	0	74215.55	ONZN		P	102217		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-04
ESSEX POWERLINES CORPORATION	MP	1467	31-May-18	0	0	-350372.2	ONZN		P	102217		0	0 OREC licensed distributor claim, current month balancing amount
FESTIVAL HYDRO INC.	MP	1467	31-May-18	0	0	258.56	ONZN		P	102340		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-04
FESTIVAL HYDRO INC.	MP	1467	31-May-18	0	0	-201213.72	ONZN		P	102340		0	0 OREC licensed distributor claim, current month balancing amount
FORT ALBANY POWER CORPORATION	MP	1467	31-May-18	0	0	-4249.66	ONZN		P	105832		0	0 OREC licensed distributor claim, current month balancing amount
FORT ALBANY POWER CORPORATION	MP	1467	31-May-18	0	0	-10090.91	ONZN		P	105832		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-04
FORT FRANCES POWER CORPORATION	MP	1467	31-May-18	0	0	-40366.49	ONZN		P	104313		0	0 OREC licensed distributor claim, current month balancing amount
GREATER SUDBURY HYDRO INC.	MP	1467	31-May-18	0	0	-547176.66	ONZN		P	102009		0	0 OREC licensed distributor claim, current month balancing amount

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	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
GREATER SUDBURY HYDRO INC.	MP	1467	31-May-18	0	0	287.66	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
GRIMSBY POWER INCORPORATED	MP	1467	31-May-18	0	0	-109102.45	ONZN		P	104471		0	0	OREC licensed distributor claim, current month balancing amount
GUELPH HYDRO ELECTRIC SYSTEMS INC.	MP	1467	31-May-18	0	0	-692089.97	ONZN		P	104325		0	0	OREC licensed distributor claim, current month balancing amount
HALTON HILLS HYDRO INC.	MP	1467	31-May-18	0	0	-258827.78	ONZN		P	104284		0	0	OREC licensed distributor claim, current month balancing amount
HEARST POWER DISTRIBUTION COMPANY LIMITED	MP	1467	31-May-18	0	0	-30709.75	ONZN		P	104249		0	0	OREC licensed distributor claim, current month balancing amount
HORIZON UTILITIES CORPORATION	MP	1467	31-May-18	0	0	-2077132.36	ONZN		P	102084		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	MP	1467	31-May-18	0	0	-57718.07	ONZN		P	104339		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE BRAMPTON NETWORKS INC.	MP	1467	31-May-18	0	0	-1575040.24	ONZN		P	104279		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-May-18	0	0	-330170.01	ONZN		P	102007		0	0	OREC embedded distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-May-18	0	0	-16382140.9	ONZN		P	102007		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-May-18	0	0	-112833.2	ONZN		P	102007		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
HYDRO ONE NETWORKS INC.	MP	1467	31-May-18	0	0	574.19	ONZN		P	102007		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
HYDRO OTTAWA LIMITED	MP	1467	31-May-18	0	0	-3197298.25	ONZN		P	102070		0	0	OREC licensed distributor claim, current month balancing amount
INNPOWER CORPORATION	MP	1467	31-May-18	0	0	-189602.84	ONZN		P	104299		0	0	OREC licensed distributor claim, current month balancing amount
KASHECHEWAN POWER CORPORATION	MP	1467	31-May-18	0	0	-11057.05	ONZN		P	105833		0	0	OREC licensed distributor claim, current month balancing amount
KENORA HYDRO ELECTRIC CORPORATION LTD.	MP	1467	31-May-18	0	0	-62402.13	ONZN		P	104269		0	0	OREC licensed distributor claim, current month balancing amount
KINGSTON HYDRO CORPORATION	MP	1467	31-May-18	0	0	-301755.14	ONZN		P	104322		0	0	OREC licensed distributor claim, current month balancing amount
KITCHENER-WILMOT HYDRO INC.	MP	1467	31-May-18	0	0	-877565.88	ONZN		P	104267		0	0	OREC licensed distributor claim, current month balancing amount
LAKEFRONT UTILITIES INC	MP	1467	31-May-18	0	0	-104121.94	ONZN		P	104487		0	0	OREC licensed distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-May-18	0	0	-127172.24	ONZN		P	113624		0	0	OREC embedded distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-May-18	0	0	-61109.14	ONZN		P	113624		0	0	OREC licensed distributor claim, current month balancing amount
LONDON HYDRO INC.	MP	1467	31-May-18	0	0	-1561938.71	ONZN		P	104282		0	0	OREC licensed distributor claim, current month balancing amount
MIDLAND POWER UTILITY CORPORATION	MP	1467	31-May-18	0	0	-79971.61	ONZN		P	104363		0	0	OREC licensed distributor claim, current month balancing amount
MILTON HYDRO DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-348671.22	ONZN		P	102743		0	0	OREC licensed distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-May-18	0	0	-36129	ONZN		P	102105		0	0	OREC embedded distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-May-18	0	0	-286749	ONZN		P	102105		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA PENINSULA ENERGY INC.	MP	1467	31-May-18	0	0	-606022.63	ONZN		P	102102		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-May-18	0	0	18657.45	ONZN		P	104422		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-May-18	0	0	-125017.58	ONZN		P	104422		0	0	OREC licensed distributor claim, current month balancing amount
NORTH BAY HYDRO DISTRIBUTION LIMITED	MP	1467	31-May-18	0	0	-281807.66	ONZN		P	102099		0	0	OREC licensed distributor claim, current month balancing amount
NORTHERN ONTARIO WIRES, INC.	MP	1467	31-May-18	0	0	-60912.61	ONZN		P	102042		0	0	OREC licensed distributor claim, current month balancing amount
O.N.TEL INC.	MP	1467	31-May-18	0	0	-47.61	ONZN		P	107810		0	0	Ontario Rebate for Electricity Consumers for the invoice of 2018/05
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-797117.92	ONZN		P	102366		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
ORANGEVILLE HYDRO LIMITED	MP	1467	31-May-18	0	0	-129042.46	ONZN		P	104480		0	0	OREC licensed distributor claim, current month balancing amount
ORILLIA POWER DISTRIBUTION CORPORATION	MP	1467	31-May-18	0	0	-163723.2	ONZN		P	104319		0	0	OREC licensed distributor claim, current month balancing amount
OSHAWA PUC NETWORKS INCORPORATED	MP	1467	31-May-18	0	0	-1127895.02	ONZN		P	104481		0	0	OREC licensed distributor claim, current month balancing amount
PETERBOROUGH DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-354660.08	ONZN		P	102082		0	0	OREC licensed distributor claim, current month balancing amount
PIKE LAKE GOLF CENTRE LIMITED	MP	1467	31-May-18	0	0	-138.73	ONZN		P	145734		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM ENERGY SERVICES INC.	MP	1467	31-May-18	0	0	-22461.68	ONZN		P	114461		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM INC.	MP	1467	31-May-18	0	0	-3529235.69	ONZN		P	108825		0	0	OREC licensed distributor claim, current month balancing amount
PRIORITY SUBMETERING SOLUTIONS INC.	MP	1467	31-May-18	0	0	-23442.8	ONZN		P	110334		0	0	OREC unit sub-meter provider claim, current month balancing amount
PROVIDENT ENERGY MANAGEMENT INC.	MP	1467	31-May-18	0	0	-19923.91	ONZN		P	110330		0	0	OREC unit sub-meter provider claim, current month balancing amount
PUC DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-425750.9	ONZN		P	102316		0	0	OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-7.2	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-22.99	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-3709.39	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-50109.37	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-9924.88	ONZN		P	105232		0	0	OREC licensed distributor claim, current month balancing amount
ST. THOMAS ENERGY INC.	MP	1467	31-May-18	0	0	-151046.05	ONZN		P	102100		0	0	OREC licensed distributor claim, current month balancing amount
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-616197.21	ONZN		P	102741		0	0	OREC licensed distributor claim, current month balancing amount
TILLSONBURG HYDRO INCORPORATED	MP	1467	31-May-18	0	0	-71067.34	ONZN		P	102673		0	0	OREC licensed distributor claim, current month balancing amount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	MP	1467	31-May-18	0	0	-10206837.64	ONZN		P	102329		0	0	OREC licensed distributor claim, current month balancing amount
VERIDIAN CONNECTIONS INC.	MP	1467	31-May-18	0	0	-1173730.47	ONZN		P	102120		0	0	OREC licensed distributor claim, current month balancing amount
WASAGA DISTRIBUTION INC.	MP	1467	31-May-18	0	0	-102360.02	ONZN		P	104278		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	31-May-18	0	0	-1210146	ONZN		P	102004		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
WATERLOO NORTH HYDRO INC.	MP	1467	31-May-18	0	0	-783436	ONZN		P	102004		0	0	OREC licensed distributor claim, current month balancing amount
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-11692.63	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-01
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-14221.4	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-02
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-13846.9	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-03
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-10471.12	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-04
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-14284.54	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-17363.48	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-13933	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-15034.22	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-17587.91	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-11241.06	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-11414.72	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-9804.53	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-11977.3	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-8211.8	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-9301.17	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-11421.65	ONZN		P	104248		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-May-18	0	0	-206693.56	ONZN		P	104248		0	0	OREC licensed distributor claim, current month balancing amount
WELLINGTON NORTH POWER INC.	MP	1467	31-May-18	0	0	-41308.89	ONZN		P	105222		0	0	OREC licensed distributor claim, current month balancing amount
WEST COAST HURON ENERGY INC.	MP	1467	31-May-18	0	0	-40018.29	ONZN		P	104297		0	0	OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	31-May-18	0	0	-234614.5	ONZN		P	104421		0	0	OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	31-May-18	0	0	40435.42	ONZN		P	104421		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-May-18	0	0	-460350.55	ONZN		P	104276		0	0	OREC licensed distributor claim, current month balancing amount
WYSE METER SOLUTIONS INC.	MP	1467	31-May-18	0	0	-69830.5	ONZN		P	110494		0	0	OREC unit sub-meter provider claim, current month balancing amount
IESO Settlement Report - May Total						**(60,272,292.64)**								

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	
145752	ALEXIAN ENERGY SERVICES INC.	ALEXIAN

Participation Name
Distributor-Metered Market Participant
Distributor-Metered Market Participant
Distributor-Metered Market Participant

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Smart Submetering Provider
Ontario Rebate for Electricity Consumers for the invoice of 2017/01
Smart Submetering Provider

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002
Issue / Re-Issue Date: 14-MAY-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00022819
Invoice Date: 14-MAY-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**
Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-APR-2018 To 30-APR-2018

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$1,865,227.26
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$19,105,418.87
1465	ONTARIO CLEAN ENERGY BENEFIT (-10%) PROGRAM BALANCING AMOUNT	($13,046.83)
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$61,926,992.22
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$20,021,458.02
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT	$13,569,883.85
Invoice Total:	$CAD	116,475,933.39

Payment Due Date 16-MAY-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

From: Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]
To: Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Ken Kandeepan [Ken.Kandeepan@ofina.on.ca]; George Sakura [George.Sakura@ofina.on.ca]; Asokan Sadasivan (MEDTE/MRI) [Asokan.Sadasivan@ontario.ca]; Kamala Sinnadurai (ENERGY) [Kamala.Sinnadurai@ontario.ca]; Gregor Schoenebeck [Gregor.Schoenebeck@ofina.on.ca]; John Psinas [John.Psinas@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]; Gavin He [Gavin.He@ofina.on.ca]; John Kim [John.Kim@ofina.on.ca]; Kevin Hwang [Kevin.Hwang@ofina.on.ca]
CC: Tai An (ENERGY) [Tai.An@ontario.ca]; Jose Yee (MEDTE/MRI) [Jose.Yee@ontario.ca]; Janet Lim (ENERGY) [Janet.Lim@ontario.ca]; Kwasny, Anna (MEDG/MRIS) [Anna.Kwasny@ontario.ca]; Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Dade, Christine (ENERGY) [Christine.Dade@ontario.ca]; Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]
Subject: April 2018 IESO Invoice - OREC
Date: Tuesday, May 15, 2018 10:41:22
Attachment 1: image001.jpg
Attachment 2: April 2018 IESO Invoice (May 14).pdf

Good Morning,

Please see the attached IESO Invoice for the month of April 2018. Please proceed with processing the OREC payment for the amount of $61,926,992.22.

Kindly note that the following programs are also included on the April invoice, and a separate email has been sent regarding information and payment approval for these:

- On-Reserve First Nations Delivery Credit
- Distribution Rate Protection
- Ontario Clean Energy Benefit
- Rural and Remote Rate Protection
- Ontario Electricity Support Program

Thank you,

Ryan Lim
Financial Analyst
56 Wellesley Street West, 4th Floor
Toronto, ON M7A 2E7
Phone: (416) 561-9361

Ministry of Energy
Ministry of Economic Development & Growth
Ministry of Infrastructure
Ministry of Research, Innovation & Science


CSD
Corporate
Services
Division
Expertise | Collaboration | Respect | Service Excellence | Integrity

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002
Issue / Re-Issue Date: 14-MAY-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00022819
Invoice Date: 14-MAY-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**
Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-APR-2018 To 30-APR-2018

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$1,865,227.26
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$19,105,418.87
1465	ONTARIO CLEAN ENERGY BENEFIT (-10%) PROGRAM BALANCING AMOUNT	($13,046.83)
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$61,926,992.22
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$20,021,458.02
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT	$13,569,883.85
Invoice Total:	$CAD	116,475,933.39

Payment Due Date 16-MAY-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X

Name													
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-856.69	ONZN		P	145752		0	0 OREC unit sub-meter provider claim, current month balancing amount
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1043.78	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-04
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1085.55	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-05
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1053.52	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-06
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1170.78	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-07
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1272.15	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-08
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1286.75	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-09
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1186.39	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-10
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1045.8	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-11
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-956.02	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-12
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1056.85	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-01
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1044.2	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-02
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-923.7	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-03
ALGOMA POWER INC.	MP	1467	30-Apr-18	0	0	-138185.21	ONZN		P	110073		0	0 OREC licensed distributor claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	30-Apr-18	0	0	-17806.92	ONZN		P	110073		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-03
ATIKOKAN HYDRO INC.	MP	1467	30-Apr-18	0	0	-17366.54	ONZN		P	104277		0	0 OREC licensed distributor claim, current month balancing amount
ATTAWAPISKAT POWER CORPORATION	MP	1467	30-Apr-18	0	0	-18836.77	ONZN		P	105834		0	0 OREC licensed distributor claim, current month balancing amount
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	1467	30-Apr-18	0	0	-353098.8	ONZN		P	104271		0	0 OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	30-Apr-18	0	0	3.25	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-11
BRANTFORD POWER INC.	MP	1467	30-Apr-18	0	0	11.24	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-12
BRANTFORD POWER INC.	MP	1467	30-Apr-18	0	0	-20.15	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-01
BRANTFORD POWER INC.	MP	1467	30-Apr-18	0	0	-32.54	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-02
BRANTFORD POWER INC.	MP	1467	30-Apr-18	0	0	-391907.58	ONZN		P	102321		0	0 OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	30-Apr-18	0	0	-371.52	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-03
BURLINGTON HYDRO INC.	MP	1467	30-Apr-18	0	0	-705108.42	ONZN		P	102298		0	0 OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	30-Apr-18	0	0	-534365.58	ONZN		P	102110		0	0 OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	30-Apr-18	0	0	-5913.27	ONZN		P	102110		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-03
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	-41310.7	ONZN		P	110345		0	0 OREC unit sub-meter provider claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	4407.87	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-02
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	6194.56	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-03
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	5029.4	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-04
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	6104.53	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-05
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	8084.92	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-06
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	8354.39	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-07
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	8631.35	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-08
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	8843.71	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-09
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	9179.5	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-10
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	9566.37	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-11
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	10048.46	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-12
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	10328.98	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-01
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	10442.49	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-02
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	10624.37	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-03
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	10808.17	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-04
CENTRE WELLINGTON HYDRO LTD.	MP	1467	30-Apr-18	0	0	6.12	ONZN		P	104468		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-03
CENTRE WELLINGTON HYDRO LTD.	MP	1467	30-Apr-18	0	0	-75013.45	ONZN		P	104468		0	0 OREC licensed distributor claim, current month balancing amount
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	30-Apr-18	0	0	-21296.26	ONZN		P	102049		0	0 OREC licensed distributor claim, current month balancing amount
COLLUS POWERSTREAM CORP.	MP	1467	30-Apr-18	0	0	-169079.99	ONZN		P	104281		0	0 OREC licensed distributor claim, current month balancing amount
E. L. K. ENERGY INC.	MP	1467	30-Apr-18	0	0	-96789.11	ONZN		P	102006		0	0 OREC licensed distributor claim, current month balancing amount
ENERCARE CONNECTIONS INC.	MP	1467	30-Apr-18	0	0	-231238.23	ONZN		P	110332		0	0 OREC unit sub-meter provider claim, current month balancing amount
ENERGY + INC.	MP	1467	30-Apr-18	0	0	-519632.54	ONZN		P	102299		0	0 OREC licensed distributor claim, current month balancing amount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
ENERGY + INC. (SETL)	MP	1467	30-Apr-18	0	0	-118668.44	ONZN		P	104290		0	0	OREC licensed distributor claim, current month balancing amount
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	30-Apr-18	0	0	-2062.16	ONZN		P	102089		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	30-Apr-18	0	0	-2360702.27	ONZN		P	102089		0	0	OREC licensed distributor claim, current month balancing amount
ENTEGRUS POWERLINES INC.	MP	1467	30-Apr-18	0	0	27822.65	ONZN		P	102140		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
ENTEGRUS POWERLINES INC.	MP	1467	30-Apr-18	0	0	-378809.48	ONZN		P	102140		0	0	OREC licensed distributor claim, current month balancing amount
ENWIN UTILITIES LTD.	MP	1467	30-Apr-18	0	0	-829956.22	ONZN		P	106085		0	0	OREC licensed distributor claim, current month balancing amount
ERIE THAMES POWERLINES CORPORATION	MP	1467	30-Apr-18	0	0	-192027.58	ONZN		P	104323		0	0	OREC licensed distributor claim, current month balancing amount
ESSEX POWERLINES CORPORATION	MP	1467	30-Apr-18	0	0	87843.89	ONZN		P	102217		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
ESSEX POWERLINES CORPORATION	MP	1467	30-Apr-18	0	0	-343071.44	ONZN		P	102217		0	0	OREC licensed distributor claim, current month balancing amount
FESTIVAL HYDRO INC.	MP	1467	30-Apr-18	0	0	-58.28	ONZN		P	102340		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
FESTIVAL HYDRO INC.	MP	1467	30-Apr-18	0	0	-216750	ONZN		P	102340		0	0	OREC licensed distributor claim, current month balancing amount
FORT ALBANY POWER CORPORATION	MP	1467	30-Apr-18	0	0	-11500	ONZN		P	105832		0	0	OREC licensed distributor claim, current month balancing amount
FORT FRANCES POWER CORPORATION	MP	1467	30-Apr-18	0	0	-45194.11	ONZN		P	104313		0	0	OREC licensed distributor claim, current month balancing amount
GREATER SUDBURY HYDRO INC.	MP	1467	30-Apr-18	0	0	650.84	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
GREATER SUDBURY HYDRO INC.	MP	1467	30-Apr-18	0	0	-564830.93	ONZN		P	102009		0	0	OREC licensed distributor claim, current month balancing amount
GRIMSBY POWER INCORPORATED	MP	1467	30-Apr-18	0	0	-115797.62	ONZN		P	104471		0	0	OREC licensed distributor claim, current month balancing amount
GUELPH HYDRO ELECTRIC SYSTEMS INC.	MP	1467	30-Apr-18	0	0	-439285.25	ONZN		P	104325		0	0	OREC licensed distributor claim, current month balancing amount
HALTON HILLS HYDRO INC.	MP	1467	30-Apr-18	0	0	-226544.86	ONZN		P	104284		0	0	OREC licensed distributor claim, current month balancing amount
HEARST POWER DISTRIBUTION COMPANY LIMITED	MP	1467	30-Apr-18	0	0	-35109.04	ONZN		P	104249		0	0	OREC licensed distributor claim, current month balancing amount
HORIZON UTILITIES CORPORATION	MP	1467	30-Apr-18	0	0	-2129183.14	ONZN		P	102084		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	MP	1467	30-Apr-18	0	0	-54457.15	ONZN		P	104339		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE BRAMPTON NETWORKS INC.	MP	1467	30-Apr-18	0	0	-1548019.43	ONZN		P	104279		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	30-Apr-18	0	0	-15234.38	ONZN		P	102007		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
HYDRO ONE NETWORKS INC.	MP	1467	30-Apr-18	0	0	-341999.71	ONZN		P	102007		0	0	OREC embedded distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	30-Apr-18	0	0	-17932179.82	ONZN		P	102007		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO OTTAWA LIMITED	MP	1467	30-Apr-18	0	0	-3353510.81	ONZN		P	102070		0	0	OREC licensed distributor claim, current month balancing amount
INNPOWER CORPORATION	MP	1467	30-Apr-18	0	0	-196261.05	ONZN		P	104299		0	0	OREC licensed distributor claim, current month balancing amount
KASHECHEWAN POWER CORPORATION	MP	1467	30-Apr-18	0	0	-17000	ONZN		P	105833		0	0	OREC licensed distributor claim, current month balancing amount
KENORA HYDRO ELECTRIC CORPORATION LTD.	MP	1467	30-Apr-18	0	0	-58939.15	ONZN		P	104269		0	0	OREC licensed distributor claim, current month balancing amount
KINGSTON HYDRO CORPORATION	MP	1467	30-Apr-18	0	0	-338577.82	ONZN		P	104322		0	0	OREC licensed distributor claim, current month balancing amount
KITCHENER-WILMOT HYDRO INC.	MP	1467	30-Apr-18	0	0	-900087.43	ONZN		P	104267		0	0	OREC licensed distributor claim, current month balancing amount
LAKEFRONT UTILITIES INC	MP	1467	30-Apr-18	0	0	-104687.42	ONZN		P	104487		0	0	OREC licensed distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	30-Apr-18	0	0	-136549.47	ONZN		P	113624		0	0	OREC embedded distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	30-Apr-18	0	0	-65734.77	ONZN		P	113624		0	0	OREC licensed distributor claim, current month balancing amount
LONDON HYDRO INC.	MP	1467	30-Apr-18	0	0	-1566672.65	ONZN		P	104282		0	0	OREC licensed distributor claim, current month balancing amount
MIDLAND POWER UTILITY CORPORATION	MP	1467	30-Apr-18	0	0	-86507.27	ONZN		P	104363		0	0	OREC licensed distributor claim, current month balancing amount
MILTON HYDRO DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-393280.56	ONZN		P	102743		0	0	OREC licensed distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	30-Apr-18	0	0	-36499.76	ONZN		P	102105		0	0	OREC embedded distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	30-Apr-18	0	0	-217812.95	ONZN		P	102105		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA PENINSULA ENERGY INC.	MP	1467	30-Apr-18	0	0	-599906.21	ONZN		P	102102		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	30-Apr-18	0	0	23284.03	ONZN		P	104422		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	30-Apr-18	0	0	-122748.6	ONZN		P	104422		0	0	OREC licensed distributor claim, current month balancing amount
NORTH BAY HYDRO DISTRIBUTION LIMITED	MP	1467	30-Apr-18	0	0	-302577.76	ONZN		P	102099		0	0	OREC licensed distributor claim, current month balancing amount
NORTHERN ONTARIO WIRES, INC.	MP	1467	30-Apr-18	0	0	-66095.83	ONZN		P	102042		0	0	OREC licensed distributor claim, current month balancing amount
O.N.TEL INC.	MP	1467	30-Apr-18	0	0	-50.61	ONZN		P	107810		0	0	Ontario Rebate for Electricity Consumers for the invoice of 2018/04
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-712723.48	ONZN		P	102366		0	0	OREC licensed distributor claim, current month balancing amount
ORANGEVILLE HYDRO LIMITED	MP	1467	30-Apr-18	0	0	-123573.61	ONZN		P	104480		0	0	OREC licensed distributor claim, current month balancing amount
ORILLIA POWER DISTRIBUTION CORPORATION	MP	1467	30-Apr-18	0	0	-173283.66	ONZN		P	104319		0	0	OREC licensed distributor claim, current month balancing amount
OSHAWA PUC NETWORKS INCORPORATED	MP	1467	30-Apr-18	0	0	-626158.19	ONZN		P	104481		0	0	OREC licensed distributor claim, current month balancing amount
PETERBOROUGH DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-386694.28	ONZN		P	102082		0	0	OREC licensed distributor claim, current month balancing amount
PIKE LAKE GOLF CENTRE LIMITED	MP	1467	30-Apr-18	0	0	-138.73	ONZN		P	145734		0	0	OREC unit sub-meter provider claim, current month balancing amount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
POWERSTREAM ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-22342.79	ONZN		P	114461		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM INC.	MP	1467	30-Apr-18	0	0	-3674915.81	ONZN		P	108825		0	0	OREC licensed distributor claim, current month balancing amount
PRIORITY SUBMETERING SOLUTIONS INC.	MP	1467	30-Apr-18	0	0	-23098	ONZN		P	110334		0	0	OREC unit sub-meter provider claim, current month balancing amount
PROVIDENT ENERGY MANAGEMENT INC.	MP	1467	30-Apr-18	0	0	-18217.18	ONZN		P	110330		0	0	OREC unit sub-meter provider claim, current month balancing amount
PUC DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-400635.42	ONZN		P	102316		0	0	OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-27.04	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-01
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-18.98	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-02
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-17.68	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-03
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-14.38	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-04
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-12.16	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-13.5	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-14.47	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-11.98	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-10.83	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-12.37	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-13.93	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-15.92	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-44.47	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-2162.81	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-11873.79	ONZN		P	105232		0	0	OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-51467.89	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
ST. THOMAS ENERGY INC.	MP	1467	30-Apr-18	0	0	-156355.85	ONZN		P	102100		0	0	OREC licensed distributor claim, current month balancing amount
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-426535.38	ONZN		P	102741		0	0	OREC licensed distributor claim, current month balancing amount
TILLSONBURG HYDRO INCORPORATED	MP	1467	30-Apr-18	0	0	-69571.89	ONZN		P	102673		0	0	OREC licensed distributor claim, current month balancing amount
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	MP	1467	30-Apr-18	0	0	-12313378.16	ONZN		P	102329		0	0	OREC licensed distributor claim, current month balancing amount
VERIDIAN CONNECTIONS INC.	MP	1467	30-Apr-18	0	0	-1247738.55	ONZN		P	102120		0	0	OREC licensed distributor claim, current month balancing amount
WASAGA DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-108952.39	ONZN		P	104278		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	30-Apr-18	0	0	-674633	ONZN		P	102004		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	30-Apr-18	0	0	-37159	ONZN		P	102004		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	30-Apr-18	0	0	-194879.39	ONZN		P	104248		0	0	OREC licensed distributor claim, current month balancing amount
WELLINGTON NORTH POWER INC.	MP	1467	30-Apr-18	0	0	-43180.12	ONZN		P	105222		0	0	OREC licensed distributor claim, current month balancing amount
WEST COAST HURON ENERGY INC.	MP	1467	30-Apr-18	0	0	-43134.23	ONZN		P	104297		0	0	OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	30-Apr-18	0	0	-300828.87	ONZN		P	104421		0	0	OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	30-Apr-18	0	0	7524.58	ONZN		P	104421		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	30-Apr-18	0	0	-461679.77	ONZN		P	104276		0	0	OREC licensed distributor claim, current month balancing amount
WYSE METER SOLUTIONS INC.	MP	1467	30-Apr-18	0	0	-70209.21	ONZN		P	110494		0	0	OREC unit sub-meter provider claim, current month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	30-Apr-18	0	0	-2906.95	ONZN		P	112232		0	0	OREC unit sub-meter provider claim, current month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	30-Apr-18	0	0	0.01	ONZN		P	112232		0	0	OREC unit sub-meter provider claim, current month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	30-Apr-18	0	0	0.01	ONZN		P	112232		0	0	OREC Sub-Meter Provider claim, previous month balancing amount for 2018-02
YES ENERGY MANAGEMENT, INC.	MP	1467	30-Apr-18	0	0	-2910.74	ONZN		P	112232		0	0	OREC Sub-Meter Provider claim, previous month balancing amount for 2018-02
YES ENERGY MANAGEMENT, INC.	MP	1467	30-Apr-18	0	0	-2923.88	ONZN		P	112232		0	0	OREC Sub-Meter Provider claim, previous month balancing amount for 2018-03
YES ENERGY MANAGEMENT, INC.	MP	1467	30-Apr-18	0	0	0.01	ONZN		P	112232		0	0	OREC Sub-Meter Provider claim, previous month balancing amount for 2018-03
IESO Settlement Report - April Total						**(61,926,992.22)**								

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	ONTEL
145752	ALEXIAN ENERGY SERVICES INC.	ALEXIAN

Participation Name
Distributor-Metered Market Participant
Distributor-Metered Market Participant
Distributor-Metered Market Participant

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Smart Submetering Provider
Ontario Rebate for Electricity Consumers for the invoice of 2017/01
Smart Submetering Provider

From: Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]
To: Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Mark Bergman (ENERGY) [Mark.Bergman@ontario.ca]; Tracy Flindall (MOF) [Tracy.Flindall@ontario.ca]; Anil Sharma (MOF) [Anil.Sharma@ontario.ca]; Dev Ram (MOF) [Dev.Ram@ontario.ca]; Naomi Morita (MOF) [Naomi.Morita@ontario.ca]; Gavin He [Gavin.He@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]
CC: Tai An (ENERGY) [Tai.An@ontario.ca]; Jose Yee (MEDTE/MRI) [Jose.Yee@ontario.ca]; Janet Lim (ENERGY) [Janet.Lim@ontario.ca]; Kwasny, Anna (MEDG/MRIS) [Anna.Kwasny@ontario.ca]; Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Dade, Christine (ENERGY) [Christine.Dade@ontario.ca]; Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]
Subject: April 2018 OREC Settlement Statement
Date: Tuesday, May 15, 2018 10:41:33
Attachment 1: image001.jpg
Attachment 2: April 2018 IESO OREC Settlement Statement.xlsx

Good Morning,

Please see the attached OREC Settlement Statement for the month of April 2018, which shows the OREC amount of $61,926,992.22.

Kindly note that the following programs are also included on the April invoice but not listed in the attached settlement statement. A separate email has been sent for these programs:

- On-Reserve First Nations Delivery Credit
- Distribution Rate Protection
- Ontario Clean Energy Benefit
- Rural and Remote Rate Protection
- Ontario Electricity Support Program

Thank you,

Ryan Lim
Financial Analyst
56 Wellesley Street West, 4th Floor
Toronto, ON M7A 2E7
Phone: (416) 561-9361

Ministry of Energy
Ministry of Economic Development & Growth
Ministry of Infrastructure
Ministry of Research, Innovation & Science


CSD
Corporate
Services
Division
Expertise | Collaboration | Respect | Service Excellence | Integrity

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X

Name													
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-856.69	ONZN		P	145752		0	0 OREC unit sub-meter provider claim, current month balancing amount
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1043.78	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-04
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1085.55	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-05
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1053.52	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-06
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1170.78	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-07
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1272.15	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-08
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1286.75	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-09
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1186.39	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-10
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1045.8	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-11
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-956.02	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-12
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1056.85	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-01
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-1044.2	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-02
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-923.7	ONZN		P	145752		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-03
ALGOMA POWER INC.	MP	1467	30-Apr-18	0	0	-138185.21	ONZN		P	110073		0	0 OREC licensed distributor claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	30-Apr-18	0	0	-17806.92	ONZN		P	110073		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-03
ATIKOKAN HYDRO INC.	MP	1467	30-Apr-18	0	0	-17366.54	ONZN		P	104277		0	0 OREC licensed distributor claim, current month balancing amount
ATTAWAPISKAT POWER CORPORATION	MP	1467	30-Apr-18	0	0	-18836.77	ONZN		P	105834		0	0 OREC licensed distributor claim, current month balancing amount
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	1467	30-Apr-18	0	0	-353098.8	ONZN		P	104271		0	0 OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	30-Apr-18	0	0	3.25	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-11
BRANTFORD POWER INC.	MP	1467	30-Apr-18	0	0	11.24	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2017-12
BRANTFORD POWER INC.	MP	1467	30-Apr-18	0	0	-20.15	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-01
BRANTFORD POWER INC.	MP	1467	30-Apr-18	0	0	-32.54	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-02
BRANTFORD POWER INC.	MP	1467	30-Apr-18	0	0	-391907.58	ONZN		P	102321		0	0 OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	30-Apr-18	0	0	-371.52	ONZN		P	102321		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-03
BURLINGTON HYDRO INC.	MP	1467	30-Apr-18	0	0	-705108.42	ONZN		P	102298		0	0 OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	30-Apr-18	0	0	-534365.58	ONZN		P	102110		0	0 OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	30-Apr-18	0	0	-5913.27	ONZN		P	102110		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-03
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	-41310.7	ONZN		P	110345		0	0 OREC unit sub-meter provider claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	4407.87	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-02
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	6194.56	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-03
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	5029.4	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-04
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	6104.53	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-05
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	8084.92	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-06
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	8354.39	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-07
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	8631.35	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-08
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	8843.71	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-09
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	9179.5	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-10
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	9566.37	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-11
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	10048.46	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2017-12
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	10328.98	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-01
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	10442.49	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-02
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	10624.37	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-03
CARMA BILLING SERVICES INC.	MP	1467	30-Apr-18	0	0	10808.17	ONZN		P	110345		0	0 OREC Sub-Meter Provider claim, previous month balancing amount for 2018-04
CENTRE WELLINGTON HYDRO LTD.	MP	1467	30-Apr-18	0	0	6.12	ONZN		P	104468		0	0 OREC licensed distributor claim, previous month balancing amount for 2018-03
CENTRE WELLINGTON HYDRO LTD.	MP	1467	30-Apr-18	0	0	-75013.45	ONZN		P	104468		0	0 OREC licensed distributor claim, current month balancing amount
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	30-Apr-18	0	0	-21296.26	ONZN		P	102049		0	0 OREC licensed distributor claim, current month balancing amount
COLLUS POWERSTREAM CORP.	MP	1467	30-Apr-18	0	0	-169079.99	ONZN		P	104281		0	0 OREC licensed distributor claim, current month balancing amount
E. L. K. ENERGY INC.	MP	1467	30-Apr-18	0	0	-96789.11	ONZN		P	102006		0	0 OREC licensed distributor claim, current month balancing amount
ENERCARE CONNECTIONS INC.	MP	1467	30-Apr-18	0	0	-231238.23	ONZN		P	110332		0	0 OREC unit sub-meter provider claim, current month balancing amount
ENERGY + INC.	MP	1467	30-Apr-18	0	0	-519632.54	ONZN		P	102299		0	0 OREC licensed distributor claim, current month balancing amount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
ENERGY + INC. (SETL)	MP	1467	30-Apr-18	0	0	-118668.44	ONZN		P	104290		0	0	OREC licensed distributor claim, current month balancing amount
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	30-Apr-18	0	0	-2062.16	ONZN		P	102089		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	30-Apr-18	0	0	-2360702.27	ONZN		P	102089		0	0	OREC licensed distributor claim, current month balancing amount
ENTEGRUS POWERLINES INC.	MP	1467	30-Apr-18	0	0	27822.65	ONZN		P	102140		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
ENTEGRUS POWERLINES INC.	MP	1467	30-Apr-18	0	0	-378809.48	ONZN		P	102140		0	0	OREC licensed distributor claim, current month balancing amount
ENWIN UTILITIES LTD.	MP	1467	30-Apr-18	0	0	-829956.22	ONZN		P	106085		0	0	OREC licensed distributor claim, current month balancing amount
ERIE THAMES POWERLINES CORPORATION	MP	1467	30-Apr-18	0	0	-192027.58	ONZN		P	104323		0	0	OREC licensed distributor claim, current month balancing amount
ESSEX POWERLINES CORPORATION	MP	1467	30-Apr-18	0	0	87843.89	ONZN		P	102217		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
ESSEX POWERLINES CORPORATION	MP	1467	30-Apr-18	0	0	-343071.44	ONZN		P	102217		0	0	OREC licensed distributor claim, current month balancing amount
FESTIVAL HYDRO INC.	MP	1467	30-Apr-18	0	0	-58.28	ONZN		P	102340		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
FESTIVAL HYDRO INC.	MP	1467	30-Apr-18	0	0	-216750	ONZN		P	102340		0	0	OREC licensed distributor claim, current month balancing amount
FORT ALBANY POWER CORPORATION	MP	1467	30-Apr-18	0	0	-11500	ONZN		P	105832		0	0	OREC licensed distributor claim, current month balancing amount
FORT FRANCES POWER CORPORATION	MP	1467	30-Apr-18	0	0	-45194.11	ONZN		P	104313		0	0	OREC licensed distributor claim, current month balancing amount
GREATER SUDBURY HYDRO INC.	MP	1467	30-Apr-18	0	0	650.84	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
GREATER SUDBURY HYDRO INC.	MP	1467	30-Apr-18	0	0	-564830.93	ONZN		P	102009		0	0	OREC licensed distributor claim, current month balancing amount
GRIMSBY POWER INCORPORATED	MP	1467	30-Apr-18	0	0	-115797.62	ONZN		P	104471		0	0	OREC licensed distributor claim, current month balancing amount
GUELPH HYDRO ELECTRIC SYSTEMS INC.	MP	1467	30-Apr-18	0	0	-439285.25	ONZN		P	104325		0	0	OREC licensed distributor claim, current month balancing amount
HALTON HILLS HYDRO INC.	MP	1467	30-Apr-18	0	0	-226544.86	ONZN		P	104284		0	0	OREC licensed distributor claim, current month balancing amount
HEARST POWER DISTRIBUTION COMPANY LIMITED	MP	1467	30-Apr-18	0	0	-35109.04	ONZN		P	104249		0	0	OREC licensed distributor claim, current month balancing amount
HORIZON UTILITIES CORPORATION	MP	1467	30-Apr-18	0	0	-2129183.14	ONZN		P	102084		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	MP	1467	30-Apr-18	0	0	-54457.15	ONZN		P	104339		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE BRAMPTON NETWORKS INC.	MP	1467	30-Apr-18	0	0	-1548019.43	ONZN		P	104279		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	30-Apr-18	0	0	-15234.38	ONZN		P	102007		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
HYDRO ONE NETWORKS INC.	MP	1467	30-Apr-18	0	0	-341999.71	ONZN		P	102007		0	0	OREC embedded distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	30-Apr-18	0	0	-17932179.82	ONZN		P	102007		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO OTTAWA LIMITED	MP	1467	30-Apr-18	0	0	-3353510.81	ONZN		P	102070		0	0	OREC licensed distributor claim, current month balancing amount
INNPOWER CORPORATION	MP	1467	30-Apr-18	0	0	-196261.05	ONZN		P	104299		0	0	OREC licensed distributor claim, current month balancing amount
KASHECHEWAN POWER CORPORATION	MP	1467	30-Apr-18	0	0	-17000	ONZN		P	105833		0	0	OREC licensed distributor claim, current month balancing amount
KENORA HYDRO ELECTRIC CORPORATION LTD.	MP	1467	30-Apr-18	0	0	-58939.15	ONZN		P	104269		0	0	OREC licensed distributor claim, current month balancing amount
KINGSTON HYDRO CORPORATION	MP	1467	30-Apr-18	0	0	-338577.82	ONZN		P	104322		0	0	OREC licensed distributor claim, current month balancing amount
KITCHENER-WILMOT HYDRO INC.	MP	1467	30-Apr-18	0	0	-900087.43	ONZN		P	104267		0	0	OREC licensed distributor claim, current month balancing amount
LAKEFRONT UTILITIES INC	MP	1467	30-Apr-18	0	0	-104687.42	ONZN		P	104487		0	0	OREC licensed distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	30-Apr-18	0	0	-136549.47	ONZN		P	113624		0	0	OREC embedded distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	30-Apr-18	0	0	-65734.77	ONZN		P	113624		0	0	OREC licensed distributor claim, current month balancing amount
LONDON HYDRO INC.	MP	1467	30-Apr-18	0	0	-1566672.65	ONZN		P	104282		0	0	OREC licensed distributor claim, current month balancing amount
MIDLAND POWER UTILITY CORPORATION	MP	1467	30-Apr-18	0	0	-86507.27	ONZN		P	104363		0	0	OREC licensed distributor claim, current month balancing amount
MILTON HYDRO DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-393280.56	ONZN		P	102743		0	0	OREC licensed distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	30-Apr-18	0	0	-36499.76	ONZN		P	102105		0	0	OREC embedded distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	30-Apr-18	0	0	-217812.95	ONZN		P	102105		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA PENINSULA ENERGY INC.	MP	1467	30-Apr-18	0	0	-599906.21	ONZN		P	102102		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	30-Apr-18	0	0	23284.03	ONZN		P	104422		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	30-Apr-18	0	0	-122748.6	ONZN		P	104422		0	0	OREC licensed distributor claim, current month balancing amount
NORTH BAY HYDRO DISTRIBUTION LIMITED	MP	1467	30-Apr-18	0	0	-302577.76	ONZN		P	102099		0	0	OREC licensed distributor claim, current month balancing amount
NORTHERN ONTARIO WIRES, INC.	MP	1467	30-Apr-18	0	0	-66095.83	ONZN		P	102042		0	0	OREC licensed distributor claim, current month balancing amount
O.N.TEL INC.	MP	1467	30-Apr-18	0	0	-50.61	ONZN		P	107810		0	0	Ontario Rebate for Electricity Consumers for the invoice of 2018/04
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-712723.48	ONZN		P	102366		0	0	OREC licensed distributor claim, current month balancing amount
ORANGEVILLE HYDRO LIMITED	MP	1467	30-Apr-18	0	0	-123573.61	ONZN		P	104480		0	0	OREC licensed distributor claim, current month balancing amount
ORILLIA POWER DISTRIBUTION CORPORATION	MP	1467	30-Apr-18	0	0	-173283.66	ONZN		P	104319		0	0	OREC licensed distributor claim, current month balancing amount
OSHAWA PUC NETWORKS INCORPORATED	MP	1467	30-Apr-18	0	0	-626158.19	ONZN		P	104481		0	0	OREC licensed distributor claim, current month balancing amount
PETERBOROUGH DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-386694.28	ONZN		P	102082		0	0	OREC licensed distributor claim, current month balancing amount
PIKE LAKE GOLF CENTRE LIMITED	MP	1467	30-Apr-18	0	0	-138.73	ONZN		P	145734		0	0	OREC unit sub-meter provider claim, current month balancing amount

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
POWERSTREAM ENERGY SERVICES INC.	MP	1467	30-Apr-18	0	0	-22342.79	ONZN		P	114461		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM INC.	MP	1467	30-Apr-18	0	0	-3674915.81	ONZN		P	108825		0	0	OREC licensed distributor claim, current month balancing amount
PRIORITY SUBMETERING SOLUTIONS INC.	MP	1467	30-Apr-18	0	0	-23098	ONZN		P	110334		0	0	OREC unit sub-meter provider claim, current month balancing amount
PROVIDENT ENERGY MANAGEMENT INC.	MP	1467	30-Apr-18	0	0	-18217.18	ONZN		P	110330		0	0	OREC unit sub-meter provider claim, current month balancing amount
PUC DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-400635.42	ONZN		P	102316		0	0	OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-27.04	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-01
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-18.98	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-02
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-17.68	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-03
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-14.38	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-04
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-12.16	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-13.5	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-14.47	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-11.98	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-10.83	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-12.37	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-13.93	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-15.92	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-44.47	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-2162.81	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-11873.79	ONZN		P	105232		0	0	OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-51467.89	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
ST. THOMAS ENERGY INC.	MP	1467	30-Apr-18	0	0	-156355.85	ONZN		P	102100		0	0	OREC licensed distributor claim, current month balancing amount
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-426535.38	ONZN		P	102741		0	0	OREC licensed distributor claim, current month balancing amount
TILLSONBURG HYDRO INCORPORATED	MP	1467	30-Apr-18	0	0	-69571.89	ONZN		P	102673		0	0	OREC licensed distributor claim, current month balancing amount
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	MP	1467	30-Apr-18	0	0	-12313378.16	ONZN		P	102329		0	0	OREC licensed distributor claim, current month balancing amount
VERIDIAN CONNECTIONS INC.	MP	1467	30-Apr-18	0	0	-1247738.55	ONZN		P	102120		0	0	OREC licensed distributor claim, current month balancing amount
WASAGA DISTRIBUTION INC.	MP	1467	30-Apr-18	0	0	-108952.39	ONZN		P	104278		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	30-Apr-18	0	0	-674633	ONZN		P	102004		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	30-Apr-18	0	0	-37159	ONZN		P	102004		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	30-Apr-18	0	0	-194879.39	ONZN		P	104248		0	0	OREC licensed distributor claim, current month balancing amount
WELLINGTON NORTH POWER INC.	MP	1467	30-Apr-18	0	0	-43180.12	ONZN		P	105222		0	0	OREC licensed distributor claim, current month balancing amount
WEST COAST HURON ENERGY INC.	MP	1467	30-Apr-18	0	0	-43134.23	ONZN		P	104297		0	0	OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	30-Apr-18	0	0	-300828.87	ONZN		P	104421		0	0	OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	30-Apr-18	0	0	7524.58	ONZN		P	104421		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	30-Apr-18	0	0	-461679.77	ONZN		P	104276		0	0	OREC licensed distributor claim, current month balancing amount
WYSE METER SOLUTIONS INC.	MP	1467	30-Apr-18	0	0	-70209.21	ONZN		P	110494		0	0	OREC unit sub-meter provider claim, current month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	30-Apr-18	0	0	-2906.95	ONZN		P	112232		0	0	OREC unit sub-meter provider claim, current month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	30-Apr-18	0	0	0.01	ONZN		P	112232		0	0	OREC unit sub-meter provider claim, current month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	30-Apr-18	0	0	0.01	ONZN		P	112232		0	0	OREC Sub-Meter Provider claim, previous month balancing amount for 2018-02
YES ENERGY MANAGEMENT, INC.	MP	1467	30-Apr-18	0	0	-2910.74	ONZN		P	112232		0	0	OREC Sub-Meter Provider claim, previous month balancing amount for 2018-02
YES ENERGY MANAGEMENT, INC.	MP	1467	30-Apr-18	0	0	-2923.88	ONZN		P	112232		0	0	OREC Sub-Meter Provider claim, previous month balancing amount for 2018-03
YES ENERGY MANAGEMENT, INC.	MP	1467	30-Apr-18	0	0	0.01	ONZN		P	112232		0	0	OREC Sub-Meter Provider claim, previous month balancing amount for 2018-03
IESO Settlement Report - April Total						**(61,926,992.22)**								

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	ONTEL
145752	ALEXIAN ENERGY SERVICES INC.	ALEXIAN

Participation Name
Distributor-Metered Market Participant
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Distributor-Metered Market Participant
Smart Submetering Provider
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Smart Submetering Provider
Ontario Rebate for Electricity Consumers for the invoice of 2017/01
Smart Submetering Provider

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002

Issue / Re-Issue Date: 16-JUL-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00023446
Invoice Date: 16-JUL-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**
Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-JUN-2018 To 30-JUN-2018

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$1,355,911.40
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$13,134,364.20
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$58,139,471.51
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$19,800,006.79
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT	$14,219,729.08
Invoice Total:	$CAD	106,649,482.98

Payment Due Date 18-JUL-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

Name	1 Record type	2 Charge type	3 Trading date	4 Trading hour	5 Trading interval	6 Adjustment amount	7 Zone id	8 Location id	9 Settlement type	10 MP ID	11 Price	12 Tax rate	13 Tax amount	14 Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Jun-18	0	0	-895.79	ONZN		P	145752		0	0	OREC unit sub-meter provider claim, current month balancing amount
ALEXIAN ENERGY SERVICES INC.	MP	1467	30-Jun-18	0	0	-858,081.78	ONZN		P	145752		0	0	Issue 840: Ontario Rebate for Electricity Consumers Balancing Amount, Invoices from 01/2017 to 05/2018
ALGOMA POWER INC.	MP	1467	30-Jun-18	0	0	-12,676.81	ONZN		P	110073		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
ALGOMA POWER INC.	MP	1467	30-Jun-18	0	0	-107,814.81	ONZN		P	110073		0	0	OREC licensed distributor claim, current month balancing amount
ATIKOKAN HYDRO INC.	MP	1467	30-Jun-18	0	0	-15,015.75	ONZN		P	104277		0	0	OREC licensed distributor claim, current month balancing amount
ATTAWAPISKAT POWER CORPORATION	MP	1467	30-Jun-18	0	0	-12,542.10	ONZN		P	105834		0	0	OREC licensed distributor claim, current month balancing amount
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	1467	30-Jun-18	0	0	-316,497.84	ONZN		P	104271		0	0	OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	30-Jun-18	0	0	-358,921.86	ONZN		P	102321		0	0	OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	30-Jun-18	0	0	-7.43	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
BRANTFORD POWER INC.	MP	1467	30-Jun-18	0	0	8.10	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
BRANTFORD POWER INC.	MP	1467	30-Jun-18	0	0	13.19	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
BRANTFORD POWER INC.	MP	1467	30-Jun-18	0	0	-29.69	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
BRANTFORD POWER INC.	MP	1467	30-Jun-18	0	0	-358.47	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
BRANTFORD POWER INC.	MP	1467	43281	0	0	-3.62	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
BRANTFORD POWER INC.	MP	1467	43281	0	0	-12.21	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
BURLINGTON HYDRO INC.	MP	1467	30-Jun-18	0	0	-647,631.99	ONZN		P	102298		0	0	OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	30-Jun-18	0	0	-34,641.77	ONZN		P	102110		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
CANADIAN NIAGARA POWER INC.	MP	1467	30-Jun-18	0	0	-544,349.21	ONZN		P	102110		0	0	OREC licensed distributor claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	30-Jun-18	0	0	-43,123.83	ONZN		P	110345		0	0	OREC unit sub-meter provider claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	30-Jun-18	0	0	11,207.75	ONZN		P	110345		0	0	OREC unit sub-meter provider claim, current month balancing amount
CENTRE WELLINGTON HYDRO LTD.	MP	1467	30-Jun-18	0	0	-66,853.80	ONZN		P	104468		0	0	OREC licensed distributor claim, current month balancing amount
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	30-Jun-18	0	0	-12,918.17	ONZN		P	102049		0	0	OREC licensed distributor claim, current month balancing amount
COLLUS POWERSTREAM CORP.	MP	1467	30-Jun-18	0	0	-155,041.06	ONZN		P	104281		0	0	OREC licensed distributor claim, current month balancing amount
E. L. K. ENERGY INC.	MP	1467	30-Jun-18	0	0	-91,270.61	ONZN		P	102006		0	0	OREC licensed distributor claim, current month balancing amount
ENERCARE CONNECTIONS INC.	MP	1467	30-Jun-18	0	0	-279,829.67	ONZN		P	110332		0	0	OREC unit sub-meter provider claim, current month balancing amount
ENERGY + INC.	MP	1467	30-Jun-18	0	0	-476,183.16	ONZN		P	102299		0	0	OREC licensed distributor claim, current month balancing amount
ENERGY + INC. (SETL)	MP	1467	30-Jun-18	0	0	-100,181.67	ONZN		P	104290		0	0	OREC licensed distributor claim, current month balancing amount
ENERSOURCE HYDRO MISSISSAUGA INC.	MP	1467	30-Jun-18	0	0	-2,103,814.73	ONZN		P	102089		0	0	OREC licensed distributor claim, current month balancing amount
ENTEGRUS POWERLINES INC.	MP	1467	30-Jun-18	0	0	-449,355.70	ONZN		P	102140		0	0	OREC licensed distributor claim, current month balancing amount
ENTEGRUS POWERLINES INC.	MP	1467	30-Jun-18	0	0	110,818.59	ONZN		P	102140		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
ENTEGRUS POWERLINES INC.	MP	1467	30-Jun-18	0	0	-223,746.41	ONZN		P	102140		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
ENWIN UTILITIES LTD.	MP	1467	30-Jun-18	0	0	-795,889.11	ONZN		P	106085		0	0	OREC licensed distributor claim, current month balancing amount
ERIE THAMES POWERLINES CORPORATION	MP	1467	30-Jun-18	0	0	-173,008.27	ONZN		P	104323		0	0	OREC licensed distributor claim, current month balancing amount
ESSEX POWERLINES CORPORATION	MP	1467	30-Jun-18	0	0	73,682.44	ONZN		P	102217		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
ESSEX POWERLINES CORPORATION	MP	1467	30-Jun-18	0	0	-395,036.57	ONZN		P	102217		0	0	OREC licensed distributor claim, current month balancing amount
FESTIVAL HYDRO INC.	MP	1467	30-Jun-18	0	0	88.38	ONZN		P	102340		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
FESTIVAL HYDRO INC.	MP	1467	30-Jun-18	0	0	-195,355.22	ONZN		P	102340		0	0	OREC licensed distributor claim, current month balancing amount
FORT ALBANY POWER CORPORATION	MP	1467	30-Jun-18	0	0	-7,590.00	ONZN		P	105832		0	0	OREC licensed distributor claim, current month balancing amount
FORT FRANCES POWER CORPORATION	MP	1467	30-Jun-18	0	0	-35,188.72	ONZN		P	104313		0	0	OREC licensed distributor claim, current month balancing amount
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-461,618.38	ONZN		P	102009		0	0	OREC licensed distributor claim, current month balancing amount
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-1,696.06	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-1,078.63	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-1,695.99	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-597.72	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-525.67	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-1,695.91	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-1,695.84	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-526.00	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	36.48	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-971.61	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
Name	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-1,845.63	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-01
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-402.06	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-01
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-560.79	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-02
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-2,269.77	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-02
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-2,062.85	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-03
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-667.34	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-03
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-416.04	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-04
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-1,090.08	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-04
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-1,696.62	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-519.25	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-576.93	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-1,696.55	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-1,696.48	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-558.03	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-611.68	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-1,696.41	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-1,696.34	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-665.96	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
GREATER SUDBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-608.16	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
GREATER SUDBURY HYDRO INC.	MP	1467	43281	0	0	**-630.71**	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
GREATER SUDBURY HYDRO INC.	MP	1467	43281	0	0	-1,696.27	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
GREATER SUDBURY HYDRO INC.	MP	1467	43281	0	0	-1,696.20	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
GREATER SUDBURY HYDRO INC.	MP	1467	43281	0	0	-1,696.13	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
GREATER SUDBURY HYDRO INC.	MP	1467	43281	0	0	-497.55	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
GRIMSBY POWER INCORPORATED	MP	1467	30-Jun-18	0	0	-112,092.77	ONZN		P	104471		0	0	OREC licensed distributor claim, current month balancing amount
GUELPH HYDRO ELECTRIC SYSTEMS INC.	MP	1467	30-Jun-18	0	0	-487,561.03	ONZN		P	104325		0	0	OREC licensed distributor claim, current month balancing amount
HALTON HILLS HYDRO INC.	MP	1467	30-Jun-18	0	0	-237,882.48	ONZN		P	104284		0	0	OREC licensed distributor claim, current month balancing amount
HEARST POWER DISTRIBUTION COMPANY LIMITED	MP	1467	30-Jun-18	0	0	-27,263.77	ONZN		P	104249		0	0	OREC licensed distributor claim, current month balancing amount
HORIZON UTILITIES CORPORATION	MP	1467	30-Jun-18	0	0	-2,320,380.19	ONZN		P	102084		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	MP	1467	30-Jun-18	0	0	-50,193.90	ONZN		P	104339		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE BRAMPTON NETWORKS INC.	MP	1467	30-Jun-18	0	0	-1,847,584.43	ONZN		P	104279		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	30-Jun-18	0	0	-264,474.04	ONZN		P	102007		0	0	OREC embedded distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	30-Jun-18	0	0	-15,121,407.42	ONZN		P	102007		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	30-Jun-18	0	0	-42,604.56	ONZN		P	102007		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
HYDRO OTTAWA LIMITED	MP	1467	30-Jun-18	0	0	-3,308,703.09	ONZN		P	102070		0	0	OREC licensed distributor claim, current month balancing amount
INNPOWER CORPORATION	MP	1467	30-Jun-18	0	0	-173,850.39	ONZN		P	104299		0	0	OREC licensed distributor claim, current month balancing amount
KASHECHEWAN POWER CORPORATION	MP	1467	30-Jun-18	0	0	-11,004.73	ONZN		P	105833		0	0	OREC licensed distributor claim, current month balancing amount
KENORA HYDRO ELECTRIC CORPORATION LTD.	MP	1467	30-Jun-18	0	0	-46,646.26	ONZN		P	104269		0	0	OREC licensed distributor claim, current month balancing amount
KINGSTON HYDRO CORPORATION	MP	1467	30-Jun-18	0	0	-218,373.66	ONZN		P	104322		0	0	OREC licensed distributor claim, current month balancing amount
KITCHENER-WILMOT HYDRO INC.	MP	1467	30-Jun-18	0	0	-805,258.01	ONZN		P	104267		0	0	OREC licensed distributor claim, current month balancing amount
LAKEFRONT UTILITIES INC	MP	1467	30-Jun-18	0	0	-86,706.08	ONZN		P	104487		0	0	OREC licensed distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	30-Jun-18	0	0	-105,855.91	ONZN		P	113624		0	0	OREC embedded distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	30-Jun-18	0	0	-50,136.03	ONZN		P	113624		0	0	OREC licensed distributor claim, current month balancing amount
LONDON HYDRO INC.	MP	1467	30-Jun-18	0	0	-1,406,504.73	ONZN		P	104282		0	0	OREC licensed distributor claim, current month balancing amount
MIDLAND POWER UTILITY CORPORATION	MP	1467	30-Jun-18	0	0	-73,805.41	ONZN		P	104363		0	0	OREC licensed distributor claim, current month balancing amount
MILTON HYDRO DISTRIBUTION INC.	MP	1467	30-Jun-18	0	0	-378,882.14	ONZN		P	102743		0	0	OREC licensed distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	30-Jun-18	0	0	-33,029.81	ONZN		P	102105		0	0	OREC embedded distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	30-Jun-18	0	0	-292,881.03	ONZN		P	102105		0	0	OREC licensed distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	30-Jun-18	0	0	-325,910.84	ONZN		P	102105		0	0	OREC licensed retailer claim, current month balancing amount
NIAGARA PENINSULA ENERGY INC.	MP	1467	30-Jun-18	0	0	-549,117.13	ONZN		P	102102		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	30-Jun-18	0	0	-135,289.82	ONZN		P	104422		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	30-Jun-18	0	0	-2,784.60	ONZN		P	104422		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
NORTH BAY HYDRO DISTRIBUTION LIMITED	MP	1467	30-Jun-18	0	0	-241,520.13	ONZN		P	102099		0	0	OREC licensed distributor claim, current month balancing amount
NORTHERN ONTARIO WIRES, INC.	MP	1467	30-Jun-18	0	0	-54,657.24	ONZN		P	102042		0	0	OREC licensed distributor claim, current month balancing amount
O.N.TEL INC.	MP	1467	30-Jun-18	0	0	-50.10	ONZN		P	107810		0	0	Ontario Rebate for Electricity Consumers for the invoice of 2018/06
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	30-Jun-18	0	0	-812,267.66	ONZN		P	102366		0	0	OREC licensed distributor claim, current month balancing amount
ORANGEVILLE HYDRO LIMITED	MP	1467	30-Jun-18	0	0	-119,462.08	ONZN		P	104480		0	0	OREC licensed distributor claim, current month balancing amount

Name	1 Record type	2 Charge type	3 Trading date	4 Trading hour	5 Trading interval	6 Adjustment amount	7 Zone id	8 Location id	9 Settlement type	10 MP ID	11 Price	12 Tax rate	13 Tax amount	14 Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
ORILLIA POWER DISTRIBUTION CORPORATION	MP	1467	30-Jun-18	0	0	-147,063.57	ONZN		P	104319		0	0	OREC licensed distributor claim, current month balancing amount
OSHAWA PUC NETWORKS INCORPORATED	MP	1467	30-Jun-18	0	0	-548,659.30	ONZN		P	104481		0	0	OREC licensed distributor claim, current month balancing amount
PETERBOROUGH DISTRIBUTION INC.	MP	1467	30-Jun-18	0	0	-261,691.16	ONZN		P	102082		0	0	OREC licensed distributor claim, current month balancing amount
PIKE LAKE GOLF CENTRE LIMITED	MP	1467	30-Jun-18	0	0	-686.50	ONZN		P	145734		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM ENERGY SERVICES INC.	MP	1467	30-Jun-18	0	0	-22,793.60	ONZN		P	114461		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM INC.	MP	1467	30-Jun-18	0	0	-3,655,623.16	ONZN		P	108825		0	0	OREC licensed distributor claim, current month balancing amount
PRIORITY SUBMETERING SOLUTIONS INC.	MP	1467	30-Jun-18	0	0	-23,632.90	ONZN		P	110334		0	0	OREC unit sub-meter provider claim, current month balancing amount
PROVIDENT ENERGY MANAGEMENT INC.	MP	1467	30-Jun-18	0	0	-22,287.78	ONZN		P	110330		0	0	OREC unit sub-meter provider claim, current month balancing amount
PUC DISTRIBUTION INC.	MP	1467	30-Jun-18	0	0	-301,522.71	ONZN		P	102316		0	0	OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Jun-18	0	0	-8,605.61	ONZN		P	105232		0	0	OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Jun-18	0	0	706.22	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Jun-18	0	0	2,884.52	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	30-Jun-18	0	0	-39,591.11	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	30-Jun-18	0	0	-313,275.29	ONZN		P	102741		0	0	OREC licensed distributor claim, current month balancing amount
TILLSONBURG HYDRO INCORPORATED	MP	1467	30-Jun-18	0	0	-66,923.34	ONZN		P	102673		0	0	OREC licensed distributor claim, current month balancing amount
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	MP	1467	30-Jun-18	0	0	-11,494,730.55	ONZN		P	102329		0	0	OREC licensed distributor claim, current month balancing amount
VERIDIAN CONNECTIONS INC.	MP	1467	30-Jun-18	0	0	-1,035,003.09	ONZN		P	102120		0	0	OREC licensed distributor claim, current month balancing amount
WASAGA DISTRIBUTION INC.	MP	1467	30-Jun-18	0	0	-91,139.50	ONZN		P	104278		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	30-Jun-18	0	0	-687,474.00	ONZN		P	102004		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	30-Jun-18	0	0	104,665.00	ONZN		P	102004		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	30-Jun-18	0	0	-189,021.70	ONZN		P	104248		0	0	OREC licensed distributor claim, current month balancing amount
WELLINGTON NORTH POWER INC.	MP	1467	30-Jun-18	0	0	-36,040.22	ONZN		P	105222		0	0	OREC licensed distributor claim, current month balancing amount
WEST COAST HURON ENERGY INC.	MP	1467	30-Jun-18	0	0	-36,751.06	ONZN		P	104297		0	0	OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	30-Jun-18	0	0	-214,705.47	ONZN		P	104421		0	0	OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	30-Jun-18	0	0	40,435.42	ONZN		P	104421		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
WESTARIO POWER INC	MP	1467	30-Jun-18	0	0	12,581.96	ONZN		P	104421		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
WESTARIO POWER INC	MP	1467	30-Jun-18	0	0	-40,435.42	ONZN		P	104421		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	30-Jun-18	0	0	-427,054.69	ONZN		P	104276		0	0	OREC licensed distributor claim, current month balancing amount
WYSE METER SOLUTIONS INC.	MP	1467	30-Jun-18	0	0	-74,222.89	ONZN		P	110494		0	0	OREC unit sub-meter provider claim, current month balancing amount
IESO Settlement Report - June Total						**(58,139,471.51)**								

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	
145752	ALEXIAN ENERGY SERVICES INC.	ALEXIAN

Participation Name
Distributor-Metered Market Participant
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Ontario Rebate for Electricity Consumers for the invoice of 2017/01
Smart Submetering Provider

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SC	755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS		30-Jun-18
SC	756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION		30-Jun-18
SC	1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (		30-Jun-18
SC	1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT		30-Jun-18
SC	2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM		30-Jun-18
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0	-497.55	ONZN	P	102009
0	-12.21	ONZN	P	102321
0	-19800006.79	ONZN	P	102007
0	-14219729.08	ONZN	P	

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amount

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002
Issue / Re-Issue Date: 15-AUG-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00023763
Invoice Date: 15-AUG-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: TD Bank
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**
Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-JUL-2018 To 31-JUL-2018

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$1,428,577.91
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$15,687,096.18
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$68,061,551.33
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$19,872,279.47
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT	$13,846,440.45
Invoice Total:	$CAD	118,895,945.34

Payment Due Date 17-AUG-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

From: Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]
To: Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Ken Kandeepan [Ken.Kandeepan@ofina.on.ca]; George Sakura [George.Sakura@ofina.on.ca]; Asokan Sadasivan (MEDTE/MRI) [Asokan.Sadasivan@ontario.ca]; Kamala Sinnadurai (ENERGY) [Kamala.Sinnadurai@ontario.ca]; Gregor Schoenebeck [Gregor.Schoenebeck@ofina.on.ca]; John Psinas [John.Psinas@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]; Gavin He [Gavin.He@ofina.on.ca]; John Kim [John.Kim@ofina.on.ca]; Kevin Hwang [Kevin.Hwang@ofina.on.ca]
CC: Tai An (ENERGY) [Tai.An@ontario.ca]; Jose Yee (MEDTE/MRI) [Jose.Yee@ontario.ca]; Janet Lim (ENERGY) [Janet.Lim@ontario.ca]; Kwasny, Anna (MEDJCT) [Anna.Kwasny@ontario.ca]; Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Mike Smith (ENERGY) [Mike.Smith@ontario.ca]; Dade, Christine (ENERGY) [Christine.Dade@ontario.ca]; Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]
Subject: July 2018 IESO Invoice - OREC
Date: Thursday, August 16, 2018 14:45:01
Attachment 1: image001.jpg
Attachment 2: July 2018 IESO Invoice (Aug 15).pdf

Good Afternoon,

Please see the attached IESO Invoice for the month of July 2018. Please proceed with processing the OREC payment for the amount of $68,061,551.33.

Kindly note that the following programs are also included on the July invoice, and a separate email will be sent regarding payment information and approval for these:

- On-Reserve First Nations Delivery Credit
- Distribution Rate Protection
- Rural and Remote Rate Protection
- Ontario Electricity Support Program

Thank you,

Ryan Lim
Financial Analyst
56 Wellesley Street West, 4th Floor
Toronto, ON M7A 2E7
Phone: (416) 561-9361

Ministry of Energy, Northern Development and Mines (Energy)
Ministry of Economic Development, Job Creation and Trade
Ministry of Infrastructure


CSD
Corporate
Services
Division
Expertise | Collaboration | Respect | Service Excellence | Integrity

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002
Issue / Re-Issue Date: 15-AUG-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00023763
Invoice Date: 15-AUG-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: TD Bank
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**
Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-JUL-2018 To 31-JUL-2018

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$1,428,577.91
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$15,687,096.18
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1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$19,872,279.47
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT	$13,846,440.45
Invoice Total:	$CAD	118,895,945.34

Payment Due Date 17-AUG-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Name	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
ALECTRA UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-8275297.59	ONZN		P	183295		0	0	OREC licensed distributor claim, current month balancing amount
ALEXIAN ENERGY SERVICES INC.	MP	1467	31-Jul-18	0	0	-1006.13	ONZN		P	145752		0	0	OREC unit sub-meter provider claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	31-Jul-18	0	0	-3159.85	ONZN		P	110073		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
ALGOMA POWER INC.	MP	1467	31-Jul-18	0	0	-120851.4	ONZN		P	110073		0	0	OREC licensed distributor claim, current month balancing amount
ATIKOKAN HYDRO INC.	MP	1467	31-Jul-18	0	0	-16610.94	ONZN		P	104277		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-07
ATTAWAPISKAT POWER CORPORATION	MP	1467	31-Jul-18	0	0	-9649.81	ONZN		P	105834		0	0	OREC licensed distributor claim, current month balancing amount
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	1467	31-Jul-18	0	0	-432716.69	ONZN		P	104271		0	0	OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	25.01	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	10.72	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	5.11	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	1.72	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	0.71	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	-7.56	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	-22.8	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	-290.64	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	-434840.92	ONZN		P	102321		0	0	OREC licensed distributor claim, current month balancing amount
BURLINGTON HYDRO INC.	MP	1467	31-Jul-18	0	0	-823984.81	ONZN		P	102298		0	0	OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	31-Jul-18	0	0	4373.84	ONZN		P	102110		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
CANADIAN NIAGARA POWER INC.	MP	1467	31-Jul-18	0	0	-675589.34	ONZN		P	102110		0	0	OREC licensed distributor claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	31-Jul-18	0	0	11268.68	ONZN		P	110345		0	0	OREC unit sub-meter provider claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	31-Jul-18	0	0	-43103.25	ONZN		P	110345		0	0	OREC unit sub-meter provider claim, current month balancing amount
CENTRE WELLINGTON HYDRO LTD.	MP	1467	31-Jul-18	0	0	908.88	ONZN		P	104468		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
CENTRE WELLINGTON HYDRO LTD.	MP	1467	31-Jul-18	0	0	-69041.1	ONZN		P	104468		0	0	OREC licensed distributor claim, current month balancing amount
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-11073.55	ONZN		P	102049		0	0	OREC licensed distributor claim, current month balancing amount
COLLUS POWERSTREAM CORP.	MP	1467	31-Jul-18	0	0	-150872.82	ONZN		P	104281		0	0	OREC licensed distributor claim, current month balancing amount
E. L. K. ENERGY INC.	MP	1467	31-Jul-18	0	0	-106329.81	ONZN		P	102006		0	0	OREC licensed distributor claim, current month balancing amount
ENERCARE CONNECTIONS INC.	MP	1467	31-Jul-18	0	0	-254961.51	ONZN		P	110332		0	0	OREC unit sub-meter provider claim, current month balancing amount
ENERGY + INC.	MP	1467	31-Jul-18	0	0	-541905.95	ONZN		P	102299		0	0	OREC licensed distributor claim, current month balancing amount
ENERGY + INC. (SETL)	MP	1467	31-Jul-18	0	0	-113570.09	ONZN		P	104290		0	0	OREC licensed distributor claim, current month balancing amount
ENTEGRUS POWERLINES INC.	MP	1467	31-Jul-18	0	0	-144902.73	ONZN		P	102140		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
ENTEGRUS POWERLINES INC.	MP	1467	31-Jul-18	0	0	-449977.91	ONZN		P	102140		0	0	OREC licensed distributor claim, current month balancing amount
ENWIN UTILITIES LTD.	MP	1467	31-Jul-18	0	0	-1051130.64	ONZN		P	106085		0	0	OREC licensed distributor claim, current month balancing amount
ERIE THAMES POWERLINES CORPORATION	MP	1467	31-Jul-18	0	0	-198057.26	ONZN		P	104323		0	0	OREC licensed distributor claim, current month balancing amount
ESSEX POWERLINES CORPORATION	MP	1467	31-Jul-18	0	0	27120.27	ONZN		P	102217		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
ESSEX POWERLINES CORPORATION	MP	1467	31-Jul-18	0	0	-406562.12	ONZN		P	102217		0	0	OREC licensed distributor claim, current month balancing amount
FESTIVAL HYDRO INC.	MP	1467	31-Jul-18	0	0	292.82	ONZN		P	102340		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
FESTIVAL HYDRO INC.	MP	1467	31-Jul-18	0	0	-217866.5	ONZN		P	102340		0	0	OREC licensed distributor claim, current month balancing amount
FORT ALBANY POWER CORPORATION	MP	1467	31-Jul-18	0	0	-4896.83	ONZN		P	105832		0	0	OREC licensed distributor claim, current month balancing amount
FORT FRANCES POWER CORPORATION	MP	1467	31-Jul-18	0	0	-35838.28	ONZN		P	104313		0	0	OREC licensed distributor claim, current month balancing amount
GREATER SUDBURY HYDRO INC.	MP	1467	31-Jul-18	0	0	16384.66	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
GREATER SUDBURY HYDRO INC.	MP	1467	31-Jul-18	0	0	5151.04	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
GREATER SUDBURY HYDRO INC.	MP	1467	31-Jul-18	0	0	-488935.11	ONZN		P	102009		0	0	OREC licensed distributor claim, current month balancing amount
GRIMSBY POWER INCORPORATED	MP	1467	31-Jul-18	0	0	-120941.79	ONZN		P	104471		0	0	OREC licensed distributor claim, current month balancing amount
GUELPH HYDRO ELECTRIC SYSTEMS INC.	MP	1467	31-Jul-18	0	0	-589558.1	ONZN		P	104325		0	0	OREC licensed distributor claim, current month balancing amount
HALTON HILLS HYDRO INC.	MP	1467	31-Jul-18	0	0	-285799.24	ONZN		P	104284		0	0	OREC licensed distributor claim, current month balancing amount
HEARST POWER DISTRIBUTION COMPANY LIMITED	MP	1467	31-Jul-18	0	0	-25445.43	ONZN		P	104249		0	0	OREC licensed distributor claim, current month balancing amount
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-2029.11	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-3199.04	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-04
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-3436.18	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-5278.52	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-01

Name	1 Record type	2 Charge type	3 Trading date	4 Trading hour	5 Trading interval	6 Adjustment amount	7 Zone id	8 Location id	9 Settlement type	10 MP ID	11 Price	12 Tax rate	13 Tax amount	14 Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-5406.14	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-02
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-5819.9	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-03
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-6165.91	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-6341.62	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-7099.67	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-7100.82	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-7545.14	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-7659.85	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-7714.72	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-8747.57	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-9864.81	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-10720.3	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-10755.37	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-2832075.49	ONZN		P	102084		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	MP	1467	31-Jul-18	0	0	-49498.13	ONZN		P	104339		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE BRAMPTON NETWORKS INC.	MP	1467	31-Jul-18	0	0	-2264269.65	ONZN		P	104279		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-Jul-18	0	0	1609.39	ONZN		P	102007		0	0	OREC embedded distributor claim, previous month balancing amount for 2018-06
HYDRO ONE NETWORKS INC.	MP	1467	31-Jul-18	0	0	-289960.63	ONZN		P	102007		0	0	OREC embedded distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-Jul-18	0	0	-16960318.68	ONZN		P	102007		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO OTTAWA LIMITED	MP	1467	31-Jul-18	0	0	-5296.7	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
HYDRO OTTAWA LIMITED	MP	1467	31-Jul-18	0	0	-4433393.35	ONZN		P	102070		0	0	OREC licensed distributor claim, current month balancing amount
INNPOWER CORPORATION	MP	1467	31-Jul-18	0	0	-186996.36	ONZN		P	104299		0	0	OREC licensed distributor claim, current month balancing amount
KASHECHEWAN POWER CORPORATION	MP	1467	31-Jul-18	0	0	-10400.89	ONZN		P	105833		0	0	OREC licensed distributor claim, current month balancing amount
KENORA HYDRO ELECTRIC CORPORATION LTD.	MP	1467	31-Jul-18	0	0	-53215.21	ONZN		P	104269		0	0	OREC licensed distributor claim, current month balancing amount
KINGSTON HYDRO CORPORATION	MP	1467	31-Jul-18	0	0	-267657.41	ONZN		P	104322		0	0	OREC licensed distributor claim, current month balancing amount
KITCHENER-WILMOT HYDRO INC.	MP	1467	31-Jul-18	0	0	-893673.33	ONZN		P	104267		0	0	OREC licensed distributor claim, current month balancing amount
LAKEFRONT UTILITIES INC	MP	1467	31-Jul-18	0	0	-97586.45	ONZN		P	104487		0	0	OREC licensed distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-Jul-18	0	0	-50540.08	ONZN		P	113624		0	0	OREC licensed distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-Jul-18	0	0	-109302.76	ONZN		P	113624		0	0	OREC embedded distributor claim, current month balancing amount
LONDON HYDRO INC.	MP	1467	31-Jul-18	0	0	-1843410.57	ONZN		P	104282		0	0	OREC licensed distributor claim, current month balancing amount
MCMASTER UNIVERSITY	MP	1467	31-Jul-18	0	0	-53809.26	ONZN		P	104357		0	0	Ontario Rebate for Electricity Consumers (8% Provincial Rebate) Balancing Amount, Invoice June 2018
MCMASTER UNIVERSITY	MP	1467	31-Jul-18	0	0	-76603.44	ONZN		P	104357		0	0	Ontario Rebate for Electricity Consumers (8% Provincial Rebate) Balancing Amount, Invoice July 2018
MIDLAND POWER UTILITY CORPORATION	MP	1467	31-Jul-18	0	0	-78789.95	ONZN		P	104363		0	0	OREC licensed distributor claim, current month balancing amount
MILTON HYDRO DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-475317.9	ONZN		P	102743		0	0	OREC licensed distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-Jul-18	0	0	325910.84	ONZN		P	102105		0	0	OREC licensed retailer claim, previous month balancing amount for 2018-06
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-Jul-18	0	0	-33068.54	ONZN		P	102105		0	0	OREC embedded distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-Jul-18	0	0	-315244.88	ONZN		P	102105		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA PENINSULA ENERGY INC.	MP	1467	31-Jul-18	0	0	-631517.33	ONZN		P	102102		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-Jul-18	0	0	13432.33	ONZN		P	104422		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-Jul-18	0	0	-160251.77	ONZN		P	104422		0	0	OREC licensed distributor claim, current month balancing amount
NORTH BAY HYDRO DISTRIBUTION LIMITED	MP	1467	31-Jul-18	0	0	-237495.48	ONZN		P	102099		0	0	OREC licensed distributor claim, current month balancing amount
NORTHERN ONTARIO WIRES, INC.	MP	1467	31-Jul-18	0	0	-55363.62	ONZN		P	102042		0	0	OREC licensed distributor claim, current month balancing amount
O.N.TEL INC.	MP	1467	31-Jul-18	0	0	-52.19	ONZN		P	107810		0	0	Ontario Rebate for Electricity Consumers for the invoice of 2018/07
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-1054197.49	ONZN		P	102366		0	0	OREC licensed distributor claim, current month balancing amount
ORANGEVILLE HYDRO LIMITED	MP	1467	31-Jul-18	0	0	-115814.39	ONZN		P	104480		0	0	OREC licensed distributor claim, current month balancing amount
ORILLIA POWER DISTRIBUTION CORPORATION	MP	1467	31-Jul-18	0	0	-154004.66	ONZN		P	104319		0	0	OREC licensed distributor claim, current month balancing amount
OSHAWA PUC NETWORKS INCORPORATED	MP	1467	31-Jul-18	0	0	-653421.62	ONZN		P	104481		0	0	OREC licensed distributor claim, current month balancing amount
PETERBOROUGH DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-355891.34	ONZN		P	102082		0	0	OREC licensed distributor claim, current month balancing amount
PIKE LAKE GOLF CENTRE LIMITED	MP	1467	31-Jul-18	0	0	-131.56	ONZN		P	145734		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM ENERGY SERVICES INC.	MP	1467	31-Jul-18	0	0	-22629.55	ONZN		P	114461		0	0	OREC unit sub-meter provider claim, current month balancing amount
PRIORITY SUBMETERING SOLUTIONS INC.	MP	1467	31-Jul-18	0	0	1328.08	ONZN		P	110334		0	0	OREC Sub-Meter Provider claim, previous month balancing amount for 2017-10
PRIORITY SUBMETERING SOLUTIONS INC.	MP	1467	31-Jul-18	0	0	-23914.1	ONZN		P	110334		0	0	OREC unit sub-meter provider claim, current month balancing amount
PROVIDENT ENERGY MANAGEMENT INC.	MP	1467	31-Jul-18	0	0	-21206.27	ONZN		P	110330		0	0	OREC unit sub-meter provider claim, current month balancing amount
PUC DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-309166.98	ONZN		P	102316		0	0	OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	51.54	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-2453.89	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-44179.13	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
Name	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
ST. THOMAS ENERGY INC.	MP	1467	31-Jul-18	0	0	-29499.95	ONZN		P	102100		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
ST. THOMAS ENERGY INC.	MP	1467	31-Jul-18	0	0	-172455.25	ONZN		P	102100		0	0	OREC licensed distributor claim, current month balancing amount
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-436298.5	ONZN		P	102741		0	0	OREC licensed distributor claim, current month balancing amount
TILLSONBURG HYDRO INCORPORATED	MP	1467	31-Jul-18	0	0	-98935.25	ONZN		P	102673		0	0	OREC licensed distributor claim, current month balancing amount
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	MP	1467	31-Jul-18	0	0	-12845565.83	ONZN		P	102329		0	0	OREC licensed distributor claim, current month balancing amount
VERIDIAN CONNECTIONS INC.	MP	1467	31-Jul-18	0	0	-1362490.97	ONZN		P	102120		0	0	OREC licensed distributor claim, current month balancing amount
WASAGA DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-96039.58	ONZN		P	104278		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	31-Jul-18	0	0	-82232	ONZN		P	102004		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
WATERLOO NORTH HYDRO INC.	MP	1467	31-Jul-18	0	0	-743766	ONZN		P	102004		0	0	OREC licensed distributor claim, current month balancing amount
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-Jul-18	0	0	-233021.39	ONZN		P	104248		0	0	OREC licensed distributor claim, current month balancing amount
WELLINGTON NORTH POWER INC.	MP	1467	31-Jul-18	0	0	-37661.25	ONZN		P	105222		0	0	OREC licensed distributor claim, current month balancing amount
WEST COAST HURON ENERGY INC.	MP	1467	31-Jul-18	0	0	-38688.34	ONZN		P	104297		0	0	OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	31-Jul-18	0	0	-11188	ONZN		P	104421		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
WESTARIO POWER INC	MP	1467	31-Jul-18	0	0	-252323.01	ONZN		P	104421		0	0	OREC licensed distributor claim, current month balancing amount
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jul-18	0	0	21955.92	ONZN		P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jul-18	0	0	21327.37	ONZN		P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jul-18	0	0	20058.22	ONZN		P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jul-18	0	0	18295.57	ONZN		P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jul-18	0	0	18133.54	ONZN		P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jul-18	0	0	17971.64	ONZN		P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jul-18	0	0	-626991.69	ONZN		P	104276		0	0	OREC licensed distributor claim, current month balancing amount
WYSE METER SOLUTIONS INC.	MP	1467	31-Jul-18	0	0	-75410.96	ONZN		P	110494		0	0	OREC unit sub-meter provider claim, current month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	31-Jul-18	0	0	0.01	ONZN		P	112232		0	0	OREC unit sub-meter provider claim, current month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	31-Jul-18	0	0	-2797.07	ONZN		P	112232		0	0	OREC unit sub-meter provider claim, current month balancing amount
IESO Settlement Report - July Total						**(68,061,551.33)**								

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	ONTEL
145752	ALEXIAN ENERGY SERVICES INC.	ALEXIAN
183295	ALECTRA UTILITIES CORPORATION	ALECTRA

104357	MCMASTER UNIVERSITY	MCMASTER

Participation Name
Distributor-Metered Market Participant
Distributor-Metered Market Participant
Distributor-Metered Market Participant

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Smart Submetering Provider
Smart Submetering Provider
Ontario Rebate for Electricity Consumers for the invoice of 2017/01
Smart Submetering Provider
Distributor-Metered Market Participant

Smart Submetering Provider

From: Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]
To: Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Mark Bergman (ENERGY) [Mark.Bergman@ontario.ca]; Tracy Flindall (MOF) [Tracy.Flindall@ontario.ca]; Anil Sharma (MOF) [Anil.Sharma@ontario.ca]; Dev Ram (MOF) [Dev.Ram@ontario.ca]; Naomi Morita (MOF) [Naomi.Morita@ontario.ca]; Gavin He [Gavin.He@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]
CC: Tai An (ENERGY) [Tai.An@ontario.ca]; Jose Yee (MEDTE/MRI) [Jose.Yee@ontario.ca]; Janet Lim (ENERGY) [Janet.Lim@ontario.ca]; Kwasny, Anna (MEDJCT) [Anna.Kwasny@ontario.ca]; Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Mike Smith (ENERGY) [Mike.Smith@ontario.ca]; Dade, Christine (ENERGY) [Christine.Dade@ontario.ca]; Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]
Subject: July 2018 OREC Settlement Statement
Date: Thursday, August 16, 2018 14:45:23
Attachment 1: image001.jpg
Attachment 2: July 2018 IESO OREC Settlement Statement.xlsx

Good Afternoon,

Please see the attached OREC Settlement Statement for the month of July 2018, which shows the OREC amount of $68,061,551.33.

Kindly note that the following programs are also included on the July invoice but are not listed in the attached settlement statement:

- On-Reserve First Nations Delivery Credit
- Distribution Rate Protection
- Rural and Remote Rate Protection
- Ontario Electricity Support Program

Thank you,

Ryan Lim
Financial Analyst
56 Wellesley Street West, 4th Floor
Toronto, ON M7A 2E7
Phone: (416) 561-9361

Ministry of Energy, Northern Development and Mines (Energy)
Ministry of Economic Development, Job Creation and Trade
Ministry of Infrastructure


CSD
Corporate
Services
Division
Expertise | Collaboration | Respect | Service Excellence | Integrity

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Name	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
ALECTRA UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-8275297.59	ONZN		P	183295		0	0	OREC licensed distributor claim, current month balancing amount
ALEXIAN ENERGY SERVICES INC.	MP	1467	31-Jul-18	0	0	-1006.13	ONZN		P	145752		0	0	OREC unit sub-meter provider claim, current month balancing amount
ALGOMA POWER INC.	MP	1467	31-Jul-18	0	0	-3159.85	ONZN		P	110073		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
ALGOMA POWER INC.	MP	1467	31-Jul-18	0	0	-120851.4	ONZN		P	110073		0	0	OREC licensed distributor claim, current month balancing amount
ATIKOKAN HYDRO INC.	MP	1467	31-Jul-18	0	0	-16610.94	ONZN		P	104277		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-07
ATTAWAPISKAT POWER CORPORATION	MP	1467	31-Jul-18	0	0	-9649.81	ONZN		P	105834		0	0	OREC licensed distributor claim, current month balancing amount
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	1467	31-Jul-18	0	0	-432716.69	ONZN		P	104271		0	0	OREC licensed distributor claim, current month balancing amount
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	25.01	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	10.72	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	5.11	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	1.72	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	0.71	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	-7.56	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	-22.8	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	-290.64	ONZN		P	102321		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
BRANTFORD POWER INC.	MP	1467	31-Jul-18	0	0	-434840.92	ONZN		P	102321		0	0	OREC licensed distributor claim, current month balancing amount
BURLINGTON HYDRO INC.	MP	1467	31-Jul-18	0	0	-823984.81	ONZN		P	102298		0	0	OREC licensed distributor claim, current month balancing amount
CANADIAN NIAGARA POWER INC.	MP	1467	31-Jul-18	0	0	4373.84	ONZN		P	102110		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
CANADIAN NIAGARA POWER INC.	MP	1467	31-Jul-18	0	0	-675589.34	ONZN		P	102110		0	0	OREC licensed distributor claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	31-Jul-18	0	0	11268.68	ONZN		P	110345		0	0	OREC unit sub-meter provider claim, current month balancing amount
CARMA BILLING SERVICES INC.	MP	1467	31-Jul-18	0	0	-43103.25	ONZN		P	110345		0	0	OREC unit sub-meter provider claim, current month balancing amount
CENTRE WELLINGTON HYDRO LTD.	MP	1467	31-Jul-18	0	0	908.88	ONZN		P	104468		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
CENTRE WELLINGTON HYDRO LTD.	MP	1467	31-Jul-18	0	0	-69041.1	ONZN		P	104468		0	0	OREC licensed distributor claim, current month balancing amount
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-11073.55	ONZN		P	102049		0	0	OREC licensed distributor claim, current month balancing amount
COLLUS POWERSTREAM CORP.	MP	1467	31-Jul-18	0	0	-150872.82	ONZN		P	104281		0	0	OREC licensed distributor claim, current month balancing amount
E. L. K. ENERGY INC.	MP	1467	31-Jul-18	0	0	-106329.81	ONZN		P	102006		0	0	OREC licensed distributor claim, current month balancing amount
ENERCARE CONNECTIONS INC.	MP	1467	31-Jul-18	0	0	-254961.51	ONZN		P	110332		0	0	OREC unit sub-meter provider claim, current month balancing amount
ENERGY + INC.	MP	1467	31-Jul-18	0	0	-541905.95	ONZN		P	102299		0	0	OREC licensed distributor claim, current month balancing amount
ENERGY + INC. (SETL)	MP	1467	31-Jul-18	0	0	-113570.09	ONZN		P	104290		0	0	OREC licensed distributor claim, current month balancing amount
ENTEGRUS POWERLINES INC.	MP	1467	31-Jul-18	0	0	-144902.73	ONZN		P	102140		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
ENTEGRUS POWERLINES INC.	MP	1467	31-Jul-18	0	0	-449977.91	ONZN		P	102140		0	0	OREC licensed distributor claim, current month balancing amount
ENWIN UTILITIES LTD.	MP	1467	31-Jul-18	0	0	-1051130.64	ONZN		P	106085		0	0	OREC licensed distributor claim, current month balancing amount
ERIE THAMES POWERLINES CORPORATION	MP	1467	31-Jul-18	0	0	-198057.26	ONZN		P	104323		0	0	OREC licensed distributor claim, current month balancing amount
ESSEX POWERLINES CORPORATION	MP	1467	31-Jul-18	0	0	27120.27	ONZN		P	102217		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
ESSEX POWERLINES CORPORATION	MP	1467	31-Jul-18	0	0	-406562.12	ONZN		P	102217		0	0	OREC licensed distributor claim, current month balancing amount
FESTIVAL HYDRO INC.	MP	1467	31-Jul-18	0	0	292.82	ONZN		P	102340		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
FESTIVAL HYDRO INC.	MP	1467	31-Jul-18	0	0	-217866.5	ONZN		P	102340		0	0	OREC licensed distributor claim, current month balancing amount
FORT ALBANY POWER CORPORATION	MP	1467	31-Jul-18	0	0	-4896.83	ONZN		P	105832		0	0	OREC licensed distributor claim, current month balancing amount
FORT FRANCES POWER CORPORATION	MP	1467	31-Jul-18	0	0	-35838.28	ONZN		P	104313		0	0	OREC licensed distributor claim, current month balancing amount
GREATER SUDBURY HYDRO INC.	MP	1467	31-Jul-18	0	0	16384.66	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
GREATER SUDBURY HYDRO INC.	MP	1467	31-Jul-18	0	0	5151.04	ONZN		P	102009		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
GREATER SUDBURY HYDRO INC.	MP	1467	31-Jul-18	0	0	-488935.11	ONZN		P	102009		0	0	OREC licensed distributor claim, current month balancing amount
GRIMSBY POWER INCORPORATED	MP	1467	31-Jul-18	0	0	-120941.79	ONZN		P	104471		0	0	OREC licensed distributor claim, current month balancing amount
GUELPH HYDRO ELECTRIC SYSTEMS INC.	MP	1467	31-Jul-18	0	0	-589558.1	ONZN		P	104325		0	0	OREC licensed distributor claim, current month balancing amount
HALTON HILLS HYDRO INC.	MP	1467	31-Jul-18	0	0	-285799.24	ONZN		P	104284		0	0	OREC licensed distributor claim, current month balancing amount
HEARST POWER DISTRIBUTION COMPANY LIMITED	MP	1467	31-Jul-18	0	0	-25445.43	ONZN		P	104249		0	0	OREC licensed distributor claim, current month balancing amount
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-2029.11	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-05
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-3199.04	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-04
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-3436.18	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-06
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-5278.52	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-01

Name	1 Record type	2 Charge type	3 Trading date	4 Trading hour	5 Trading interval	6 Adjustment amount	7 Zone id	8 Location id	9 Settlement type	10 MP ID	11 Price	12 Tax rate	13 Tax amount	14 Adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-5406.14	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-02
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-5819.9	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-03
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-6165.91	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-6341.62	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-07
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-7099.67	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-7100.82	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-7545.14	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-08
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-7659.85	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-7714.72	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-09
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-8747.57	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-9864.81	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-10
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-10720.3	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-10755.37	ONZN		P	102084		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
HORIZON UTILITIES CORPORATION	MP	1467	31-Jul-18	0	0	-2832075.49	ONZN		P	102084		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	MP	1467	31-Jul-18	0	0	-49498.13	ONZN		P	104339		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE BRAMPTON NETWORKS INC.	MP	1467	31-Jul-18	0	0	-2264269.65	ONZN		P	104279		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-Jul-18	0	0	1609.39	ONZN		P	102007		0	0	OREC embedded distributor claim, previous month balancing amount for 2018-06
HYDRO ONE NETWORKS INC.	MP	1467	31-Jul-18	0	0	-289960.63	ONZN		P	102007		0	0	OREC embedded distributor claim, current month balancing amount
HYDRO ONE NETWORKS INC.	MP	1467	31-Jul-18	0	0	-16960318.68	ONZN		P	102007		0	0	OREC licensed distributor claim, current month balancing amount
HYDRO OTTAWA LIMITED	MP	1467	31-Jul-18	0	0	-5296.7	ONZN		P	102070		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
HYDRO OTTAWA LIMITED	MP	1467	31-Jul-18	0	0	-4433393.35	ONZN		P	102070		0	0	OREC licensed distributor claim, current month balancing amount
INNPOWER CORPORATION	MP	1467	31-Jul-18	0	0	-186996.36	ONZN		P	104299		0	0	OREC licensed distributor claim, current month balancing amount
KASHECHEWAN POWER CORPORATION	MP	1467	31-Jul-18	0	0	-10400.89	ONZN		P	105833		0	0	OREC licensed distributor claim, current month balancing amount
KENORA HYDRO ELECTRIC CORPORATION LTD.	MP	1467	31-Jul-18	0	0	-53215.21	ONZN		P	104269		0	0	OREC licensed distributor claim, current month balancing amount
KINGSTON HYDRO CORPORATION	MP	1467	31-Jul-18	0	0	-267657.41	ONZN		P	104322		0	0	OREC licensed distributor claim, current month balancing amount
KITCHENER-WILMOT HYDRO INC.	MP	1467	31-Jul-18	0	0	-893673.33	ONZN		P	104267		0	0	OREC licensed distributor claim, current month balancing amount
LAKEFRONT UTILITIES INC	MP	1467	31-Jul-18	0	0	-97586.45	ONZN		P	104487		0	0	OREC licensed distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-Jul-18	0	0	-50540.08	ONZN		P	113624		0	0	OREC licensed distributor claim, current month balancing amount
LAKELAND POWER DISTRIBUTION LTD.	MP	1467	31-Jul-18	0	0	-109302.76	ONZN		P	113624		0	0	OREC embedded distributor claim, current month balancing amount
LONDON HYDRO INC.	MP	1467	31-Jul-18	0	0	-1843410.57	ONZN		P	104282		0	0	OREC licensed distributor claim, current month balancing amount
MCMASTER UNIVERSITY	MP	1467	31-Jul-18	0	0	-53809.26	ONZN		P	104357		0	0	Ontario Rebate for Electricity Consumers (8% Provincial Rebate) Balancing Amount, Invoice June 2018
MCMASTER UNIVERSITY	MP	1467	31-Jul-18	0	0	-76603.44	ONZN		P	104357		0	0	Ontario Rebate for Electricity Consumers (8% Provincial Rebate) Balancing Amount, Invoice July 2018
MIDLAND POWER UTILITY CORPORATION	MP	1467	31-Jul-18	0	0	-78789.95	ONZN		P	104363		0	0	OREC licensed distributor claim, current month balancing amount
MILTON HYDRO DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-475317.9	ONZN		P	102743		0	0	OREC licensed distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-Jul-18	0	0	325910.84	ONZN		P	102105		0	0	OREC licensed retailer claim, previous month balancing amount for 2018-06
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-Jul-18	0	0	-33068.54	ONZN		P	102105		0	0	OREC embedded distributor claim, current month balancing amount
NEWMARKET - TAY POWER DISTRIBUTION LTD.	MP	1467	31-Jul-18	0	0	-315244.88	ONZN		P	102105		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA PENINSULA ENERGY INC.	MP	1467	31-Jul-18	0	0	-631517.33	ONZN		P	102102		0	0	OREC licensed distributor claim, current month balancing amount
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-Jul-18	0	0	13432.33	ONZN		P	104422		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
NIAGARA-ON-THE-LAKE HYDRO INC.	MP	1467	31-Jul-18	0	0	-160251.77	ONZN		P	104422		0	0	OREC licensed distributor claim, current month balancing amount
NORTH BAY HYDRO DISTRIBUTION LIMITED	MP	1467	31-Jul-18	0	0	-237495.48	ONZN		P	102099		0	0	OREC licensed distributor claim, current month balancing amount
NORTHERN ONTARIO WIRES, INC.	MP	1467	31-Jul-18	0	0	-55363.62	ONZN		P	102042		0	0	OREC licensed distributor claim, current month balancing amount
O.N.TEL INC.	MP	1467	31-Jul-18	0	0	-52.19	ONZN		P	107810		0	0	Ontario Rebate for Electricity Consumers for the invoice of 2018/07
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-1054197.49	ONZN		P	102366		0	0	OREC licensed distributor claim, current month balancing amount
ORANGEVILLE HYDRO LIMITED	MP	1467	31-Jul-18	0	0	-115814.39	ONZN		P	104480		0	0	OREC licensed distributor claim, current month balancing amount
ORILLIA POWER DISTRIBUTION CORPORATION	MP	1467	31-Jul-18	0	0	-154004.66	ONZN		P	104319		0	0	OREC licensed distributor claim, current month balancing amount
OSHAWA PUC NETWORKS INCORPORATED	MP	1467	31-Jul-18	0	0	-653421.62	ONZN		P	104481		0	0	OREC licensed distributor claim, current month balancing amount
PETERBOROUGH DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-355891.34	ONZN		P	102082		0	0	OREC licensed distributor claim, current month balancing amount
PIKE LAKE GOLF CENTRE LIMITED	MP	1467	31-Jul-18	0	0	-131.56	ONZN		P	145734		0	0	OREC unit sub-meter provider claim, current month balancing amount
POWERSTREAM ENERGY SERVICES INC.	MP	1467	31-Jul-18	0	0	-22629.55	ONZN		P	114461		0	0	OREC unit sub-meter provider claim, current month balancing amount
PRIORITY SUBMETERING SOLUTIONS INC.	MP	1467	31-Jul-18	0	0	1328.08	ONZN		P	110334		0	0	OREC Sub-Meter Provider claim, previous month balancing amount for 2017-10
PRIORITY SUBMETERING SOLUTIONS INC.	MP	1467	31-Jul-18	0	0	-23914.1	ONZN		P	110334		0	0	OREC unit sub-meter provider claim, current month balancing amount
PROVIDENT ENERGY MANAGEMENT INC.	MP	1467	31-Jul-18	0	0	-21206.27	ONZN		P	110330		0	0	OREC unit sub-meter provider claim, current month balancing amount
PUC DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-309166.98	ONZN		P	102316		0	0	OREC licensed distributor claim, current month balancing amount
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	51.54	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-2453.89	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-05
RIDEAU ST.LAWRENCE DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-44179.13	ONZN		P	105232		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Record type	Charge type	Trading date	Trading hour	Trading interval	Adjustment amount	Zone id	Location id	Settlement type	MP ID	Price	Tax rate	Tax amount	Adjustment comment
Name	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
ST. THOMAS ENERGY INC.	MP	1467	31-Jul-18	0	0	-29499.95	ONZN		P	102100		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
ST. THOMAS ENERGY INC.	MP	1467	31-Jul-18	0	0	-172455.25	ONZN		P	102100		0	0	OREC licensed distributor claim, current month balancing amount
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-436298.5	ONZN		P	102741		0	0	OREC licensed distributor claim, current month balancing amount
TILLSONBURG HYDRO INCORPORATED	MP	1467	31-Jul-18	0	0	-98935.25	ONZN		P	102673		0	0	OREC licensed distributor claim, current month balancing amount
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	MP	1467	31-Jul-18	0	0	-12845565.83	ONZN		P	102329		0	0	OREC licensed distributor claim, current month balancing amount
VERIDIAN CONNECTIONS INC.	MP	1467	31-Jul-18	0	0	-1362490.97	ONZN		P	102120		0	0	OREC licensed distributor claim, current month balancing amount
WASAGA DISTRIBUTION INC.	MP	1467	31-Jul-18	0	0	-96039.58	ONZN		P	104278		0	0	OREC licensed distributor claim, current month balancing amount
WATERLOO NORTH HYDRO INC.	MP	1467	31-Jul-18	0	0	-82232	ONZN		P	102004		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
WATERLOO NORTH HYDRO INC.	MP	1467	31-Jul-18	0	0	-743766	ONZN		P	102004		0	0	OREC licensed distributor claim, current month balancing amount
WELLAND HYDRO ELECTRIC SYSTEM CORP.	MP	1467	31-Jul-18	0	0	-233021.39	ONZN		P	104248		0	0	OREC licensed distributor claim, current month balancing amount
WELLINGTON NORTH POWER INC.	MP	1467	31-Jul-18	0	0	-37661.25	ONZN		P	105222		0	0	OREC licensed distributor claim, current month balancing amount
WEST COAST HURON ENERGY INC.	MP	1467	31-Jul-18	0	0	-38688.34	ONZN		P	104297		0	0	OREC licensed distributor claim, current month balancing amount
WESTARIO POWER INC	MP	1467	31-Jul-18	0	0	-11188	ONZN		P	104421		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-06
WESTARIO POWER INC	MP	1467	31-Jul-18	0	0	-252323.01	ONZN		P	104421		0	0	OREC licensed distributor claim, current month balancing amount
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jul-18	0	0	21955.92	ONZN		P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-01
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jul-18	0	0	21327.37	ONZN		P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-12
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jul-18	0	0	20058.22	ONZN		P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-03
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jul-18	0	0	18295.57	ONZN		P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-04
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jul-18	0	0	18133.54	ONZN		P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2018-02
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jul-18	0	0	17971.64	ONZN		P	104276		0	0	OREC licensed distributor claim, previous month balancing amount for 2017-11
WHITBY HYDRO ELECTRIC CORPORATION	MP	1467	31-Jul-18	0	0	-626991.69	ONZN		P	104276		0	0	OREC licensed distributor claim, current month balancing amount
WYSE METER SOLUTIONS INC.	MP	1467	31-Jul-18	0	0	-75410.96	ONZN		P	110494		0	0	OREC unit sub-meter provider claim, current month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	31-Jul-18	0	0	0.01	ONZN		P	112232		0	0	OREC unit sub-meter provider claim, current month balancing amount
YES ENERGY MANAGEMENT, INC.	MP	1467	31-Jul-18	0	0	-2797.07	ONZN		P	112232		0	0	OREC unit sub-meter provider claim, current month balancing amount
IESO Settlement Report - July Total						**(68,061,551.33)**								

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	ONTEL
145752	ALEXIAN ENERGY SERVICES INC.	ALEXIAN
183295	ALECTRA UTILITIES CORPORATION	ALECTRA

104357	MCMASTER UNIVERSITY	MCMASTER

Participation Name
Distributor-Metered Market Participant
Distributor-Metered Market Participant
Distributor-Metered Market Participant

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Smart Submetering Provider
Ontario Rebate for Electricity Consumers for the invoice of 2017/01
Smart Submetering Provider
Distributor-Metered Market Participant

Smart Submetering Provider

PROGRAM NOTE

ENERGY – Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable

Government Priority Outcome	**Leader on Environmental Sustainability & Climate Change Mitigation**
Program Type	**Assisting**
Ministry Linkages	**MNDM, MEDG and MNRF**

I. Program Overview

	Current Allocation				PROPOSED ALLOCATION			
$M	17-18	18-19	19-20	20-21	**17-18**	**18-19**	**19-20**	**20-21**
Operating Expense					**249**	**263**	**276**	**319**
Capital Expense								
Total Expense*					**249**	**263**	**276**	**319**
Operating Assets								
Capital Assets								

Notes:
1. Table should be presented on a fully consolidated basis. Capital assets include acquisitions of consolidated entities. Consolidation information should be consistent with information in ORBIT and information submitted to the Office of the Provincial Controller Division (OPCD).
2. See ORBIT for current allocation.
*Reflects sum of all financial impacts related to Key Operating, Capital, Climate Change and Technical Decisions.

- Ontario's cap and trade program will result in an increase in electricity prices. Recycling cap and trade auction proceeds to lower the cost of electricity would offset electricity consumers' contributions to investments/initiatives which reduce greenhouse gas (GHG) emissions (e.g., non-emitting generation, conservation programs, etc.).

- Using cap and trade auction proceeds to lower the cost of electricity would make electricity more competitive with traditionally cheaper fossil fuels. By using the proceeds to lower the cost of electricity, consumers will be incented to fuel-switch away from fossil fuels toward much cleaner grid-connected electricity.

- Lowering the cost of electricity would have the desired effect of fuel switching in building and home heating, electric vehicles and the electrification of transit, and industrial processes.

- As recognized by Ontario's Climate Change Action Plan (CCAP), "technologies that are readily available

and being used today can significantly reduce energy demands and GHG emissions."

- Due to the long-term nature (i.e., typically 20 years) of electricity generation contracts and conservation programs, the associated costs are ongoing and are expected to be about $7 billion dollars annually during the first cap and trade compliance period (2017-2020). These costs will continue well beyond the timelines described in the CCAP. Auction proceeds recycling would help reduce electricity sector emissions by, directly and / or indirectly, offsetting the cost of non-emitting generation and conservation programs.

- The Ministry of Energy estimates approximately 3,300,000 tonnes of GHG emissions reductions by 2020 associated with "planned/committed" electricity sector initiatives that were developed following the 2013 Long-Term Energy Plan (LTEP). The forecast amount of GHG emissions savings is based on planned/committed electricity projects that have not yet been funded by electricity ratepayers. By using the proceeds to lower the cost of electricity, there is potential to support CCAP goals of fuel-switching and electrification.

- Fuel-switching to clean electricity supports the following CCAP goals:
    - Production or installation of renewable, low-carbon, carbon-free and net zero alternative energy;
    - Distributed renewable generation and energy management technologies to support load-shifting, energy storage, net metering and other measures to eliminate the need for grid-based electricity during natural gas peaking periods; and
    - Reduction of GHGs from land use and buildings including the adoption and use of zero emission and plug-in hybrid vehicles, and low-carbon alternative fuels.

PROGRAM NOTE

ENERGY – Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable

II. Proposed Program Changes

- Ontario's cap and trade program will result in an increase in electricity prices. Recycling cap and trade auction proceeds to lower the cost of electricity would offset electricity consumers' contributions to investments/initiatives which reduce greenhouse gas (GHG) emissions (e.g., non-emitting generation, conservation programs, etc.).

- As recognized by Ontario's Climate Change Action Plan (CCAP), "technologies that are readily available and being used today can significantly reduce energy demands and GHG emissions."

- Cap and trade auction proceeds recycling would help reduce electricity sector GHG emissions by, directly and / or indirectly, offsetting the cost of non-emitting generation and conservation programs. Due to the long-term nature (i.e., typically 20 years) of electricity generation contracts and conservation programs, the associated costs are ongoing and are expected to be about $7 billion dollars annually during the first cap and trade compliance period (2017-2020). These costs will continue well beyond the timelines described in the CCAP.

- By using the proceeds to lower the cost of electricity, CCAP goals of fuel-switching and electrification will also be supported. The Ministry of Energy estimates approximately 3,300,000 tonnes of GHG emissions reductions by 2020 associated with "planned/committed" electricity sector initiatives that were developed following the 2013 Long-Term Energy Plan (LTEP). The forecast amount of GHG emissions savings is based on planned/committed electricity projects that have not yet been funded by electricity ratepayers.

- On September 12, 2016, Cabinet directed the Ministry of Energy, working with MOECC, to report back to Cabinet on an approach to recycle cap and trade proceeds to industrial and commercial electricity consumers over the first compliance period (2017-2020).

- On September 12, 2016, Ontario announced a number of initiatives to reduce electricity bills for consumers across the province, including the intention to use a portion of the cap and trade auction proceeds to help keep electricity prices affordable for industrial and commercial electricity consumers.

- For FY 2017-18, the Ministry of Energy is requesting $249 million.

- Implementation and delivery:

    - The Ministry is refining the program design, including approach and mechanism, and is expected to report back to Cabinet in November 2016.

    - Depending on the final approach, legislation, regulation or Lieutenant Governor in Council (LGIC) regulation may be required to allow the Independent Electricity System Operator (IESO) and Local Distribution Companies (LDCs) to recycle proceeds to consumers. The program dates are subject to change.

    - ENERGY Legal Services Branch is analyzing the required changes to ENERGY's statutes (e.g., Electricity Act, 1998) and regulations.

PROGRAM NOTE

ENERGY – Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable

- ENERGY LSB has identified some key areas where legislative and/or regulatory amendments are likely necessary depending on which mechanism to recycling proceeds is chosen.

- Such amendments could include, clarifying that the IESO can receive amounts from the GGRA and ensuring that Ontario Energy Board (OEB) and IESO have the necessary authority to address electricity pricing matters as contemplated.

- Furthermore, IESO and electricity distribution companies would need to update billing systems to reflect the recycled proceeds on bills for consumers.

III. Decisions

1) Operating Decisions

Key Decisions

Greenhouse Gas Reduction Account Decisions

A. APPROVE an expenditure increase of $249,000,000 in 2017-18, $263,000,000 in 2018-19, $276,000,000 in 2019-20, $319,000,000 in 2020-21 in the transfer payment line entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative” under Vote/Item 2905-04, Electricity Price Mitigation.

GGRA#: 91

$M	2017-18	2018-19	2019-20	2020-21	Docket #
Operating Expense	**249**	**263**	**276**	**319**	D0042197
GGRA Offset	**249**	**263**	**276**	**319**	

- The funding for this GGRA item will be flowed out through a new TP line. This funding is for the first compliance period (2017-2020).

Non-Financial Decisions

Docket # D0042330

- APPROVE the creation of a new Operating Expense item entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable” under Vote/Item 2905-04, Electricity Price Mitigation.

- APPROVE the creation of a new transfer payment line entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative” under Vote/Item 2905-04, Electricity Price Mitigation.

PROGRAM NOTE

ENERGY – Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable

IV. Outcome Measures

Outcome Measures	Docket #	N/A

Desired Outcomes/Outputs

Measure	Outcome
Proceeds from Cap and Trade / Greenhouse Gas Reduction Account	• $ million per year
Electricity Commodity Price ($/MWh)	• Estimated cost-savings to consumers relative to what they otherwise would have paid

- Keep electricity prices affordable for industrial and commercial electricity consumers to incent fuel-switching away from more GHG intensive fossil fuels to clean electricity.

- Electricity prices have increased over time when electricity sector emissions have decreased. Since 2003, Ontario has invested more than $30 billion in over 11,000 megawatts (MW) of new and refurbished clean generation, including nuclear, hydro, wind and solar – this represents about 30% of our current supply. Ontario eliminated coal-fired electricity generation, replacing it with cleaner sources of energy, which has decreased electricity sector emissions by approximately 80% since 2003.

- The costs associated with ongoing investments in the electricity sector to ensure a clean, low-GHG-emitting system are significant and continue to be borne by electricity consumers. Due to the long-term nature (i.e., typically 20 years) of electricity generation contracts and conservation programs, the associated costs are ongoing and are expected to be about $7 billion dollars annually during the first cap and trade compliance period (2017-2020). These costs will continue well beyond the timelines described in Ontario's Climate Change Action Plan (CCAP). Auction proceeds recycling would help reduce electricity sector greenhouse gas (GHG) emissions by, directly and/or indirectly, offsetting the cost of non-emitting generation and conservation programs.

- Using cap and trade auction proceeds to lower the cost of electricity would make it more competitive with traditionally cheaper fossil fuels, providing an incentive to fuel switch from fossil fuels to electricity. Ontario's electricity sector is now approximately 90% emissions-free. Ontario's grid electricity currently has an emission factor which is far lower than the carbon content of natural gas or diesel.

- During off-peak periods, Ontario's current mix of electricity resources typically emits low levels of emissions. This puts Ontario's electricity sector in a strong position to support fuel switching as a GHG-reducing activity. Recycling proceeds to consumers by lowering electricity prices would help to maintain the emission reductions achieved thus far and encourage further reductions in the future.

- By using the auction proceeds to lower the cost of electricity, consumers will be incented to fuel-switch away from fossil fuels toward much cleaner grid-connected electricity. Lowering the cost of electricity would have the desired effect of fuel switching in building and home heating, electric vehicles and the

electrification of transit, and industrial processes. Fuel-switching to clean electricity supports the following CCAP goals:

  - Production or installation of renewable, low-carbon, carbon-free and net zero alternative energy;
  - Distributed renewable generation and energy management technologies to support load-shifting, energy storage, net metering and other measures to eliminate the need for grid-based electricity during natural gas peaking periods; and
  - Reduction of GHGs from land use and buildings including the adoption and use of zero emission and plug-in hybrid vehicles, and low-carbon alternative fuels.

- On September 12, 2016, Cabinet directed the Ministry of Energy, working with MOECC, to report back to Cabinet on an approach to recycle cap and trade proceeds to industrial and commercial electricity consumers over the first compliance period (2017-2020).

- On September 12, 2016, Ontario announced a number of initiatives to reduce electricity bills for consumers across the province, including the intention to use a portion of the cap and trade auction proceeds to help keep electricity prices affordable for industrial and commercial electricity consumers.

Approach:

- A decision has not been made on the mechanism to enable proceeds recycling to industrial and commercial electricity consumers. As directed by Cabinet on September 12, 2016, the Ministry of Energy is to report back to Cabinet (and Treasury Board) on the approach to recycle proceeds.

V. Additional Considerations

Implementation

- See above for the rationale.

- A decision has not been made on the mechanism to enable proceeds recycling to industrial and commercial electricity consumers. As directed by Cabinet on September 12, 2016, the Ministry of Energy is to report back to Cabinet (and Treasury Board) on the approach to recycle proceeds. Cabinet report back is expected in November 2016 (TBC).

- Depending on the final approach, legislation, regulation or LGIC may be required to allow the IESO and LDCs to recycle auction proceeds to consumers. Dates are subject to change. ENERGY Legal Services Branch (LSB) is analyzing the required changes to ENERGY's statutes (e.g., Electricity Act, 1998) and regulations.

PROGRAM NOTE

ENERGY – Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable

- ENERGY LSB has identified some key areas where legislative and/or regulatory amendments are likely necessary depending on which mechanism to recycling proceeds is chosen.

- Such amendments could include, clarifying that the IESO can receive amounts from the GGRA and ensuring that OEB and IESO have the necessary authority to address electricity pricing matters as contemplated.

- Furthermore, IESO and electricity distribution companies would need to update billing systems to reflect the recycled proceeds on bills for consumers.

Communications/Stakeholder Engagement Plans

- Stakeholders include all non-residential electricity consumers and LDCs (i.e., billing system changes to facilitate proceeds recycling).

- Work with ENERGY Communications to develop communication plan and key messaging.

- Key Messages could include:
    - Ontario has been taking strong climate-positive actions for years, such as successfully eliminating coal as a source of electricity generation and developing a long-term energy plan that focuses on a safe, clean, reliable and affordable energy future.

    - Since 2003, Ontario has invested more than $30 billion in over 11,000 megawatts (MW) of new and refurbished clean generation, including nuclear, hydro, wind and solar – this represents about 30% of our current supply. Ontario eliminated coal-fired electricity generation, replacing it with cleaner sources of energy, which has decreased electricity sector emissions by approximately 80% since 2003.

    - The Climate Change Action Plan (CCAP) indicated a desire of using cap and trade proceeds to keep electricity rates.

    - Ontario intends to use cap and trade proceeds to keep electricity rates affordable for commercial and industrial electricity consumers.

    - Keeping electricity prices affordable for industrial and commercial electricity consumers to incent fuel-switching away from more greenhouse gas (GHG) intensive fossil fuels to clean electricity.

PROGRAM NOTE

ENERGY – Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable

Risks	Docket #	N/A

Risk	Likelihood (L/M/H)	Impact (L/M/H)	Mitigation Strategy
Legal	L	L	ENERGY LSB is analyzing the required changes to ENERGY's statutes (e.g., Electricity Act, 1998) and regulations. ENERGY LSB has identified some key areas where legislative and/or regulatory amendments are likely necessary depending on which mechanism to recycle proceeds is chosen. Such amendments could include, clarifying that the Independent Electricity System Operator (IESO) can receive amounts from the GGRA and ensuring that Ontario Energy Board (OEB) and IESO have the necessary authority to address electricity pricing matters as contemplated.
Timing	H	M	The recovery of cap and trade costs from natural gas consumers is set by the Ontario Energy Board (OEB) could begin as early as the beginning of 2017. This means that natural gas-fired generators would pass on the cost of carbon at the same time. Billing for the cost of cap and trade is expected to begin as of January 2017. While the impact of cap and trade would be added to electricity bills as of January 2017, the offsetting effect of proceeds recycling may not occur immediately depending on implementation and potential alignment with the first auction expected in March 2017. Furthermore, IESO and electricity distribution companies would need to update billing systems to reflect the recycled proceeds on bills for consumers.

PROGRAM NOTE

ENERGY – Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable

VI. Proposed Minute

Proposed Minute

- APPROVE the creation of a new Operating Expense item entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable” under Vote/Item 2905-04, Electricity Price Mitigation.
- APPROVE the creation of a new transfer payment line entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative” under Vote/Item 2905-04, Electricity Price Mitigation.
- APPROVE an expenditure increase of $249,000,000 in 2017-18, $263,000,000 in 2018-19, $276,000,000 in 2019-20, $319,000,000 in 2020-21 in the transfer payment line entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative” under Vote/Item 2905-04, Electricity Price Mitigation.

Approve the following multi-year resources for the program:

Financial Decisions $M	2017-18	2018-19	2019-20	2020-21
Operating Expense	**249**	**263**	**276**	**319**
Capital Expense				
Total Expense	**249**	**263**	**276**	**319**
Operating Assets				
Capital Assets				

In this regard:

- APPROVE the creation of a new Operating Expense item entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable” under Vote/Item 2905-04, Electricity Price Mitigation.
- APPROVE the creation of a new transfer payment line entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative” under Vote/Item 2905-04, Electricity Price Mitigation.
- APPROVE an expenditure increase of $249,000,000 in 2017-18, $263,000,000 in 2018-19, $276,000,000 in 2019-20, $319,000,000 in 2020-21 in the transfer payment line entitled “Cap and Trade Proceeds Recycling to Keep Electricity Rates Affordable Initiative” under Vote/Item 2905-04, Electricity Price Mitigation.

OPG LOAN - 30-Year

STEP 1: Loan Details

OPG Debt Issue Details	
Pricing Date	21-Nov-16
Maturity	22-Nov-46
Original Issue Date	22-Nov-16
Term (yrs)	30
Original Issue Size	$50,000,000

General Corporate Requirements

STEP 2: DETERMINE CANADA CURVE ADJUSTMENT

Canada Bonds Used to Interpolate

Source: Bloomberg RBCB — *** Bid side of market

Settlement: 21-Nov-16

Coupon	Maturity	Yield	Price
5.00%	6/1/2037	2.164	146.789
4.00%	6/1/2041	2.210	133.744
3.50%	6/1/2045	2.209	127.550
2.75%	6/1/2048	2.193	112.766

Canada Curve Adjustment to Bond Maturity Date

Interp To	Interpolated CAD Yld	Curve Adj off first bond
22-Nov-2046	2.2011	-0.0079

STEP 3: DETERMINE BASE RATE

Canada Bond Yield	2.2090
Curve Adjustment	-0.0079
Adjusted Cda Bond Yield	2.2011
Commission	0.0318
Base Rate	2.2329
OPG Credit Spread	1.7950
OPG Interest Rate on Debt	4.0280

Commission Calculation		
Price Method:		
Commission	0.550 cents	***based on Ontario's commissions
Hyp Coupon Rate	3.996	***coupon rate based on GOC + OPG credit spread
Price after commissions	99.450	
Yield	4.028%	
Commission in bps	0.032	
Modified Duration Method:		
	17.389	
Commission in bps	0.032	

OPG LOAN - 30-Year

DETERMINATION OF OPG CREDIT SPREAD

DEALER QUOTES FOR NOVEMBER 14, 2016

	BMO	CIBC	NBF	RBC	SC	TD
Benchmark Canada Bond (3.5% Dec 2045)	2.070%	2.184%	2.193%	2.197%	2.180%	2.188%
Curve Adjustment (bp)	0	0	0	0	0	0
OPG Credit Spread to GoC Curve (bp)	190	176	185	177	174	180
Re-Offered Yield	3.970%	3.944%	4.043%	3.967%	3.920%	3.988%
Commission (bp)	1.7	2.9	2.9	2.9	4.0	2.3
All-in Canada Yield	3.987%	3.973%	4.072%	3.996%	3.960%	4.010%
All-in Spread to GoC Curve (bp)	**192**	**179**	**188**	**180**	**178**	**182**
All-in Swapped to BA's (before credit charges)						

	30-Year	30-Year	30-Year	30-Year	30-Year	30-Year
Hydro One Inc. (A / A3 / A(H))	162	157	160	157	159	156
TransAlta Corp (BBB-/BBB)						
Nova Scotia Power (A(L)/BBB+)	178	177	170	170	183	176
Toronto Hydro (A/A)	162	159				
EPCOR Utilities (A(L)/A-)	165		160	161	162	164
FortisBC (Baa1/A(L))			165	169		
FortisAlberta (A- / Baa1 / A(l))		168	165	165		
TransCanada Pipelines (A(L)/A-)	225			220		

AVERAGE OPG CREDIT SPREAD:

1. Eliminate High and Low Spread

High Spread = 190
Low Spread = 174

2. Calculate Average of Remaining Spreads

Average Spread = 179.50

PROGRAM NOTE

ENERGY – Electric Vehicle Overnight Charging Rebate Program

Government Priority Outcome	**Leader on Environmental Sustainability & Climate Change Mitigation**
Program Type	**Supporting**
Ministry Linkages	**MTO**

I. Program Overview

	Current Allocation					PROPOSED ALLOCATION			
$M	17-18	18-19	19-20	20-21		**17-18**	**18-19**	**19-20**	**20-21**
Operating Expense						**2.15**	**2.7**	**3.7**	**5.0**
Capital Expense									
Total Expense*						**2.15**	**2.7**	**3.7**	**5.0**
Operating Assets									
Capital Assets									

Notes:
1. Table should be presented on a fully consolidated basis. Capital assets include acquisitions of consolidated entities. Consolidation information should be consistent with information in ORBIT and information submitted to the Office of the Provincial Controller Division (OPCD).
2. See ORBIT for current allocation.
*Reflects sum of all financial impacts related to Key Operating, Capital, Climate Change and Technical Decisions.

This initiative is directed by Cabinet Minutes of 11 May 2016. Minute 10: "ENERGY work with MOECC and MTO to establish a 4 year time-limited free overnight charging program for residential and affected multi-unit residential customers/building and report back to Cabinet in 2016."

The Ontario government wishes to increase the number and use of electric vehicles in Ontario. Free overnight charging provides an incentive to acquire and make use of an electric vehicle by reducing the running costs of electric vehicles.

This initiative is expected to reduce GHGs from automobiles by encouraging greater acquisition and use of EVs, and encouraging EV owners to shift to charging during off-peak hours, reducing peaking demand (which is typically when natural gas electricity generation plants are used to meet power demand).

PROGRAM NOTE

ENERGY – Electric Vehicle Overnight Charging Rebate Program

While the Minute states the program is to provide “free overnight charging”, based upon average daily EV charging rates and anticipated EV adoption, the $15 million in funding announced in CCAP would be insufficient.

II. Proposed Program Changes

- This is a new program announced in the Climate Change Action Plan (CCAP), which was released on June 8, 2016 by the Ministry of Environment and Climate Change (MOECC).
- Using the MOECC CCAP EV uptake forecast, which targets 5% of annual sales to be EVs by 2020 (14,000 EVs), the Ministry estimates there would be about 2,400 vehicles added each year, resulting in almost 52,000 EV on the road by the end of 2020.

	2015	2016	2017	2018	2019	2020	2021
EV Sales	1,900	4,300	6,700	9,200	11,600	14,000	16,400
EVs at Year End	5,900	10,200	16,900	26,100	37,700	51,700	68,100

- Based on the assumption that owners drive their car 50 kilometers a day (18,250 kms/ year), EVs would require about 8 kilowatt hours (kWh) of charging each day. Using the current time-of-use (TOU) off-peak rate and variable delivery charges, this works out to $1.04 a day, or $380 a year.
    - This forecast assumes a 90% participation rate and a 90% rate of qualification for the rebate (see Measuring Behavior).These assumptions are based on the expectation that majority of customers will be incented to participate to receive the rebate.
- The Ministry estimates that a 4-year program capped at $15 million with comprehensive coverage of EV owners across Ontario would enable an annual rebate of $105.
    - Since specific program design has not been determined yet, the Ministry estimates administration costs of about 10% of total program costs, or about $1.5 million, bringing total program costs to $15 million. Administration costs are assumed to be front-loaded, with annual processing costs of about $200,000.
- To provide the equivalent of free EV charging during overnight / off-peaks times, additional funding would be required to deliver a four-year program.

PROGRAM NOTE

ENERGY – Electric Vehicle Overnight Charging Rebate Program

Fiscal Year Funding Requirements (July 1, 2017 Start Date)	2017-18	2018-19	2019-20	2020-21	2021-22	4 Year Total
Annual Rebate Cost: $105/ customer ($s)	1,300,000	2,500,000	3,500,000	4,800,000	1,400,000	13,500,000
Administrative Cost	850,000	200,000	200,000	200,000	50,000	1,500,000
Total Cost ($)	**2,150,000**	**2,700,000**	**3,700,000**	**5,000,000**	**1,450,000**	**15,000,000**

Other Program Approvals

- The Ministry plans to seek approval of program details from Cabinet at a future date.
- If the program design requires a government ministry to administer the program, a request to TB/MBC may be made for FTEs.

III.Decisions

1) Operating Decisions

Key Decisions

Greenhouse Gas Reduction Account Decisions

A. APPROVE an expenditure increase of $2,150,000 in 2017-18, $2,700,000 in 2018-19, $3,700,000 in 2019-20, and $5,000,000 2020-21 in the transfer payment line entitled "Electric Vehicle Overnight Charging Rebate Program" under Vote/Item 2902-01, Energy Development and Management.

B. Note a funding requirement of $1,450,000 in 2021-22.

GGRA#: 10

$M	2017-18	2018-19	2019-20	2020-21	Docket #
Operating Expense	**2.15**	**2.7**	**3.7**	**5.0**	D0042201
GGRA Offset	**2.15**	**2.7**	**3.7**	**5.0**	

- The funding for this GGRA item will be flowed out through the TP line. This funding is for the first compliance period.

PROGRAM NOTE

ENERGY – Electric Vehicle Overnight Charging Rebate Program

Non-Financial Decisions

	Docket #	D0042331
• APPROVE the creation of a new transfer payment line entitled “Electric Vehicle Overnight Charging Rebate Program” under Vote/Item 2902-01, Energy Development and Management.		

IV. Outcome Measures

Outcome Measures	Docket #	N/A

Desired Outcomes/Outputs

As articulated in the CCAP, the desired outcome of this program is increased EV purchases as a proportion of overall vehicle sales, and EV charging during off-peak hours. Data collection would be a corollary output.

The Ministry is engaging with other ministries responsible for EV-related programs under the CCAP to ensure information sharing. This will enable the collection of data to measure program outcomes.

Information derived from this data could lead to the development of future programs that encourage and support low-emission transportation in Ontario. In terms of the efficient operation of the electricity grid, program data could also be used to mitigate any potential negative impact of growth in EV ownership (e.g. causing stress on low-voltage transformer stations if too many EVs are charging at the same time).

The Ministry is also responsible for developing a Vehicle-to-Grid Roadmap as per the CCAP Treasury Board Minute. Data derived from this and other EV programs, and from projects supported by the Ontario Smart Grid Fund, could instruct the design of the Roadmap (Vehicle-to-Grid is a concept whereby EVs are used as “distributed energy resources” that can both consume and supply power in a way that optimizes electricity grid assets).

Approach

Program options are under development. Existing EV program delivery frameworks are being taken under consideration for program design. The Ministry is also undertaking thorough consultations with key stakeholders to identify other key considerations for program design (e.g. utilities, energy agencies, other ministries, non-government agencies, industry).

PROGRAM NOTE

ENERGY – Electric Vehicle Overnight Charging Rebate Program

V. Additional Considerations

Implementation

- Implementation of the program is tentatively planned for Q2 2017, pending approval / direction from Cabinet and TB/MBC.

Communications/Stakeholder Engagement Plans

- The Ministry has held multiple formal working group meetings with key stakeholders (LDCs, IESO, OEB) as well as other stakeholders (industry associations, not-for-profits, private sector companies, unit sub-meter providers, multi-unit residential sector experts) to solicit feedback on how the program could best achieve the desired objectives. The key themes from these discussions include:
    - Simplicity: The program should minimize administrative and processing costs. To do this program should be kept as simple as possible.
    - Behavioral Change: Incentivizing charging behavior (overnight and not during peak times) is as important as incentivizing adoption of EV ownership.
    - Scope: The program should aim to be province wide and apply to all EV owners (existing and future).
    - Tie to Hydro accounts: Rebate should be tied to customers' hydro accounts – no intention to refund costs of charging away from home.
    - Additional Data: Although there are benefits to capturing additional valuable data – this should be balanced against the costs of hardware to capture the data.
    - Auditability: Program should be robust against post event audits/reviews and able to demonstrate that funding has been disbursed appropriately.
    - Multi-Residential: Charging program for multi-residential customers will require more detailed analysis. It may be necessary to restrict to customers where charging is metered with a personal hydro account.
- Depending on the final project design, the program could have a financial and / or staff impact on some of these stakeholders, and the Ministry has concentrated on minimizing these potential impacts.
- The Ministry of Energy would participate in media / advertising undertaken to support public awareness of CCAP initiatives, including those focused on encouraging greater uptake of EVs.

PROGRAM NOTE

ENERGY – Electric Vehicle Overnight Charging Rebate Program

Risks	Docket #	N/A

Financial Risks

- While MOECC targeted EV sales of 14,000 in 2020, it is possible that uptake could be higher, resulting in a higher program cost. Mitigation measures could either be requesting an increase in funding, or making a change in the program to ensure overspending does not occur.
- It is also possible that the estimated program participation (90%), and rebate qualification (90%) are too low, resulting in higher program cost. Mitigation measures could either be requesting an increase in funding, or making a change in the program to ensure overspending does not occur.
- Funding for the program is expected to come from Greenhouse Gas Reduction Account (GGRA), which will be funded by proceeds from Ontario's cap and trade program. It is possible that forecasts for cap and trade proceeds are too high. Mitigation measures could either be requesting an increase in funding from a different source, or making a change in the program to ensure overspending does not occur.

Participation and Behavioural Change Risk

- As articulated in the CCAP, the key program outcomes are increased EV uptake as proportion of personal vehicles in Ontario, and EV charging overnight instead of during mid- and on-peak hours. These outcomes are behavioural.
- Program options are currently under development. These behavioural outcomes will be taken under consideration for program design. The funding level or other program design options (e.g. a requirement to make the program available for current and future EV owners across Ontario within the $15 million notional allocation) may constrain the ability to achieve these outcomes and ensure a high program participation rate.

Human Resources (HR) Implications	Docket #	N/A

- The Ministry does not yet know whether the program will require any additional FTEs. Once program details are finalized, the Ministry will make an FTE request (if one is required).

PROGRAM NOTE

ENERGY – Electric Vehicle Overnight Charging Rebate Program

VI. Proposed Minute

Proposed Minute
• APPROVE the creation of a new transfer payment line entitled “Electric Vehicle Overnight Charging Rebate Program” under Vote/Item 2902-01, Energy Development and Management. • APPROVE an expenditure increase of $2,150,000 in 2017-18, $2,700,000 in 2018-19, $3,700,000 in 2019-20, and $5,000,000 2020-21 in the transfer payment line entitled “Electric Vehicle Overnight Charging Rebate Program” under Vote/Item 2902-01, Energy Development and Management. • NOTE a funding requirement of $1,450,000 in 2021-22. • NOTE the Ministry will report back to Treasury Board/ Management Board of Cabinet on staffing requirements and further program design in 2017.

Approve the following multi-year resources for the program:

Financial Decisions $M	2017-18	2018-19	2019-20	2020-21
Operating Expense	**2.15**	**2.7**	**3.7**	**5.0**
Capital Expense				
Total Expense	**2.15**	**2.7**	**3.7**	**5.0**
Operating Assets				
Capital Assets				

In this regard:

- APPROVE the creation of a new transfer payment line entitled “Electric Vehicle Overnight Charging Rebate Program” under Vote/Item 2902-01, Energy Development and Management.

- APPROVE an expenditure increase of $2,150,000 in 2017-18, $2,700,000 in 2018-19, $3,700,000 in 2019-20, and $5,000,000 2020-21 in the transfer payment line entitled “Electric Vehicle Overnight Charging Rebate Program” under Vote/Item 2902-01, Energy Development and Management.

- NOTE a funding requirement of $1,450,000 in 2021-22.

- NOTE the Ministry will report back to Treasury Board/ Management Board of Cabinet on staffing requirements and further program design in 2017.

PROGRAM NOTE
ENERGY – Strategic Asset Management

Government Priority Outcome	**Modernized Infrastructure and Transportation Networks**
Program Type	**Public Good**
Ministry Linkages	**MOF**

I. Program Overview

	Current Allocation				PROPOSED ALLOCATION			
$M	17-18	18-19	19-20	20-21	**17-18**	**18-19**	**19-20**	**20-21**
Operating Expense – Strategic Asset Management	**70.0000**	**70.0000**			**140.0000**	**70.0000**	**5.0000**	**5.0000**
Operating Expense – Human Resources Support	**0.9300**	**0.9300**			**0.9300**	**0.9300**	**0.9300**	**0.9300**
Operating Expense – First Nations Cash Contribution	**15.0000**	**15.0000**	**15.0000**		**45.0000**			
Operating Expense – Conferred Benefit Amount to First Nations					**135.0000**			
Capital Expense								
Total Expense*	**85.9300**	**85.9300**	**15.0000**		**320.9300**	**70.9300**	**5.9300**	**5.9300**
Operating Assets								
Capital Assets								

Notes:
1. Table should be presented on a fully consolidated basis. Capital assets include acquisitions of consolidated entities. Consolidation information should be consistent with information in ORBIT and information submitted to the Office of the Provincial Controller Division (OPCD).
2. See ORBIT for current allocation.
*Reflects sum of all financial impacts related to Key Operating, Capital, Climate Change and Technical Decisions.

1. GOVERNMENT'S ASSET STRATEGY - FUTURE SHARE SALES

In November 2015, the Province completed the first phase of its plan to broaden Hydro One ownership. It sold approximately 16% of the Province's outstanding Hydro One common shares at a price of $20.50 per share through an IPO and through related share sales to electricity sector union trusts. The Province sold an additional 14% of the Province's outstanding Hydro One common shares at a price of $23.65 through a

secondary share offering completed in April 2016. As a result, the Province currently owns about 70% of the outstanding common shares of Hydro One.

The government may be in a position to complete the broadening of Hydro One in 2017-18 and will require the appropriate allocation to support this effort. An expenditure increase of $70 million would cover the increase in underwriting fees, legal expertise and consulting costs, in the event of a larger sale in 2017-18.

2. PERMANENT HUMAN RESOURCES SUPPORT FOR GOVERNMENT'S ASSET STRATEGY

The Ministry continues to require dedicated resources and expertise to support the Province's asset strategy. In October 2015, the Ministry received approval to create an Expert Investment Advisory Committee and an Investment and Governance Secretariat. The Expert Investment Advisory Committee has a mandate of up to three years and consists of five members including a Chair.

The Ministry received temporary funding for 5 FTEs during 2016-17 PRRT for the Secretariat, including an executive director, a manager, two senior advisors and an administrative coordinator. The funding for these FTEs expires in 2018-19.

The Investment and Governance Secretariat was initially created as a temporary office, but the Ministry will require permanent resources in order to support both investment and governance decisions related to the Province's asset strategy on an ongoing basis.

The Ministry is requesting that the 5 temporary FTE positions be made permanent for the Secretariat – an executive director, a manager, two senior advisors and an administrative coordinator. Note, the level of FTEs would not change.

3. CASH CONTRIBUTIONS ACCELERATION FOR FIRST NATIONS AGREEMENT-IN-PRINCIPLE

In July 2016, the Province and First Nations in Ontario announced an agreement-in-principle for the Province to sell to First Nations for their collective benefit, shares of Hydro One Limited. The Province would sell up to approximately 15 million shares (2.5% of total current outstanding Hydro One common shares), depending on the level of First Nation participation, to a new collective investment vehicle owned by First Nations.

In addition to the benefit of investing collectively in Hydro One, the Province would also provide seed capital of up to $45 million in cash to the First Nation investment vehicle, depending on the level of First Nation participation. A minimum approval threshold of at least 80% of First Nation participation must be achieved by the end of 2017.

The Ministry received a preliminary allocation for the cash contribution during the 2017-18 PRRT for $45 million over a three year period (2017-18 to 2019-20). The timing for the cash contribution has been revised to a single contribution of up to $45 million in upon closing of the transaction.

4. CONFERRED BENEFIT AMOUNTS TO FIRST NATIONS

As part of the Province's agreement-in-principle with First Nations, the Province agreed to sell to First Nations up to approximately 15 million Hydro One shares, representing 2.5% of total Hydro One common shares outstanding, depending on the level of First Nations participation. The purchase price for the shares is $18 per share, which is above the Province's book value but below the current market value.

PROGRAM NOTE

ENERGY – Strategic Asset Management

In September 2016, the Ministry was directed to report back through the 2017-18 PRRT process with estimates of the conferred benefit amounts, methodology used to project future market values, and estimates of other financial implications over the agreement timeline and proposed disclosure.

The Ministry is requesting an allocation of $135M in order to book the conferred benefit amount with methodology provided below.

II. Proposed Program Changes

1. GOVERNMENT'S ASSET STRATEGY - FUTURE SHARE SALES

The Ministry may be in a position to complete broadening the ownership of Hydro One by the end of 2017-18. In order to accomplish this, the Ministry requires an expenditure increase of $70 million in 2017-18 to ensure the Province has the flexibility to maximize value depending on market conditions.

Financial Implications:

Item	Forecast 2017-18 Millions ($)	Description
Secondary Offering	132.5	• These are costs associated with further share sales of Hydro One • Underwriting fees are a fixed portion of revenues (gross proceeds of offering) and comprise the vast majority of the budget under this cost category • Other costs include legal / administrative costs for government and Hydro One (to be reimbursed to the company)
Consulting, Services and Other Costs	7.5	• Legal costs for advice related to Hydro One Brampton and First Nations and Métis discussions • Transfer Payment Agreements include capacity funding to First Nations and Métis for their respective legal / financial / other advisors • Other procurements for consultants and advisors related to investment and governance decisions to support the Province's ongoing asset management strategy related to Hydro One and OPG
Total	**140.0**	• The Ministry may be in a position to complete broadening the ownership of Hydro One in 2017-18 and requires this allocation to ensure it has the flexibility to maximize value depending on market conditions.

Most of the forecasted budget above is recoverable through the proceeds from future offerings.

Ongoing consulting, advisory services and other costs for the Investment and Governance Secretariat are estimated to be approximately $5 million per year starting in 2019-20. This relates to investment and governance decisions to support the Province's ongoing asset management strategy as it relates to both the Province's investment in Hydro One and OPG.

PROGRAM NOTE
ENERGY – Strategic Asset Management

2. PERMANENT HUMAN RESOURCES SUPPORT FOR GOVERNMENT'S ASSET STRATEGY

Following the Hydro One Initial Public Offering (IPO), the Ministry of Energy created a separate structure that included:

- An Expert Investment Advisory Committee to advise on both investment and governance responsibilities, to support the Minister of Energy in his role as a shareholder; and
- An Investment and Governance Secretariat to support the Expert Investment Advisory Committee.

For these structures, the Ministry received approval during the 2016-17 PRRT process for 5 new FTEs from 2016-17 to 2018-19 to support the Investment and Governance Secretariat in overseeing investment and governance decisions related to the Province's asset strategy. The Ministry received $930,000, including $580,000 in salary and wages, for an Executive Director, a Manager, two Senior Advisors and an Administrative Assistant.

Through the Expert Investment Advisory Committee and the Investment and Governance Secretariat, the Ministry successfully executed part of the Province's asset strategy, including:

- A secondary offering which reduced the Province's share of Hydro One to approximately 70% and increased revenues by $1.97 billion in April 2016;
- An agreement-in-principle with First Nations to sell up to 2.5% of shares of Hydro One was announced July 2016; and
- The Province is poised to continue with its share sales of Hydro One in a staged and prudent manner.

The Secretariat was created in order to support the Minister on both financial and governance matters. While some of that role relates to temporary initiatives such as facilitating the share sale strategy, the Secretariat also provides ongoing advice and support related to, but not limited to:

Scope	Responsibilities
General	• Providing ongoing advice on all financial and governance related matters • Staying informed of industry and market developments through ongoing research, analysis and dialogue with the business community • Tracking the quarterly and annual financial performance to monitor the Province's investments • Being informed about the manner in which assets are consolidated on the Province's financials • Interfacing with the Expert Investment Advisory Committee
Specific to Hydro One	• Periodically validating Hydro One is meeting its legal requirements to maintain its grid control, head office and substantially all of its strategic decision making functions in Ontario • Exercising shareholder rights including participating in shareholder meetings, election of directors etc., ensuring the Province operates in accordance with its rights and obligations under the Governance Agreement • Maintaining an up-to-date understanding of the Province's rights and responsibilities as the Province's ownership in Hydro One changes • Effective management of holdings; ensuring the Province operates in accordance with the Registration Rights Agreement • Provide advice on maintaining the Province's ownership objective, including exercising the Province's pre-emptive right to purchase shares up to 45% of any new issuance

	• Facilitating the submission of documents to the Ontario Securities Commission to disclose the amount of shares held (may be required as the Province is a shareholder owning more than 20% of a TSX-listed company)
Specific to OPG	• The Province's role and responsibilities as the shareholder of OPG, including analysis of OPG's business plans, and conducting due diligence and analysis on new OPG initiatives • Providing advice and support to ensure OPG's compensation framework aligns with the Province's current legislation and regulations

The nature of the work requires highly technical skill sets with specialized knowledge in areas such as capital markets, corporate finance and financial analysis.

In order to attract and retain qualified individuals, the Ministry needs to be able to advertise permanent positions to be competitive.

Given Energy's ever-expanding mandate, the ministry is managing on-going staffing pressures and doing its best to manage these staffing requirements internally. The absence of permanent positions or a reduction of FTEs would severely impact the Ministry's ability to deliver its ever-increasing mandate.

Financial Implications:

The Ministry is requesting a total of 5 permanent FTEs starting in 2017-18 and onwards. During the 2016-17 PRRT, the Ministry received funding for these FTEs until 2018-19, permanent funding is being requested from 2019-20 and onwards.

The table below shows the financial requirements and classification levels for the requested FTEs for the Investment and Governance Secretariat.

Vote	Standard Accounts	FTEs	Existing Allocation		Request	
			2017-18 ($M)	2018-19 ($M)	2019-20 ($M)	2020-21 ($M)
2902-01	Salary and Wages	5	0.580	0.580	0.580	0.580
	Benefits		0.075	0.075	0.075	0.075
	Services – Office operations		0.175	0.175	0.175	0.175
	Services – Remuneration for EIAC		0.100	0.100	0.100	0.100
	Subtotal		**0.930**	**0.930**	**0.930**	**0.930**

Classification	# of FTE
XSMC3	1
XSMC1	1
7A007	2
5A007	1

Note: the Ministry received funding the 2016-17 PRRT for remuneration for the Expert Investment Advisory Committee. The table below shows funding for 2017-18 and 2018-19 which include remuneration for each member, with the exception of the Chair, who will not be remunerated. The ministry will report back in-year for formal Order-in-Council to extend the mandate of the Expert Investment Advisory Committee.

PROGRAM NOTE

ENERGY – Strategic Asset Management

Vote	Activity	Estimated Financial Requirement			
		2017-18	2018-19	2019-20	2020-21
2902-01	Remuneration for Committee members (up to 4)	$2,000 day/member, up to $25,000 each	$2,000 day/member, up to $25,000 each	$2,000 day/member, up to $25,000 each	$2,000 day/member, up to $25,000 each
	Subtotal	**0.100**	**0.100**	**0.100**	**0.100**

3. CASH CONTRIBUTIONS ACCELERATION FOR FIRST NATIONS AGREEMENT-IN-PRINCIPLE

As part of the Province's agreement-in-principle with First Nations, the Province agreed to provide a cash contribution of up to $45 million to First Nations over three years, depending on level of First Nations participation.

In September 2016, the Ministry was minuted the following:

- Note the Ministry of Energy will formally request an annual expenditure increase of up to $15,000,000 in each of 2017-18, 2018-19, and 2019-20 under vote/item 2902-01 for a cash contribution to the Purchaser. Underspending will be returned to the Treasury Board Contingency Fund.

Timing of payments was recently renegotiated with First Nations. The original timing contemplated the Province contributing three annual payments of up to $15 million following initial close of the share purchase. Revised timing contemplates a one-time contribution of up to $45 million.

Terms which encompass participation thresholds have not changed. The Province will contribute $45 million if 100% of First Nations participate or $30 million and prorated if less than 100% of First Nations participate.

Financial Implications:

In order to meet the new negotiated timeline, the Ministry will require the full $45 million cash contribution in 2017-18. Transfer payments in 2018-19 and 2019-20 will decrease by $15 million each year, and transfer payments in 2017-18 will increase by $30 million. The table below shows what the Ministry received during its preliminary allocation and the proposed new estimate / appropriation requirements for the out-years.

Millions ($)	2017-18	2018-19	2019-20
Preliminary Allocation	15.0	15.0	15.0
Updated Forecast	45.0	-	-

While we expect the transaction to close in the 2017-18 fiscal year, the agreement includes an extension provision which could allow closing to be postponed to the 2018-2019 fiscal year, if needed. It is unclear at this time when closing will occur and the Ministry does not expect to have a definitive timing on closing until late 2017 and thus, the Ministry will return during the 2018-19 PRRT process to request an appropriation to cover the risk that closing occurs during the 2018-2019 fiscal year, if needed.

4. CONFERRED BENEFIT AMOUNTS TO FIRST NATIONS

As part of the Province's agreement-in-principle with First Nations, the Province agreed to sell to First Nations up to approximately 15 million Hydro One shares, representing approximately 2.5% of total current Hydro One common shares outstanding, depending on the level of First Nations participation. The purchase price for the shares is $18 per share, which is above the Province's book value but below current market value.

PROGRAM NOTE

ENERGY – Strategic Asset Management

In September 2016, the Ministry was minuted the following:

- Direct the Ministry to work with Ministry of Finance / Ontario Financing Authority and Treasury Board Secretariat to report back either through Quarterly Reporting or the 2017-18 Program Review, Renewal and Transformation process with estimates of the conferred benefit amounts, methodology used to project future market values, and estimates of other financial implications over the agreement timeline and proposed disclosure.

TBS is in the process of obtaining a regulation under the *Financial Administration Act* prescribing a new class of non-cash expense for imputed subsidies arising out of dispositions of financial assets below fair market value. This is intended to best serve public interest for transparency and accountability.

Financial Implications:

A preliminary estimate of the conferred benefit amount to First Nations is up to approximately $135 million. The methodology is shown in the table below. These estimates are highly variable and will be based market conditions at the time of transaction close. The entire amount is expected to be incurred in 2017-18.

While we expect the transaction to close in the 2017-18 fiscal year, the agreement includes an extension provision which could allow closing to be postponed to the 2018-2019 fiscal year, if needed. It is unclear at this time when closing will occur and the Ministry does not expect to have a definitive timing on closing until late 2017 and thus, the Ministry will return during the 2018-19 PRRT process to request an appropriation to cover the risk that closing occurs during the 2018-2019 fiscal year, if needed.

Estimate of Difference between Market Value and Purchase Price	
A. Assumed Market Price of Shares in 2017-18 (based on average of analyst price targets[1])	$27.00
B. Purchase Price for First Nations (per Agreement-in-Principle)	$18.00
C. Estimated Value Conveyed per Share (A - B)	**$9.00**
D. Maximum Number of Shares being Purchased by First Nations	14.875 million (2.5% of current Hydro One common shares outstanding)
E. Conferred Benefit Amounts (C x D)	**$133.875 million** **or approximately $135 million**
1. Analyst share price valuations are generally based on analysis of estimated future earnings, dividends and/or cash flows.	

PROGRAM NOTE

ENERGY – Strategic Asset Management

III.Decisions

1) Operating Decisions

Key Decisions

A. APPROVE an expenditure increase of $70,000,000 in 2017-18 and $5,000,000 in 2019-20 and onwards under Vote/Item 2906-01, Strategic Asset Management and Transformation.

$M	2017-18	2018-19	2019-20	2020-21	Docket #
Operating Expense	**70.0000**	**-**	**5.0000**	**5.0000**	D0042437
Operating Assets					

- These expenses are intended to cover fees for services the Ministry requires to support various aspects of the Province's asset transformation strategy. These services include underwriting fees, external legal and financial advisors.
- Most of the forecasted budget above is recoverable through the proceeds from future offerings.
- Ongoing consulting, advisory services and other costs for the Investment and Governance Secretariat are estimated to be approximately $5 million per year.
- This relates to investment and governance decisions to support the Province's ongoing asset management strategy as it relates to both the Province's investment in Hydro One and OPG. The Ministry has sufficient existing funding in 2018-19 to support the government's asset strategy.

B. APPROVE an expenditure increase in the amount of $930,000, including $580,000 in salary and wages to support the Investment and Governance Secretariat in 2019-20 and onwards under Vote/Item 2902-01, Energy Development and Management.

$M	2017-18	2018-19	2019-20	2020-21	Docket #
Operating Expense			**0.9300**	**0.9300**	D0042454
Operating Assets					

- The Ministry requires dedicated, permanent resources to manage and oversee the government's asset strategy; this includes funding for salary & wages (5 FTEs) as well as office operation service costs for the Investment and Governance Secretariat.
- During the 2016-17 PRRT, the Ministry received funding for these FTEs until 2018-19, permanent funding is being requested from 2019-20 and onwards.

PROGRAM NOTE

ENERGY – Strategic Asset Management

C. APPROVE an expenditure decrease of $15,000,000 in 2017-18 to 2019-20 under Vote/Item 2902-01, Energy Development and Management and an expenditure increase of $45,000,000 in 2017-18 in the transfer payment line entitled “Cash Contribution for First Nations” under Vote/Item 2906-01, Strategic Asset Management and Transformation.

$M	2017-18	2018-19	2019-20	2020-21	Docket #
Operating Expense: Vote/Item 2902-01	**(15.0000)**	**(15.0000)**	**(15.0000)**		D0042460
Operating Expense: Vote/Item 2906-01	**45.0000**				
Operating Assets					

- The Ministry received the cash contribution for First Nations in its preliminary allocation in Vote/Item 2902-01 Energy Development and Management. The Ministry will manage this cash contribution from Vote/Item 2906-01 Strategic Asset Management to better track all expense related to the government’s asset strategy.
- As part of its 2017-18 preliminary allocation, the Ministry received a $45 million transfer payment over three years to First Nations, as a cash contribution.
- First Nations have renegotiated the terms of the agreement and full cash contribution to First Nations may be issued upon closing of the transaction depending on the level of First Nation participation.

D. APPROVE an expenditure increase of $135,000,000 in 2017-18 in the Transfer Payment line entitled “Conferred Benefit Amount” under Vote/Item 2906-01, Strategic Asset Management and Transformation.

$M	2017-18	2018-19	2019-20	2020-21	Docket #
Operating Expense	**135.0000**				D0042465
Operating Assets					

- The Ministry will incur this expense to account for the conferred benefit amount to First Nations, which is the difference between the purchase price for the shares and the market price.
- This is a one-time transaction.

Non-Financial Decisions

Docket #	D0042434

- APPROVE 5 FTEs the Ministry of Energy received during the 2016-17 PRRT for the establishment of the Investment and Governance Secretariat on a permanent basis.
- APPROVE the creation of a new transfer payment line entitled “Cash Contribution for First Nations” under Vote/Item 2906-01, Strategic Asset Management and Transformation.
- APPROVE the creation of a new transfer payment line entitled “Conferred Benefit Amount” under Vote/Item 2906-01, Strategic Asset Management and Transformation.

PROGRAM NOTE

ENERGY – Strategic Asset Management

IV. Outcome Measures

Outcome Measures	Docket #	N/A

Desired Outcomes/Outputs

Measure	Desired Outcome
Investment contribution	• Broadening the ownership of Hydro One will raise approximately $9 billion in funding for both the Trillium Trust to support priority infrastructure investments and pay down debt.
Ownership	• The Province is expected to sell down to 40% ownership in a careful, staged, and prudent manner

V. Additional Considerations

Implementation

- The government may be in a position to complete the broadening of Hydro One in 2017-18.
- Share sale plans will be developed by the Investment and Governance Secretariat and the Expert Investment Advisory Committee.
- The Ministry will seek approval from TB/MBC in early 2017 of a proposed share sale strategy.

PROGRAM NOTE

ENERGY – Strategic Asset Management

Communications/Stakeholder Engagement Plans

Stakeholder Group	Potential Issue	Stakeholder Engagement / Communications Strategy
General Public (1)	• First Nations being able to purchase shares at a reduced price compared to market value, as shown in conferred benefit amounts, may raise issues of fairness	• No proactive engagement required • Conferred benefit amounts are disclosed to best serve public interest for transparency and accountability • Purchase price is above the Province's book value for the shares and there is no impact to the Province's expectation to raise up to $9 billion to support infrastructure investment and pay down debt
General Public (2)	• Accelerating cash contributions to First Nations from up to three annual payments to one full payment increases costs for next year	• No proactive engagement required • Continue to reinforce to stakeholders that no changes to overall amounts have been contemplated • Timing of payments are fluid and remain subject to negotiation
Shareholders / Investors	• Increases in costs associated with potentially accelerating share sales	• No proactive engagement required • Justification is that the Ministry requires flexibility to maximize value for the Province depending on market conditions

Risks

Docket # See Risks Dockets

Market Conditions (High Risk)

The Ministry's ability to meet financial targets will be largely impacted by the state of the market. The Ministry will seek to develop share sale plans and maintain on-going relationships with key investors to maximize returns and minimize costs.

First Nations and Métis (Low Risk)

Risk that First Nations or Métis may interfere with future share offerings. Plan to mitigate by engaging with First Nation and Métis communities and working to facilitate participation in broadening the ownership of Hydro One.

Staffing Resources (Medium Risk)
Once the government has completed the sale of Hydro One, there remains a need to manage and oversee the government's investments in the organization. The nature of the work requires highly technical skill sets with specialized knowledge that are in high demand.

In order to attract and retain qualified individuals, the Ministry needs to be able to advertise permanent positions to be competitive. Lack of qualified individual could hinder the ministry's ability to manage the shares in the future.

PROGRAM NOTE
ENERGY – Strategic Asset Management

Human Resources (HR) Implications	Docket #	D0042454

Successful implementation and development of the government's asset strategy requires staff resources in the Investment and Governance Secretariat in the Ministry. The Secretariat is a separate division of the Ministry, formally reporting to the Deputy Minister of Energy.

The Ministry requires permanent 5 FTEs to support the Investment and Governance Secretariat.

See Section II Proposed Changes – Human Resource Implications for more details.

Previously Requested Report Backs	Docket #	N/A

- **Hydro One Brampton (April 2015):** TB requested Ministry of Energy to report back to TB/MBC with details on the final Brampton transaction results. At the August 25, 2015 meeting, the ministry provided an update and was directed to report back with details on the final Brampton transaction results.

- **First Nations (September 2016):** Direct the Ministry to work with Ministry of Finance/Ontario Financing Authority and Treasury Board Secretariat to report back either through Quarterly Reporting or the 2017-18 Program Review, Renewal and Transformation process with the recommended treatment of the conferred benefit being given to First Nations including estimates of the conferred benefit amounts over the agreement timeline and the methodology used to project future market values.

- **Métis (September 2016):** Direct the Ministry to report back to Treasury Board/Management Board of Cabinet for approval prior to finalization of the term sheet.

VI. Proposed Minute

Proposed Minute

- APPROVE an expenditure increase of $70,000,000 in 2017-18 and $5,000,000 in 2019-20 and onwards under Vote/Item 2906-01, Strategic Asset Management and Transformation.

- APPROVE 5 FTEs the Ministry of Energy received during the 2016-17 PRRT for the establishment of the Investment and Governance Secretariat on a permanent basis.

- APPROVE an expenditure increase in the amount of $930,000, including $580,000 in salary and wages to support the Investment and Governance Secretariat in 2019-20 and onwards under Vote/Item 2902-01, Energy Development and Management.

- APPROVE the creation of a new transfer payment line entitled "Cash Contribution for First Nations" under Vote/Item 2906-01, Strategic Asset Management and Transformation.

PROGRAM NOTE

ENERGY – Strategic Asset Management

- APPROVE an expenditure decrease of $15,000,000 in 2017-18 to 2019-20 under Vote/Item 2902-01, Energy Development and Management and an expenditure increase of $45,000,000 in 2017-18 in the transfer payment line entitled “Cash Contribution for First Nations” under Vote/Item 2906-01, Strategic Asset Management and Transformation.

- APPROVE the creation of a new transfer payment line entitled “Conferred Benefit Amount” under Vote/Item 2906-01, Strategic Asset Management and Transformation.

- APPROVE an expenditure increase of $135,000,000 in 2017-18 in the Transfer Payment line entitled “Conferred Benefit Amount” under Vote/Item 2906-01, Strategic Asset Management and Transformation.

Approve the following multi-year resources for the program:

Financial Decisions $M	2017-18	2018-19	2019-20	2020-21
Operating Expense – Vote 2902-01	(15.0000)	(15.0000)	(15.0000)	
Operating Expense – Vote 2906-01	250.0000*		5.9300	5.9300
Capital Expense				
Total Expense	**235.0000**	**(15.0000)**	**(9.0700)**	**5.9300**
Operating Assets				
Capital Assets				

* Operating expense requests for 2906-01 is the aggregate total of additional funding for Strategic Asset Management and Transformation ($70 million), Cash Contribution for First Nations ($45 million) and Conferred Benefit Amount ($135 million).

In this regard:

- APPROVE an expenditure increase of $70,000,000 in 2017-18 and $5,000,000 in 2019-20 and onwards under Vote/Item 2906-01, Strategic Asset Management and Transformation.

- APPROVE 5 FTEs the Ministry of Energy received during the 2016-17 PRRT for the establishment of the Investment and Governance Secretariat on a permanent basis.

- APPROVE an expenditure increase in the amount of $930,000, including $580,000 in salary and wages to support the Investment and Governance Secretariat in 2019-20 and onwards under Vote/Item 2902-01, Energy Development and Management.

PROGRAM NOTE

ENERGY – Strategic Asset Management

- APPROVE the creation of a new transfer payment line entitled “Cash Contribution for First Nations” under Vote/Item 2906-01, Strategic Asset Management and Transformation.

- APPROVE an expenditure decrease of $15,000,000 in 2017-18 to 2019-20 under Vote/Item 2902-01, Energy Development and Management and an expenditure increase of $45,000,000 in 2017-18 in the transfer payment line entitled “Cash Contribution for First Nations” under Vote/Item 2906-01, Strategic Asset Management and Transformation.

- APPROVE the creation of a new transfer payment line entitled “Conferred Benefit Amount” under Vote/Item 2906-01, Strategic Asset Management and Transformation.

- APPROVE an expenditure increase of $135,000,000 in 2017-18 in the Transfer Payment line entitled “Conferred Benefit Amount” under Vote/Item 2906-01, Strategic Asset Management and Transformation.

PROGRAM NOTE

ENERGY – Ontario Rebate for Electricity Consumers

Government Priority Outcome	**Reduced Poverty, Inequality and Exclusion**
Program Type	**Assisting**
Ministry Linkages	**MOF, OFA**

I. Program Overview

	Current Allocation				PROPOSED ALLOCATION			
$M	17-18	18-19	19-20	20-21	**17-18**	**18-19**	**19-20**	**20-21**
Operating Expense	**1,006.00**	**1,004.00**	**1,004.00**	**1,004.00**	**1,103.11**	**1,103.11**	**1,203.11**	**1,203.11**
Capital Expense								
Total Expense*	**1,006.00**	**1,004.00**	**1,004.00**	**1,004.00**	**1,103.11**	**1,103.11**	**1,203.11**	**1,203.11**
Operating Assets								
Capital Assets								

Notes:
1. Table should be presented on a fully consolidated basis. Capital assets include acquisitions of consolidated entities. Consolidation information should be consistent with information in ORBIT and information submitted to the Office of the Provincial Controller Division (OPCD).
2. See ORBIT for current allocation.
*Reflects sum of all financial impacts related to Key Operating, Capital, Climate Change and Technical Decisions.

Ontario is taking action to reduce electricity bills for families, farms, and businesses.

Electricity costs have increased as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.

Ontario has taken action to replace coal-fired generation with cleaner sources of energy. Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished clean generation, including nuclear, natural gas and renewables. This investment represents about 40% of our current supply and has helped decrease electricity sector emissions by approximately 80%. Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.

Since 2010, electricity prices have risen considerably, particularly for households and small businesses. Prices are forecast to continue to increase as additional generation comes online. Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50% and rates paid by commercial have increased by 56%.

To mitigate electricity prices, the Ministry of Energy has implemented an 8% rebate equal to the provincial portion of HST to consumers eligible for the Regulated Price Plan and other eligible consumers as defined by legislation – this includes about five million residential consumers, small businesses and farms.

PROGRAM NOTE

ENERGY – Ontario Rebate for Electricity Consumers

The rebate will be automatically added to every eligible consumer's bill beginning January 1, 2017.

The 8% rebate is part of a broader package of rate mitigation measures, that will help all electricity rate payers, announced in the 2016 Speech from the Throne, including:

- Enhancement of existing Rural or Remote Rate Protection to provide additional support to approximately 330,000 eligible rural consumers; and
- Expanding participation in the Industrial Conservation Initiative to allow more businesses to participate.

II. Proposed Program Changes

In September 2016, the Ministry received Treasury Board/Management Board of Cabinet (TB/MBC) approval for the implementation of the Ontario Rebate for Electricity Consumers Program, an 8% rebate equal to the provincial portion of HST to consumers eligible for the Regulated Price Plan and other eligible consumers as defined by legislation – this includes about five million residential consumers, small businesses and farms.

The 8% rebate is part of a broader package of rate mitigation measures, that will help all electricity rate payers, announced in the 2016 Speech from the Throne, including:

- Enhancement of existing Rural or Remote Rate Protection to provide additional support to approximately 330,000 eligible rural consumers; and
- Expanding participation in the Industrial Conservation Initiative to allow more businesses to participate.

As part of approving the program, the Ministry is required to report back on updated future year impacts and a potential offset strategy for resource requirements to support program implementation.

The program design and implementation for the new Ontario Rebate for Electricity Consumers will follow procedures established through the previous administration of the Ontario Clean Energy Benefit, including a parallel process to provide support to Independent Power Authorities serving remote Indigenous communities.

Electricity consumers will receive the 8% benefit directly on their bill from their electricity vendor. The distributors and sub-meterers then submit claims for the month through the IESO. A total monthly invoice is issued to the Ministry of Energy by the IESO, which is then paid by the Ontario Financing Authority (OFA), on behalf of the Ministry for Energy. Once the OFA makes the payment, the IESO reimburses distributors and sub-meterers. The Ministry of Energy will enter into Memorandums of Understanding (MOU) with the IESO and OFA to clearly define each organizations respective role in the delivery of the Rebate.

Local distribution companies (LDCs) require time and investment to prepare billing systems to provide the rebate directly to consumers. The LDC community has indicated it intends to have such implementation work ready to begin providing rebates as of January 1, 2017. In the event that an LDC is not prepared for January 1, the legislation allows LDCs until July 1, 2017 for rebates to begin appearing on bills, with consumers entitled to a lump sum payment of rate assistance from the period between January 1 and the time the rebate begins appearing on their bills.

FINANCIAL IMPLICATION:

Electricity price is a key input variable in calculating the total costs associated with the Ontario Rebate for Electricity Consumers since expenditure is a direct function of the size of the bill. The ministry is providing a revised price forecast that reflects the Ministry's best estimate of all current and future price pressures and weather projections. The initial forecast was subsequently revised based on updated methodology and improved data inputs, leading to an increase in the estimated cost of administering the program in all years. The table below shows what the Ministry received during its preliminary allocation and the proposed new

estimate/appropriation requirements for the out-years. The Ontario Rebate for Electricity Rebate program does not have an end date.

Millions ($)	2017-18	2018-19	2019-20	2020-21
Preliminary Allocation	1,006.00	1,004.00	1,004.00	1,004.00
Updated Forecast	1,100.00	1,100.00	1,200.00	1,200.00

HUMAN RESOURCES IMPLICATIONS:

Successful implementation of the Ontario Rebate for Electricity Consumers, a permanent program, will require additional permanent staff resources in the Ministry of Energy to support new government policy and operational responsibilities.

The ministry's partners in this initiative – the IESO, OFA and the Ministry of Finance – are not providing program administration support. Rather, the IESO and OFA are only making payments on behalf of the Ministry of Energy, and the Ministry of Finance is tasked with auditing entities post payment.

Successful implementation of the Ontario Rebate for Electricity Consumers will require additional permanent staff resources in the Ministry of Energy to support new government policy and operational responsibilities. The implementation of an initiative of this magnitude and importance cannot be met within existing resources.

Rising electricity price in Ontario has been a continued to grow as a media focus over last few months. This has created significant communication challenges that the ministry needs to address on a regular basis. The ministry cannot falter in the implementation of the program, especially in the light public perception that the government is not doing enough to reduce the price of electricity for consumers. Negative stakeholder reactions would raise concerns about the government's energy price mitigation commitments.

The Ministry is requesting a total of 4 new permanent FTEs starting in 2017-18 and onwards. The FTEs requested will cover a variety of responsibilities critical to the success of the Ontario Rebate for Electricity Consumers, including:

- Policy and program development, providing direction to 72 local distribution companies (LDCs) and 10 Independent Power Authorities to develop specific payment and billing mechanisms, in addition to managing the relationships with service providers to ensure that any identified issues are addressed and resolved.
- Financial support to track and monitor up to 400 data elements each month in order to know how much funding has been provided and to what entities, and tracking LDC payments and settlement statements based on information received from the IESO.
- Communications and marketing support to handle internal and external program stakeholders.

The table below shows the financial requirements and classification levels for the requested permanent FTEs for the Ontario Rebate for Electricity Consumers.

Vote	Standard Accounts	FTEs	2017-18 ($M)	2018-19 ($M)	2019-20 ($M)	2020-21 ($M)
2902-01	Salary and Wages	4	0.41	0.41	0.41	0.41
	Benefits		0.06	0.06	0.06	0.06
	Services – Office operations		0.14	0.14	0.14	0.14
	Subtotal		**0.61**	**0.61**	**0.61**	**0.61**

PROGRAM NOTE

ENERGY – Ontario Rebate for Electricity Consumers

Classification	# of FTE
7A007	1
6A007	2
5A007	1

In addition, the Ministry requires $2.5 million to cover program implementation and delivery of the Ontario Rebate for Electricity Consumers, this includes:

Program Development and Management

- Overall program management and oversight
- Develop policies as they relate to the implementation and ongoing management of the benefit
- Manage the relationships with service providers (IESO/OFA/Finance/OEB) to ensure that any identified issues are addressed and resolved
- Develop the program design for the Independent Power Authorities including payment mechanisms, audit and monitoring
- Field ongoing LDC, sub-meterer, and retailer program questions
- Assess other information from IESO and LDCs
- Develop and implement tools, standards, definitions, service expectations and monitoring systems which will result in an accountable, well managed disbursement of funds
- Develop performance measures and standards for delivery in order to take corrective action if standards are not being met
- Develop agreements relative to the administration of the Ontario Rebate for Electricity Consumers

Financial and Administrative Oversight

- Manage the appropriation and provide information to Treasury Board for quarterly reporting
- Develop controllership framework to ensure the financial integrity in the use of public funds is maintained for audit purposes, and that appropriate accountability mechanisms are in place
- Manage appropriation variances, and compute accruals
- Prepare reports and central agency request for spending authority and/or in-year funding adjustments as part of the annual PRRT process based on information and forecasted data
- Monthly tracking of LDC payments and settlement statements based on information received from the IESO. There will be a need to track and monitor up to 400 data elements in each month in order to know how much funding has been provided and to what entities
- Internal due diligence checks of payments
- Develop contract management tools to ensure that service partners are meeting contractual requirements and compliance of Transfer Payment directives are being met
- Monitor monthly payments
- Provide updates in quarterly management reports on expenditures to date and beneficiaries.
- Obtain actual annual costs of the Ontario Rebate for Electricity Consumers and the number of beneficiaries from the LDCs
- Liaise with IESO, OEB and LDCs to come up with accurate fiscal/allocation forecasting

Communications Support

- Lead overall communications around the Rebate, both internal and external
- Development of communications and marketing materials to explain the Rebate (e.g., web content, print materials if needed, etc.)
- Ongoing media relations and issues management support

PROGRAM NOTE

ENERGY – Ontario Rebate for Electricity Consumers

Program Delivery for Independent Power Authorities (IPAs)

- IPAs are not connected to the IESO-controlled grid; not part of the provincial electricity system; and outside of Ontario's regulatory framework. IPAs set their own electricity rates and are not subject to the OEB's ratemaking or licensing authority.
- Payments to the IPAs expected to be highly resource intensive: complexity of running auditable programs in remote entities.
- Program requirements include:
  - determining eligibility of customers;
  - defining the "base invoice amount" to apply the 8% credit;
  - developing accurate projections and forecasts;
  - determining program delivery process – how the rebate will be delivered and received; and
  - setting accountability mechanisms to maintain financial integrity of public funds

The table below shows the total financial request for the Ontario Rebate for Electricity Consumers. The Ontario Rebate for Electricity Rebate program does not have an end date.

Millions ($)	2017-18	2018-19	2019-20	2020-21
Salary and Wages	0.41	0.41	0.41	0.41
Benefits	0.06	0.06	0.06	0.06
Services – Office Operations	0.14	0.14	0.14	0.14
Services – Program Delivery	2.50	2.50	2.50	2.50
Transfer Payment	1,100.00	1,100.00	1,200.00	1,200.00
Subtotal	**1,103.11**	**1,103.11**	**1,203.11**	**1,203.11**

III. Decisions

1) Operating Decisions

Key Decisions

A. APPROVE an expenditure increase of $94,000,000 in 2017-18, $96,000,000 in 2018-19, $196,000,000 in 2019-20, and $196,000,000 in 2020-21, under Vote/Item 2905-03 Ontario Rebate for Electricity Consumers.

$M	2017-18	2018-19	2019-20	2020-21	Docket #
Operating Expense	**94.0000**	**96.0000**	**196.0000**	**196.0000**	D0042468
Operating Assets					

- The initial forecast was subsequently revised based on updated methodology and improved data inputs, leading to an increase in the estimated cost of administering the program in all years.
- Note: The Ontario Rebate for Electricity Rebate program does not have an end date.

PROGRAM NOTE

ENERGY – Ontario Rebate for Electricity Consumers

B. APPROVE an expenditure increase of $610,000, including $410,000 in salary and wages in 2017-18 and onwards under Vote/Item 2902-01, Energy Development and Management.

$M	2017-18	2018-19	2019-20	2020-21	Docket #
Operating Expense	**0.6100**	**0.6100**	**0.6100**	**0.6100**	D0042470
Operating Assets					

- The Ministry will require dedicated resources and expertise to support the implementation of the Ontario Rebate for Electricity Consumers, in particular:
  - Funding for salary & wages (4 FTEs) as well as office operation service costs.

C. APPROVE an expenditure increase of $2,500,000 for program delivery in 2017-18 and onwards under Vote/Item 2902-01, Energy Development and Management.

$M	2017-18	2018-19	2019-20	2020-21	Docket #
Operating Expense	**2.5000**	**2.5000**	**2.5000**	**2.5000**	D0042470
Operating Assets					

- The Ministry requires funding for program implementation and delivery to manage the Ontario Rebate for Electricity Consumers. This includes program development and management, financial administration and oversight, communications and program delivery for IPAs.

Non-Financial Decisions

Docket #	D0042470

- APPROVE 4 new permanent FTEs starting in 2017-18 and onwards to support policy and operational responsibilities related to the Ontario Rebate for Electricity Consumers.

PROGRAM NOTE

ENERGY – Ontario Rebate for Electricity Consumers

IV. Outcome Measures

Outcome Measures	Docket #	N/A

Desired Outcomes/Outputs

Measure	Desired Outcome
Investment	• Number of rebates provided to eligible residential consumers, farms and small businesses • Number of Ontario electricity consumers benefiting from the Ontario Rebate for Electricity Consumers
Rate Mitigation	• Total amount saved in each sector – residential and small business – expressed both in dollar amount and percentage savings • Contribution to reduction in annual growth of electricity cost • Estimated cost-savings to consumers

V. Additional Considerations

Implementation

LDCs require time and investment to prepare billing systems to provide the rebate directly to consumers. The LDC community has indicated it intends to have such implementation work ready to begin providing rebates as of January 1, 2017. In the event that an LDC is not prepared for January 1, the legislation allows LDCs until July 1, 2017 for rebates to begin appearing on bills, with consumers entitled to a lump sum payment of rate assistance from the period between January 1 and the time the rebate begins appearing on their bills.

Role of Ministry's partners in this initiative:

Electricity consumers receive the 8% benefit directly on their bill from their electricity vendor. The distributors and sub-meterers then submit claims for the month through the IESO. A total monthly invoice is issued to the Ministry of Energy by the IESO, which is then paid by the Ontario Financing Authority (OFA), on behalf of the Ministry for Energy. Once the OFA makes the payment, the IESO reimburses distributors and sub-meterers.

The Ministry of Energy will enter into Memorandums of Understanding (MOU) with the IESO and OFA to clearly define each organizations respective role in the delivery of the Rebate.

PROGRAM NOTE

ENERGY – Ontario Rebate for Electricity Consumers

Communications/Stakeholder Engagement Plans

A series of high-profile announcements occurred around the introduction of legislation in September 2016:

- Keynote speech and two public events pre-introduction
- News release at introduction
- Full media availability province-wide
- Regional echo events post-introduction
- Early engagement of EDA, CEOs of LDCs
- Stakeholder outreach/technical briefings with Ontario Chamber of Commerce, AMPCO, OEB low-income table, AMO, etc.

The target audience is all electricity consumers in Ontario.

The Ministry has/is positioning the Ontario Rebate for Electricity Consumers as:

- An unprecedented plan to benefit all ratepayers in a lasting, meaningful way.
- Rural customers will receive the largest single rate relief ever.
- Businesses across Ontario will have even more opportunity to be competitive and manage their energy costs.

Risks

Docket # N/A

Legal (Low Risk)

The government introduced legislation that would authorize financial assistance for certain Ontario electricity consumers in respect of electricity costs.

The proposed *Ontario Rebate for Electricity Consumers Act, 2016* would authorize the making of regulations to reimburse electricity vendors for amounts credited to consumers' accounts under the Act. The Act authorizes the making of various other regulations, including setting out other ways for consumers to receive financial assistance, to alter the default rules in the Act for how to calculate the financial assistance and to limit or alter who is entitled to financial assistance. The Act amends the *Ontario Clean Energy Benefit Act, 2010* to authorize the making of regulations under that Act in respect of cut-off dates for financial assistance under that Act.

Pressure on the Fiscal Plan (Low Risk)

The 8% rebate is expected to cost about $1 billion per year (i.e., $4 billion from 2017-2020), representing an additional pressure on the fiscal plan. Consideration could be given to allocating the $0.24 billion in reduced proceeds required towards other existing initiatives in the fiscal plan that also reduce greenhouse gas (GHG) emissions, thereby providing an overall fiscal plan offset. If cap and trade auctions are under-subscribed, the $0.24 billion may not be available for reallocation to the fiscal plan.

In the absence of any offset strategies, the full cost of the rate mitigation approach would add to the pressures and risks that need to be managed in order for the government to balance the budget in 2017-18 and stay balanced in 2018-19 and beyond.

Fiscal Estimates (Low Risk)

The estimated cost of the Ontario Rebate for Electricity Consumers is based on projected electricity prices, applied to estimated consumption each year by residential, farm, and small businesses. There is a fiscal risk exposure, as actual fiscal cost will depend on actual prices, including existing and new retailer contract prices

and numbers, and actual consumption by eligible consumers, which will certainly be variable.

This may lead to insufficient funds nearing year-end. A mitigation strategy will require a flexible and quick method for obtaining additional funds, or otherwise risk late payment to the IESO, LDCs and sub-metering providers, which could delay the availability of the rebate to customers or cause significant working capital issues for these entities.

Independent Power Authorities (IPA) (Low Risk)

There are inherent risks in the program delivery especially with the IPAs as they have varying degrees of sophistication, some are well-managed with administration functions contracted out, while others are very resource constrained. The billing of customers across IPAs is not necessarily consistent (it may be that not all customers are billed regularly) and some IPAs may not be able to apply the rebate directly to customer's electricity bills. This may require the rebate to be applied retroactively on a quarterly basis, possibly as a mailed cheque through the IPA. The Ministry will use parallel process to support to Independent Power Authorities serving remote Indigenous communities that was used during the delivery of the Ontario Clean Energy Benefit.

Human Resources (HR) Implications	Docket #	D0042470

Successful implementation of the Ontario Rebate for Electricity Consumers will require additional staff resources in the Ministry of Energy to support new government policy and operational responsibilities.

The Ministry is requesting a total of 4 new FTEs starting in 2017-18 and onwards.

See Section II Proposed Changes – Human Resource Implications for more details.

VI. Proposed Minute

Proposed Minute

- APPROVE an expenditure increase of $94,000,000 in 2017-18, $96,000,000 in 2018-19, $196,000,000 in 2019-20, and $196,000,000 in 2020-21, under Vote/Item 2905-03 Ontario Rebate for Electricity Consumers.
- APPROVE 4 new permanent FTEs starting in 2017-18 and onwards to support policy and operational responsibilities related to the Ontario Rebate for Electricity Consumers.
- APPROVE an expenditure increase of $610,000, including $410,000 in salary and wages in 2017-18 and onwards under Vote/Item 2902-01, Energy Development and Management.
- APPROVE an expenditure increase of $2,500,000 for program delivery in 2017-18 and onwards under Vote/Item 2902-01, Energy Development and Management.

PROGRAM NOTE

ENERGY – Ontario Rebate for Electricity Consumers

Approve the following multi-year resources for the program:

Financial Decisions $M	2017-18	2018-19	2019-20	2020-21
Operating Expense	**97.1100**	**99.1100**	**199.1100**	**199.1100**
Capital Expense				
Total Expense	**97.1100**	**99.1100**	**199.1100**	**199.1100**
Operating Assets				
Capital Assets				

In this regard:

- APPROVE an expenditure increase of $94,000,000 in 2017-18, $96,000,000 in 2018-19, $196,000,000 in 2019-20, and $196,000,000 in 2020-21, under Vote/Item 2905-03 Ontario Rebate for Electricity Consumers.

- APPROVE 4 new permanent FTEs starting in 2017-18 and onwards to support policy and operational responsibilities related to the Ontario Rebate for Electricity Consumers.

- APPROVE an expenditure increase of $610,000, including $410,000 in salary and wages in 2017-18 and onwards under Vote/Item 2902-01, Energy Development and Management.

- APPROVE an expenditure increase of $2,500,000 for program delivery in 2017-18 and onwards under Vote/Item 2902-01, Energy Development and Management.

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

Government Priority Outcome	**Modernized Infrastructure and Transportation Networks**
Program Type	**External**
Ministry Linkages	**ENERGY, OMAFRA**

I. Program Overview

	Current Allocation				PROPOSED ALLOCATION			
$M	17-18	18-19	19-20	20-21	**17-18**	**18-19**	**19-20**	**20-21**
Natural Gas Program – Capital Expense *Includes Natural Gas **Loan** (launching in 2016) and **Grant Program** (not yet launched)*	1.5000 Loan	16.7000 *Loan – 1.5 Grant – 15.2*	9.2000 *Loan – 1.5 Grant – 7.7*	9.2000 *Loan – 1.5 Grant – 7.7*	**0.0000**	**15.2000** *Grant*	**7.7000** *Grant*	**7.7000** *Grant*
Natural Gas Program – Operating Expense *Includes Interest Incentive and Program Admin Costs*	0.0000	0.0000	0.0000	0.0000	**5.5540** *Loan*	**22.8483** *Loan*	**17.7524** *Loan*	**0.0925** *Loan*
Program Expense – Bad Debt	0.0000	0.0000	0.0000	0.0000	**0.0010**	**0.0010**	**0.0010**	**0.0010**
Municipal Infrastructure Investment Initiative – Capital Expense	4.0540	4.0540	4.0540	4.0540	**0.0000**	**0.0000**	**0.0000**	**4.0540**
Strategic Community Infrastructure Fund – Reduced Request	0.0000	160.0000	420.0000	690.0000	**0.0000**	**142.7057**	**407.8016**	**0.0000**

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

Total Expense*	5.5540	180.7540	433.2540	703.2540	**5.5550**	**180.7550**	**433.2550**	**11.8475**
Operating Assets	0.0000	0.0000	0.0000	0.0000	**60.0000**	**80.0000**	**60.0000**	**0.0000**
Capital Assets								

Notes:
1. Table should be presented on a fully consolidated basis. Capital assets include acquisitions of consolidated entities. Consolidation information should be consistent with information in ORBIT and information submitted to the Office of the Provincial Controller Division (OPCD).
2. See ORBIT for current allocation.
*Reflects sum of all financial impacts related to Key Operating, Capital, Climate Change and Technical Decisions.

Request for New Allocation and Operating Asset in 2017-18

- MOI is requesting a new allocation of $5.6 million in 2017-18 to support program expenses (interest expense and program administration costs) associated with the Natural Gas Access Loan program approved by Treasury Board on September 13, 2016.
- This is to ensure that loans can be advanced starting in 2017-18 and until 2019-20.
- MOI is requesting the creation of a new Operating Asset (for disbursement of Natural Gas Loans) and an Operating Expense in the form of a Transfer Payment for the Natural Gas Interest Incentive in the Ministry of Infrastructure starting in 2017-18, Vote-Item 4003-05.
- MOI is also noting a risk of $10.8M to the 2017-18 Natural Gas Interest Incentive Transfer Payment line representing the province's cost of borrowing to make interest-free loans. Additional risks of $2.9M in 2017-18 and $1.6M in 2018-19 are noted, reflecting market fluctuations in the interest rate applicable to the province's cost of borrowing. Actual applicable interest rates and borrowing costs will be determined at the time that loans are made.
- MOI is also requesting the creation of a new Operating Asset line under Loans and Investments for disbursement of Natural Gas loans.
- ENERGY is requesting the creation of a new Operating Asset (for disbursement of Natural Gas Loans) and an Operating Expense in the form of a Transfer Payment for the Natural Gas Interest Incentives starting in 2017-18, Vote/Item 2902-06.

New Expense profile for 2018-19 to 2020-21, fully offset

- $40.7 million in program expenses from 2018-19 to 2020-21 are fully offset from MOI's Municipal Infrastructure Investment Initiative, Natural Gas Access Program, and reduced request under the Strategic Community Infrastructure Fund notional capital expense allocations.
- MOI is requesting the creation of a new Bad Debt Operating Statutory Appropriation for the Natural Gas Access Loan Program in the Ministry of Infrastructure Vote-Item 4003-19 with a $1,000 placeholder in 2017-18, 2018-19, 2019-20, and 2020-21.
- Note, in 2022-23, MOI is requesting a $30.0 million Bad Debt Expense allocation that will be offset by a reduced request under the Strategic Community Infrastructure Fund. The Bad Debt Operating Statutory Appropriation will require a $1,000 placeholder allocation from 2023-24 until 2036-37 (i.e., over the remaining duration of the 20-year loan program).

Loan Loss Provision Policy

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

- This program note also provides an update to the loan loss provision policy in support of the Natural Gas Access Loan Program, in consultation with the Ontario Financing Authority.

II. Proposed Program Changes

Budget 2016 committed to introducing the Natural Gas Access Loan program to support access to natural gas in 2016. This commitment was further supported by Minister of Infrastructure's 2016 mandate letter, which includes direction to implement the Natural Gas Access Loan and Natural Gas Economic Development Grant programs.

Loan Program

In September 2016, the Ministries of Infrastructure (MOI), Energy (ENERGY) and Agriculture, Food and Rural Affairs (OMAFRA) received Treasury Board/Management Board of Cabinet (TB/MBC) approval for the Loan program, including program design, fiscal impacts and launch in Fall of 2016.

As part of approving the Loan program, TB/MBC noted the ministries have identified offsets to partially address the fiscal impact of the Loan program, and instructed the ministries to report back through PRRT to:

a. Create expense lines, operating asset(s), and bad debt allocations.
b. Confirm offsets and provide updates to future-year implications.
c. Provide an update on the loan provision policy, in consultation with the Ontario Financing Authority, that includes a risk assessment to determine if any changes are required to the loan loss provision

MOI is projecting the estimated fiscal impact of the Loan program at $89 million, including $87 million in program expenses over the next six years and $2 million in program administration over the next 20 years. It should be noted that the actual fiscal impact will depend on the types of loans that are approved (e.g., risk level of borrower, loan repayment schedule, etc.).

The following table summarizes the fiscal profile for the Loan program, including the identified offsets and the outstanding net pressure of $10.8 million in 2017-18.

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

$M	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Total (2016-17 – 2022-23)	Total (20 year program)
Program Expense - Interest Subsidy	0.0000	5.4615	22.7558	17.6599	0.0000	0.0000	0.0000	45.8772	45.8772
Program Expense – Bad Debt	0.0000	0.0.0010	0.0010	0.0010	0.0010	0.0010	30.0000	30.0050	30.0190
Program Expense - Administration	0.1500	0.0925	0.0925	0.0925	0.0925	0.0925	0.0925	0.7050	2.0000
Total Program Cost:	**0.1500**	**5.5550**	**22.8493**	**17.7534**	**0.0935**	**0.0935**	**30.0925**	**76.5872**	**77.8972**
Offsets:									
ODOE Underspending (operating)	(0.1500)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	(0.1500)	(0.1500)
Existing Natural Gas Loan Program Allocation	0.0000	(1.5000)	(1.5000)	(1.5000)	(0.0925)	(0.0925)	(1.5000)	(6.1850)	(7.3875)
Municipal Infrastructure Program	0.0000	(4.0540)	(4.0540)	(4.0540)	0.0000	0.0000	(4.0540)	(16.2160)	(16.2160)
Moving Ontario Forward (outside GTHA set-aside for Strategic Community Infrastructure Fund)	0.0000	0.0000	(17.2943)	(12.1984)	0.0000	0.0000	(24.5385)	(54.0312)	(54.0312)
Total Offsets	***(0.1500)***	***(5.5540)***	***(22.8483)***	***(17.7524)***	***(0.0925)***	***(0.0925)***	***(30.0925)***	***(76.5822)***	***(76.5822)***
Net Pressure	**0**	**0.0010**	**0.0010**	**0.0010**	**0.0010**	**0.0010**	**0**	**0.0050**	**1.315**

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

MOI is noting a risk of $10.8M to the 2017-18 Natural Gas Interest Incentive Transfer Payment which represents the province's cost of borrowing to make interest-free loans (for a total interest cost of $16.2M). This is based on the following assumptions (please see Appendix for details):

- Loans will be disbursed on a milestone basis as follows: $60 million in 2017-18, $80 million in 2018-19 and $60 million in 2019-20.
- An interest rate of 2.72% is used to estimate the cost of borrowing to the province. This represents the serial amortizer rate that was applicable at the time of the Treasury Board submission in September 2015.
- Loan recipients would being repaying years 5-7 of the loan term (maximum of 20 years).

The actual interest cost to the province is contingent upon a number of factors that will be known at the time that loans are made, including:

- The amount and term of approved loans
- The repayment profile of approved loans
- Applicable market interest rates to the province's cost of borrowing, based on consultation with the OFA

MOI is also seeking approval to create:

- An Operating Asset for the Natural Gas loan in the Ministry of Infrastructure starting in 2017-18;
- An Operating Transfer Payment line for the Natural Gas Interest Incentive in the Ministry of Infrastructure starting in 2017-18 to reflect the total cost borrowing to Ontario for providing interest-free loans; and,
- A Bad Debt Operating Statutory Appropriation for the Natural Gas loan program in the Ministry of Infrastructure with a $1,000 placeholder starting in 2017-18.

<u>Loan Loss Provision</u>

As part of TB/MBC approval to launch the Loan program, the ministries were also instructed to develop a loan loss provision to outline the fiscal impact of an event where a lender defaults on their loan.

Loan Loss Policy:

For planning purposes, MOI is requesting an allocation of $30 million in 2022-23 for bad debt expense. This is to create an "Allowance for Doubtful Accounts (ADA) to cover loan losses that may occur 2022-23 is the first year that repayments are currently scheduled to occur under the loan program.

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

To minimize the risk of loan loss, the Ministry and Infrastructure Ontario will assess the collectability of the loan principal at the time of application and on an annual basis. A minimum debt-service coverage ratio of 1.0x will be required; preference will be given to projects with a ratio of 1.25x or greater. The assessment will be informed by Infrastructure Ontario's extensive experience lending to municipalities and utilities and may include the use of sector-specific financial metrics, including debt-equity ratio, liquidity, etc.

Evidence to be collected in estimating a provision (%) include:

a) sources of revenues for loan repayment;
b) recent collection experience for the loan (principal);
c) recent financial performance/condition of the borrower;
d) security held for the loan (if any);
e) factors known at the time of reporting that are likely to affect the borrower's ability to repay the loan in the future;
f) economic conditions in the region in which the borrower operates; and,
g) conditions in the industry in which the borrower operates.

The methodology for estimating the amount of loan loss provision will be reviewed by management based on actual experience and as new information comes to light. Infrastructure Ontario will be responsible for monitoring/administering the loans with borrowers and providing advice to MOI.

Loan agreements signed with successful applicants will include rights and remedies available to the Province in case of default, including the ability to withhold provincial transfers and exercise security, where available.

<u>Consultation with the Ontario Financing Authority</u>

Fiscal Profile

The OFA has advised that interest expense for the Loan Program is subject to prevailing borrowing rates in the market at the time that loans are made. This means the interest incentive transfer payment line is subject to fluctuations depending on when loans are made and repaid.

To reflect this additional risk, MOI modelled an additional scenario, using a higher interest rate (3.072% from Q2 in 2016), leading to an additional $2.9M risk to the 2017-18 and $1.6M to the 2018-19 Natural Gas Interest Incentive Transfer Payment line.

As loans are approved under the program and actual loan disbursement schedules are developed, MOI will work with the OFA to refine applicable interest rates and report back through subsequent in-year submissions and PRRT.

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

Loan Loss Policy

The Loan Loss Policy has been updated to reflect OFA's feedback, including the addition of a minimum debt-service coverage ratio (1.0x), use of sector-specific financial metrics (e.g., liquidity) as well as consideration of available security for the loan.

Grant Program

The 2014 mandate letter to the Minister of the former Ministry of Economic Development, Employment and Infrastructure noted the importance of creating a Natural Gas Economic Development Grant to accelerate projects with clear economic development potential.

It is expected that uptake for the Grant program will be high, since the Grant program will provide non-repayable project funding, particularly in comparison to the Loan program. The Ministry will attempt to target Grant program funding by using focused metrics, including economic benefit, proponent contribution, number of natural gas connections established, and impact on greenhouse gas emissions.

Preparation for the Grant program, including program design, are under development and will likely be launched sometime in Spring-Summer 2017.

Background

The Natural Gas Loan and Grant Programs are part of *Moving Ontario Forward*, the Province's plan to invest $31.5 billion in public transit, transportation and other priority infrastructure projects over ten years. This includes $16.5 billion for transit and transportation inside the Greater Toronto and Hamilton Area (GTHA), and $15 billion for transit, transportation and other infrastructure priorities outside the GTHA, including the Natural Gas Loan and Grant Programs.

As part of *Moving Ontario Forward*, MOI reached out to communities and interested stakeholders to seek input on the design of the natural gas programs from May – September 2015. Consultation feedback highlighted competing expectations regarding the design of the programs:

- Small communities and businesses are concerned about energy fairness, i.e., they want all communities to have an opportunity to share in affordable supplies of natural gas.
- Established utilities would like to prioritize projects for government funding based on economic feasibility (i.e., the ones closest to being economic would proceed first).
- New natural gas distributors are seeking subsidization of consumer conversion costs to help them attract new customers, and support for different modes of delivery such as liquefied natural gas.

The Loan program has been approved for launch in fall 2016, with the following program parameters:

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

Parameter	Program Overview
What types of projects are eligible?	• Capital projects to build new natural gas pipelines, compressors and other related infrastructure. • Capital projects to fund liquefied or compressed natural gas infrastructure, including pipelines, liquefaction facilities, regasification facilities, storage facilities and other related infrastructure. • Local programs to subsidize customer conversion costs or individual customer contributions in aid of construction. In such cases, the entities receiving loans are restricted to Municipalities and Indigenous communities, not private corporations. All projects must be for net new connections / volume.
Who is eligible to apply?	• Municipalities* • Indigenous Communities* • Private sector entities providing liquefied natural gas (LNG) and compressed natural gas (CNG) for the MOI-funded portions only. **Municipalities or Indigenous communities would use the loan to make a capital contribution-in-aid-of-construction to the utility to build natural gas infrastructure.* *They could also use the funds to launch a local program to subsidize customer conversion costs (e.g., converting a furnace to natural gas) or customer contributions in aid of construction to the utility (e.g., the cost to a customer of bringing pipe across a large property, such as a farm, over and above the distance that a utility would normally fund).* *The municipality or Indigenous community would be the borrower, however, the natural gas infrastructure would be owned by the utility.*
What are key assessment criteria?	• Credit-worthiness (i.e. the ability to pay back the loan) • Additional criteria related to cost per connection, net new connections, savings and greenhouse gas emissions impact.
Funding Terms	• There is no cap on the amount of funding that can be requested within the overall $200 million funding envelope. • Loans would be repayable over a term of up to 20 years.
Timing	• Application intake and assessment would occur on an ongoing basis over two years.

III.Decisions

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

1) Operating Decisions

Key Decisions – MOI

A. Creation of Natural Gas Loan Interest Incentive transfer payment lines (Vote/Item 4003-05) to report borrowing cost to the province for providing an interest free loan.
B. Operating Asset line and appropriation required for initial Natural Gas Loan disbursement in 2017-18 (Vote/Item 4003-05)

$M	2017-18	2018-19	2019-20	2020-21	Docket #
Operating Expense	**5.5540**	**22.8483**	**17.7524**	**0.0925**	X
Operating Assets	**60.0000**	**80.0000**	**60.0000**		

Key Decisions – Energy

A. Approve the creation of an Operating Asset entitled “Natural Gas Loans” under Vote/Item 2902-06, Energy Development and Management with a $1,000 placeholder for Natural Gas Loan disbursements.
B. Approve the creation of a new Operating Expense item entitled “Natural Gas Loan Interest” under Vote/Item 2902-07, Energy Development and Management.
C. Approve the creation of Transfer Payment line entitled “Natural Gas Loan Interest Incentive” in Vote/Item 2902-07, Energy Development and Management with a $1,000 placeholder to record borrowing cost to the province for providing an interest free loan. Note that expense impact will be offset from the Ministry of Infrastructure’s Natural Gas Loan Interest Incentives transfer payment line (Vote/Item 4003-05).
D. Note that bad debt expense incurred by ENERGY will be offset from the Ministry of Infrastructure’s bad debt expense allocation established for the Natural Gas Access Loan Program.

$M	2017-18	2018-19	2019-20	2020-21	Docket #
Operating Expense	**0.0010**	**0.0010**	**0.0010**	**0.0010**	X
Operating Assets	**0.0010**	**0.0010**	**0.0010**	**0.0010**	

Technical Decisions

A. The Ministry of Infrastructure notes an Operating Expense appropriation requirement with an increase to Statutory Appropriations for Bad Debt Expense, in Vote 4003, with a $1,000 placeholder in 2017-18, 2018-19, 2019-20, and 2020-21. Note, in 2022-23, MOI is requesting an allocation of $30.0M Bad Debt Expense

that will be offset by a reduced request under the Strategic Community Infrastructure Fund.

$M	2017-18	2018-19	2019-20	2020-21	Docket #
Operating Expense	**0.0010**	**0.0010**	**0.0010**	**0.0010**	X
Section 15	**X.X**				

Non-Financial Decisions

	Docket #	X
o	N/A	

2) Capital Decisions

Key Decisions

A. Decrease appropriation under the Municipal Infrastructure Investment Initiative and Natural Gas Access Program Transfer Payment lines (Vote/Item 4003-05) for the purposes of establishing Loan program offsets.

$M	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	Docket #
Municipal Infrastructure Investment Initiative – Capital Expense	**-4.0540**	**-4.0540**	**-4.0540**	**X.X**	**X.X**	**-4.0540**	**X.X**	**X.X**	**X.X**	**X.X**	X
Natural Gas Access Program – Capital Expense	**-1.5000**	**-1.5000**	**-1.5000**	**-0.0925**	**-0.0925**	**-1.5000**	**-0.0925**	**-0.0925**	**-0.0925**	**-0.0925**	

Note:
Table should be presented on a fully consolidated basis. Capital assets include acquisitions of consolidated entities. Consolidation information should be consistent with information in ORBIT and information submitted to the Office of the Provincial Controller Division (OPCD) in their consolidation worksheets.

- Decrease in funding for the Municipal Infrastructure Investment Initiative is requested as an offset to support increased Loan program funding. This offset is requested to partially address an identified increase in the fiscal impact of the Loan program resulting from additional interest incentive (Appendix A).
- This will help ensure the Loan program has the fiscal capacity to maintain the current proposal of providing loans starting in 2017-18.

B. Reduced funding request under the Strategic Community Infrastructure Fund for the purposes of establishing Loan Program Offsets, with reductions of $17.4M in 2018-19, $12.3M in 2019-20 and $24.5M in 2022-23.

$M	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	Docket #
Reduced	**X.X**	**-17.2943**	**-12.1984**	**X.X**	**X.X**	**-24.5385**	**X.X**	**X.X**	**X.X**	**X.X**	X

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

Strategic Critical Infrastructure Fund Request											
Capital Asset	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	

Note:
Table should be presented on a fully consolidated basis. Capital assets include acquisitions of consolidated entities. Consolidation information should be consistent with information in ORBIT and information submitted to the Office of the Provincial Controller Division (OPCD) in their consolidation worksheets.

- This decrease in notional funding is requested as an offset to support increased Loan program funding. This offset is requested to partially address an identified increase in the fiscal impact of the Loan program resulting from additional interest incentive and adjusted timing for the recognition of bad debt expenses (Appendix A).
- This will help ensure the Loan program has the fiscal capacity to maintain the current proposal of providing loans starting in 2017-18.

Technical Decisions

C. N/A

$M	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	Docket #
Capital Expense	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	X
Capital Asset	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	**X.X**	

Note:
Table should be presented on a fully consolidated basis. Capital assets include acquisitions of consolidated entities. Consolidation information should be consistent with information in ORBIT and information submitted to the Office of the Provincial Controller Division (OPCD) in their consolidation worksheets.

Non-Financial Decisions

	Docket #
o N/A	X

IV. Outcome Measures

Outcome Measures	Docket #
	X

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

Measure	Outcome
Investment	• Ratio of $ provincial loan amount to municipal/private sector investment • Number of communities served though the investment
Connections	• Number of net new connections to natural gas – residential, business and industrial • Volume increase in natural gas through new connections
Adoption	• Rate of adoption/conversion among individuals and businesses
Previous Energy Source	• % of conversions from oil, propane, electricity, etc. • Estimated cost-savings to consumers

Additional Considerations

Implementation

- Funding under the Loan Program would be conditional on the project receiving approval for a leave-to-construct application from the Ontario Energy Board (OEB).
    - Natural gas projects, depending on their size, require approval for a leave-to-construct application from the OEB to proceed.
    - The OEB assesses projects for, among other things, economic feasibility, i.e., the expected project costs and revenues and anticipated impact on rates (more details in Section 4.0).
    - LNG/CNG applicants for loans or utilities potentially receiving an aid in contribution payment from a municipality or First Nation will have the flexibility to seek approval from the Board after making an application or in the case of an utility after an application is made by a municipality or First Nation to the Loan Program in order to allow them to bring forward a more complete application for the Board's review.
- Projects must be submitted to the OEB within **three** months of receiving approval under the Loan Program to ensure the credit-assessment stays current.
- Project financials submitted to the OEB must be the same as those submitted under the Loan Program for review. In instances where there is a material change in relevant financial details, the project may be re-assessed under the Loan Program.
- The delivery of loans under the Loan program is partially affected by a regulatory review process currently being undertaken by the OEB.

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

- Loan program guidelines will encourage applicants to ensure proposals include full use of the rate-base, including through "stand alone" rates for new expansion communities, which are now allowed as a result of the OEB's generic review of regulatory flexibility.
- The timing for the launch of the Loan program is proposed as follows:

Milestone	Estimated Timeline
Program Launch	Fall 2016
Application Submissions	Starting Fall 2016
Applications evaluated by IO. Shared with MOI and ENERGY Ministers for approval	Winter 2017 (Approximately 3-4 months process, at the earliest)
Begin Notifying Successful Applicants	Spring 2017
OEB Review Process Complete and Funding Begins to Flow **OEB's review process typically takes an estimated 4 to 7 months**	Summer – Fall 2017
Close of the rolling application intake	Summer/Fall 2018

- It is also important to consider the impact of the ongoing work in preparation of the launch of the Grant program.
- Since the launch of the Grant program will occur after the launch of the Loan program, it is anticipated that some applicants may wait to apply for Grant funding first.

Communications/Stakeholder Engagement Plans

- MOI consulted with stakeholders, including municipalities, natural gas distributors and special interest groups (e.g., Ontario Federation of Agriculture, Canadian Propane Association, etc.) on the design of the natural gas programs as part of the *Moving Ontario Forward* consultations last summer. The Province released a discussion guide to gather feedback on infrastructure initiatives outside the GTHA, including the Loan and Grant programs.

- A number of additional stakeholders also reached out to MOI, ENERGY and OMAFRA to provide input on the natural gas programs, as follows:

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

STAKEHOLDER	FEEDBACK SUMMARY
MUNICIPALITIES AND INDIGENOUS COMMUNITIES	• Concerned about energy fairness and want the opportunity to share in affordable supplies of natural gas and support economic development. • Primarily looking for grant funding to help offset the upfront costs of expansion, as well as consumer conversion costs.
UNION and ENBRIDGE GAS *Established utility seeking to maximize connections by leveraging regulatory flexibility*	• Provide funding to marginally (un)economic projects with a minimum of 50 existing homes/businesses. These are projects that are unable to meet the economic feasibility test put in place for the Ontario Energy Board for expansion projects and would require additional revenues to proceed. • Projects must leverage flexibility (i.e., customer surcharge, increases in rates for existing customers and municipal property tax equivalent contributions) • Provincial funding should not support establishment of new utilities • Customers should be responsible for conversion costs (e.g., furnace, baseboards, etc.,)
EPCOR *New entrant trying to incent new customers to attach and build a rate base*	• Provincial funding be used to subsidize consumer conversion costs—50% from provincial grant, 25% from loan and the remaining would be covered by Epcor • Additional funding to potentially provide a capital contribution in aid of construction to the communities

NORTHEAST MIDSTREAM
 	
New entrant developing a greenfield LNG distribution system
	• Natural gas programs should be open to private-sector proponents.
	• Eligible costs should include:
	  o Capital expenditures associated with the creation of LNG distribution systems
	  o 50% of consumer conversion costs
	  o Acquisition of LNG supply capacity
	• The Natural Gas Access Loan should be structured with a customized repayment schedule.

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

ONTARIO FEDERATION OF AGRICULTURE *Seeking to maximize access for individual farm owners*	• In partnership with the Western Ontario Wardens' Caucus and the Eastern Ontario Wardens' Caucus asked that provincial government work with gas companies to install 1,000Km of new pipe each year for the next 20 years, at an approximate cost of $75 million a year. • Indicated gas expansion would provide an estimated 1 billion savings in energy costs for rural residents and farmers. • Provincial funding should be directly accessible to farm owners and support contributions-in-aid-of-construction by individual property owners (i.e., the cost of bringing the pipe to the property boundary). • Farm owners pay for cost of traversing the property setback and equipment conversion costs.

Phase 2 of Federal Infrastructure Funding

o N/A

Risks

Docket # X

Risk	Mitigation
No or Low Program Uptake	There has been no uptake of the existing Infrastructure Ontario Loan Program for natural gas expansion. A similar risk exists for the new Loan Program as several stakeholders expressed a preference for grant funding rather than a loan. The Loan Program has been structured as a broad and flexible program to provide additional incentive for communities to expand by offering loans at zero-interest.

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

Low rate of application success	A number of communities currently without natural gas are small and northern communities with low fiscal capacity, and may not meet the credit assessment criteria. In addition, LNG distribution companies with no established credit history or assets may have challenges demonstrating credit-worthiness. MOI and ENERGY will work with IO through the loan approval process to balance considerations related to credit-worthiness with supporting expansion projects.
Projects may not leverage regulatory flexibility	Program guidelines will encourage applicants to ensure proposals include full use of the rate-base, including through "stand alone" rates for new expansion communities, which are now allowed as a result of the OEB's generic review of regulatory flexibility. Since the loans are repayable, failure to make full use of the rate-base would increase their debt obligation. This means that there is a built-in incentive for projects to leverage regulatory flexibility to minimize the loan amount being requested.
Climate Change Mitigation	Residents applying to the Loan Program would be switching from a mix of fuels – electricity, propane and fuel oil. As such, it is not possible to know the exact greenhouse gas (GHG) emissions impact of the program in advance. Residents switching from propane and fuel oil would reduce their carbon emissions, while residents switching from electricity would increase their emissions under the current electricity supply mix. Overall, given the profile of heating systems in Ontario, it is expected that emissions will increase by about 70% or 35 kt CO2e per year for the converted customers as a whole. While this represents less than 0.01% of the Province's GHG reduction targets for 2020, 2030 and 2050, there is a risk that the Loan Program will be seen as inconsistent with the Province's efforts to reduce reliance on fossil fuels. The Ministries will develop a responsive communications strategy that focuses on affordability and complementarity with other provincial efforts. The key message is that expanding access to natural gas is about energy affordability and providing consumers in underserved areas with more energy choices and lowering energy costs. These savings could be used to finance other GHG reducing initiatives such as building envelope improvements or the purchase of electric vehicles.

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

Loan Defaults	IO will perform financial due diligence to ensure the credit worthiness of the applicants prior to final funding decisions. Loans will be secured using security agreements, where possible. IO will be responsible for annual monitoring and tracking loan payments in order to flag any potential concerns for MOI and ENERGY associated with the borrower and the loan. If the borrower is demonstrating signs of financial duress and/or a loan goes into default, as a first step, IO on behalf of MOI and ENERGY will work with the borrower to determine the underlying reasons associated with their current situation. If it is determined the borrower is experiencing a short term issue, IO would provide advice on restructuring the repayment schedule or developing other solutions. Final decisions with rest with the MOI or ENERGY Minister.

Human Resources (HR) Implications	**Docket #**	X

- No FTE impacts have been identified
- Infrastructure Ontario would administer the Natural Gas Access Loan program using the existing loan program framework.

Previously Requested Report Backs	**Docket #**	X

- As part of the 2016-17 PRRT process, TB/MBC directed the former MEDEI, ENERGY and OMAFRA to report back on details of the proposed Loan program by summer 2016 and prior to program launch.
- MOI, ENERGY and OMAFRA reported back to TB/MBC as requested, in September 2016 and received approval to launch the Loan program in Fall 2016.
- At the September 2016 TB/MBC Report Back, MOI, ENERGY and OMAFRA were directed to report back in the 2017-18 PRRT process to:

  a) Create expense lines, operating asset(s), and bad debt allocations.

  b) Confirm offsets and provide updates to future-year implications.

  c) Provide an update on the loan loss provision policy, in consultation with the Ontario Financing Authority, that includes a risk assessment to determine if any changes are required to the loan loss provision.

- As part of the September 2016 TB/MBC Report Back, MOI, ENERGY and OMAFRA were also

directed to report back through the quarterly reporting process on the status of implementation, spending to date, and any additional fiscal impacts.

V. Proposed Minute

Proposed Minute

- Receive a Report Back on the fiscal profile for the Natural Gas Access Loan and Natural Gas Economic Development Grant Programs, including an update on the loan loss provision policy under the Natural Gas Access Loan Program in consultation with the Ontario Financing Authority.
- In this regard:

MOI:

- Approve the creation of an Operating Asset line entitled “Natural Gas Access Loans” under Loans and Investments (Vote-Item 4003-05).
  - Approve an increase of $60,000,000 in 2017-18, $80,000,000 in 2018-19, and $60,000,000 in 2019-20 under Natural Gas Access Loans.
- Approve the Operating Expense appropriation of $5.6M 2017-18, $22.9M in 2018-19 and $17.9M in 2019-20 (Vote/Item 4003-01)
  - Approve the creation of the operating transfer payment line entitled “Natural Gas Loan Interest Incentive” (Vote/Item 4003-01) to report the province’s cost of borrowing to support the interest-free loan program.
  - Approve expenditure increases of $5,554,000 in 2017-18, $22,848,300 in 2018-19 and $17,752,400 in 2019-20 in the Natural Gas Loan Interest Incentive Transfer Payment.
  - Approve increases in program administration costs of $92,500 in 2017-18 and ongoing under Services in Infrastructure Policy and Planning, Vote/Item, 4003-01.
- Approve a Capital Expense offset from the existing Natural Gas Loan Program Transfer Payment, Vote-Item 4003-02, with $1.5000 million in 2017-18, 2018-19, 2019-20 and $0.0925 million in 2020-21.
  - Note that decreases of $0.0925 million in 2021-22, decreases of $1.5000 million in 2022-23, decreases of $0.0925 million in 2023-24, 2024-25, 2025-26, and 2026-27 will be offset from the Natural Gas Access Loan Program.
- Approve the creation of a new Bad Debt Operating Statutory Appropriation under Vote 4003.
- Approve an increase of $1,000 placeholder in 2017-18, 2018-19, 2019-20, and 2020-21 under Bad Debt Expense, the Financial Administration Act under Vote 4003.
- Note an increase of $30,000,000 in Bad Debt expense that will be offset by a reduced request under the Strategic Community Infrastructure Fund.

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

- Note an increase of $1,000 from 2023-24 and ongoing for Bad Debt Expense.
- Note a reduction in funding to be requested under the Strategic Community Infrastructure Fund for the purposes of establishing Loan Program Offsets, with reductions of $17,294,300 in 2018-19, $12,198,400 in 2019-20 and $24,538,500 in 2022-23.
- Approve an expenditure decrease under the Municipal Infrastructure Investment Initiative transfer payment line (Vote/Item 4003-02), for the purposes of establishing Loan program offsets, with reductions of $4,054,000 in 2017-18, $4,054,000 in 2018-19, $4,054,000 in 2019-20, and $4,054,000 in 2022-23 in Vote-Item 4003-02.

Energy:

- Approve the creation of a new Operating Asset item entitled “Natural Gas Loans” under Vote/Item 2902-06, Energy Development and Management with a $1,000 placeholder for Natural Gas Loan disbursements.
- Approve the creation of a new Operating Expense item entitled “Natural Gas Loan Interest Incentive” under Vote/Item 2902-07, Energy Development and Management.
- Approve the creation of a new Transfer Payment line entitled “Natural Gas Loan Interest Incentives” under Vote/Item 2902-07, Energy Development and Management with a $1,000 placeholder to record borrowing cost to the province for providing an interest free loan. Note that expense impact will be offset from the Ministry of Infrastructure’s Natural Gas Loan Interest Incentives transfer payment line (Vote/Item 4003-01).
- Note that bad debt expenses incurred by ENERGY will be offset from the Ministry of Infrastructure’s bad debt expense allocation established for the Natural Gas Access Loan Program.

Approve the following multi-year resources for the program:

Financial Decisions $M	2017-18	2018-19	2019-20	2020-21
Operating Expense	**5.5540**	**22.8483**	**17.7524**	**0.0925**
Capital Expense	**0.0**	**0.0**	**0.0**	**0.0**
Total Expense	**5.5540**	**22.8483**	**17.7524**	**0.0925**
Operating Assets	**60.0000**	**80.0000**	**60.0000**	**0.0000**
Capital Assets	**-**	**-**	**-**	**-**

Note the following multi-year capital resources:

Financial Decisions $M	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Capital Expense*	**0.0925***	**30.0925**	**0.0925***	**0.0925***	**0.0925***	**0.0925***

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

Capital Assets	**-**	**-**	**-**	**-**	**-**	**-**

*To be moved to Operating Expense allocation

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

APPENDIX A: Loan Program Expense Breakdown

What is the Ministry proposing to expense and when?

Estimated expense requirements for the natural gas loan program are approximately $87 million over 6 years, based on the following assumptions:

1. $200 million dollars will be advanced to recipients on a project milestones-basis – i.e., as certain stages of construction are completed. The fiscal profile below assumes that loans are advanced as follows: $60 million in 2017-18; $80 million in 2018-19; $60 million in 2019-20.
2. An interest rate of 2.72% is assumed and is expensed in the year the loan is advanced. The Interest Subsidy is the difference between the value of the loan advanced and the Net Present Value of loan and repayment stream.
3. The bad debt placeholder represents 15% of the loan portfolio ($30 million) and occurs in the first year that re-payment would take place. The placeholder would be reviewed annually and adjusted to reflect the latest information on the status of loans.
4. A total of $2 million over 20 years for program administration costs would also be expensed ($150,000 in the launch year and $90,000 per year after that) resulting in a total program cost of $89 million over 20 years.

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37
Fiscal Impact	**Total ($M)**	**Yr 0**	**Yr 1**	**Yr 2**	**Yr 3**	**Yr 4**	**Yr 5**	**Yr 6**	**Yr 7**	**Yr 8**	**Yr 9**	**Yr 10**	**Yr 11**	**Yr 12**	**Yr 13**	**Yr 14**	**Yr 15**	**Yr 16**	**Yr 17**	**Yr 18**	**Yr 19**	**Yr 20**
Statutory Bad Debt Expense	30.0							30.0													
Interest Incentive	56.6		16.2	22.8	17.6																
Program Admin	2.0	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Fiscal Impact	**88.6**	**0.2**	**16.3**	**22.9**	**17.8**	**0.1**	**0.1**	**30.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**

PROGRAM NOTE
Ministry of Infrastructure – Natural Gas Access Loan and Economic Development Grant Programs

APPENDIX B: Available Offsets

Existing Allocation

MOI has an existing allocation of $1.5M per year for 20 years for the Loan program (total $30 million):

$M	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Capital Expense	1.5	1.5	1.5	1.5	1.5	1.5	9

Municipal Infrastructure Funding

MOI has $24.6M available over 6 years from its Municipal Infrastructure Investment Transfer Payment:

$M	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Capital Expense	4.1	4.1	4.1	4.1	4.1	4.1	24.6

Proposed Strategic Community Infrastructure Fund (SCIF)

MOI is developing a proposal for a $2.6 billion application-based funding program for infrastructure development outside the Greater Toronto and Hamilton Area. The program would be part of the Moving Ontario Forward initiative, and would support critical infrastructure projects identified through municipal asset management plans as well as larger strategic projects of economic importance. Funding has not yet been approved by Treasury Board. The profile includes $2.42 billion over 6 years.

$M	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Capital Expense	0	160	420	690	700	450	2,420.0

MINISTRY OF THE ENVIRONMENT AND CLIMATE CHANGE – REPORT BACKS

GREEN INVESTMENT FUND (GIF)

SUMMARY

Report Back Requirements	Provided?	Comment
Requirement 1 - Provide details on the outcomes achieved and status	Yes	All programs are on track, with one exception.
Requirement 2 - Provide an estimate of the reduction in Greenhouse Gas (GHG) emissions and actual GHG emissions reductions to date	Yes	Estimates reported for all applicable programs, with one exception. Actual GHG reductions and verification will be reported at a later date, when information is available, which will vary by ministry/program.

Executive Summary

Ontario's Green Investment Fund (GIF) was announced in the 2015 Fall Economic Statement. GIF is a down payment on the province's cap and trade program that commits $325 million to programs that will fight climate change, grown the economy and create jobs. GIF programs will: help homeowners use less energy; support more electric vehicle charging stations across Ontario; retrofit social housing developments; help businesses reduce emissions; help fund local environmental organizations; and help provide Indigenous communities with training, tools and infrastructure to address climate change.

Nine programs from seven ministries were approved for funding through the GIF. Ministries participating in GIF include: Energy; Housing; Transportation; Research, Innovation and Science; Economic Development and Growth; Indigenous Relations and Reconciliation; and Environment and Climate Change.

The GIF programs are as follows:

1. Supporting businesses to make energy efficiency investments (Sustainability CoLab)
2. Audits and energy efficiency retrofits for single family homes (Home Retrofits)
3. Development of microgrid and energy storage to reduce diesel fuel use in First Nation communities (Smart Grid Fund)
4. Social Housing Electricity Efficiency Program (SHEEP)
5. Social Housing Apartment Retrofit Program (SHARP)
6. Energy efficiency projects for small and medium sized businesses and industry (SMART Green)
7. Technology innovation initiatives for large industrial emitters (TargetGHG)

8. Improve capacity for First Nations to inform development of and participate in economic opportunities associated with GHG mitigation and adaptation (First Nation Capacity Building)
9. Electrical Vehicles Chargers Ontario (EVCO)

The smart grid program is off track. Additional details can be found later in the report back.

The total estimated GHG emission reduction potential to date is 4,637 kt. The estimates are expected to change since MOECC is currently reviewing and providing feedback to ministries on the estimates calculations. Actual GHG reductions will be available when projects are implemented, the timing of which will vary with each program. One program has yet to provide the GHG estimated emission reduction potential (SHEEP). An estimate will be available in Q3. Additional details can be found later in the report back.

1. Ministry of the Environment and Climate Change (MOECC) – Sustainability CoLab

Overview

- The Sustainability CoLab program will help small businesses launch and grow target-based sustainability programs that will reduce their environmental impact, increase profitability and stimulate the low-carbon economy.

- The Sustainability CoLab supports a network of non-profit members that assist businesses in becoming more environmentally sustainable.

- Network members include: Durham Sustain Ability, Niagara Sustainability Initiative, Sustainable Waterloo Region, Enviro Centre, reThink Green, Sustainable Kingston, Sustainable Hamilton-Burlington, and the Windfall Ecology Centre.

- Network members support the following geographical areas: Region of Durham, Niagara Region, Waterloo Region, City of Ottawa, Greater Sudbury, City of Kingston, Hamilton-Burlington, and York Region.

Status/Achievements/Challenges

- The Transfer Payment Agreement (TPA) has been signed with Sustainability CoLab.

- Progress to date includes:
    - Seven of the 8 Network Members have signed sub-funding agreements with CoLab and the remaining agreement will be finalized shortly.

    - Three peer learning events have been held by CoLab for Network Members on GHG accounting methodologies.

  - Funds have been disbursed to 7 of the 8 Network Members, based on achievement of certain milestones in Q1.
  - Performance data has been collected and analyzed to provide funding based on the achievements of Network Members for Q2.
  - Coaching of Network Members has taken place to encourage increased action.

- The end date of the program is August, 2018.

Performance Measures

- Program participation: 48 businesses/ organizations have participated in the program to date (Q1 and Q2).
  - The annual target for participation is X businesses/organizations.

- This program will not be reporting on GHG reductions, cost-per-tonne or verification of actual GHG emissions as it is an enabling initiative (does not result in direct GHG reductions).

- Performance measures such as capacity building will be reported on at a later date due to the early stage of program implementation.

Co-Benefits

- The anticipated co-benefits are related to: employment; economic development opportunities in vulnerable regions/ communities; infrastructure and energy; environment; and, social issues.

- Results for co-benefits cannot be reported on at this time due to the early stage of program implementation.

Value for Money

- The program is designed to help participating businesses with setting and achieving targets to reduce their GHG emissions cost-effectively.

- The program provides coaching, resources, tools, networking and learning opportunities to help participants build a business case to make investments and take measures to reduce emissions.

- The program is designed so that Network Members will become self-sustaining, social enterprises over time through fees paid by participating organizations.

2. Ministry of Energy – Home Retrofits

Overview

- This program expands on the existing home audit and retrofit programs offered by Enbridge Gas Distribution (Enbridge) and Union Gas (Union).
- Enbridge and Union are regulated utilities that have been delivering conservation programs in Ontario for over 20 years.
- This program is province-wide, and targets homes that use natural gas, oil, propane or wood for primary heating.
- The program will help approximately 37,000 additional homes become more energy efficient by providing rebates for home energy audits and retrofits.

Status/Achievements/Challenges

- TPAs have been signed with Enbridge and Union.
- The program launched in October 2016 and is on track.
- In July 2016, funding was flowed by ENERGY to Enbridge and Union and the programs are available to homeowners until the funds are exhausted.

Performance Measures

- Cost-per-tonne for GHGs (see Table 2).
    - Note that cost-per-tonne (for all programs) represents the GIF funding divided by the estimated GHG reduction potential, e.g., For example, for the energy home retrofits program: $100.000M/ 1,600,000 tonnes = $62.50.
    - When actual GHG reductions become known, this value may be recalculated based on actuals.
    - This value should be evaluated alongside estimated or actual GHG reductions, and other performance measures in order to evaluate the effectiveness of the program.
- The following performance measures will be reported on at a later date due to the early stage of program implementation:
    - Program participation
    - Cost effectiveness
    - Annual incremental cubic metre of gas saving (including the related GHG impact) (propane, oil and wood savings will also be measured)
    - Cumulative lifetime GHG savings (including the related GHG impact)

Co-Benefits

- The anticipated co-benefits are related to: new jobs; Ontario's economy; training; the environment (clean air); and, health.

- Results of co-benefits cannot be reported on at this time due to the early stage of program implementation.

Value for Money

- $100 million from the GIF has been allocated to Ontario's two primary natural gas utilities, Enbridge and Union Gas, to expand their existing audit and energy-efficiency programs for single family homes. Historically, every dollar invested in natural gas efficiency has resulted in $1.5 to $4 in savings for natural gas ratepayers (largely through savings on natural gas costs).

- Enbridge and Union have been delivering natural gas energy efficiency programs across the province to the industrial, commercial, institutional and residential sectors for over 20 years under the Demand Side Management (DSM) Framework which is overseen by the Ontario Energy Board (OEB).

- Home energy retrofits reduce greenhouse gas emissions and help residential consumers manage energy bills as Ontario transitions to a low-carbon economy. Based on past performance of residential natural gas energy efficiency programs, it is estimated that an incremental $100 million investment in these initiatives would result in 850 million cubic metres of cumulative natural gas savings (propane, oil and wood savings will also be measured), which translates to a 1,600,000 tonne reduction in greenhouse gas emissions.

3. Ministry of Energy – Smart Grid Fund

Overview

- Smart Grid projects are designed to demonstrate and deploy microgrid and energy storage technology and infrastructure, with a focus on reducing diesel use in remote First Nations communities.

- The transfer payment recipients are Canadian Solar (2 projects) and Ontario Power Generation (1 project). Canadian Solar is a leading manufacturer of solar photovoltaic modules and provider of solar energy solutions.

    - The three projects are located in Keewaywin First Nation, Weenusk First Nation, and Gull Bay First Nation (GBFN).

- Note that a fourth project was planned with Strathcona Solar and the Shawanaga First Nation. The project proposal for this project was revised significantly by the proposed recipient. As a result, this project was terminated.

Status/Achievements/Challenges

- The Keewaywin and Weenusk First Nation projects are on hold, awaiting final agreements between the proponent and the host community. However, letters of commitment have been signed, allowing funds to accrue.

  - The project challenges are primarily associated with drafting the agreements needed between the applicant and the respective First Nation communities regarding future ownership of the new energy assets.

  - To mitigate project risk, the Ministry is requiring that any agreement with the First Nation communities is reviewed by a third party that can provide independent advice to the community about the draft agreement. This would ensure full community support of the project before funds are delivered.

  - The applicant is working diligently with to the First Nations, the federal government, and other collaborators to reach an agreement.

- The Gull Bay project is also experiencing a delay.

  - GBFN is involved in the development of agreements between Ontario Power Generation and all collaborators.

  - GBFN is having an election and has requested that no further work take place until the election has concluded and the new leadership is in place (mid to late November).

- The Ministry of Energy's Smart Grid spending did not take place by June 30, 2016 (2015/16 fiscal year).

  - The Ministry plans to accrue $6M and anticipates spending in 2017/18 and 2018/19).

  - Funding will flow in future years in accordance with Smart Grid Fund rules, which is to disburse funds upon the successful completion of project milestones throughout the life of the project.

Performance Measures

- Cost effectiveness: See value for money below.

- Cost-per-tonne for GHGs (see Table 2).

- Diesel savings: the solar installations are estimated to offset approximately 546,000 litres of diesel use for Keewaywin/Weenusk and 127,000 litres for Gull Bay.

- The following performance measure will be reported on at a later date due to the early stage of program implementation:
  - Annual incremental diesel savings (including the related incremental GHG reductions)

- Cumulative incremental lifetime GHG savings
- Innovation/ productivity improvements associated with GHG savings
- Near-term increases in jobs and investment in Ontario's Smart Grid sector
- Proactive investment by utilities in Smart Grid solutions where Smart Grid Fund projects have demonstrated benefits
- Increased commercialization of products in Ontario, with a focus on intellectual property
- Program participation
- Leveraged funding and economic development opportunities

Co-Benefits

- The anticipated co-benefits are related to: First Nations and Metis communities; new jobs; training; environmental (clean air); and, health.

- Results for co-benefits cannot be reported on at this time due to the early stage of program implementation.

Value for Money

- This remote First Nation community has relied on diesel generation for electricity, exposing them to unreliable generators, high service costs and long outages, high fuel prices, diesel's inherent transportation costs and the associated environmental risks. Once completed, this project is anticipated to offset significant diesel spending in the community and allow for greater control of the energy resources within the community.

- The 2 Canadian Solar projects are expecting the system to offset approximately $0.8000M in diesel spending annually for the life of the asset.

4. Ministry of Housing (MHO) – Social Housing Electricity Program (SHEEP)

Overview

- SHEEP will assist social-housing single family homes become more energy efficient.

- This program will take place in various municipalities in Ontario.

- MHO is encouraging all recipients to participate in any and all gas and electricity incentive programs that may be available to them through their local distribution company or gas utility. Incentive levels may vary across programs; however, the incentives are not being quantified or reported on by ministries.

Status/Achievements/Challenges

- TPAs have been signed with 21 Service Managers (includes Consolidated Municipal Service Managers and District Social Service Administration Boards) and the Ontario Aboriginal Housing Services (OAHS).

- MHO received approval to flow 85% of the funds to recipients by June 30, 2016; the remaining 15% will be flowed based on completed reports.

- Recipients have selected, or are finalizing the selection of social housing providers that will receive funding for retrofit work under the program.

- The end date of this program is March, 2018.

Performance Measures

- Cost-per-tonne information is not yet available as GHG reduction estimates will not be reported until Q3.

- The following performance measure will be reported on at a later date due to the early stage of program implementation:
    - Program participation
    - Cost effectiveness
    - Annual incremental electricity usage savings
    - Innovation/ productivity improvements associated with electricity usage savings
    - Financial savings incurred by families in social housing single homes

Co-Benefits

- The anticipated co-benefits are related to: First Nations and Metis communities; new jobs; collaboration and capacity building; training; health; financial; quality of living conditions; and, energy security.

- Results for co-benefits cannot be reported on at this time due to the early stage of program implementation.

Value for Money

- The program will provide good value for money through the funded retrofits, as these will not only assist in measurably reducing GHG emissions in Ontario, but also assist housing providers in securing the long-term viability and sustainability of the social housing stock.

5. Ministry of Housing – Social Housing Apartment Retrofit Program (SHARP)

Overview

- SHARP will allow for energy efficiency retrofits in high-rise apartment buildings owned by social housing providers.

- This program will take place in various municipalities in Ontario.

- MHO is encouraging all recipients to participate in any and all gas and electricity incentive programs that may be available to them through their local distribution company or gas utility. Incentive levels may vary across programs; however, the incentives are not being quantified or reported on by ministries.

Status/Achievements/Challenges

- TPAs have been signed with ten Service Managers (includes Consolidated Municipal Service Managers and District Social Service Administration Boards).

- MHO received approval to flow 85% of the funds to recipients by June 30, 2016; the remaining 15% will be flowed based on completed reports.

- Recipients have selected, or are finalizing the selection of social housing providers that will receive funding for retrofit work under the program.

- The end date of this program is March, 2018.

Performance Measures

- Cost-per-tonne for GHGs (see Table 2).

- The following performance measure will be reported on at a later date due to the early stage of program implementation:
  - Program participation
  - Cost effectiveness
  - Annual incremental cubic metre of gas savings (including the related incremental GHG reductions)
  - Cumulative incremental lifetime GHG savings
  - Innovation/ productivity improvements associated with GHG savings

Co-Benefits

- The anticipated co-benefits are related to: vulnerable communities; low-income households; social issues; new jobs; Ontario's economy; innovation, science and technology; collaboration and capacity building; the environment (clean air); and, health.

- Results for co-benefits cannot be reported on at this time due to the early stage of program implementation.

Value for Money

- The program will provide good value for money through the funded retrofits, as these will not only assist in measurably reducing GHG emissions in Ontario, but also assist housing providers in securing the long-term viability and sustainability of the social housing stock.

6. Ministry of Economic Development and Growth (MEDG) – SMART Green

MINISTRY OF THE ENVIRONMENT AND CLIMATE CHANGE – REPORT BACKS

Overview

- SMART Green is a province-wide program, which will help small and medium-sized manufacturers and industry to reduce their GHG emissions and become more energy efficient through upgrades to their production/process equipment.

Status/Achievements/Challenges

- A TPA has been signed with the Canadian Manufacturers and Exporters (CME).
- Program is on track and launched in October, 2016.
- CME will be distributing the funding on an application, matching-funding basis.
- The end date of this program is March, 2019.

Performance Measures

- Cost-per-tonne for GHGs (see Table 2).
- The following performance measure will be reported on at a later date due to the early stage of program implementation:
    - Program participation
    - Cost effectiveness
    - Annual incremental energy reductions based on production output levels (e.g., energy savings in cubic metres of gas, kilowatt-hours of electricity or litres of fuel), including the related incremental GHG reductions
    - Cumulative incremental lifetime GHG savings
    - Innovation/ productivity improvements associated with per production unit GHG savings
    - Match a specified percentage of grant investment (exact amount TBD, but expected to be 1:1)

Co-Benefits

- The anticipated co-benefits are related to: Ontario's economy, productivity, the environment (clean air), and, health.
- Results for co-benefits cannot be reported on at this time due to the early stage of program implementation.

Value for Money

- ...

7. Ministry of Research Innovation and Science (MRIS) – TargetGHG

Overview

- The TargetGHG Program has three streams: Industrial Innovation Demonstration; Technology Development; and, Solutions for 2030.

- This program brings together large industry, cleantech small and medium-sized enterprises (SMEs), and research consortiums.

- The objectives of the program are to:
    - Establish Ontario as a leader in reducing GHG emissions;
    - Build a marketplace that brings together technology development with technology adoption, where Ontario's innovators and entrepreneurs can work together with the industry/customers/supply chains to develop, demonstrate and adopt new and innovative solutions to significantly reduce GHG emissions; and,
    - Catalyze private sector investments in GHG reduction strategies, and drive adoption.

Status/Achievements/Challenges

- A TPA has been signed with the Ontario Centres of Excellence (OCE), who is managing the application-based grant program to fund various projects.

- Round-table industry consultations were held in May, 2016 and included 104 participants.

- Partnering forums occurred in October, 2016.

- MOUs have been signed with Emissions Reductions Alberta; Natural Sciences and Engineering Research Council (NSERC); and, Sustainable Development Technology Canada (SDTC).

- Projects are expected to begin...

- The end date of this program is March, 2022.

Performance Measures

- Cost-per-tonne for GHGs (see Table 2).

- Matching funding:
    - For NSERC projects, OCE will provide $0.8M with a matching contribution from NSERC.

- The following performance measure will be reported on at a later date due to the early stage of program implementation:
    - Program participation (industry partners and SMEs)
    - Cost effectiveness

- Annual incremental energy reductions based on production output levels (e.g., energy savings in cubic metres of gas, kilowatt-hours of electricity or litres of fuel), including the related incremental GHG reductions
- Cumulative incremental lifetime GHG savings
- Innovation/ productivity improvements associated with per production unit GHG savings
- Match a specified percentage of grant investment (exact amount TBD, but expected to be 1:1)
- Additional economic development indicators

Co-Benefits

- The anticipated co-benefits relate to: First Nations and Metis communities; new jobs; vulnerable communities; productivity; training; the environment (clean air, water, and soil); and, health.

- Results for co-benefits cannot be reported on at this time due to the early stage of program implementation.

Value for Money

- ...

8. Ministry of Indigenous Relations and Reconciliation (MIRR) – First Nation Capacity Building

Overview

- This program provides support to First Nation communities to build capacity to participate in economic opportunities related to cap and trade, to prepare for the effects of climate change (e.g., training, tools, infrastructure), and fund a Northern Climate Change Impact Study.

- The Transfer Payment recipient is the Ontario Centre for Climate Impacts and Adaptation Resources (OCCIAR), who will partner with the Ontario First Nations Technical Services Corporation to develop a program to distribute the funding.

- The program is taking place in four regions of the province: northern, eastern, south western and west central Ontario. It involves First Nations in 10 Northern and 4 Southern communities.

Status/Achievements/Challenges

- TPA has been signed with OCCIAR.

- This program has been launched, events are being held, and is on track. The following outlines the progress to date:

  - Participation in the Climate Change Impact Study has been confirmed (20 communities); the Climate change field work has begun and the frog range study is underway in two locations (Fort Severn, Eabametoong).

  - Two youth engagement sessions have been held.

  - The participation of additional First Nations has been confirmed for adaptation and energy planning.

- The anticipated end date of this program is March, 2018.

Performance Measures

- Program participation rate: Energy Plans - 150%; Adaptation Plans - 150%; and, Climate Change Impacts for the North - 200%.

- This program will not be reporting on GHG reductions, cost-per-tonne or verification of actual GHG emissions as it is an enabling initiative (does not result in direct GHG reductions).

- The following performance measure will be reported on at a later date due to the early stage of program implementation:
  - Number of adaptation and mitigation plans created
  - Number of First Nations communities represented in the governance structure
  - Number of adaptation and mitigation measures created
  - Number of adaptation and mitigation projects identified

Co-Benefits

- The anticipated co-benefits relate to: First Nations and Metis communities; new jobs; collaboration and capacity building; training; health; financial issues; quality of living conditions; and, energy security.

- Results for co-benefits cannot be reported on at this time due to the early stage of program implementation.

Value for Money

- The program will build capacity in Indigenous communities to develop and implement climate change adaptation and energy plans.

  - Plans created in pilot communities will be made available to all Indigenous communities across the province.

  - The Climate Change Impact Study for the North (CI Study) will assess potential climate change impacts by working with Indigenous community members to collect traditional ecological knowledge and scientific data related to climate change markers.

9. Ministry of Transportation (MTO) – Electric Vehicle Chargers Ontario (EVCO)

Overview

- Through the EVCO grant program, the province is working with 24 public and private sector partners to create a network of electric vehicle stations in cities, along highways and at workplaces and public places across Ontario.

Status/Achievements/Challenges

- Some projects have been completed already and others are underway.

- The Ministry of Transportation was approved to spend $20M on EVCO; however only $19.8451M will be spent (variance of $0.1549M).

- The end date of this program is June 2022.

Performance Measures

- This program will not be reporting on GHG reductions, cost-per-tonne or verification of actual GHG emissions as it is an enabling initiative (does not result in direct GHG reductions).

- The following performance measure will be reported on at a later date due to the early stage of program implementation:
    - …

Co-Benefits

- The anticipated co-benefits relate to: First Nations and Metis communities; new jobs; the environment (clean air); collaboration and capacity building; Ontario's economy; financial issues; health; innovation, science and technology; productivity; social issues; and, vulnerable communities.

- Results for co-benefits cannot be reported on at this time due to the early stage of program implementation.

Value for Money

- EVCO is an application-based program. All EVCO submissions were evaluated on their optimal connectivity, site or corridor selection, innovativeness, cost efficiency and effectiveness, and reasonableness. Successful applicants delivered the best value for money and customer experience.

- With a focus on value for money at the application, location and broader network-level, the province selected 24 partners to install close to 500 charging stations with a $20M investment.

Financial Status

- Approved funds for GIF were $325M; $303.0451M has been spent to date.
- Leveraged, in-kind, and matching funding total $69.4364M to date.

Table 1: Financial Summary ($M)

	MOECC - Sustainability Co-Lab	Energy - Home Retrofits	Energy - Smart Grid Fund	MHO - SHEEP (Homes)	MHO - SHARP (Buildings)	MEDG - SMART Green	MRIS - TargetGHG	MIRR - FN Capacity Building	MTO - EVCO	Total
GIF Funding	1.0000	100.0000	6.0000	$10.0000	$82.0000	$25.0000	$74.0000	$5.0000	$20.0000	$325.0000
Leveraged Funding	$0	$0	$7.9961	$0	$0	$0	$19.0000	$0	$0	$27.5422
In-Kind Funding	$0	$0	$0.2082	$0	$0	$0	$2.0000	$0	$0	$2.1442
Matching Funding	$0	$0	$0	$0	$0	TBD	$39.7500	$0	$0	$39.7500
Total Additional Funding (leveraged, in-kind, and matching)	$0	$0	$8.2043	$0	$0	$0	$60.7500	$0	$0	$69.4364
Total Funding (all types)	$1.0000	$100.0000	$14.2043	$10.0000	$82.0000	$25.0000	$134.7500	$5.0000	$20.0000	$394.4364
Ministry Spending	$1.0000	$100.0000	$0	$8.5000	$69.7000	$25.0000	$74.0000	$5.0000	$19.8451	$303.0451
Ministry Spending Variance	$0	$0	$6.0000	$1.5000	$12.3000	$0	$0	$0	$0.1549	$21.9549
Recipient Spending	$0.0988	$0.216	$0	Not Reported	Not Reported	$0.0676	$0.0958	$0.2762	$0.2168	$0.7552
Audit Planned (Y/N/Not Reported)	N	Y	N	Not Reported	Not Reported	Not Reported	Y	N	TBD	

GHG Reduction Estimates

- Total GHG reductions estimates for all programs are 4,637 kt.
- MOECC is currently reviewing and providing feedback to ministries on the estimates calculations. The estimate total is anticipated to change as a result.

Table 2: Greenhouse Gas Reduction Estimates Summary

	Total Estimated GHG Reductions (kt)[1]	Cost-per-tonne based on GHG Reduction Potential ($/tonne)[2]	Comments
MOECC Sustainability CoLab	N/A	N/A	Enabling initiative, no direct GHG reductions
Energy Home Retrofits	1,600	$62.50	GHG reduction estimate up to 2031/32
Energy Smart Grid Fund	26	$208.99-$285.03	GHG reduction estimate up to 2050. Range provided for three projects.
MHO SHEEP (Homes)	Not reported	Not reported	GHG reduction estimate to be reported in Q3. MOECC is assisting MHO in calculating these estimates.
MHO SHARP (Buildings)	208	$395.18	GHG reduction estimate up to 2050
MEDG SMART Green	1,174	$21.29	GHG reduction estimate up to 2050
MRIS TargetGHG	1,630	$29.70 - $54.48	GHG reduction estimate up to 2030
MIRR FN Capacity Building	N/A	N/A	Enabling initiative, no direct GHG reductions
MTO EVCO	N/A	N/A	Enabling initiative, no direct GHG reductions
Total	4,637		

1. Rounded to the nearest kt
2. Cost-per-tonne values are based on values provided by ministries or calculated by dividing the GI funding allocation by GHG estimates provided.

MINISTRY OF THE ENVIRONMENT AND CLIMATE CHANGE – REPORT BACKS

PROPOSED MINUTE

- Received the reportback providing the outcomes achieved, including an estimate of the reduction in GHG emissions.

APPENDIX 1: REPORT BACK MINUTE

- Directed MOECC, MAA, MMAH, MTO, ENE, MEDEI and MRI to report back in the 2017-18 PRRT process with details on the outcomes achieved, including an estimate of the reduction in GHG emissions.

☐ [2016] Document Initiative	☐ [2016-17] PRRT Final Minutes (Not a Doc. Initiative)	☒ [TB/MBC January 26, 2016] In-Year Minute

BUSINESS CASE - FTE TRANSFER
FROM: MINISTRY OF ENERGY
TO: GSIC

A. Request:

This note requests the transfer of 2 temporary FTEs for 2017-18 only from the Ministry of Energy to GSIC to undertake project work for the Energy and Water Reporting and Benchmarking (EWRB) Project.

Docket # D0041897	**2016-17**	**2017-18**	**2018-19**	**2019-20**
Total operating ($M)	-	-	-	-
Total capital ($M)	-	-	-	-
Total financial impact ($M)	0	0	0	0
Net FTE impact		0	0	0
FTE impact - GSIC		2	0	0
FTE impact – Ministry Of Energy		(2)	0	0

B. Key Considerations:

The 2 FTEs are required for work on the EWRB Project which will continue into the 2017-18. No funding is being transferred as the project work and ongoing sustainment work will be recoverable from the Ministry of Energy.

Policy Linkages:
N/A

C. Business Case Rationale:

The Ministry of Energy FTEs will support the development and implementation of the EWRB Project which is continuing into 2017-18.

At this time GSIC does not have the flexibility to manage from within the allocation due to a number of multi-year initiatives to meet Budget commitments and the Ministry's mandate. Accordingly, GSIC seeks approval to receive two FTEs from Ministry of Energy to meet its business needs

D. Additional Background:

N/A

E. Linkages to Government Priorities:

Government Priority Areas	Description of Alignment
Investing in people	N/A
Investing in modern infrastructure	N/A
Supporting a dynamic and innovative business climate	N/A

F. Cross Cutting Linkages:

N/A

G. Alignment with the Commission on the Reform of Ontario Public Services (CROPS) Recommendations:

N/A

H. Risk Analysis and Mitigation Strategy:

N/A

I. Human Resource Implications:

GSIC is seeking the transfer of 2 temporary FTE for 2017-18 only from the Ministry of Energy to GSIC to work on the EWRB Project.

J. Performance Measures:

N/A

K. Communications and Stakeholder Engagement:

N/A

L. Proposed Minute

Treasury Board/Management Board of Cabinet decision requested:

- Approve a temporary transfer of 2 FTEs from ENERGY (Vote/Item 2902-01 Energy Development and Management) to MGCS (Vote/Item 1817-01), to support the Energy and Water Reporting and Benchmarking Project for 2017-18 only.

Ministry of Finance
Additional Q&As on the Price Mitigation Announcement
September 14, 2016

Q. Why would we not just go with a straight HST rebate?

A. The Harmonized Sales Tax is a federally imposed and administered value-added tax with a combined rate of 13% - Ontario's portion is 8% and the federal portion is 5%. It can only be removed from electricity bills by the federal government. The federal government has not shared any plans to mitigate electricity costs for Canadians.

~~shared tax among the federal and provincial governments — it combines the goods and services tax (GST) and the provincial sales tax (PST) into a single tax.~~

In order to effect electricity cost mitigation, Ontario will introduce legislation to provide a provincially administered rebate, equal to the provincial portion of the HST. ~~The Ontario government has provided an eight per cent rebate which is equal to the provincial portion of the HST on electricity bills of Ontarians, the only part over which Ontario has control. Currently, the federal government has not shared any plans to mitigate electricity costs for Canadians, which is why it can't just be a straight HST rebate.~~ By structuring cost mitigation in this way, it would provide a real benefit to small business and farms, as well as to residential electricity consumers.

This rebate is part of the larger plan that includes new and existing energy relief programs to provided needed assistance~~t~~ to consumers.

Q. Why would you not cap it so the benefits are directed towards those who really need it?

A. While the province and independent economic analysis projects consistent economic growth for Ontario, many families are not yet feeling the impact of the recovery in their everyday lives.

And despite government efforts to date, electricity cost increases continue to rise above the level of inflation.

This rebate~~,~~ in conjunction with new and existing energy relief programs~~, will~~ would benefit families, farms and small businesses in rural or remote northern areas, which have recently raised their concerns for their increasing electricity costs.

Relief is also provided to all Ontarians through an overall net benefit. More…

Q. Aren't you just making the taxpayer subsidize the ratepayer? And won't that be even more expensive once interest rates are taken into account?

A. The government is dedicated to reducing electricity costs wherever possible, while maintaining reliability for all consumers.

The government will deliver significant on-bill savings for all electricity customers. This new rebate will help Ontarians with increasing costs of electricity by providing an eight per cent rebate equal to the provincial portion of HST on electricity bills.

With this new rebate in place and as a result of the government's prudent fiscal management, the Ontario government remains committed to balancing the budget by 2017-18, recognizing that balance provides the foundation for the long-term well-being and prosperity of Ontarians.

More…

Q. What will be the cost of providing this rebate to Ontarians be and how will it be reflected in the fiscal plan? How can the government provide this rebate?

A. Ontario has taken action ~~by~~ to ~~providing~~ provide residential customers with an eight per cent rebate equal to the provincial portion of the HST on their electricity bills, which will make everyday life for Ontarians easier. This program ~~will~~ would cost approximately $1 billion annually.

Commented [LL1]: Check with Energy. I think their TB submission said $1.1B

With this new rebate in place and as a result of the government's prudent fiscal management, the Ontario government remains committed to balancing the budget by 2017-18, recognizing that balance provides the foundation for the long-term well-being and prosperity of Ontarians.

More details will be provided in the upcoming Ontario Economic Outlook and Fiscal Review.

Ministry of Finance
Additional Q&As on the Price Mitigation Announcement
September 14, 2016

Q. Why would we not just go with a straight HST rebate?

A. The Harmonized Sales Tax (HST) is administered and imposed by the federal government with a combined rate of 13 per cent - Ontario's portion is eight per cent and the federal portion is five per cent. HST can only be removed from electricity bills by the federal government.

To date, the federal government has not shared any plans to ease electricity costs for Canadians.

Ontario will introduce legislation to provide a provincially administered rebate, equal to the provincial portion of the HST to effectively mitigate electricity costs for families, small businesses and farms. ~~By structuring cost mitigation this way, it would provide a real benefit to small business and farms, as well as to residential electricity consumers.~~

This rebate is part of the larger plan that ~~includes~~ proposed new and expanded ~~new and existing and proposed new~~ energy relief programs to reduce electricity costs wherever possible for eligible consumers~~, while maintaining reliability for all consumers~~.

Q. Why would you not cap it so the benefits are directed towards those who really need it?

A. While Ontario's economy has recovered from the global recession, many families are not yet feeling the impact of the recovery.

And despite government efforts to date, electricity cost increases continue to rise above the level of inflation.

This rebate, along with proposed new and expanded ~~new and existing and proposed new~~ energy relief programs, ~~will~~ would help people in their everyday lives with the cost of living. It would benefit families, farms and small businesses ~~in rural or remote northern areas~~ across Ontario.

~~Relief is also provided to all Ontarians through an overall net benefit.~~

Commented [DS1]: The proposed new energy relief programs require Leg Assembly and/or LGIC approvals. So we can't say "new … programs" without a qualifier like "proposed".

Commented [DS2]: The proposed new energy relief programs require Leg Assembly and/or LGIC approvals. So we can't say "new … programs" without a qualifier like "proposed".

Commented [DS3]: This wording could confuse and suggest that the rebate and other relief is only targeted to rural or remote northern areas.

Commented [LH4]: The 8% rebate is available to all eligible consumers regardless of population density / area.

Commented [DS5]: What does this mean?

Q. Aren't you just making the taxpayer subsidize the ratepayer? And won't that be even more expensive once interest rates are taken into account?

A. The government is dedicated to reducing electricity costs wherever possible, while maintaining reliability for all consumers.

The ~~government~~ proposed initiatives ~~will~~ would deliver significant on-bill savings for ~~all electricity~~eligible electricity consumers ~~customers~~. This new rebate ~~will~~ would help Ontarians with increasing costs of electricity by providing an eight per cent rebate equal to the provincial portion of HST on electricity bills.

With this proposed new rebate in place and as a result of the government's prudent fiscal management, the Ontario government remains committed to balancing the budget by 2017-18, recognizing that balance provides the foundation for the long-term well-being and prosperity of Ontarians.

Q. What will be the cost of providing this rebate to Ontarians ~~be~~ and how will it be reflected in the fiscal plan? How can the government provide this rebate?

A. Ontario has taken action to provide residential customers with an eight per cent rebate equal to the provincial portion of the HST on their electricity bills, which will make everyday life for Ontarians easier. The rebate is expected to cost approximately $1 billion per year. As a result of the government's prudent fiscal management, we can provide this benefit to help ease electricity costs for Ontarians.

The Ontario government remains committed to balancing the budget by 2017-18, recognizing that balance provides the foundation for the long-term well-being and prosperity of Ontarians.

More details will be provided in the upcoming Ontario Economic Outlook and Fiscal Review.

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Ontario will introduce legislation to provide a provincially administered rebate, equal to the provincial portion of the HST to effectively mitigate electricity costs for families, small businesses and farms.

This rebate is part of the larger plan that proposed new and expanded energy relief programs to reduce electricity costs wherever possible for eligible consumers.

Q. Why would you not cap it so the benefits are directed towards those who really need it?

A. While Ontario's economy has recovered from the global recession, many families are not yet feeling the impact of the recovery.

And despite government efforts to date, electricity cost increases continue to rise above the level of inflation.

This rebate, along with proposed new and expanded energy relief programs, would help people in their everyday lives with the cost of living. It would benefit families, farms and small businesses across Ontario.

Q. Aren't you just making the taxpayer subsidize the ratepayer? And won't that be even more expensive once interest rates are taken into account?

A. The government is dedicated to reducing electricity costs wherever possible, while maintaining reliability for all consumers.

The proposed initiatives would deliver significant on-bill savings for eligible electricity consumers. This new rebate would help Ontarians with increasing costs of electricity by providing an eight per cent rebate equal to the provincial portion of HST on electricity bills.

With this proposed new rebate in place and as a result of the government's prudent fiscal management, the Ontario government remains committed to balancing the budget by 2017-18, recognizing that balance provides the foundation for the long-term well-being and prosperity of Ontarians.

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A. Ontario has taken action to provide residential customers with an eight per cent rebate equal to the provincial portion of the HST on their electricity bills, which will make everyday life for Ontarians easier. The rebate is expected to cost approximately $1 billion per year. As a result of the government's prudent fiscal management, we can provide this benefit to help ease electricity costs for Ontarians.

The Ontario government remains committed to balancing the budget by 2017-18, recognizing that balance provides the foundation for the long-term well-being and prosperity of Ontarians.

More details will be provided in the upcoming Ontario Economic Outlook and Fiscal Review.

Fair Hydro Trust
Investor Presentation

January [xx], 2018

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Presenters

ONTARIO POWER GENERATION

Ken Hartwick
Chief Financial Officer &
Senior Vice President – Finance

John Lee
Vice President, Treasurer

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VIII. Investment Highlights









I. Introduction and Transaction Overview

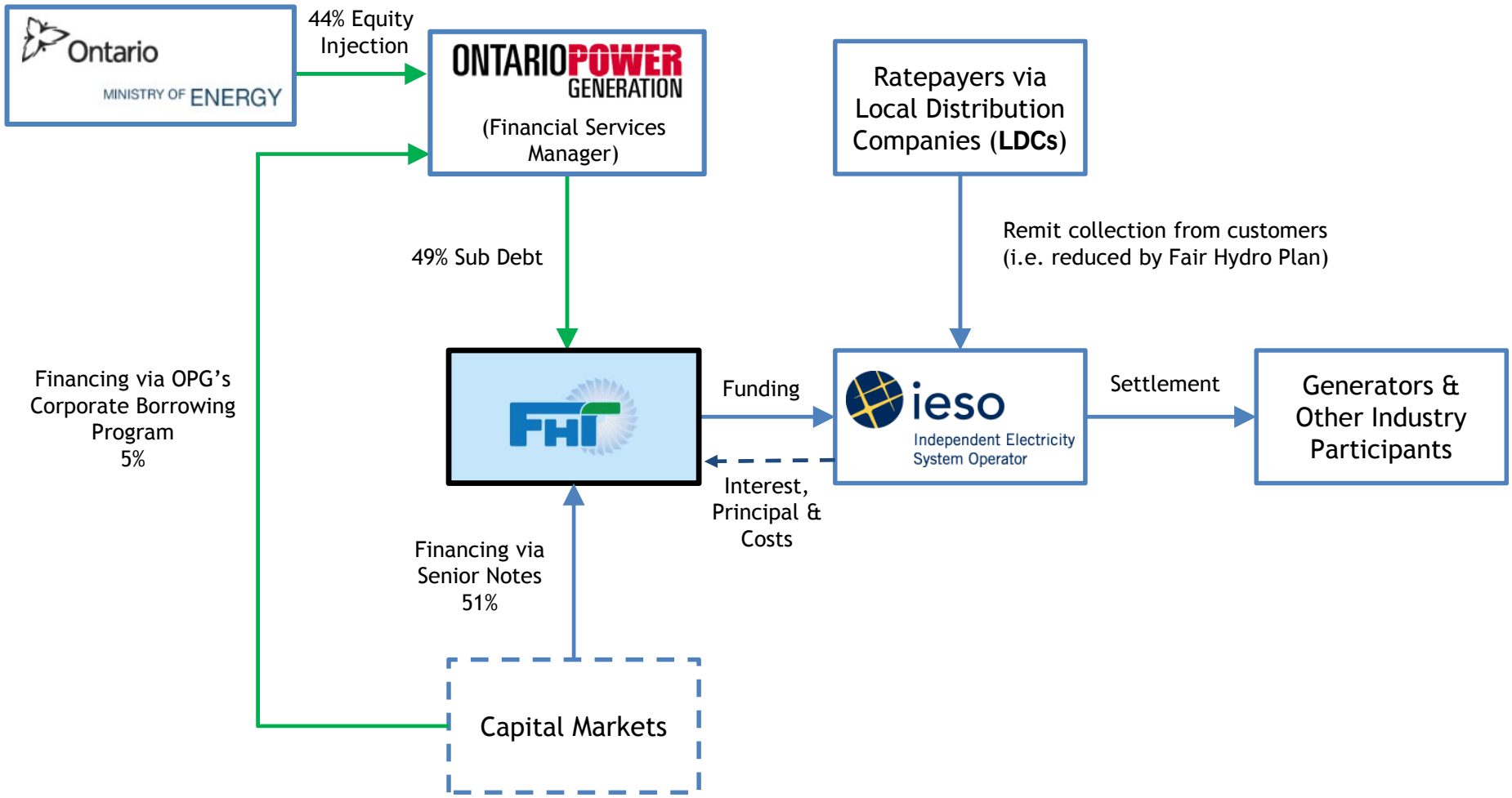
Introduction

Ontario's Fair Hydro Plan	• The Province of Ontario announced its Fair Hydro Plan ("FHP") on March 2nd, 2017, which proposed to lower the average electricity bill for eligible customers[1] (referred to as "Specified Consumers") by 25% (the "Fair Adjustment") • The 25% reduction includes an 8% rebate in the provincial portion of the HST granted by the Ontario government in January 2017 • It is expected that the rate reduction will be in effect to April 30, 2021, with any rate increases over that period limited to the rate of inflation in Ontario
Legislation	• On June 1, 2017, the Ontario government passed the *Ontario Fair Hydro Plan Act, 2017* (the "FHPA" or "Act"), legislation that reallocates certain electricity costs over time and provides immediate rate relief to Specified Consumers • The FHPA imposes an irrevocable and non-bypassable charge referred to as the Clean Energy Adjustment ("CEA") that will be determined by Ontario Power Generation ("OPG") in its role as Financial Services Manager under the Act • The CEA will be determined for each six month reference period and converted by the Ontario Energy Board ("OEB") into a $/kWh rate and added to electricity invoices sent to Specified Consumers commencing on May 1, 2021 • From July 1, 2017 until April 30, 2021 (the "Moratorium Period"), no CEA will be collected; during this period the Independent Electricity System Operator ("IESO") is obligated to pay all funding costs (excluding principal) under the Regulations
Fair Hydro Trust ("FHT")	• The implementation of the Fair Hydro Plan will be financed by the Fair Hydro Trust ("FHT", the "Trust" or the "Issuer") through the issuance of senior and subordinated notes • Structured to be bankruptcy remote and ring fenced from OPG

[1] Primarily Regulated Price Plan-eligible customers.

Transaction Structure

- Concurrent with every issuance of senior notes, it is expected that OPG will purchase subordinated debt of the Trust in an amount not to exceed 49% of all outstanding debt

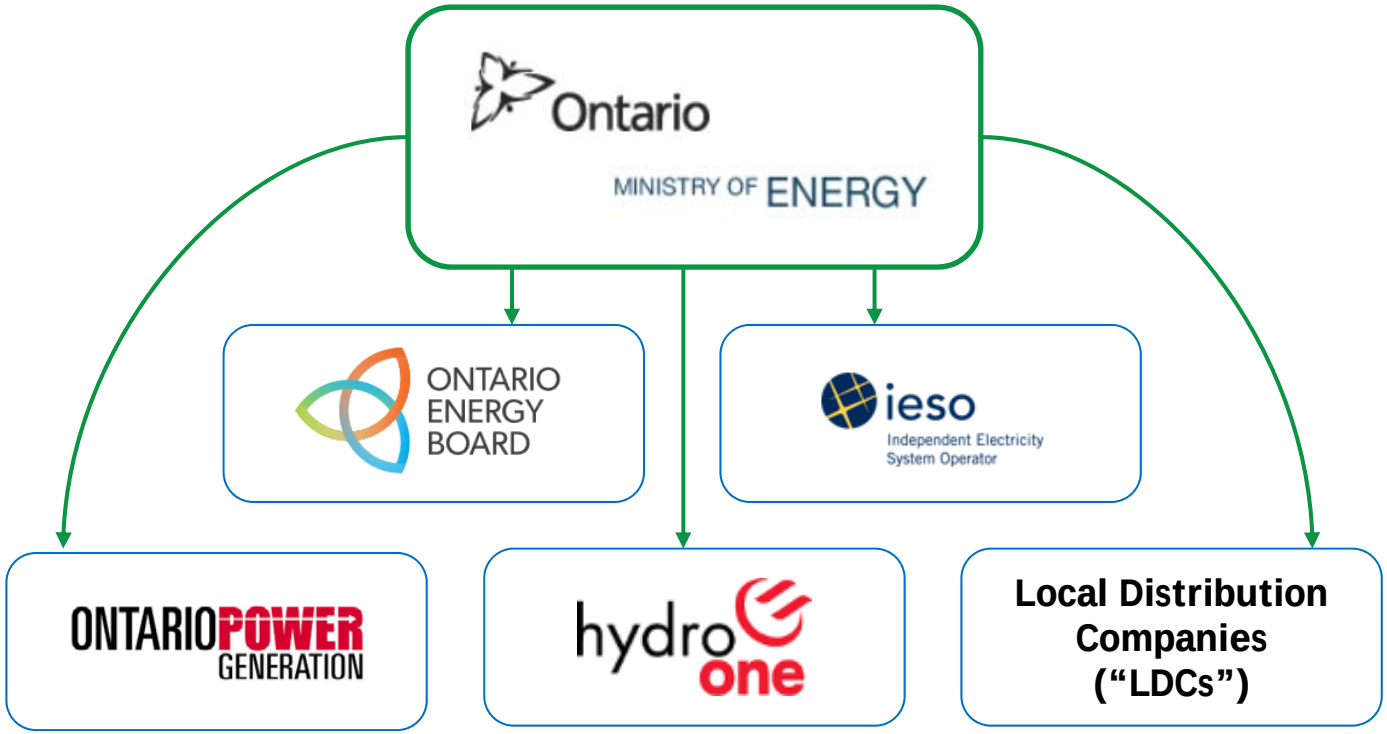


Note: The assets and liabilities of the Trust are deemed, under the *Electricity Act, 1998* to not include the assets and liabilities of OPG, and vice versa

II. Ontario Electricity Market

Overview of Ontario's Electricity Market

- Highly regulated electricity market comprised primarily of three components: generation, transmission and distribution; ~$22 billion in annual cash flows
- Transmission rates, distribution rates, and OPG's regulated rates are set by the Ontario Energy Board
- Rates for the majority of the remaining generation supply are set by direct contracts with the IESO (e.g. wind, solar, hydroelectric)



Key Industry Participants

Participant	Rating *(DBRS / S&P / Moody's)*	Description
ONTARIO ENERGY BOARD	--	• The OEB is an independent public regulatory agency established under the Ontario Energy Board Act, 1998 • The Ontario Energy Board Act, 1998 provides the OEB with the authority to regulate Ontario's electricity market, including the activities of transmitters and distributors • The OEB sets the regulated price for the commodity cost charged to most residential electricity customers via the Regulated Price Plan ("RPP"); RPP rates are set twice a year (May and November) • RPP prices are set for: time-of-use (On-peak, Mid-peak, and Off-peak); and tiered (Tier 1 and Tier 2), to recover the forecast commodity cost of electricity
ieso Independent Electricity System Operator	A(h) / -- / Aa2	• The Independent Electricity System Operator (the "IESO") is a not-for-profit corporation established under the Electricity Act, 1998 • The IESO manages the operation and reliability of Ontario's bulk power system and administers the wholesale electricity market
ONTARIO POWER GENERATION	A(l) / BBB+ / --	• OPG is a corporation formed under the Business Corporation Act (Ontario), whose sole shareholder is the Province of Ontario • OPG's principal business is the generation and sale of electricity in Ontario • OPG is Ontario's largest electricity generator, providing approximately half of Ontario's electricity
hydro one	A(h) / A / A3	• Hydro One is Ontario's largest electricity transmission and distribution company; Hydro One delivers electricity to over 1.3 million customers across the Province of Ontario, and to large industrial customers and municipal utilities

Key Industry Participants – LDC Overview

- As part of the restructuring of Ontario's electricity industry, the province's municipally-owned electricity distributors were reorganized into separate business corporations
  - These distributors are typically referred to in Ontario as local distribution companies, or "LDCs"
- An LDC is responsible for distributing electricity to customers in its OEB-licensed service territory, and in some cases to other distributors
  - A service territory may cover large portions of all of a particular municipality, or an otherwise-defined geographic area
  - Distribution customers include residential, commercial and industrial end-users, such as governments, schools and hospitals

Select Aggregate Market Stats[1]

Number of LDCs	65
Residential & Small Commercial[2] Revenue	$18.89 billion
Residential & Small Commercial[2] Metered Usage (kWh)	52.39 billion
Residential Customers	4.61 million
Small Commercial[2] Usage Customers	0.44 million
Total Residential & Small Commercial[2] Customers	5.05 million

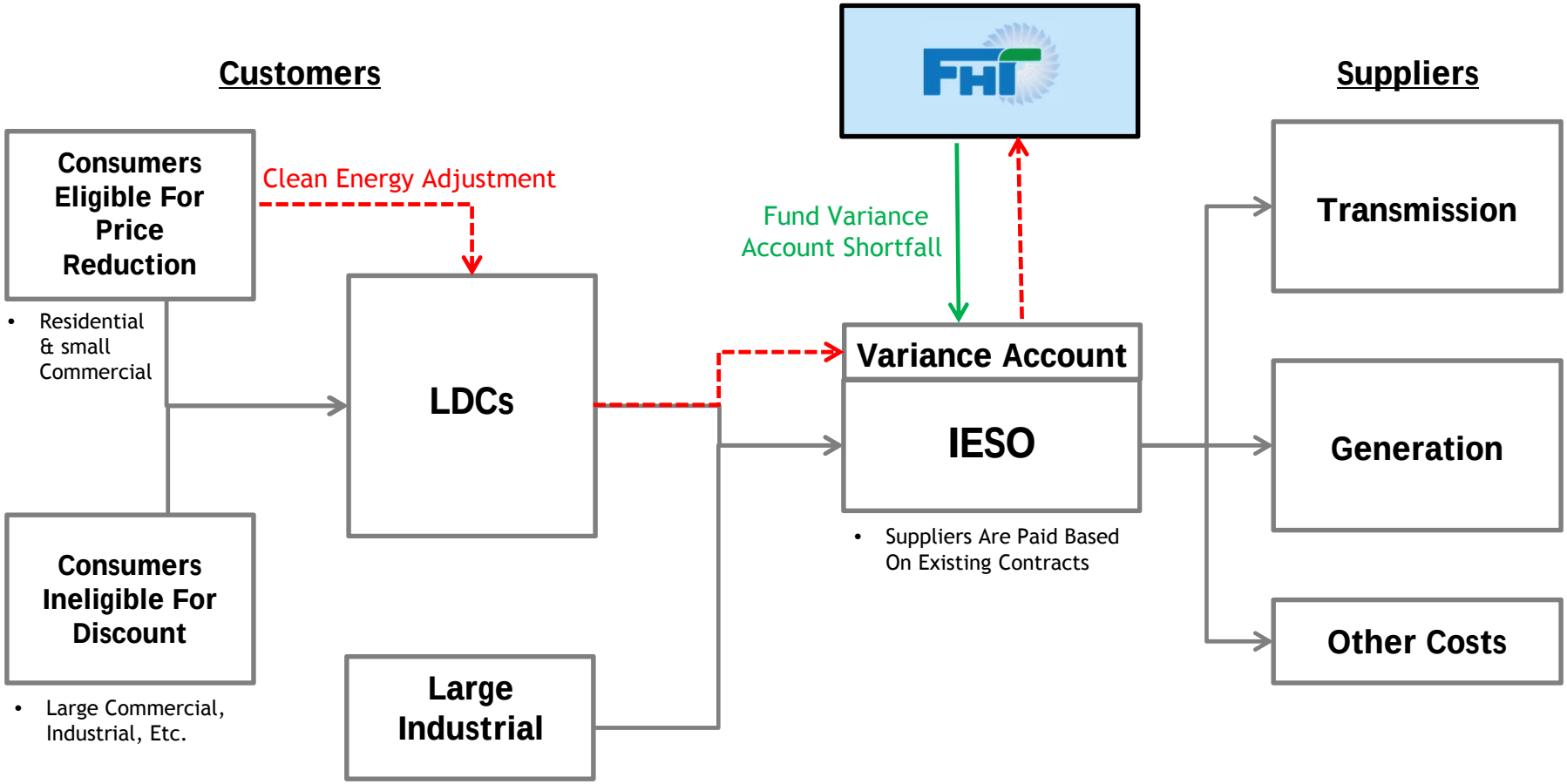
Top 5 LDCs by Customer Base[1]

	Rating[3] *(S&P/DBRS/Moody's)*	Customers[4] *(MM)*	Revenue[4] *(C$MM)*
hydro one	A / A(h) / A3	1.30	$4,533
alectra utilities	A / A / --	0.96	$3,642
TORONTO HYDRO	A / A / --	0.75	$3,886
HydroOttawa	BBB+ / A / --	0.32	$1,130
London Hydro	A / -- / --	0.15	$488
		3.49	**$13,680**

[1] Source: OEB 2016 Yearbook of Electricity Distributors
[2] Small Commercial includes General Service <50kW Customers
[3] Most recent rating reports from S&P, DBRS and Moody's
[4] Residential and Small Commercial customers

Electricity Market with FHT

- Under the FHPA, each month the IESO determines the shortfall that results from the Fair Adjustment and records this amount, together with financing costs, in a variance account
- FHT will finance the shortfall and is entitled to recover its costs through CEAs from Specified Consumers



III. Legislative and Regulatory Framework

Legislation Overview

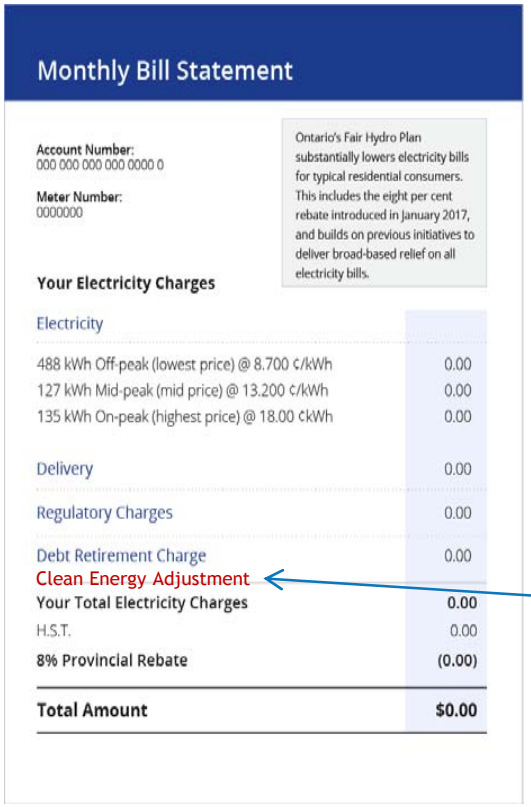
Purpose	• The FHPA was enacted to ensure that clean energy costs and clean energy benefits are fairly allocated among present and future Specified Consumers • Clean energy costs are costs allocated to consumers as a result of Ontario's clean energy initiative; clean energy benefits are benefits that accrue to both present and future electricity consumers
Specified Consumers	• A category of consumers that generally is comprised of residential consumers, small businesses and farms • Includes consumers with a demand for electricity of 50 kW or less or those that use not more than 250,000 kWh of electricity annually
Rate Reduction Period	• *July 1, 2017 – April 30, 2018* – Specified Consumers charged an invoice amount that is 25% less than the regulated rate that would otherwise have been determined by the OEB (referred to as the "Fair Adjustment") • *May 1, 2018 – April 30, 2019* - previously established regulated rate anticipated to increase by the rate of inflation in Ontario • *May 1, 2019 – April 30, 2021* - rate reductions will be established by regulation but anticipated to increase by the rate of inflation in Ontario

Legislation Overview

Regulatory Asset	• Each month the IESO determines the shortfall that results from the Fair Adjustment and records this amount, together with the costs of financing the shortfall, in a variance account • The IESO has the right to recover the balance recorded in the variance account from Specified Consumers (such right, the "Regulatory Asset") • The IESO may transfer a specified portion of the Regulatory Asset to the Trust for a cash purchase price equal to the amount recorded in the variance account in respect of such specified portion of the Regulatory Asset
Investment Asset	• If the IESO and the Trust agree to the transfer of a specified portion of the Regulatory Asset, such transfer results in the creation of a current and irrevocable property right that is immediately vested in the Trust (such right, an "Investment Interest") • By acquiring an Investment Interest, the Trust will be entitled to recover all of its costs of such financing and will acquire the right to impose, invoice, collect, receive and recover CEAs from Specified Consumers • The Trust is not obligated to purchase Regulatory Assets from the IESO
Moratorium Period	• From July 1, 2017 to April 30, 2021, CEAs are not permitted to be collected from Specified Consumers ("Moratorium Period") • The IESO is obligated to pay all funding and other expenses of the Trust (referred to as Carrying Costs), excluding principal, during the Moratorium Period up to July 31, 2021 • The IESO has a $2 billion credit facility from the Ontario Electricity Financing Corporation ("OEFC") to pay Carrying Costs; as security for the performance of its obligations, the IESO has granted a first-priority security interest in all of its accounts receivables

Clean Energy Adjustments

- Under the FHPA, the "clean energy adjustment" is the amount payable by Specified Consumers to cover the cost of financing the shortfall from the Fair Adjustment and the associated costs to finance, including operating costs of the Trust and funding of reserve accounts
- CEAs may not be set off or by-passed by Specified Consumers
- **Finance amount** = estimate of the amount payable by the Trust in respect of principal payments, interest costs, Trust expenses and taxes, reserve account deposits and derivative payments
- **True-up amount** = captures the difference between the finance amounts incurred by the Trust and the CEAs collected from consumers and also includes other anticipated shortfalls and differences due to various factors (e.g. consumer defaults and delays, billing lags, write-offs and variations in electricity consumption)



Monthly Bill Statement

Account Number:
000 000 000 000 0000 0

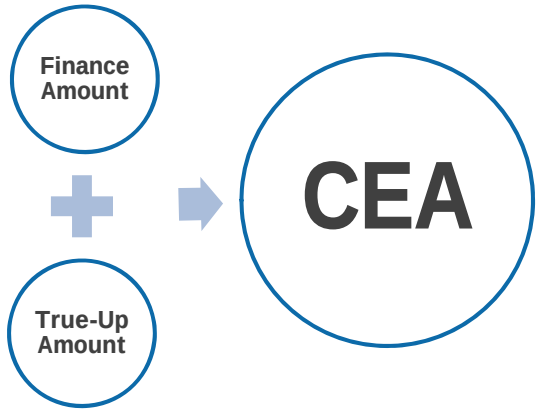
Meter Number:
0000000

Ontario's Fair Hydro Plan substantially lowers electricity bills for typical residential consumers. This includes the eight per cent rebate introduced in January 2017, and builds on previous initiatives to deliver broad-based relief on all electricity bills.

Your Electricity Charges

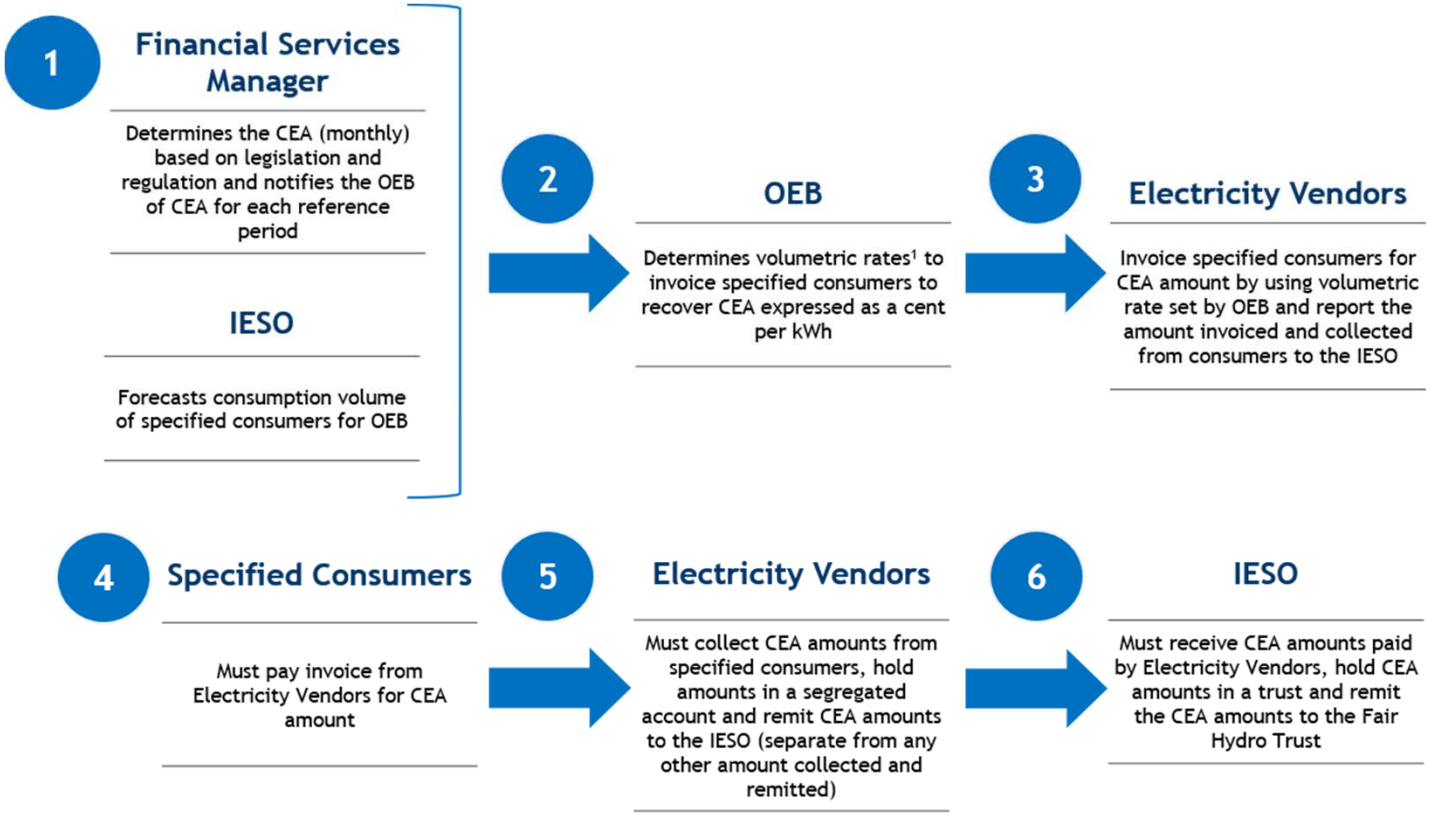
Electricity	
488 kWh Off-peak (lowest price) @ 8.700 ¢/kWh	0.00
127 kWh Mid-peak (mid price) @ 13.200 ¢/kWh	0.00
135 kWh On-peak (highest price) @ 18.00 ¢kWh	0.00
Delivery	0.00
Regulatory Charges	0.00
Debt Retirement Charge	0.00
Clean Energy Adjustment	
Your Total Electricity Charges	0.00
H.S.T.	0.00
8% Provincial Rebate	(0.00)
Total Amount	**$0.00**

New charge that will be added to electricity bills in May 2021 as a separate line item



Billing and Collection of CEAs

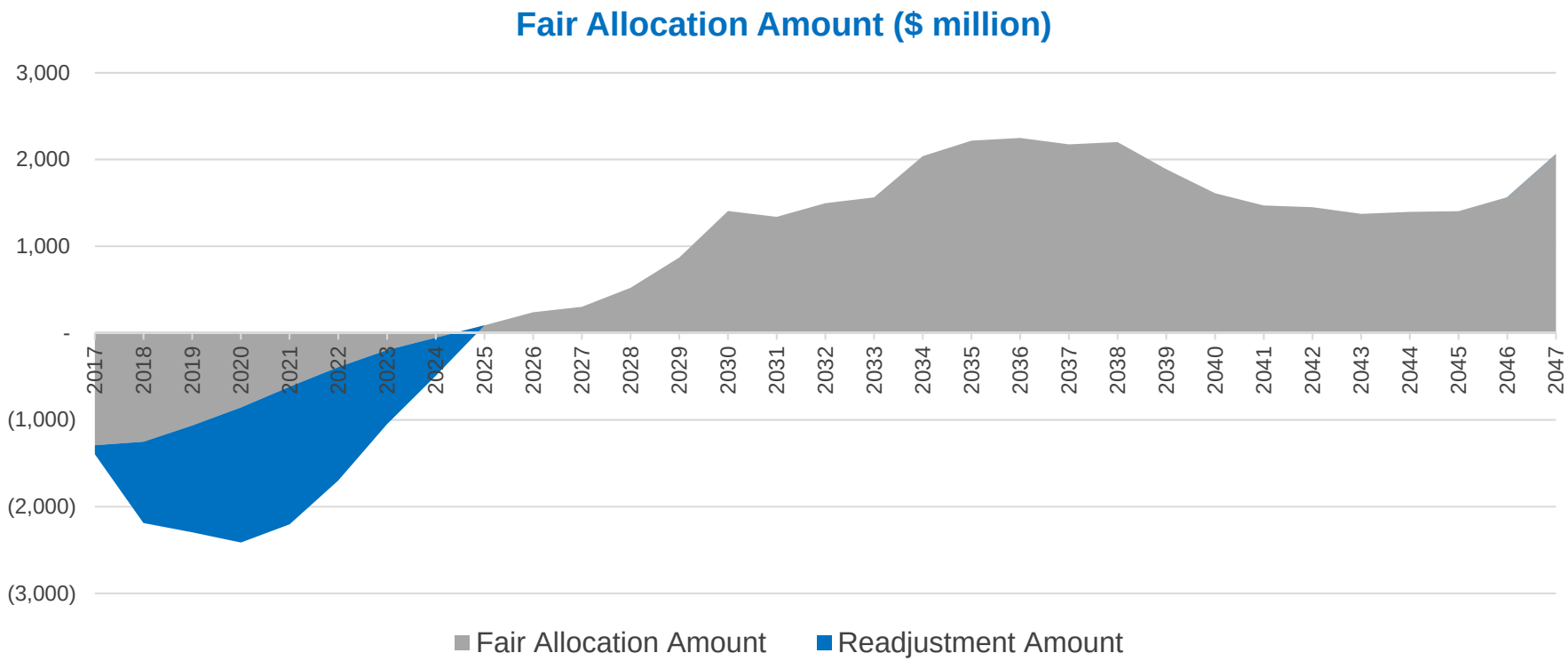
- CEA amounts for billing and collection purposes will be managed outside of the IESO's current settlement processes set out in the Market Rules for electricity invoice amounts
- Collection risk for CEA amounts are dealt with through statutory rights in the Act, the collection obligations of the IESO under the Master Transfer & Servicing Agreement ("MTSA") and the ability to include amounts into the true up mechanism



[1] The rates will be determined by dividing the CEA amount by the forecasted energy consumption in the reference period by Specified Consumers

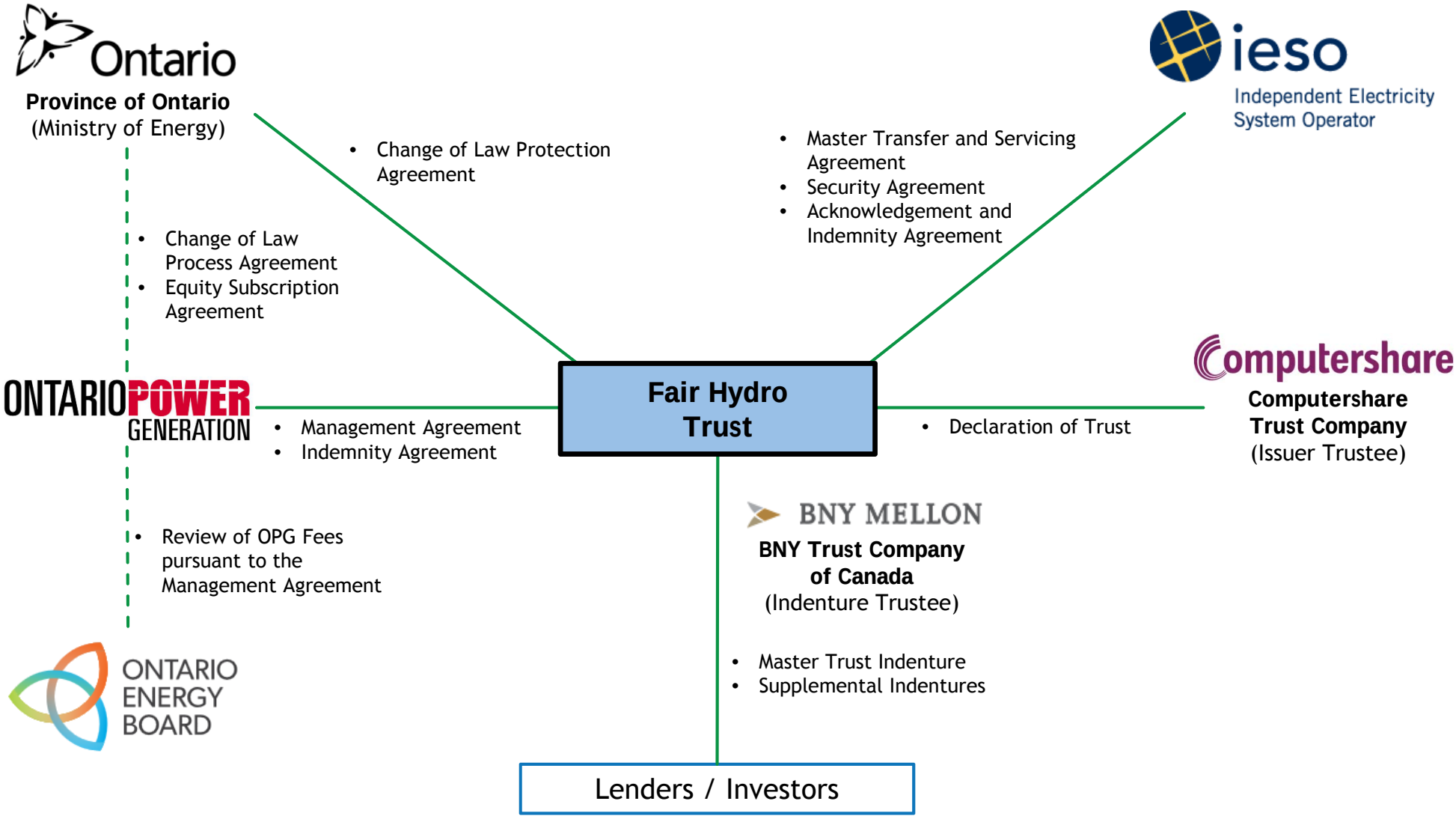
Fair Allocation Amount

- The Fair Allocation Amount ("FAA") is the estimated clean energy costs without consideration of the FHP compared to these same costs reallocated on the basis of estimated clean energy benefits to Specified Consumers in respect of each reference period and includes operating and financing costs of the FHT
- If the FAA is negative, this means that the Minister of Energy has determined that current Specified Consumers have borne more than their fair share of Clean Energy Costs (with the consequent rate reduction for current Specified Consumers); the FAA is expected to be negative until at least May 2024
- The Ministry of Energy will provide updated FAAs to OPG from time-to-time



IV. Contractual Framework

Simplified Contractual Structure



Key Agreements

Change of Law Protection Agreement

Parties	• (1) Province of Ontario as Obligor and (2) Indenture Trustee, on behalf of Specified Creditors[1], as Beneficiaries and (3) OPG as Financial Services Manager ("FSM")
Purpose	• Provides assurance to investors that upon the occurrence of a Protection Event, the Province of Ontario will have an obligation to make payments on behalf of the Trust
Key Terms	• **Term**: Continues for as long as any obligations of the Trust that are secured under the Master Trust Indenture (MTI) remain outstanding • **Mandatory Payment**: Upon the occurrence of a Protection Event, the Indenture Trustee has the right to require the Province to pay all obligations when due and payable • **Priority of Payments**: The priority of payments is governed by the waterfall provision under the MTI • **Adherence Conditions**: OPG as FSM is required to comply with certain conditions, including the delivery of an Adherence Compliance Certificate, prior to the issuance of debt which is to benefit from change in law protection from the Province • **Suspension Notice**: The Province may deliver a suspension notice, after which date funding obligations incurred will not have the benefit of the Change of Law Protection, upon the occurrence of a program breach, a default in performance, or misrepresentation by OPG as FSM

[1] **Specified Creditors** are any other Person that is owed a payment obligation by the Issuer that gives rise to a Finance Amount in respect of the Issuer

Key Agreements

Change of Law Protection Agreement (cont'd)

Protection Events

The occurrence of any of the following events:

- The Legislature repeals (and does not replace on an equivalent basis) or amends the Act or any portion thereof as in effect on the date hereof
- The Legislature enacts or amends any other statute
- The Lieutenant Governor in Council repeals (and does not replace on an equivalent basis) the regulations made under the Act or any portion thereof as in effect on the date hereof
- The Lieutenant Governor in Council amends any "regulation" (as defined in Part III of the Legislation Act, 2006) as in effect on the date hereof
- The implementation of a change in the organization or structure of the IESO or Ontario's electricity market undertaken at the initiative of the Province
- A court of competent jurisdiction determines that all or a portion of the Act or the regulations made under the Act, is ultra vires or invalid in a way that adversely affects the ability of the Trust to pay its obligations

in each case that adversely affects the ability of the Trust to pay its obligations when due and payable, taking into account any funds available in reserve accounts and any reasonably expected potential effect of a true-up amount

Key Agreements (cont'd)

Master Transfer and Servicing Agreement

Parties	• (1) the IESO, as transferor and servicer; (2) the Trust
Purpose	• Provides for the transfer, by the IESO to the Trust of the regulatory asset, and upon such transfer the Trust acquires an investment interest
Key Terms	• **Transfer of Regulatory Asset**: The IESO may offer, no more frequently than monthly, to transfer the regulatory asset to the Trust. The Trust has the right, but not the obligation, to accept IESO's offer. • **Servicing Duties:** The IESO will be responsible for servicing the investment interest under the Regulations, including collecting clean energy adjustment amounts from electricity vendors and remitting the same to the Trust, including: – Establishing a segregated account for collecting CEAs and use reasonable efforts to cause electricity vendors to do the same – Collect CEAs from electricity vendors – Remit CEAs monthly to the Trust – Prepare monthly servicer reports – Forecast electricity consumption of Specified Consumers • **Moratorium Period:** During Moratorium Period (until May 1, 2021), the IESO will be required by regulation to fund all interest and other expenses of the Trust, which will be offered, as regulatory assets, for transfer to the Trust in a subsequent period. • **IESO Letter of Credit:** After the Moratorium Period, the IESO will provide the Trust, a letter of credit or other form of security, for the obligation of non-rated or non-investment grade rated electricity vendors.

Key Agreements (cont'd)

Management Agreement

Parties	• Issuer Trustee, on behalf of the Trust, and OPG, as Manager
Purpose	• Issuer Trustee delegates to the Manager all powers and duties of managing the Trust
Key Terms	• **Duties Include**: – Negotiating and executing program agreements; – Preparing, in accordance with applicable securities laws, any offering documents to be furnished by the Trust to prospective purchasers of funding obligations; – Review or caused to be reviewed, records of electricity vendors on a annual basis with respect to CEAs – Preparing financial statements; and – Paying taxes on behalf of the Trust • **Incurrence of Funding Obligations**: Manager will determine how and when to incur funding obligations to acquire investment interests • **Standard of Care**: Manager will perform its duties diligently and in conformity with the Trust's obligations under the program agreements • **Resignation/ Termination:** Manager may not resign from its duties or terminate the Management Agreement as long as funding obligations of the Trust are outstanding

Key Agreements (cont'd)

Other Key Agreements

Security Agreement	• As security for the performance of its obligations under the Regulation to pay the Trust's carrying cost during the Moratorium Period, IESO has granted the Trust a first priority security interest in all of its accounts receivable
Acknowledgement and Indemnity Agreement (IESO)	• IESO, as servicer under the MTSA, acknowledges that a security interest has been granted to the Indenture Trustee thereby assigning as security the rights and benefits of the Issuer under the MTSA to the Indenture Trustee and provides certain indemnities with respect to its duties and obligations under the MTSA
Indemnity Agreement (OPG)	• OPG, as manager under the Management Agreement, provides certain indemnities to the Indenture Trustee with respect to its duties and obligations under the Management Agreement
Change of Law Process Agreement	• Outlines procedural requirements between the Province and OPG with respect to issuing debt that benefits from the Change of Law Protection Agreement • Among other things, OPG is required to deliver to the Province a process certificate, outlining the material terms of a proposed debt issues and confirm such debt offerings will not cause the protection agreement maximum (as updated from time to time) to be exceeded
Equity Subscription Agreement	• Specifies the terms and conditions upon which the Province provides equity injections to OPG to purchase subordinated debt issued by the Trust
Declaration of Trust	• Establishes FHT to carry out activities for the benefit of its beneficiary unitholders • Specifies the rights and powers of the Issuer Trustee (Computershare)

Allocation of Servicing Role and Responsibilities

The shared responsibilities of servicing and management roles are summarized below

	OPG	IESO	LDC
Annually Review Records of LDCs with Respect to CEAs	✔		
Determination of True-Up Amount	✔		
Ongoing Filings for Trustee and Rating Agencies	✔		
Management of Ongoing Debt Issuances	✔		
Cash Management		✔	
Preparation of Monthly Service Reports		✔	
Remittance of CEA to IESO and to the Trust		✔	✔
Responding to inquiries by customers if practicable, or forwarding such inquiries to OPG		✔	✔
Customer Billing			✔
Customer Collections			✔
Customer Meter Reading			✔

V. Financing Program

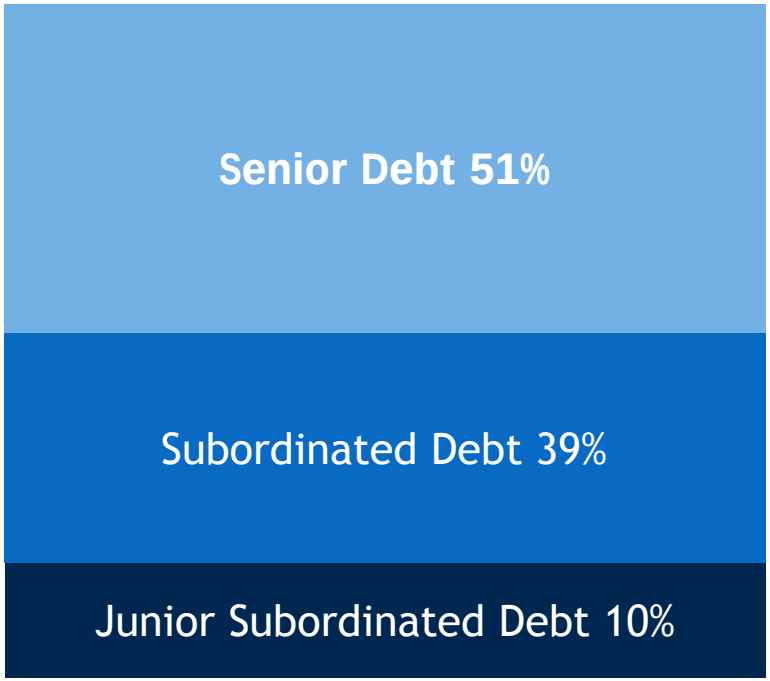
Financing Plan / Strategy

- OPG is responsible for administering the FHT financing program
- Given the size (~$20 billion) and longevity (~10 years) of the FHT financing program, the funding strategy has been designed to provide flexibility
- Warehouse financing (ABCP conduit) and OPG subordinated debt will be used to fund monthly regulatory asset purchases from the IESO
  - Periodically refinance the warehouse facility through the issuance of term debt (likely access the market 2-3 times per year)
- Term debt can take the form of bullet bonds or could be issued as amortizing bonds

ABCP Conduit	• ABCP conduit and OPG subordinated debt will be used to fund monthly regulatory asset purchases from the IESO
Term Debt	• Term debt issuances will be used to refinance short term debt financing provided by ABCP conduit and OPG subordinated debt • Both Canadian term debt and U.S. term debt market will be considered • Maturity profiles will be structured to fit under the fair allocation curve (bullet bonds with synthetic amortization or amortizing bonds)
Subordinated Debt	• Subordinated debt provides credit enhancement for senior debt (ranks behind senior debt in cash flow waterfall)

Financing Structure

- The Trust will fund regulatory asset purchases through the issuance of senior, subordinated and junior subordinated secured debt
- Senior debt (51%) will be sourced monthly from committed warehouse facilities, and the periodic issuance of term debt
- Subordinated debt (49% anticipated; minimum of 35% required) will be purchased by OPG, primarily with equity injections from the Province (44%) and the remaining 5% from OPG



Senior Notes
Term debt issuances (in Canada and/or the U.S.)

Subordinated Notes
Provided to Trust by OPG via equity injection from the Province

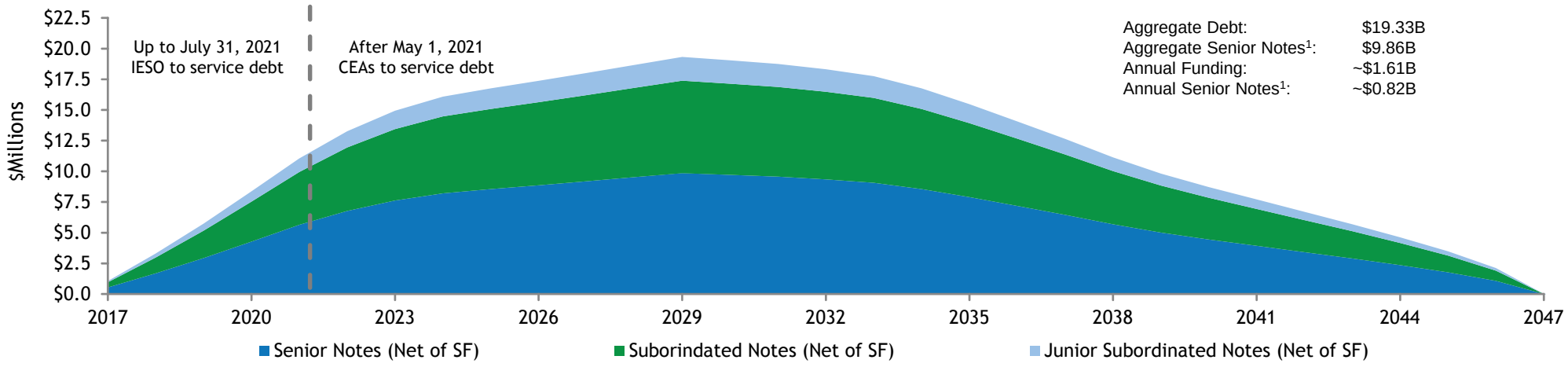
Junior Subordinated Debt
- OPG equity injection (5%)
- Provided to Trust by OPG via the Province (5%)

Aggregate Financing Program

Illustrative Debt Summary - Funding & Repayment Period (Annual)

- Based on the Fair Allocation Amount and the Province's electricity bill reduction targets, the following debt profile for the program is expected, peaking at just under $20 billion by 2029
- Various tranches of debts will be issued periodically during the period of 2017 - 2028, which will mature over a period after 2029

Illustrative Aggregatee Funding and Repayment Profile (Annual; Net of Sinking Fund ("SF") Payments)

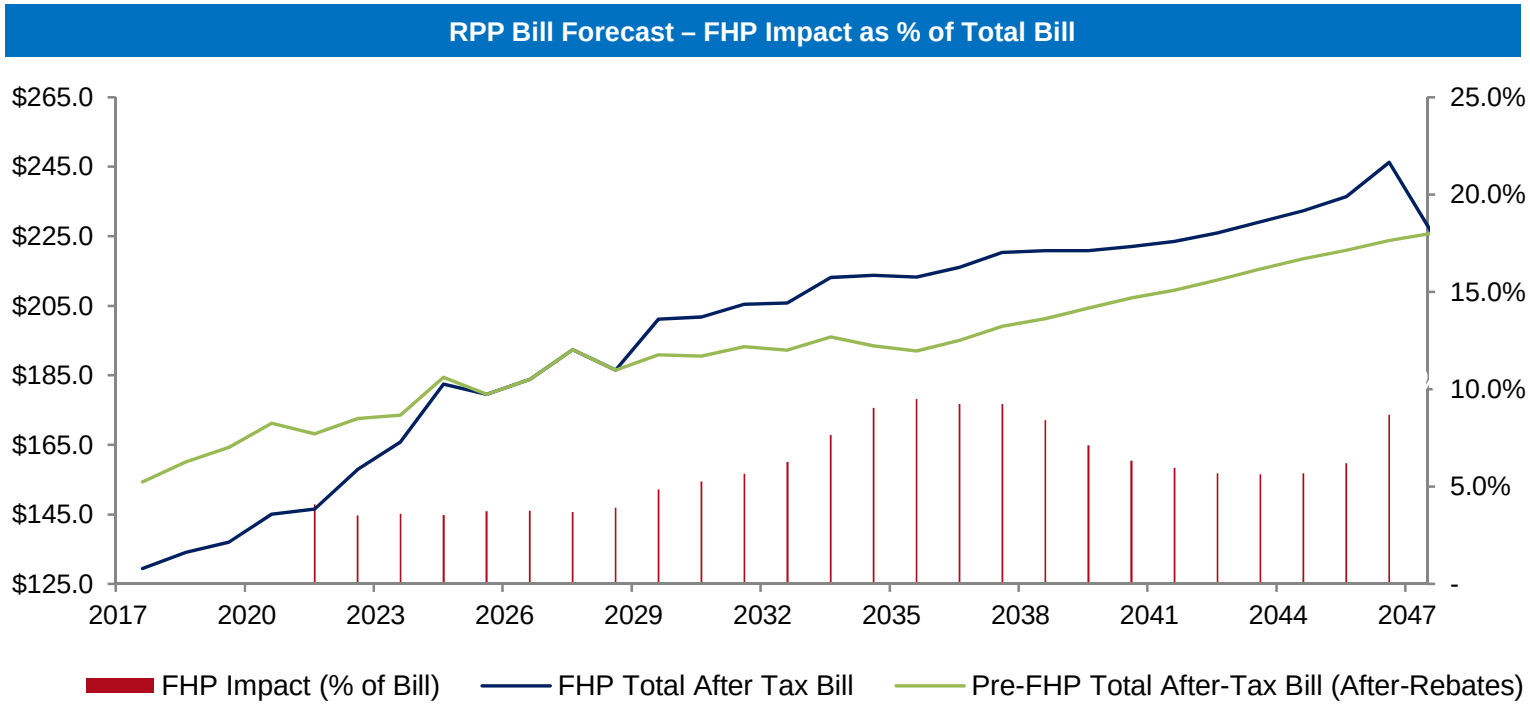


[1] Assumes 51% Senior Notes

Consumer Bill Forecast with FHP

RPP Bill Forecast - FHP Impact % of Total Bill (C$ per Month)

- Over the duration of the Fair Hydro program, the clean energy adjustment for the average residential customer is anticipated to remain below 10% of the total electricity bill
- Max CEA as a percent of the total bill is forecast to be 10.1%
- Average CEA as a percent of the total bill is forecast to be 6.9%



Capital Markets Platform

Master Trust Indenture

Parties	• (1) Computershare Trust Company (Issuer Trustee), on behalf of the Trust, acting through OPG as the Manager; (2) BNY Trust Company (Indenture Trustee) on behalf of Specified Creditors
Purpose	• All Specified Creditors are required to be bound by the terms of the MTI including the priority provisions and to limit recourse to the assets of the Trust

Key Terms

Incurrence of Funding Obligations	• Trust may incur funding obligations under a variety of instruments including:
	  • Note issuances under supplemental indentures
	  • Borrowings under credit agreements
	  • Purchase of notes under note purchase agreements
	  • Letters of Credit/Guarantees under credit enhancement agreements
	  • Liquidity loans under liquidity agreements backing short term notes

Conditions Precedent	• Prior to incurring additional funding obligations, the Trust confirms to the Indenture Trustee and each rating agency that:
	  – the incurrence of such additional obligations will not cause an adverse effect
	  – the incurrence of such additional obligations is materially consistent with the Financing Plan
	  – the estimated finance amount that would become due during the applicable reference period is expected to reasonably align with the fair allocation amount for such reference period
	• It will also be a condition precedent that each rating agency confirm that the issuance of such additional funding obligations will not result in a reduction or withdrawal of any existing ratings of outstanding funding obligations

Security	• Granted over all assets of the Trust, including the Trust's investment interest, all collections under the MTSA and all accounts

Capital Markets Platform

Master Trust Indenture – Key Terms (cont'd)

Subordination	• Provides for three different classes of funding obligations (i) senior (ii) subordinated, and (iii) junior subordinated
Priority	• Prior to an Event of Default: the waterfall provision applies • After an Event of Default: payment priority direct all amounts to pay senior obligations first
Early Amortization	• Early amortization events will include the occurrence of a scheduled final payment date on notes, the Trust becoming an investment company, the insolvency of IESO or the Manager and any other additional early amortization events set out in a funding obligation agreement • An early amortization event will result in a modified repayment schedule for the outstanding funding obligations
Events of Default	• Include payment defaults, and representation and covenant breaches
Acceleration	• CEAs cannot be increased to the level to repay all outstanding principal following acceleration, however the subordination of debt would advance the repayment of the senior funding obligations

Indicative Waterfall



VI. Summary of Offering

Summary of Indicative Terms

Initial Fair Hydro Issuance	**Class**	**Size**	**% of Trust**	**Expected Maturity**	**Legal Maturity**	**Rating (DBRS / Moody's)**
	Senior Warehouse	$[ ] mm (Not Offered)	[ ]%	[ ]	[ ]	N / A
	Senior Term Notes	$[ ] mm	[ ]%	[ ]	[ ]	AAA / Aa2
	Subordinated Notes	$[ ] mm (Not Offered)	[ ]%	[ ]	[ ]	[ ]
	Jr. Subordinated Notes	$[ ] mm (Not Offered)	[ ]%	[ ]	[ ]	[ ]
Issuer	Fair Hydro Trust, a single purpose, bankruptcy-remote wholly-owned subsidiary of the Financial Services Manager					
Financial Services Manager	Ontario Power Generation, Inc.					
Servicer	Independent Electricity System Operator					
Guarantor	Province of Ontario					
Provincial Rate Authority	Ontario Energy Board					
Source of Repayment	• Moratorium Period: Statutorily mandated remittances from IESO • Post Moratorium Period: Non-bypassable charge from residential and commercial customers in Ontario, related collections and reserve accounts					
Amortization	Sinking fund with bullet maturity					
Payment Frequency	Semi-annual					
Interest	Fixed rate					
Senior Note Credit Enhancements	• Semi-annual True-up • Reserve Account (Senior Notes) • Subordination					
Reserve Account	[ ]					
True-up	Calculated on a semi-annual basis post-moratorium period					
Subordination	Subordinated and Jr. Subordinated Notes will be retained by OPG					
Additional Issuance	Master trust allows for the issuance of additional notes subject to Rating Agency Condition					

VII. Key Risks and Mitigants

Risk Mitigation

Risk	Description of Risk	Mitigants
Political Risk	• There may be pressure on a future government to adjust certain aspects of the repayment requirements	• Change of Law Protection Agreement in favour of lenders / investors
Under Collection	• If the IESO inaccurately forecasts electricity consumption or if OPG uses inaccurate consumer delinquency or write-off data when setting the CEA, there could be a shortfall in collections, which might result in missed or delayed payments of principal and interest on the Notes	• 6-month reference period • True up mechanism • Any shortfall in collections are recoverable from all Specified Consumers
Defaults (IESO & LDCs)	• During the Moratorium Period, the Trust is dependent on the IESO to pay carrying costs • Receipt of CEAs dependent on the performance of LDCs and IESO	• IESO has a very strong credit profile and very low losses • IESO to provide a letter of credit/other security for the obligation of non-rated or below investment grade rated LDCs • LDCs collect security deposits and, when permitted, have the ability to disconnect service for non-payment
Size of Charge vs. Bill	• If the charge applied to bills becomes too high, there could be a consumer and/or political backlash	• 20-year repayment period allows for gradual rate increases • Max CEAs as a percent of the total is forecast to be ~10%

VIII. Investment Highlights

Investment Highlights

- Strong provincial support through the Change of Law Protection Agreement
- Irrevocable & non-bypassable rate payer charge
- Full cross-collateralization; collection shortfalls allocated among all Specified Consumers
- Enhanced true-up mechanism
- Credit enhancement for senior debt provided via subordinated debt
- Experienced operating agents (OPG, IESO, and LDCs)
- Strong service territory
- No large user industrial risk exposure

Policy

Cabinet agreed that:

1. ENERGY implement electricity price mitigation for residential, commercial and industrial consumers through the following:

i) Provide a rebate of 8% on the pre-tax cost of electricity for all electricity consumers eligible to be billed under the Ontario Energy Board's Regulated Price Plan (RPP); and any other consumers who would be eligible for RPP if their electricity account was with a licensed distributor.

ii) Increase the total amount of rate protection available to R2 with low density electricity consumers under the Rural or Remote Rate Protection Program (RRRP) by increasing the subsidy by $110 million from its current level of $127 million which has been capped since 2004.

iii) Implement a mechanism to periodically adjust the total annual amount of rate protection available to R2 low density electricity consumers under the RRRP, effective on or after January 1, 2018.

iv) Expanding eligibility for participation in the Industrial Conservation Initiative (ICI) to smaller industrial, institutional and commercial customers by lowering the eligibility threshold to 1 MW and removing restrictions on eligible sectors.

2. ENERGY seek necessary TB/MBC approvals.

3. ENERGY seek approvals for:

i) the proposed *Ontario Rebate for Electricity Consumers Act, 2016* – **NTD-LSB – please confirm what title to use.]** and any supporting regulations under the proposed *Ontario Rebate for Electricity Consumers Act, 2016*, and with other complementary regulatory amendments and consequential legislative amendments to the *Ontario Energy Board Act, 1998* and the *Ontario Clean Energy Benefit Act, 2010*, subject to the Legislature's approval of the Act, including the following elements:

   i. The rebate would be available starting January 1, 2017;
   ii. The legislation would specify the types of costs to which the rebate would or would not be applied, with authority to make changes by regulation;
   iii. The legislation would address invoicing requirements, including authority to prescribe how the rebate is to appear on consumers electricity bills;
   iv. The legislation would include authority to prescribe the way in which the rebate is to be flowed through to consumers, and the way

in which electricity vendors providing the rebate are to be reimbursed;

v. The legislation would include record-keeping requirements for electricity vendors and other prescribed persons;
vi. The legislation would include inspection powers for inspectors appointed by the minister of Finance, including powers related to the recovery of overpayments.
vii. The legislation would provide for regulation-making authority to establish a limitation period for ceasing payments and reimbursement based on past entitlement. Similar amendments would be provided for the *Ontario Clean Energy Benefit Act, 2010* but would allow the ceasing of all payments and reimbursements after a prescribed date.

4. ENERGY notes the following amendments:

i) Amendments to Ontario Regulation 429/04 (Adjustments Under Section 25.33 of the Act) made under the *Electricity Act, 1998* to lower the Industrial Conservation Initiative (ICI) threshold to 1 megawatt and require electricity consumers and market participants between 1 MW and 5 MW to opt in.

ii) Amendments to Ontario Regulation 442/01 (Rural or Remote Electricity Rate Protection) made under the Ontario Energy Board Act, 1998, to increase support through the Rural and Remote Rate Protection Plan to R2 low density rural electricity customers and provide for a periodic adjustment mechanism.

5. ENERGY work with MOECC to recycle an estimated annual average of $270 million of Cap and Trade auction proceeds from the Greenhouse Gas Reduction Account for non-RPP commercial and industrial electricity consumers over the first compliance period (2017-2020) through a volumetric rebate mechanism.

6. ENERGY and MOF work with Cabinet Office, Premier's office to develop a communications plan.

TB/MBC

TBC with TBS

LRC

Cabinet approved version [name] of this draft legislation for introduction, subject to the following:

1. The Office of Legislative Counsel is authorized to prepare a French version and to make minor adjustments to the English version, for the purpose of ensuring consistency between the two versions and making other improvements or correcting mistakes discovered in the translation process

Policy

Cabinet agreed that:

1. ENERGY implement electricity price mitigation for residential, commercial and industrial consumers through the following:

i) Provide a rebate of 8% on the pre-tax cost of electricity for all electricity consumers eligible to be billed under the Ontario Energy Board's Regulated Price Plan (RPP); and any other consumers who would be eligible for RPP if their electricity account w~~as~~ere with a licensed distributor.

ii) Increase the total amount of rate protection available to R2 ~~with~~ low density electricity consumers under the Rural or Remote Rate Protection Program (RRRP) by increasing the subsidy by $110 million from its current level of $127 million, which has been capped since 2004.

iii) Implement a mechanism to periodically adjust the total annual amount of rate protection available to R2 low density electricity consumers under the RRRP, effective on or after January 1, 2018.

Commented [RK1]: Shouldn't this be better defined on the nature of the mechanism (inflation adjustment?) and / or what is being targeted as the effect of the mechanism (e.g., to pay similar amount as an R1 consumer, or some other target)?

iv) Expand~~ing~~ eligibility for participation in the Industrial Conservation Initiative (ICI) to smaller industrial, institutional and commercial customers by lowering the eligibility threshold to 1 MW and removing restrictions on eligible sectors.

2. ENERGY seek necessary TB/MBC approvals.

3. ENERGY seek approvals for:

i) the proposed *Ontario Rebate for Electricity Consumers Act, 2016* ~~**– NTD LSB – please confirm what title to use.]** and any supporting regulations under the proposed *Ontario Rebate for Electricity Consumers Act, 2016*, and with other complementary regulatory amendments and consequential legislative amendments to the *Ontario Energy Board Act, 1998* and the *Ontario Clean Energy Benefit Act, 2010*,~~ which would, subject to the Legislature's approval of the Act, includ~~e~~~~ing~~ the following elements:

i. The rebate would be available starting January 1, 2017;
ii. The legislation would specify the types of costs to which the rebate would or would not be applied, with authority to make changes by regulation;
iii. The legislation would address invoicing requirements, including authority to prescribe how the rebate is to appear on consumers' electricity bills;
iv. The legislation would include authority to prescribe the way in which the rebate is to be flowed through to consumers, and the way

in which electricity vendors providing the rebate are to be reimbursed;

v. The legislation would include record-keeping requirements for electricity vendors and other prescribed persons;

vi. The legislation would include inspection powers for inspectors appointed by the ~~m~~Minister of Finance, including powers related to the recovery of overpayments.

~~vi.~~vii. The legislation would include consequential amendments to the *Ontario Energy Board Act, 1998* and the *Ontario Clean Energy Benefit Act, 2010*,

viii. The legislation would provide for regulation-making authority to establish a limitation period for ceasing payments and reimbursement based on past entitlement. Similar amendments would be provided for the *Ontario Clean Energy Benefit Act, 2010* but would allow the ceasing of all payments and reimbursements after a prescribed date.

4. ENERGY to report back to LRC and Cabinet for approval of any supporting regulations under the proposed *Ontario Rebate for Electricity Consumers Act, 2016*, and with other complementary regulatory amendments.

5.~~4~~. ENERGY notes the following amendments:

i) Amendments to Ontario Regulation 429/04 (Adjustments Under Section 25.33 of the Act) made under the *Electricity Act, 1998* to lower the Industrial Conservation Initiative (ICI) threshold to 1 megawatt and require electricity consumers and market participants between 1 MW and 5 MW to opt in.

ii) Amendments to Ontario Regulation 442/01 (Rural or Remote Electricity Rate Protection) made under the Ontario Energy Board Act, 1998, to increase support through the Rural and Remote Rate Protection Plan to R2 low density ~~rural~~ electricity customers and provide for a periodic adjustment mechanism.

~~5~~6. ENERGY work with MOECC to recycle an estimated annual average of $270 million of Cap and Trade auction proceeds from the Greenhouse Gas Reduction Account for non-RPP commercial and industrial electricity consumers over the first compliance period (2017-2020) through a volumetric rebate mechanism.

~~6~~7. ENERGY and MOF work with Cabinet Office, Premier's office to develop a communications plan.

~~***TB/MBC***~~

Commented [RK2]: Shouldn't the clause indicate what the amendments are about – e.g., wrt the OEBA, to implement the proposed ORECA; and for OCEBA, to have wrap up timelines as per viii below, or is Energy asking for more? If so, what?

Commented [RK3]: Comment as above.

~~TBC with TBS~~

~~LRC~~

Cabinet approved version of the proposed ~~[name]~~ *Ontario Rebate for Electricity Consumers Act, 2016* ~~of this draft legislation~~ for introduction, subject to the following:

1. The Office of Legislative Counsel is authorized to prepare a French version and to make minor adjustments to the English version, for the purpose of ensuring consistency between the two versions and making other improvements or correcting mistakes discovered in the translation process.

COMMITTEE BRIEFING NOTE

Committee:		
Meeting Date:		
Ministry:		
Last reviewed by: Committee (date)		**Tracking to:**

SUBMISSION TITLE:

I. REQUEST/DECISION REQUIRED:

•

II. KEY POINTS:

- Think storyline!
    - What do the Deputy and Minister need to know?
    - Why is this coming forward now?
    - What result will occur due to this decision?
    - What is the critical context needed for effective decision-making?
    - What issues is Cabinet Office flagging as part of their briefings to senior management?
    - What was the discussion at previous committees on the issue?
    - What do other jurisdictions do re: this issue?
    - What are the risks surrounding this decision – if approved/not approved?
    - Is this contentious?
    - How does this contribute to competitive government?

III. KEY CONSIDERATIONS

Summarize TBS/MOF comments and suggestions in up to 2-3 short bullets.

- Are there impacts or risks to the fiscal plan?
- Does the initiative have economic impacts?
- Does the initiative set a precedent?

- Please note the Briefing Note should be a maximum of one page double-sided
  1 attachment appendix (e.g., map, key table, agreement) – if necessary

IV. FINANCIAL SUMMARY

$ Millions	2016-17	2017-18	2018-19
Initiative cost requested	0.0	0.0	0.0
Requested program base	0.0	0.0	0.0
Total fiscal impact (draw from c-funds)	0.0	0.0	0.0

VI. PERFORMANCE MEASURES

-

Name of analyst:	
Date:	
Branch / Division:	

APPENDIX A: SCHEDULES

- Map, Key table including (Before/After examples), agreement – if necessary

Examples of information to have as back-pocket:

- What have we done historically on this issue?
- What regions will be impacted/excluded?
- Who has been consulted? (or will be?)
- Who are the key people involved? (e.g. names of lead negotiator, CEO)
- Does this set a precedent or have linkages to other programs? (e.g. pools - community centres - hockey rinks)
- What are the key milestones, timelines for implementation?
- What is the accounting treatment? When does it hit our books?
- Who owns the risk? (e.g. agency, provincial government, feds, municipalities)
- What are the administration costs, and FTE implications?

Tab x

CABINET BRIEFING NOTE

Committee:	Cabinet
Meeting Date:	September 14, 2016 [or Sept 13?]
Ministry:	Finance/TBS
Last reviewed by:	**Tracking to:**

SUBMISSION TITLE:	**[BASED ON MATERIALS FROM FPC SUBMISSION, WAITING ON CABINET SUBMISSION FOR FINALIZED PROPOSAL]** Electricity Price Mitigation

I. REQUEST/DECISION REQUIRED:

- Since 2010, electricity prices have risen considerably, particularly for households.
- The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These measure include:
  1. Provide an 8% rebate to Regulated Price Plan consumers (i.e., residential, small business and farms), similar to OCEB~~, with a 3,000 kWh cap~~.
  2. Provide targeted business support by expanding the ICI eligibility threshold to customers above 1MW in all sectors.
  3. Provide relief to rural customers by updating Rural and Remote Rate Protection (RRRP).
  4. Eliminate proceeds recycling to Regulated Price Plan consumers and increase proceeds recycling to commercial and industrial consumers.

Commented [SK1]: Based on draft materials from FPC submission

II. KEY POINTS:

- The Ministry of Energy (ENERGY) and Ministry of Finance (MOF) have been asked to explore rate mitigation options, including offsetting the provincial portion of the Harmonized Sales Tax (HST).
- There are 4 components to this proposal, each providing relief to different customer classes.

	Measure	Impact	Targeted Recipients
1.	8% Rebate to Regulated Price Plan	Fiscal ($1B)*	Residential, Farms, Small business and other small users
2.	Expanding ICI eligibility to customers above 1MW in all sectors	Rate base (47M/82M)**	Small Industrial, Commercial and Institutional consumers above 1MW in all sectors
3.	Updating Rural and Remote Rate Protection	Rate base ($110M)	Residents in rural or remote locations: Hydro One's lowest-density R2 customers.
4.	Redirecting proceed recycling to Commercial and Industrial	Fiscal (-$60M)*	Commercial and Industrial consumers

*Note: Annual Numbers from ENERGY. MOF analysis provided further below.

**NOTE: Short-term/Long-term rate base impact, where short term is one year after expanded eligibility takes place and long-term is expected impact once new customers have time to change behavior.

- Due to the nature of the Global Adjustment mechanism, the rate base proposal (#2 and #3) while benefiting the targeted recipients, come at a cost to all other electricity rate payers in Ontario.

- ENERGY provided the following overview of bill impacts:

Regulated Price Plan (Residential)*		Class B (Commercial)	Class A (Industrial)	
Average (750 kWh/month)	Rural (1000 kWh/month)		Existing	New
-$9.9/month (-7%)	-$45/month (-20%)	-$1/MWh (-1%)	-$1/MWh (-1%)	Up to -$52/MWh (-33%)

*NOTE: ENERGY did not provide impact for other Regulated Price Plan not classified as residential (eg. Farms, small businesses) that would benefit from the 8% Rebate to Regulated Price Plan.

1. 8% Rebate to Regulated Price Plan

- An 8% rebate on the pre-tax portion for Regulated Price Plan consumers would be equal to the provincial portion of HST and funded by the tax base.

- The rebate would appear directly on bills. As such, Local Distribution Companies (LDC) would be the delivery mechanism for the rebate.
  - While non-Regulated Price Plan consumers would not see a benefit from the 8% rebate under this option, all industrial and commercial consumers would receive proceeds recycling through the GGRA.
  - Commercial and industrial consumers would also continue to receive input tax credits and Public Service Bodies would continue to receive PSB rebates.
- New legislation would be required and closely mirror the Ontario Clean Energy Benefit (OCEB) Act, 2010. More details further below.
- On-bill rebate delivery would likely require adjustments to Local Distribution Company (LDC) billing systems, which could impact delivery costs and timelines.
- In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
  - One option to address any timing concerns is to allow LDCs to provide retroactive payments if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.

2. Expanding ICI Eligibility to customers above 1MW in all sectors

- Lower the threshold for participation in ICI to 1 MW and remove sectoral restrictions on participation.
- Most newly eligible ICI participants who choose to opt-in to the program would be able to reduce their electricity costs substantially. All other consumers would see a relatively small increase in their bills.

- Expanding the ICI will reduce electricity peak demand by incenting more consumers to lower their electricity demand during peak periods (80MW in the short term and 165 MW in the long term) providing a
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
    - A few examples of companies that would become eligible under such an expansion would be Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.
- All residential consumers would see an average cost increase of $0.42/month in the short term and $0.74/month in the long term.

3. Updating Rural and Remote Rate Protection

- Provide an additional $110 million in support to approximately 330,000 Hydro One rural customers.
- All residential consumers would see an average cost increase of $0.57/month.
- [TO BE EXPANDED]

4. Redirecting proceed recycling to Commercial and Industrial

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers.
- Ontario's Climate Change Action Plan (CCAP) includes up to $1.32 billion over 4 years to help keep electricity rates affordable for residential and industrial consumers.
- 8% rebate to Regulated Price Plan consumers fulfills the commitment to reduce residential rates by $2/month.
- Redirecting some of the forecast $1.3 billion in GGRA proceeds from Regulated Price Plan consumers to commercial and industrial consumers would ensure that the impact of cap and trade and ICI expansion and RRRP update would not increase costs for any large industrial and would result in a benefit to the average industrial and commercial customers.

III. KEY CONSIDERATIONS

1. 8% Rebate to Regulated Price Plan

- This 8% pre-tax rebate is similar to the previous Ontario Clean Energy Benefit (See Appendix for background) which provided a 10% post-tax rebate.
  - The OCEB legislation was set out with an end date, and was subsequently modified to be capped at 3,000 kWh for all electricity customers after 8 months of the program.
  - This proposal does not specify any consumption caps nor an end date.
- Compared to OCEB, this proposal is more generous to high RPP users
  - OCEB was eligible for up to 36,000 kWh while this proposal is more generous for those consuming more than 50,850 kWh annually.
- Blanket reduction in electricity prices for all users irrespective of consumption amounts hamper efforts to conserve electricity, and mutes TOU price signals.
- Removal of HST (a broad tax) to one particular product distorts and shifts consumption to that area.
- Businesses that fall under the Regulated Price Plan pay little to no HST due to the Input Tax Credit. The 8% reduction can be deemed a windfall for these users.
- While eligibility is intended to align with OCEB consumers, there exist a set of consumers not covered by the RPP (eg. Those on retail contracts – See Appendix) which were OCEB eligible.
  - Unclear if those other OCEB eligible consumers are also eligible for the 8% rebate.

- *Preliminary* MOF calculations align favorably with ENERGY projections. Note refined estimates are forthcoming.

FISCAL IMPACT

	2016-17	2017-18	2018-19	2019-20
ENERGY	261	1006	1004	994
MOF	224	909	958	1005
DIFFERENCE:	**16.5%**	**10.7%**	**4.8%**	**-1.1%**

- ENERGY's projections indicate a reduction in costs from the 2017-18 to 2019-20. While minimal, this trend contradicts MOF's projected cost increases.

2. Expanding ICI Eligibility to customers above 1MW in all sectors

- Previous expansion of ICI eligibility from 5MW to 3MW users in selected sectors provided those industrial users between 3MW and 5MW the option to enroll in the ICI program
  - Unclear if this initiative is a similar 'opt-in' proposal or a mandatory enrollment such as the initial ICI program for 5MW customers

3. Updating Rural and Remote Rate Protection

- According to ENERGY, the RRRP is a $175M program with the majority of program funding ($125.5M) to Hydro One's lowest-density 'R2' customers

Commented [SK2]: 36000*0.113/0.08 = 50,850

36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate
0.08 – pre-tax effective rebate (8%)

Commented [SK3]: This is a general/classic economic comment on the preference of broad consumption taxes vs taxes for particular items.
TPD might have a better way to communicate this, if applicable.

Commented [SK4]: Will need to verify

- Unclear who the remaining $49.5M is directed towards, nor whether the expended RRRP program would accommodate these customers
- Unclear whether the RRRP would be indexed or trued up on a regularly basis per one of the options ENERGY's FP deck.

4. Redirecting proceed recycling to Commercial and Industrial

- Unclear on the mechanism of how these proceeds will be directed to Commercial and Industrial users.
- According to the ENERGY deck the GGRA allocated $120M to average residential consumers, $170M to commercial and $40M to industrial consumers. Deck implies $60M in savings from 8% Rebate.
    - Unclear, how the redirected amount $60M ($120M-$60M) will be allocated to commercial and industrial users.

Fiscal Impact from Each Proposal ($M)

	2016-17	2017-18	2018-19
1. 8% Rebate to Regulated Price Plan	261	1006	994
4. Redirecting proceed recycling to Commercial and Industrial	-	-60	-60
TOTAL	**261**	**946**	**934**

[TO BE INSERTED IF NECESSARY, TABLE SUMMARIZING ELECTRICITY PRICE IMPACTS FROM EACH OF THESE 4 COMPONENTS]

IV. Cabinet Committee Discussion Summary

n/a

V. Financial Summary

$ Millions	2016-17	2017-18	2018-19
Initiative cost requested	261	946	934
Requested program base	?	?	?
Total fiscal impact (draw from c-funds)	261	946	934

VI. Performance Measures

- To estimate the impact of the program, and the savings provided to the various consumers, information should be provided from the LDCs on consumption profiles, particularly those affected by the 8% rebate on the Regulated Price Plan Consumers.

Name of analyst:	Shajee Kathirgamanathan (416-325-1402)
Date:	August 30, 2016
Branch / Division:	Electricity Finance Branch / Corporate and Electricity Finance Division

APPENDIX A: PROPOSED CABINET MINUTE

1. Ensure LDCs provide details on consumption profiles and bills to assess the effectiveness of the electricity price relief provided and better inform any future changes in legislation should it be necessary. (Eg. caps, effects on user demands, changes to peak demand forecasts).

APPENDIX B: BACKGROUND – ONTARIO CLEAN ENERGY BENEFIT

Quick Background: The Ontario Clean Energy Benefit

- OCEB was in effect from 2011 to 2015, and provided residential, farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax.
    - Effective September 2012 electricity consumption eligible for the 10 per cent benefit was capped at the first 3,000 kWh of electricity consumed per month.
- OCEB helped Ontario families through the transition to a more reliable and cleaner electricity system, with the monthly cap balancing the fiscal implications of providing electricity relief.
- OCEB costs totalled $1,006 million in 2013-14 and $1,078 million in 2014-15, with a projected cost for 2015-16 of $860 million (for the 9 months remaining in the program).

Eligible Consumers	
Categories Listed in Legislation (coincides with categories eligible for RPP)	
Residential	• a dwelling • a property within the meaning of the Condominium Act, 1998 • a residential complex, within the meaning of the Residential Tenancies Act, 2006 • a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the Co-operative Corporations Act
Farms	• carries on a business that is a farming business for the purposes of the Farm Registration and Farm Organizations Funding Act, 1993, and • holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act
Demand for electricity of 50 kW or less, or consumes not more than 250,000 kWh annually	Would include small business, smaller broader- public-sector entities, and other small users.
Special Cases (not eligible for RPP, but eligible for OCEB)	
Consumers On Retail Contracts	Includes consumers with existing retail contracts and those who sign them during the duration of the program.
Cornwall Electric and Hydro One Remote Communities Inc.	Included since they are licensed distributors.
Other Consumers Prescribed by Regulation	10 First Nations remote unlicensed distributors have been added by regulation.
Exclusions	
Generators	Generation station service and the microFIT distribution service charge are excluded in legislation.

APPENDIX C: ELECTRICITY SUPPORT PROGRAMS

- [To be completed: Table on Electricity Support programs, who were eligible and impacts compared to this program]

	DRC Removal	OCEB	OCEB w/Cap	OESP	**Electricity Rate Mitigation**
Elibigility et.c					

Tab x

CABINET BRIEFING NOTE

Committee:	Cabinet
Meeting Date:	September 14, 2016 [or Sept 13?]
Ministry:	Finance/TBS
Last reviewed by:	**Tracking to:**

SUBMISSION TITLE:	**[BASED ON MATERIALS FROM FPC SUBMISSION, WAITING ON CABINET SUBMISSION FOR FINALIZED PROPOSAL]** Electricity Price Mitigation

I. REQUEST/DECISION REQUIRED:

- Since 2010, electricity prices have risen considerably, particularly for households.
- The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These measure include:
  1. Provide an 8% rebate to Regulated Price Plan consumers (i.e., residential, small business and farms), similar to OCEB~~, with a 3,000 kWh cap~~.
  2. Provide targeted business support by expanding the ICI eligibility threshold to customers above 1MW in all sectors.
  3. Provide relief to rural customers by updating Rural and Remote Rate Protection (RRRP).
  4. Eliminate proceeds recycling to Regulated Price Plan consumers and increase proceeds recycling to commercial and industrial consumers.

Commented [SK1]: Based on draft materials from FPC submission

II. KEY POINTS:

- The Ministry of Energy (ENERGY) and Ministry of Finance (MOF) have been asked to explore rate mitigation options, including offsetting the provincial portion of the Harmonized Sales Tax (HST).
- There are 4 components to this proposal, each providing relief to different customer classes.

	Measure	Impact	Targeted Recipients
1.	8% Rebate to Regulated Price Plan	Fiscal ($1B)*	Residential, Farms, Small business and other small users
2.	Expanding ICI eligibility to customers above 1MW in all sectors	Rate base (47M/82M)**	Small Industrial, Commercial and Institutional consumers above 1MW in all sectors
3.	Updating Rural and Remote Rate Protection	Rate base ($110M)	Residents in rural or remote locations: Hydro One's lowest-density R2 customers.
4.	Redirecting proceed recycling to Commercial and Industrial or providing fiscal offsets to the 8% rebate	TBD~~Fiscal (-$60M)*~~	TBD~~Commercial and Industrial consumers~~

*Note: Annual Numbers from ENERGY. ~~MOF analysis provided further below.~~

**NOTE: Short-term/Long-term rate base impact, where short term is one year after expanded eligibility takes place and long-term is expected impact once new customers have time to change behavior.

- Due to the nature of the Global Adjustment mechanism, the rate base proposal (#2 and #3) while benefiting the targeted recipients, come at a cost to all other electricity rate payers in Ontario.

- ENERGY provided the following overview of bill impacts:

Regulated Price Plan (Residential)*		Class B (Commercial)	Class A (Industrial)	
Average (750 kWh/month)	Rural (1000 kWh/month)		Existing	New
-$9.9/month (-7%)	-$45/month (-20%)	-$1/MWh (-1%)	-$1/MWh (-1%)	Up to -$52/MWh (-33%)

*NOTE: ENERGY did not provide impact, separately, for other Regulated Price Plan not classified as residential (eg. Farms, small businesses) that would benefit from the 8% Rebate to Regulated Price Plan.

Commented [JK2]: Why would it matter to separate?

1. 8% Rebate to Regulated Price Plan

- An 8% rebate on the pre-tax portion for Regulated Price Plan consumers would be equal to the provincial portion of HST and funded by the tax base.

- The rebate would appear directly on bills. As such, Local Distribution Companies (LDC) would be the delivery mechanism for the rebate.
  - While non-Regulated Price Plan consumers would not see a benefit from the 8% rebate under this option, all industrial and commercial consumers would receive proceeds recycling through the Greenhouse Gas Reduction Account (GGRA).
  - Commercial and industrial consumers would also continue to receive input tax credits and Public Service Bodies would continue to receive PSB rebates.
- New legislation would be required and closely mirror the Ontario Clean Energy Benefit (OCEB) Act, 2010. More details further below.
- On-bill rebate delivery would likely require adjustments to Local Distribution Company (LDC) billing systems, which could impact delivery costs and timelines.
- In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
  - One option to address any timing concerns is to allow LDCs to provide retroactive payments if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.

Commented [JK3]: Could we define this?

2. Expanding ICI Eligibility to customers above 1MW in all sectors

- Lower the threshold for participation in ICI to 1 MW and remove sectoral restrictions on participation.
- Most newly eligible ICI participants who choose to opt-in to the program would be able to reduce their electricity costs substantially. All other consumers would see a relatively small increase in their bills.

- Expanding the ICI will reduce electricity peak demand by incenting more consumers to lower their electricity demand during peak periods (80MW in the short term and 165 MW in the long term) providing a
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
    - A few examples of companies that would become eligible under such an expansion would be Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.
- All residential consumers would see an average cost increase of $0.42/month in the short term and $0.74/month in the long term.

3. Updating Rural and Remote Rate Protection

- Provide an additional $110 million in support to approximately 330,000 Hydro One rural customers.
- All residential consumers would see an average cost increase of $0.57/month.
- [TO BE EXPANDED]

4. ~~Redirecting proceed recycling to Commercial and Industrial~~Greenhouse Gas Reduction Account (GGRA)

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers.
- Ontario's Climate Change Action Plan (CCAP) includes up to $1.32 billion over 4 years to help keep electricity rates affordable for residential and industrial consumers.
- 8% rebate to Regulated Price Plan consumers fulfills the commitment to reduce residential rates by $2/month.
- Would lead to savings ~~Redirecting some of the forecast $1.3 billion~~ in GGRA proceeds from Regulated Price Plan consumers, ~~to commercial and industrial consumers would ensure that the impact of cap and trade and ICI expansion and RRRP update would not increase costs for any large industrial and would result in a benefit to the average industrial and commercial customers~~which would help offset the fiscal impact of the 8% rebate to the RPP consumers.

III. KEY CONSIDERATIONS

1. 8% Rebate to Regulated Price Plan

- This 8% pre-tax rebate is similar to the previous Ontario Clean Energy Benefit (See Appendix for background) which provided a 10% post-tax rebate.
  - The OCEB legislation was set out with an end date, and was subsequently modified to be capped at 3,000 kWh for all electricity customers after 8 months of the program.
  - This proposal does not specify any consumption caps nor an end date.
- Compared to OCEB, this proposal is more generous to high volume RPP users
  - OCEB was eligible for up to 36,000 kWh (12 months times 3,000 kWh cap per month) while this proposal would be ~~is~~ more generous for those consuming more than 50,850 kWh annually.
- Blanket reduction in electricity prices for all users irrespective of consumption amounts hamper efforts to conserve electricity, and mutes TOU price signals.
- Removal of HST (a broad tax) to one particular product distorts and shifts consumption to that area.
- Businesses that fall under the Regulated Price Plan pay little to no HST due to the Input Tax Credit. The 8% reduction can be deemed a windfall for these users.
- While eligibility is intended to align with OCEB consumers, there exist a set of consumers not covered by the RPP (eg. Those on retail contracts – See Appendix) which were OCEB eligible.
  - Unclear if those other OCEB eligible consumers are also eligible for the 8% rebate.

- ~~*Preliminary* MOF calculations align favorably with ENERGY projections. Note refined estimates are forthcoming.~~

FISCAL IMPACT

($ millions)	2016-17	2017-18	2018-19	2019-20
ENERGY	261	1006	1004	994
~~MOF~~	~~224~~	~~909~~	~~958~~	~~1005~~
~~DIFFERENCE:~~	~~16.5%~~	~~10.7%~~	~~4.8%~~	~~-1.1%~~

- ENERGY's projections indicate a reduction in costs from the 2017-18 to 2019-20. While minimal, this trend contradicts MOF's projected cost increases.

2. Expanding ICI Eligibility to customers above 1MW in all sectors

- Previous expansion of ICI eligibility from 5MW to 3MW users in selected sectors provided those industrial users between 3MW and 5MW the option to enroll in the ICI program
  - Unclear if this initiative is a similar 'opt-in' proposal or a mandatory enrollment such as the initial ICI program for 5MW customers

3. Updating Rural and Remote Rate Protection

- According to ENERGY, the RRRP is a $175M program with the majority of program funding ($125.5M) to Hydro One's lowest-density 'R2' customers

Commented [SK4]: 36000*0.113/0.08 = 50,850

36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate
0.08 – pre-tax effective rebate (8%)

Commented [SK5]: This is a general/classic economic comment on the preference of broad consumption taxes vs taxes for particular items.
TPD might have a better way to communicate this, if applicable.

Commented [SK6]: Will need to verify

Commented [JK7]: Let's delete MOF analysis for now.

- Unclear who the remaining $49.5M is directed towards, nor whether the expended RRRP program would accommodate these customers
- Unclear whether the RRRP would be indexed or trued up on a regularly basis per one of the options ENERGY's FP deck.

4. ~~Redirecting proceed recycling to Commercial and Industrial~~Greenhouse Gas Reduction Account (GGRA)
   - ~~Unclear on the mechanism of how these proceeds will be directed to Commercial and Industrial users.~~
   - According to the ENERGY deck the GGRA allocated $120M to average residential consumers, $170M to commercial and $40M to industrial consumers. Deck implies $60M in savings from 8% Rebate.
     - Unclear, how the redirected amount $60M ($120M-$60M) will be allocated to commercial and industrial users.

~~Fiscal Impact from Each Proposal ($M)~~

	~~2016-17~~	~~2017-18~~	~~2018-19~~
~~1. 8% Rebate to Regulated Price Plan~~	~~261~~	~~1006~~	~~994~~
~~4. Redirecting proceed recycling to Commercial and Industrial~~	~~-~~	~~-60~~	~~-60~~
~~TOTAL~~	~~261~~	~~946~~	~~934~~

[TO BE INSERTED IF NECESSARY, TABLE SUMMARIZING ELECTRICITY PRICE IMPACTS FROM EACH OF THESE 4 COMPONENTS]

IV. Cabinet Committee Discussion Summary

n/a

V. Financial Summary

$ Millions	2016-17	2017-18	2018-19
Initiative cost requested	261	946	934
Requested program base	?	?	?
Total fiscal impact (draw from c-funds)	261	946	934

Commented [JK8]: Update as above?

VI. Performance Measures

- To estimate the impact of the program, and the savings provided to the various consumers, information should be provided from the LDCs on consumption profiles, particularly those affected by the 8% rebate on the Regulated Price Plan Consumers.

Name of analyst:	Shajee Kathirgamanathan (416-325-1402)
Date:	August 30, 2016
Branch / Division:	Electricity Finance Branch / Corporate and Electricity Finance Division

APPENDIX A: PROPOSED CABINET MINUTE

Commented [JK9]: Let's indicate that this is just work in progress….to be filled out by TBS or Cabinet Office staff.

1. Ensure LDCs provide details on consumption profiles and bills to assess the effectiveness of the electricity price relief provided and better inform any future changes in legislation should it be necessary. (Eg. caps, effects on user demands, changes to peak demand forecasts).

APPENDIX B: BACKGROUND – ONTARIO CLEAN ENERGY BENEFIT

Quick Background: The Ontario Clean Energy Benefit

- OCEB was in effect from 2011 to 2015, and provided residential, farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax.
    - Effective September 2012 electricity consumption eligible for the 10 per cent benefit was capped at the first 3,000 kWh of electricity consumed per month.
- OCEB helped Ontario families through the transition to a more reliable and cleaner electricity system, with the monthly cap balancing the fiscal implications of providing electricity relief.
- OCEB costs totalled $1,006 million in 2013-14 and $1,078 million in 2014-15, with a projected cost for 2015-16 of $860 million (for the 9 months remaining in the program).

Eligible Consumers	
Categories Listed in Legislation (coincides with categories eligible for RPP)	
Residential	• a dwelling • a property within the meaning of the Condominium Act, 1998 • a residential complex, within the meaning of the Residential Tenancies Act, 2006 • a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the Co-operative Corporations Act
Farms	• carries on a business that is a farming business for the purposes of the Farm Registration and Farm Organizations Funding Act, 1993, and • holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act
Demand for electricity of 50 kW or less, or consumes not more than 250,000 kWh annually	Would include small business, smaller broader- public-sector entities, and other small users.
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Consumers On Retail Contracts	Includes consumers with existing retail contracts and those who sign them during the duration of the program.
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Generators	Generation station service and the microFIT distribution service charge are excluded in legislation.

APPENDIX C: ELECTRICITY SUPPORT PROGRAMS

- [To be completed: Table on Electricity Support programs, who were eligible and impacts compared to this program]

	DRC Removal	OCEB	OCEB w/Cap	OESP	**Electricity Rate Mitigation**
Elibigility et~~-~~c.					

Tab x

CABINET BRIEFING NOTE

Committee:	Cabinet
Meeting Date:	September 14, 2016 [or Sept 13?]
Ministry:	Finance/TBS
Last reviewed by:	**Tracking to:**

SUBMISSION TITLE:	**[BASED ON MATERIALS FROM FPC SUBMISSION, WAITING ON CABINET SUBMISSION FOR FINALIZED PROPOSAL]** Electricity Price Mitigation

I. REQUEST/DECISION REQUIRED:

- Since 2010, electricity prices have risen considerably, particularly for households.
- The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These measure include:
  1. Provide an 8% rebate to Regulated Price Plan consumers (i.e., residential, small business and farms), similar to OCEB~~, with a 3,000 kWh cap~~.
  2. Provide targeted business support by expanding the ICI eligibility threshold to customers above 1MW in all sectors.
  3. Provide relief to rural customers by updating Rural and Remote Rate Protection (RRRP).
  4. Eliminate proceeds recycling to Regulated Price Plan consumers and increase proceeds recycling to commercial and industrial consumers.

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II. KEY POINTS:

- The Ministry of Energy (ENERGY) and Ministry of Finance (MOF) have been asked to explore rate mitigation options, including offsetting the provincial portion of the Harmonized Sales Tax (HST).
- There are 4 components to this proposal, each providing relief to different customer classes.

	Measure	Impact	Targeted Recipients
1.	8% Rebate to Regulated Price Plan	Fiscal ($1B)*	Residential, Farms, Small business and other small users
2.	Expanding ICI eligibility to customers above 1MW in all sectors	Rate base ($47M/$82M)**	Small Industrial, Commercial and Institutional consumers above 1MW in all sectors
3.	Updating Rural and Remote Rate Protection	Rate base ($110M)	Residents in rural or remote locations: Hydro One's lowest-density R2 customers.
4.	Redirecting proceed recycling to Commercial and Industrial or provide fiscal offsets to the 8% rebate	TBD~~Fiscal ($60M)*~~	TBD~~Commercial and Industrial consumers~~

*Note: Annual Numbers from ENERGY. ~~MOF analysis provided further below.~~

**NOTE: Short-term/Long-term rate base impact, where short term is one year after expanded eligibility takes place and long-term is expected impact once new customers have time to change behavior.

- Due to the nature of the Global Adjustment mechanism, the rate base proposal (#2 and #3) while benefiting the targeted recipients, come at a cost to all other electricity rate payers in Ontario.

- ENERGY provided the following overview of bill impacts:

Regulated Price Plan (Residential)*		Class B (Commercial)	Class A (Industrial)	
Average (750 kWh/month)	Rural (1000 kWh/month)		Existing	New
-$9.9/month (-7%)	-$45/month (-20%)	-$1/MWh (-1%)	-$1/MWh (-1%)	Up to -$52/MWh (-33%)

*NOTE: ENERGY did not provide the monthly impact ~~impact,~~ ~~separately.~~ for other Regulated Price Plan not classified as ~~residential~~ Residential (eg. ~~Farms~~farms, small businesses) that would benefit from the 8% Rebate to Regulated Price Plan.

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- An 8% rebate on the pre-tax portion for Regulated Price Plan consumers would be equal to the provincial portion of HST and funded by the tax base.

- The rebate would appear directly on bills. As such, Local Distribution Companies (LDC) would be the delivery mechanism for the rebate.
  - While non-Regulated Price Plan consumers would not see a benefit from the 8% rebate under this option, all industrial and commercial consumers would receive proceeds recycling through the Greenhouse Gas Reduction Account (GGRA).
  - Commercial and industrial consumers would also continue to receive input tax credits and Public Service Bodies would continue to receive PSB rebates.
- New legislation would be required and closely mirror the Ontario Clean Energy Benefit (OCEB) Act, 2010. More details further below.
- On-bill rebate delivery would likely require adjustments to Local Distribution Company (LDC) billing systems, which could impact delivery costs and timelines.
- In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
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- Lower the threshold for participation in ICI to 1 MW and remove sectoral restrictions on participation.
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- Expanding the ICI will reduce electricity peak demand by incenting more consumers to lower their electricity demand during peak periods (80MW in the short term and 165 MW in the long term) providing a
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
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- All residential consumers would see an average cost increase of $0.42/month in the short term and $0.74/month in the long term.

3. Updating Rural and Remote Rate Protection

- Provide an additional $110 million in support to approximately 330,000 Hydro One rural customers.
- All residential consumers would see an average cost increase of $0.57/month.
- [TO BE EXPANDED]

4. ~~Redirecting proceed recycling to Commercial and Industrial~~Greenhouse Gas Reduction Account (GGRA)

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers.
- Ontario's Climate Change Action Plan (CCAP) includes up to $1.32 billion over 4 years to help keep electricity rates affordable for residential and industrial consumers.
- The 8% rebate to the Regulated Price Plan consumers fulfills the commitment to reduce residential rates by $2/month.
- Would lead to savings ~~Redirecting some of the forecast $1.3 billion~~ in GGRA proceeds previously allocated to ~~from~~ Regulated Price Plan consumers, ~~to commercial and industrial consumers would ensure that the impact of cap and trade and ICI expansion and RRRP update would not increase costs for any large industrial and would result in a benefit to the average industrial and commercial customers~~~~which would~~ and help offset the fiscal impact of the 8% rebate to the RPP consumers.

III. KEY CONSIDERATIONS

1. 8% Rebate to Regulated Price Plan

- This 8% pre-tax rebate is similar to the previous Ontario Clean Energy Benefit (See Appendix for background) which provided a 10% post-tax rebate.
  - The OCEB legislation was set out with an end date, and was subsequently modified to be capped at 3,000 kWh per month for all electricity customers after 8 months of the program.
  - This proposal does not specify any consumption caps nor an end date.
- Compared to OCEB, this proposal is more generous to high volume RPP users
  - OCEB was eligible for up to 36,000 kWh (12 months times 3,000 kWh cap per month) while this proposal would be ~~is~~ more generous for those consuming more than 50,850 kWh annually.
- Blanket reduction in electricity prices for all users irrespective of consumption amounts hamper efforts to conserve electricity, and mutes TOU price signals.
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- ~~Unclear on the mechanism of how these proceeds will be directed to Commercial and Industrial users.~~
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~~**Fiscal Impact from Each Proposal ($M)**~~

	~~2016-17~~	~~2017-18~~	~~2018-19~~
~~1. 8% Rebate to Regulated Price Plan~~	~~261~~	~~1006~~	~~994~~
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~~**TOTAL**~~	~~**261**~~	~~**946**~~	~~**934**~~

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IV. Cabinet Committee Discussion Summary

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V. Financial Summary

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- To estimate the impact of the program, and the savings provided to the various consumers, information should be provided from the LDCs on consumption profiles, particularly those affected by the 8% rebate on the Regulated Price Plan Consumers.

Name of analyst:	Shajee Kathirgamanathan (416-325-1402)
Date:	August 30, 2016
Branch / Division:	Electricity Finance Branch / Corporate and Electricity Finance Division

APPENDIX A: PROPOSED CABINET MINUTE

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~~Quick Background: The Ontario Clean Energy Benefit~~

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APPENDIX C: ELECTRICITY SUPPORT PROGRAMS

- [To be completed: Table on Electricity Support programs, who were eligible and impacts compared to this program]

	DRC Removal	OCEB	OCEB w/Cap	OESP	**Electricity Rate Mitigation**
Elibigility et~~-~~c.					

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CABINET BRIEFING NOTE

Committee:	Cabinet
Meeting Date:	September 14, 2016 [or Sept 13?]
Ministry:	Finance/TBS
Last reviewed by:	**Tracking to:**

SUBMISSION TITLE:	**[BASED ON MATERIALS FROM FPC SUBMISSION, WAITING ON CABINET SUBMISSION FOR FINALIZED PROPOSAL]** Electricity Price Mitigation

I. REQUEST/DECISION REQUIRED:

- Since 2010, electricity prices have risen considerably, particularly for households.
- The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These measure include:
    1. Provide an 8% rebate to Regulated Price Plan consumers (i.e., residential, small business and farms), similar to OCEB.
    2. Provide targeted business support by expanding the ICI eligibility threshold to customers above 1MW in all sectors.
    3. Provide relief to rural customers by updating Rural and Remote Rate Protection (RRRP).
    4. Eliminate proceeds recycling to Regulated Price Plan consumers and increase proceeds recycling to commercial and industrial consumers.

II. KEY POINTS:

- The Ministry of Energy (ENERGY) and Ministry of Finance (MOF) have been asked to explore rate mitigation options, including offsetting the provincial portion of the Harmonized Sales Tax (HST).
- There are 4 components to this proposal, each providing relief to different customer classes.

	Measure	Impact	Targeted Recipients
1.	8% Rebate to Regulated Price Plan	Fiscal ($1B)*	Residential, Farms, Small business and other small users
2.	Expanding ICI eligibility to customers above 1MW in all sectors	Rate base ($47M/$82M)**	Small Industrial, Commercial and Institutional consumers above 1MW in all sectors
3.	Updating Rural and Remote Rate Protection	Rate base ($110M)	Residents in rural or remote locations: Hydro One's lowest-density R2 customers.
4.	Redirecting proceed recycling to Commercial and Industrial or provide fiscal offsets to the 8% rebate	TBD	TBD

*Note: Annual Numbers from ENERGY.

**NOTE: Short-term/Long-term rate base impact, where short term is one year after expanded eligibility takes place and long-term is expected impact once new customers have time to change behavior.

- Due to the nature of the Global Adjustment mechanism, the rate base proposal (#2 and #3) while benefiting the targeted recipients, come at a cost to all other electricity rate payers in Ontario.

- ENERGY provided the following overview of bill impacts:

Regulated Price Plan (Residential)*		Class B (Commercial)	Class A (Industrial)	
Average (750 kWh/month)	Rural (1000 kWh/month)		Existing	New
-$9.9/month (-7%)	-$45/month (-20%)	-$1/MWh (-1%)	-$1/MWh (-1%)	Up to -$52/MWh (-33%)

*NOTE: ENERGY did not provide the monthly impact for other Regulated Price Plan not classified as Residential (eg. farms, small businesses) that would benefit from the 8% Rebate to Regulated Price Plan.

1. 8% Rebate to Regulated Price Plan

- An 8% rebate on the pre-tax portion for Regulated Price Plan consumers would be equal to the provincial portion of HST and funded by the tax base.

- The rebate would appear directly on bills. As such, Local Distribution Companies (LDC) would be the delivery mechanism for the rebate.
  - While non-Regulated Price Plan consumers would not see a benefit from the 8% rebate under this option, all industrial and commercial consumers would receive proceeds recycling through the Greenhouse Gas Reduction Account (GGRA).
  - Commercial and industrial consumers would also continue to receive input tax credits and Public Service Bodies would continue to receive PSB rebates.
- New legislation would be required and closely mirror the Ontario Clean Energy Benefit (OCEB) Act, 2010. More details further below.
- On-bill rebate delivery would likely require adjustments to Local Distribution Company (LDC) billing systems, which could impact delivery costs and timelines.
- In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
  - One option to address any timing concerns is to allow LDCs to provide retroactive payments if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.

2. Expanding ICI Eligibility to customers above 1MW in all sectors

- Lower the threshold for participation in ICI to 1 MW and remove sectoral restrictions on participation.
- Most newly eligible ICI participants who choose to opt-in to the program would be able to reduce their electricity costs substantially. All other consumers would see a relatively small increase in their bills.

- Expanding the ICI will reduce electricity peak demand by incenting more consumers to lower their electricity demand during peak periods (80MW in the short term and 165 MW in the long term) providing a
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
    - A few examples of companies that would become eligible under such an expansion would be Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.
- All residential consumers would see an average cost increase of $0.42/month in the short term and $0.74/month in the long term.

3. Updating Rural and Remote Rate Protection

- Provide an additional $110 million in support to approximately 330,000 Hydro One rural customers.
- All residential consumers would see an average cost increase of $0.57/month.
- [TO BE EXPANDED]

4. Greenhouse Gas Reduction Account (GGRA)

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers.
- Ontario's Climate Change Action Plan (CCAP) includes up to $1.32 billion over 4 years to help keep electricity rates affordable for residential and industrial consumers.
- The 8% rebate to the Regulated Price Plan consumers fulfills the commitment to reduce residential rates by $2/month.
- Would lead to savings in GGRA proceeds previously allocated to Regulated Price Plan consumers, and help offset the fiscal impact of the 8% rebate to the RPP consumers.

III. KEY CONSIDERATIONS

1. 8% Rebate to Regulated Price Plan

- This 8% pre-tax rebate is similar to the previous Ontario Clean Energy Benefit (See Appendix for background) which provided a 10% post-tax rebate.
    - The OCEB legislation was set out with an end date, and was subsequently modified to be capped at 3,000 kWh per month for all electricity customers after 8 months of the program.
    - This proposal does not specify any consumption caps nor an end date.
- Compared to OCEB, this proposal is more generous to high volume RPP users
    - OCEB was eligible for up to 36,000 kWh (12 months times 3,000 kWh cap per month) while this proposal would be more generous for those consuming more than 50,850 kWh annually.
- Blanket reduction in electricity prices for all users irrespective of consumption amounts hamper efforts to conserve electricity, and mutes TOU price signals.
- Removal of HST (a broad tax) to one particular product distorts and shifts consumption to that area.
- Businesses that fall under the Regulated Price Plan pay little to no HST due to the Input Tax Credit. The 8% reduction can be deemed a windfall for these users.
- While eligibility is intended to align with OCEB consumers, there exist a set of consumers not covered by the RPP (eg. those on retail contracts – See Appendix) which were OCEB eligible.
    - Unclear if those other OCEB eligible consumers are also eligible for the 8% rebate.

FISCAL IMPACT

($ millions)	2016-17	2017-18	2018-19	2019-20
ENERGY	261	1006	1004	994

- ENERGY's projections indicate a reduction in costs from 2017-18 to 2019-20.

2. Expanding ICI Eligibility to customers above 1MW in all sectors

- Previous expansion of ICI eligibility from 5MW to 3MW users in selected sectors provided those industrial users between 3MW and 5MW the option to enroll in the ICI program
    - Unclear if this initiative is a similar 'opt-in' proposal or a mandatory enrollment such as the initial ICI program for 5MW customers

3. Updating Rural and Remote Rate Protection

- According to ENERGY, the RRRP is a $175M program with the majority of program funding ($125.5M) to Hydro One's lowest-density 'R2' customers
- Unclear who the remaining $49.5M is directed towards, nor whether the expended RRRP program would accommodate these customers
- Unclear whether the RRRP would be indexed or trued up on a regularly basis per one of the options ENERGY's deck.

4. Greenhouse Gas Reduction Account (GGRA)

- According to the ENERGY deck the GGRA allocated $120M to average residential consumers, $170M to commercial and $40M to industrial consumers. Deck implies more than $60M in savings from 8% Rebate for the RPP consumers.
    - Unclear, how the redirected amount $60M ($120M-$60M) will be allocated to commercial and industrial users.

[TO BE INSERTED IF NECESSARY, TABLE SUMMARIZING ELECTRICITY PRICE IMPACTS FROM EACH OF THESE 4 COMPONENTS]

IV. CABINET COMMITTEE DISCUSSION SUMMARY

n/a

V. Financial Summary

$ Millions	2016-17	2017-18	2018-19
Initiative cost requested	261	1,006	994
Requested program base	?	?	?
Total fiscal impact (draw from c-funds)	261	946	934

VI. Performance Measures

- To estimate the impact of the program, and the savings provided to the various consumers, information should be provided from the LDCs on consumption profiles, particularly those affected by the 8% rebate on the Regulated Price Plan Consumers.

Name of analyst:	Shajee Kathirgamanathan (416-325-1402)
Date:	August 30, 2016
Branch / Division:	Electricity Finance Branch / Corporate and Electricity Finance Division

APPENDIX A: PROPOSED CABINET MINUTE

[WORK IN PROGRESS, TO BE FILLED OUT BY TBS/CO STAFF]

1. Ensure LDCs provide details on consumption profiles and bills to assess the effectiveness of the electricity price relief provided and better inform any future changes in legislation should it be necessary. (Eg. caps, effects on user demands, changes to peak demand forecasts).

APPENDIX B: BACKGROUND – ONTARIO CLEAN ENERGY BENEFIT

- OCEB was in effect from 2011 to 2015, and provided residential, farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax.
    - Effective September 2012 electricity consumption eligible for the 10 per cent benefit was capped at the first 3,000 kWh of electricity consumed per month.
- OCEB helped Ontario families through the transition to a more reliable and cleaner electricity system, with the monthly cap balancing the fiscal implications of providing electricity relief.
- OCEB costs totalled $1,006 million in 2013-14 and $1,078 million in 2014-15, with a projected cost for 2015-16 of $860 million (for the 9 months remaining in the program).

Eligible Consumers	
Categories Listed in Legislation (coincides with categories eligible for RPP)	
Residential	• a dwelling • a property within the meaning of the Condominium Act, 1998 • a residential complex, within the meaning of the Residential Tenancies Act, 2006 • a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the Co-operative Corporations Act
Farms	• carries on a business that is a farming business for the purposes of the Farm Registration and Farm Organizations Funding Act, 1993, and • holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act
Demand for electricity of 50 kW or less, or consumes not more than 250,000 kWh annually	Would include small business, smaller broader- public-sector entities, and other small users.
Special Cases (not eligible for RPP, but eligible for OCEB)	
Consumers On Retail Contracts	Includes consumers with existing retail contracts and those who sign them during the duration of the program.
Cornwall Electric and Hydro One Remote Communities Inc.	Included since they are licensed distributors.
Other Consumers Prescribed by Regulation	10 First Nations remote unlicensed distributors have been added by regulation.
Exclusions	
Generators	Generation station service and the microFIT distribution service charge are excluded in legislation.

APPENDIX C: ELECTRICITY SUPPORT PROGRAMS

- [To be completed: Table on Electricity Support programs, who were eligible and impacts compared to this program]

	DRC Removal	OCEB	OCEB w/Cap	OESP	**Electricity Rate Mitigation**
Elibigility etc.					

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CABINET BRIEFING NOTE

Committee:	Cabinet
Meeting Date:	September 14, 2016 [or Sept 13?]
Ministry:	Finance/TBS [ENERGY?]
Last reviewed by:	**Tracking to:**

SUBMISSION TITLE:	**[BASED ON MATERIALS FROM FPC SUBMISSION, WAITING ON CABINET SUBMISSION FOR FINALIZED PROPOSAL]** Electricity Price Mitigation

I. REQUEST/DECISION REQUIRED:

- ~~Since 2010, electricity prices have risen considerably, particularly for households.~~
- The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These measure include:
  1. Provide an 8% pre-tax rebate to Regulated Price Plan consumers ~~(i.e., residential, small business and farms), similar to OCEB.~~
  2. Provide targeted business support by expanding the ICI eligibility threshold to customers above 1MW in all sectors.
  3. Provide relief to rural customers by updating Rural and Remote Rate Protection (RRRP).
  4. Eliminate proceeds recycling to Regulated Price Plan consumers and increase proceeds recycling to commercial and industrial consumers.

II. KEY POINTS:

- The Ministry of Energy (ENERGY) and Ministry of Finance (MOF) have been asked to explore rate mitigation options, including offsetting the provincial portion of the Harmonized Sales Tax (HST).
- There are 4 components to this proposal, each providing relief to different customer classes.

	Measure	Annual Impact	Targeted Recipients
1.	8% Rebate to Regulated Price Plan	Fiscal [~~(~~$1B~~)~~*]*	Residential, ~~Farms,~~ Small business, small farms and other small users
2.	Expanding ICI eligibility to customers above 1MW in all sectors	Rate base (~~$~~[$47M/$82M~~)~~**]**	Intermediate and large-sized ~~Small i~~industrial, ~~Commercial~~ commercial and ~~Institutional~~ institutional consumers above 1MW in all sectors
3.	Updating Rural and Remote Rate Protection	Rate base (~~$~~[$110M]~~)~~	Residents in rural or remote locations: Hydro One's lowest-density R2 customers.
4.	Redirecting proceed recycling to Commercial and Industrial or	TBD	TBD

	provide fiscal offsets to the 8% rebate		

*Note: Annual ~~Numbers~~ numbers from ENERGY.
**NOTE: Short-term/Long-term rate base impact, where short term is one year after expanded eligibility takes place and long-term is expected impact once new customers have time to change behavior.

- ~~Due to the nature of the Global Adjustment mechanism, the rate base proposal (#2 and #3) while benefiting the targeted recipients, come at a cost to all other electricity rate payers in Ontario.~~

Commented [SK21]: Moved to key considerations

- ENERGY provided the following overview of bill impacts:

Regulated Price Plan (Residential)*		Class B (Commercial)	Class A (Industrial)	
Average (750 kWh/month)	Rural (1000 kWh/month)		Existing	New
-$9.9/month (-7%)	-$45/month (-20%)	-$1/MWh (-1%)	-$1/MWh (-1%)	Up to -$52/MWh (-33%)

*NOTE: ENERGY did not provide the monthly impact for other Regulated Price Plan not classified as Residential (eg. farms, small businesses) that would benefit from the 8% Rebate to Regulated Price Plan.

1. 8% Rebate to Regulated Price Plan

- An 8% rebate on the pre-tax portion for Regulated Price Plan consumers would be equal to the provincial portion of HST and funded by the tax base.

- The rebate would appear directly on bills. As such, Local Distribution Companies (LDC) would be the delivery mechanism for the rebate.
  - While non-Regulated Price Plan consumers would not see a benefit from the 8% rebate under this option, all industrial and commercial consumers would receive proceeds recycling through the Greenhouse Gas Reduction Account (GGRA).
  - Commercial and industrial consumers would also continue to receive input tax credits and Public Service Bodies would continue to receive PSB rebates.
- New legislation would be required and closely mirror the Ontario Clean Energy Benefit (OCEB) Act, 2010. More details further below.
- On-bill rebate delivery would likely require adjustments to Local Distribution Company (LDC) billing systems, which could impact delivery costs and timelines.
- In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
  - One option to address any timing concerns is to allow LDCs to provide retroactive payments if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.

2. Expanding ICI Eligibility to customers above 1MW in all sectors

- Lower the threshold for participation in ICI to 1 MW and remove sectoral restrictions on participation.

- Most newly eligible ICI participants who choose to opt-in to the program would be able to reduce their electricity costs substantially. All other consumers would see a relatively small increase in their bills.
- Expanding the ICI will reduce electricity peak demand by incenting more consumers to lower their electricity demand during peak periods (80MW in the short term and 165 MW in the long term)
- Bill savings to new participants up to 21% in the short term and up to 34% ~~providing a~~ in the long-term
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
    - A few examples of companies that would become eligible under such an expansion would be Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.
- All residential consumers would see an average cost increase of $0.42/month in the short term and $0.74/month in the long term.

3. Updating Rural and Remote Rate Protection

- RRRP funding supporting Hydro One R2 (rural) customers capped at current levels since 2004.
- Provide an additional $110 million in support to approximately 330,000 ~~Hydro One~~ R2 ~~rural~~ customers to $235 million annually.
- Proposal will equalize R2 bills with Hydro One R1 (medium) density customers.~~-~~
- ~~~~
- All residential consumers would see an average cost increase of $0.57/month.
- ~~[TO BE EXPANDED]~~

4. ~~Redirecting proceed recycling to Commercial and Industrial~~Greenhouse Gas Reduction Account (GGRA)

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers.
- Ontario's Climate Change Action Plan (CCAP) includes up to $1.32 billion over 4 years to help keep electricity rates affordable for residential and industrial consumers.
- The 8% rebate to the Regulated Price Plan consumers fulfills the commitment to reduce residential rates by $2/month.
- Would lead to savings ~~Redirecting some of the forecast $1.3 billion~~ in GGRA proceeds previously allocated to ~~from~~ Regulated Price Plan consumers, ~~to commercial and industrial consumers would ensure that the impact of cap and trade and ICI expansion and RRRP update would not increase costs for any large industrial and would result in a benefit to the average industrial and commercial customers~~~~which would~~ and help offset the fiscal impact of the 8% rebate to the RPP consumers.

III. KEY CONSIDERATIONS

NOTE: *Due to the nature of the ICI Global Adjustment mechanism and cost recovery of the RRRP, the rate base proposal (#2 and #3) while benefiting the targeted recipients,* ***come at a cost to all other electricity rate payers in Ontario****.*

1. 8% Rebate to Regulated Price Plan

- This 8% pre-tax rebate is similar to the previous Ontario Clean Energy Benefit (See Appendix for background) which provided a 10% post-tax rebate.
  - The OCEB legislation was set out with an end date, and was subsequently modified to be capped at 3,000 kWh per month for all electricity customers after 8 months of the program.
  - This proposal does not specify any consumption caps nor an end date.
- Due to the lack of a cap, ~~C~~compared to OCEB, this proposal is more generous to high volume ~~RPP~~ users
  - OCEB rebate was ~~eligible~~ applicable for up to 36,000 kWh annually (12 months times 3,000 kWh cap per month) while this proposal would be ~~is~~ more generous for those consuming more than 50,850 kWh annually.
  - Furthermore, highest volume users in this proposal would receive **up to 392% more** than under the OCEB program.
- Unclear why any proposals for a cap would be any more complex or onerous to LDCs than prior OCEB cap (instituted beginning September 2012 to termination of OCEB program in December 2015).
  - ~~o~~
- Blanket reduction in electricity prices for all users irrespective of consumption amounts hamper efforts to conserve electricity, and mutes TOU price signals.
- Removal of HST (a broad tax) to one particular product distorts and shifts consumption to that area.
- Businesses that fall under the Regulated Price Plan pay little to no HST due to the Input Tax Credit. The 8% reduction can be deemed a windfall for these users.
- While eligibility is intended to align with OCEB consumers, there exist a set of consumers not covered by the RPP (eg. ~~Those~~ those on retail contracts – See Appendix) which were OCEB eligible.
  - Unclear if those other OCEB eligible consumers are also eligible for the 8% rebate.
- ENERGY staff have provided the following preliminary fiscal impact projections:

- ~~*Preliminary* MOF calculations align favorably with ENERGY projections. Note refined estimates are forthcoming.~~

FISCAL IMPACT ($M)

2016-17	2017-18	2018-19	2019-20
261	1,006	1,004	994
~~224~~	~~909~~	~~958~~	~~1005~~
~~16.5%~~	~~10.7%~~	~~4.8%~~	~~-1.1%~~

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36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate
0.08 – pre-tax effective rebate (8%)

Commented [SK24]: 36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate

36000*0.113 = 4068 [OCEB effective rebated consumption]

Max under proposal: 250,000
pre-tax effective rebate: 0.08
Proposal effective rebated consumption: 250,000*0.08 = 20,000

(20,000-4068)/4068 = **3.9164**

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Commented [SK5]: This is a general/classic economic comment on the preference of broad consumption taxes vs taxes for particular items.
TPD might have a better way to communicate this, if applicable.

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Commented [SK8R7]: OK

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- Ministry staff are in the process of developing a refined estimate of the cost.
- ENERGY's projections indicate a reduction in costs from 2017-18 to 2019-20.
-

2. Expanding ICI Eligibility to customers above 1MW in all sectors

- Not all users with demand above 1MW will be in a position to take full advantage of the ICI expansion (eg. Inability to load shift during peaks).~~Previous expansion of ICI eligibility from 5MW to 3MW users in selected sectors provided those industrial users between 3MW and 5MW the option to enroll in the ICI program~~
  - ~~Unclear if this initiative is a similar 'opt in' proposal or a mandatory enrollment such as the initial ICI program for 5MW customers~~

3. Updating Rural and Remote Rate Protection

- According to ENERGY, the RRRP is a $175M program with the majority of program funding ($125.5M) to Hydro One's lowest-density 'R2' customers
- Unclear why ~~who the remaining $49.5M is directed towards, nor whether the expended RRRP program would accommodate these customers~~customers on RRRP who are not Hydro One's R2 customers are not also targeted for this benefit.
- Unclear whether the RRRP would be indexed or trued up on a regularly basis per one of the options ENERGY's ~~FP~~ deck.

~~4. Redirecting proceed recycling to Commercial and Industrial~~Greenhouse Gas Reduction Account (GGRA)

- ~~Unclear on the mechanism of how these proceeds will be directed to Commercial and Industrial users.~~
- According to the ENERGY deck the GGRA allocated $120M to average residential consumers, $170M to commercial and $40M to industrial consumers. Deck implies more than $60M in savings from 8% Rebate for the RPP consumers.
  - ~~o~~ Unclear, how the redirected amount $60M ($120M-$60M) will be allocated to commercial and industrial users.
  - o

~~Fiscal Impact from Each Proposal ($M)~~

	~~2016-17~~	~~2017-18~~	~~2018-19~~
~~1. 8% Rebate to Regulated Price Plan~~	~~261~~	~~1006~~	~~994~~
~~4. Redirecting proceed recycling to Commercial and Industrial~~	~~-~~	~~-60~~	~~-60~~
~~TOTAL~~	~~261~~	~~946~~	~~934~~

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~~[TO BE INSERTED IF NECESSARY, TABLE SUMMARIZING ELECTRICITY PRICE IMPACTS FROM EACH OF THESE 4 COMPONENTS]~~

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IV. Cabinet Committee Discussion Summary

n/a

V. Financial Summary

$ Millions	2016-17	2017-18	2018-19
Initiative cost requested	261	~~946~~1,006	~~934~~~~994~~1,0
Requested program base	~~?~~261	~~?~~1,006	1,004~~?~~
Total fiscal impact (draw from c-funds)	261	~~946~~1,006	~~934~~1,004

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VI. Performance Measures

To estimate the impact of the program, ~~and~~ the savings provided to the various consumers, and any potential for adjustments to the program, information should be provided from ~~the~~ LDCs on consumption profiles and rebate amounts, particularly those affected by the 8% rebate on ~~the~~ Regulated Price Plan Consumers.

Name of analyst:	Shajee Kathirgamanathan (416-325-1402)
Date:	~~August 30~~September 4, 2016
Branch / Division:	Electricity Finance Branch / Corporate and Electricity Finance Division

APPENDIX A: PROPOSED CABINET MINUTE

[WORK IN PROGRESS, TO BE FILLED OUT BY TBS/CO STAFF]

1. ~~Ensure LDCs provide details on consumption profiles and bills to assess the effectiveness of the electricity price relief provided and better inform any future changes in legislation should it be necessary. (Eg. caps, effects on user demands, changes to peak demand forecasts).~~

Commented [JK11]: Let's indicate that this is just work in progress….to be filled out by TBS or Cabinet Office staff.

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APPENDIX B: BACKGROUND – ONTARIO CLEAN ENERGY BENEFIT

~~Quick Background: The Ontario Clean Energy Benefit~~

- OCEB was in effect from 2011 to 2015, and provided residential, farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax.
    - Effective September 2012 electricity consumption eligible for the 10 per cent benefit was capped at the first 3,000 kWh of electricity consumed per month.
- OCEB helped Ontario families through the transition to a more reliable and cleaner electricity system, with the monthly cap balancing the fiscal implications of providing electricity relief.
- OCEB costs totalled $1,006 million in 2013-14 and $1,078 million in 2014-15, with a projected cost for 2015-16 of $860 million (for the 9 months remaining in the program).

Eligible Consumers	
Categories Listed in Legislation (coincides with categories eligible for RPP)	
Residential	• a dwelling • a property within the meaning of the Condominium Act, 1998 • a residential complex, within the meaning of the Residential Tenancies Act, 2006 • a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the Co-operative Corporations Act
Farms	• carries on a business that is a farming business for the purposes of the Farm Registration and Farm Organizations Funding Act, 1993, and • holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act
Demand for electricity of 50 kW or less, or consumes not more than 250,000 kWh annually	Would include small business, smaller broader- public-sector entities, and other small users.
Special Cases (not eligible for RPP, but eligible for OCEB)	
Consumers On Retail Contracts	Includes consumers with existing retail contracts and those who sign them during the duration of the program.
Cornwall Electric and Hydro One Remote Communities Inc.	Included since they are licensed distributors.
Other Consumers Prescribed by Regulation	10 First Nations remote unlicensed distributors have been added by regulation.
Exclusions	
Generators	Generation station service and the microFIT distribution service charge are excluded in legislation.

APPENDIX C: ELECTRICITY SUPPORT PROGRAMS

- [To be completed: Table on Electricity Support programs, who were eligible and impacts compared to this program]

"eligible account" means, in respect of a consumer, an account with an electricity vendor, or with a person prescribed by the regulations, for the provision of electricity in Ontario if,	Class of consumers, s. 79.16	
~~(a) the consumer has a demand for electricity of 50 kilowatts or less,~~	**4.** (1) Revoked: O. Reg. 494/10, s. 2 (1).	
~~(c) the consumer,~~	(2) On and after November 1, 2009, the following are prescribed as the class of consumers for the purposes of subsection 79.16 (1) of the Act:	
~~(c)(i) carries on a business that is a farming business for the purposes of the *Farm Registration and Farm Organizations Funding Act, 1993*, and~~	~~1. Low-volume consumers.~~	
~~(c)(ii) holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act.~~	~~2. A consumer who has a demand of 50 kilowatts or less.~~	
~~(d) the account relates to,~~	~~3. A consumer who has an account with a distributor, if the account relates to,~~	
~~(d)(i) a dwelling,~~	~~3.i. a dwelling,~~	
~~(d)(ii) a property, within the meaning of the *Condominium Act, 1998*,~~	~~3.ii. a property as defined in the *Condominium Act, 1998*,~~	
~~(d)(iii) a residential complex, within the meaning of subsection 2 (1) of the *Residential Tenancies Act, 2006*,~~	~~3.iii. a residential complex as defined in the *Residential Tenancies Act, 2006*, or~~	
~~(d)(iv) a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the *Co-operative Corporations Act*, or~~	~~3.iv. a property that includes one or more dwellings and that is owned or leased by a co-operative as defined in the *Co-operative Corporations Act*.~~	
	~~4. A consumer who annually uses at least 150,000 but not more than 250,000 kilowatt hours of electricity.~~	
	~~5. A consumer who has an account with a distributor if the consumer,~~	
	~~5.i. carries on a business that is a farming business for the purposes of the *Farm Registration and Farm Organizations Funding Act, 1993*, and~~	
	~~5.ii. holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was~~	

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~~(e) the consumer or the account satisfies such conditions as may be prescribed by the regulations; ("compte admissible")~~	~~waived pursuant to an order made under subsection 22 (6) of that Act. O. Reg. 58/08, s. 1; O. Reg. 115/09, s. 1 (2); O. Reg. 494/10, s. 2 (2, 3).~~	
OCEB	RPP	
"eligible account" means, in respect of a consumer, an account with an electricity vendor, or with a person prescribed by the regulations, for the provision of electricity in Ontario if,	Class of consumers, s. 79.16 **4.** (1) Revoked: O. Reg. 494/10, s. 2 (1). (2) On and after November 1, 2009, the following are prescribed as the class of consumers for the purposes of subsection 79.16 (1) of the Act:	
(a) the consumer has a demand for electricity of 50 kilowatts or less,	2. A consumer who has a demand of 50 kilowatts or less,	
(b) the consumer annually uses not more than 250,000 kilowatt hours of electricity,	1. Low-volume consumers. 4. A consumer who annually uses at least 150,000 but not more than 250,000 kilowatt hours of electricity,	
(c) the consumer,	5. A consumer who has an account with a distributor if the consumer,	
(c)(i) carries on a business that is a farming business for the purposes of the *Farm Registration and Farm Organizations Funding Act, 1993*, and (c)(ii) holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act,	5.i. carries on a business that is a farming business for the purposes of the *Farm Registration and Farm Organizations Funding Act, 1993*, and 5.ii. holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act. O. Reg. 58/08, s. 1; O. Reg. 115/09, s. 1 (2); O. Reg. 494/10, s. 2 (2, 3).	
(d) the account relates to, (d)(i) a dwelling, (d)(ii) a property, within the meaning of the *Condominium Act, 1998*, (d)(iii) a residential complex, within the meaning of subsection 2 (1) of the *Residential Tenancies Act, 2006*,	3. A consumer who has an account with a distributor, if the account relates to, 3.i. a dwelling, 3.ii. a property as defined in the *Condominium Act, 1998*, 3.iii. a residential complex as defined in the *Residential Tenancies Act, 2006*, or 3.iv. a property that includes one or more dwellings and that is owned or leased by a co-operative as defined in the *Co-operative Corporations Act*.	

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(d)(iv) a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the *Co-operative Corporations Act*, or		
(e) the consumer or the account satisfies such conditions as may be prescribed by the regulations; ("compte admissible")		
Exceptions		
	OEB ACT: https://www.ontario.ca/laws/statute/98o15#BK113 ***Exception: service transaction request, contract entered into after December 9, 2002*** (6) If a consumer enters into or renews a contract after December 9, 2002 with respect to which a service transaction request as defined in the Retail Settlement Code is or has been implemented to enable the consumer to purchase electricity from a competitive retailer as defined in the Retail Settlement Code, subsection (1) does not apply to the consumer during the term of the contract. 2004, c. 23, Sched. B, s. 25. ***Contracts entered into after December 9, 2002*** (7) Subject to subsection (6), the commodity price for electricity payable by a consumer under subsection (1) is subject to any contract the consumer renews or enters into after December 9, 2002. 2004, c. 23, Sched. B, s. 25. ***Same*** (8) A consumer who enters into or renews a retail contract for electricity after the date prescribed for the purposes of subsection (1) or becomes subject to a rate approved or fixed by the Board under this section is subject to	

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	such conditions as may be determined by the Board. 2004, c. 23, Sched. B, s. 25.	
	Application of subs. (1) (5) Subsection (1) does not apply to a consumer to whom electricity is distributed through a distribution system that is not connected to the IESO-controlled grid. 2004, c. 23, Sched. B, s. 25.	

Class A Consumers	>5MW in certain industrial sectors automatically fall in
	>3MW and <5MW in certain industrial sectors who opt-in
Class B Consumers	

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	DRC Removal	OCEB	OCEB w/Cap	OESP	~~Electricity Rate Mitigation~~RPP
		https://www.ontario.ca/laws/statute/10o26			***Class of consumers, s. 79.16***
Elibigility etc.		"eligible account" means, in respect of a consumer, an account with an electricity vendor, or with a person prescribed by the regulations, for the provision of electricity in Ontario if, (a) the consumer has a demand for electricity of 50 kilowatts or less, (b) the consumer annually uses not more than 250,000 kilowatt hours of electricity, (c) the consumer, (i) carries on a business that is a farming business for the purposes of the *Farm Registration and Farm Organizations Funding Act, 1993*, and (ii) holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form	(1.1) A consumer is entitled to receive financial assistance under subsection (1) in accordance with the following rules: 1. A consumer (except a consumer described in paragraph 2) is entitled to receive financial assistance in respect of the cost of a maximum of 3,000 kilowatt hours of electricity per eligible account per month, as determined in accordance with the regulations.		**4.** (1) Revoked: O. Reg. 494/10, s. 2 (1). (2) On and after November 1, 2009, the following are prescribed as the class of consumers for the purposes of subsection 79.16 (1) of the Act: 1. Low-volume consumers. 2. A consumer who has a demand of 50 kilowatts or less. 3. A consumer who has an account with a distributor, if the account relates to, i. a dwelling, ii. a property as defined in the

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		was waived pursuant to an order made under subsection 22 (6) of that Act, (d) the account relates to, (i) a dwelling, (ii) a property, within the meaning of the *Condominium Act, 1998*, (iii) a residential complex, within the meaning of subsection 2 (1) of the *Residential Tenancies Act, 2006*, (iv) a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the *Co-operative Corporations Act*, or (e) the consumer or the account satisfies such conditions as may be prescribed by the regulations; ("compte admissible")	2. A consumer who has an eligible account that relates to a multi-unit complex is entitled to receive financial assistance in respect of the eligible account in respect of the cost of such maximum number of kilowatt hours of electricity per month as may be prescribed and as determined in accordance with the regulations. 2012, c. 8, Sched. 38, s. 1 (2).		*Condominium Act, 1998*, iii. a residential complex as defined in the *Residential Tenancies Act, 2006*, or iv. a property that includes one or more dwellings and that is owned or leased by a co-operative as defined in the *Co-operative Corporations Act*. 4. A consumer who annually uses at least 150,000 but not more than 250,000 kilowatt hours of electricity. 5. A consumer who has an account with a distributor if the consumer, i. carries on a business that is a farming business for the purposes of the *Farm Registration and Farm Organizations*

					Funding Act, 1993, and ii. holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act. O. Reg. 58/08, s. 1; O. Reg. 115/09, s. 1 (2); O. Reg. 494/10, s. 2 (2, 3).

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http://www.rds.ontarioenergyboard.ca/webdrawer/webdrawer.dll/webdrawer/rec/145111/view/RPP%20Eligibility_ltr_20090813.PDF

https://www.ontario.ca/laws/statute/98o15:
"low-volume consumer" means a consumer who annually uses less than 150,000 kilowatt hours of electricity or such other amount of electricity as is prescribed by the regulations; ("petit consommateur")

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CABINET BRIEFING NOTE

Committee:	Cabinet
Meeting Date:	September 14, 2016 [or Sept 13?]
Ministry:	Finance/TBS [ENERGY?]
Last reviewed by:	**Tracking to:**

SUBMISSION TITLE:	**[BASED ON MATERIALS FROM FPC SUBMISSION, WAITING ON CABINET SUBMISSION FOR FINALIZED PROPOSAL]** Electricity Price Mitigation

I. REQUEST/DECISION REQUIRED:

- ~~Since 2010, electricity prices have risen considerably, particularly for households.~~
- The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These measure include:
  1. Provide an 8% pre-tax rebate to Regulated Price Plan consumers ~~(i.e., residential, small business and farms), similar to OCEB.~~
  2. Provide targeted business support by expanding the ICI eligibility threshold to customers above 1MW in all sectors.
  3. Provide relief to rural customers by updating Rural and Remote Rate Protection (RRRP).
  4. Eliminate proceeds recycling to Regulated Price Plan consumers and increase proceeds recycling to commercial and industrial consumers.

II. KEY POINTS:

- The Ministry of Energy (ENERGY) and Ministry of Finance (MOF) have been asked to explore rate mitigation options, including offsetting the provincial portion of the Harmonized Sales Tax (HST).
- There are 4 components to this proposal, each providing relief to different customer classes.

	Measure	Annual Impact	Targeted Recipients
1.	8% Rebate to Regulated Price Plan	Fiscal [~~(~~$1B~~)~~*]*	Residential, ~~Farms,~~ Small business, small farms and other small users
2.	Expanding ICI eligibility to customers above 1MW in all sectors	Rate base (~~$~~[$47M/$82M~~)~~**]**	Intermediate and large-sized ~~Small i~~industrial, ~~Commercial~~ commercial and ~~Institutional~~ institutional consumers above 1MW in all sectors
3.	Updating Rural and Remote Rate Protection	Rate base (~~$~~[$110M]~~)~~	Residents in rural or remote locations: Hydro One's lowest-density R2 customers.
4.	Redirecting proceed recycling to Commercial and Industrial or	TBD	TBD

	provide fiscal offsets to the 8% rebate		

*Note: Annual ~~Numbers~~ numbers from ENERGY.
**NOTE: Short-term/Long-term rate base impact, where short term is one year after expanded eligibility takes place and long-term is expected impact once new customers have time to change behavior.

- ~~Due to the nature of the Global Adjustment mechanism, the rate base proposal (#2 and #3) while benefiting the targeted recipients, come at a cost to all other electricity rate payers in Ontario.~~

Commented [SK21]: Moved to key considerations

- ENERGY provided the following overview of bill impacts:

Regulated Price Plan (Residential)*		Class B (Commercial)	Class A (Industrial)	
Average (750 kWh/month)	Rural (1000 kWh/month)		Existing	New
-$9.9/month (-7%)	-$45/month (-20%)	-$1/MWh (-1%)	-$1/MWh (-1%)	Up to -$52/MWh (-33%)

*NOTE: ENERGY did not provide the monthly impact ~~,~~ for other Regulated Price Plan not classified as Residential (eg. farms, small businesses) that would benefit from the 8% Rebate to Regulated Price Plan.

1. 8% Rebate to Regulated Price Plan

- An 8% rebate on the pre-tax portion for Regulated Price Plan consumers would be equal to the provincial portion of HST and funded by the tax base.

- The rebate would appear directly on bills. As such, Local Distribution Companies (LDC) would be the delivery mechanism for the rebate.
  - While non-Regulated Price Plan consumers would not see a benefit from the 8% rebate under this option, all industrial and commercial consumers would receive proceeds recycling through the Greenhouse Gas Reduction Account (GGRA).
  - Commercial and industrial consumers would also continue to receive input tax credits and Public Service Bodies would continue to receive PSB rebates.
- New legislation would be required and closely mirror the Ontario Clean Energy Benefit (OCEB) Act, 2010. More details further below.
- On-bill rebate delivery would likely require adjustments to Local Distribution Company (LDC) billing systems, which could impact delivery costs and timelines.
- In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
  - One option to address any timing concerns is to allow LDCs to provide retroactive payments if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.

2. Expanding ICI Eligibility to customers above 1MW in all sectors

- Lower the threshold for participation in ICI to 1 MW and remove sectoral restrictions on participation.

- Most newly eligible ICI participants who choose to opt-in to the program would be able to reduce their electricity costs substantially. All other consumers would see a relatively small increase in their bills.
- Expanding the ICI will reduce electricity peak demand by incenting more consumers to lower their electricity demand during peak periods (80MW in the short term and 165 MW in the long term)
- Bill savings to new participants up to 21% in the short term and up to 34% ~~providing a~~ in the long-term
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
    - A few examples of companies that would become eligible under such an expansion would be Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.
- All residential consumers would see an average cost increase of $0.42/month in the short term and $0.74/month in the long term.

3. Updating Rural and Remote Rate Protection

- RRRP funding supporting Hydro One R2 (rural) customers capped at current levels since 2004.
- Provide an additional $110 million in support to approximately 330,000 ~~Hydro One~~ R2 ~~rural~~ customers to $235 million annually.
- Proposal will equalize R2 bills with Hydro One R1 (medium) density customers.~~-~~
- ~~~~
- All residential consumers would see an average cost increase of $0.57/month.
- ~~[TO BE EXPANDED]~~

4. ~~Redirecting proceed recycling to Commercial and Industrial~~Greenhouse Gas Reduction Account (GGRA)

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers.
- Ontario's Climate Change Action Plan (CCAP) includes up to $1.32 billion over 4 years to help keep electricity rates affordable for residential and industrial consumers.
- The 8% rebate to the Regulated Price Plan consumers fulfills the commitment to reduce residential rates by $2/month.
- Would lead to savings ~~Redirecting some of the forecast $1.3 billion~~ in GGRA proceeds previously allocated to ~~from~~ Regulated Price Plan consumers, ~~to commercial and industrial consumers would ensure that the impact of cap and trade and ICI expansion and RRRP update would not increase costs for any large industrial and would result in a benefit to the average industrial and commercial customers~~~~which would~~ and help offset the fiscal impact of the 8% rebate to the RPP consumers.

III. KEY CONSIDERATIONS

NOTE: *Due to the nature of the ICI Global Adjustment mechanism and cost recovery of the RRRP, the rate base proposal (#2 and #3) while benefiting the targeted recipients,* ***come at a cost to all other electricity rate payers in Ontario****.*

1. 8% Rebate to Regulated Price Plan

- This 8% pre-tax rebate is similar to the previous Ontario Clean Energy Benefit (See Appendix for background) which provided a 10% post-tax rebate.
  - The OCEB legislation was set out with an end date, and was subsequently modified to be capped at 3,000 kWh per month for all electricity customers after 8 months of the program.
  - This proposal does not specify any consumption caps nor an end date.
- Due to the lack of a cap, ~~C~~compared to OCEB, this proposal is more generous to high volume ~~RPP~~ users
  - OCEB rebate was ~~eligible~~ applicable for up to 36,000 kWh annually (12 months times 3,000 kWh cap per month) while this proposal would be ~~is~~ more generous for those consuming more than 50,850 kWh annually.
  - Furthermore, highest volume users in this proposal would receive **up to 392% more** than under the OCEB program.
- Unclear why any proposals for a cap would be any more complex or onerous to LDCs than prior OCEB cap (instituted beginning September 2012 to termination of OCEB program in December 2015).
  - ~~o~~
- Blanket reduction in electricity prices for all users irrespective of consumption amounts hamper efforts to conserve electricity, and mutes TOU price signals.
- Removal of HST (a broad tax) to one particular product distorts and shifts consumption to that area.
- Businesses that fall under the Regulated Price Plan pay little to no HST due to the Input Tax Credit. The 8% reduction can be deemed a windfall for these users.
- While eligibility is intended to align with OCEB consumers, there exist a set of consumers not covered by the RPP (eg. ~~Those~~ those on retail contracts – See Appendix) which were OCEB eligible.
  - Unclear if those other OCEB eligible consumers are also eligible for the 8% rebate.
- ENERGY staff have provided the following preliminary fiscal impact projections:

- ~~*Preliminary* MOF calculations align favorably with ENERGY projections. Note refined estimates are forthcoming.~~

FISCAL IMPACT ($M)

2016-17	2017-18	2018-19	2019-20
261	1,006	1,004	994
~~224~~	~~909~~	~~958~~	~~1005~~
~~16.5%~~	~~10.7%~~	~~4.8%~~	~~-1.1%~~

Commented [SK22]: Moved to key considerations

Commented [SK3]: 36000*0.113/0.08 = 50,850

36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate
0.08 – pre-tax effective rebate (8%)

Commented [SK24]: 36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate

36000*0.113 = 4068 [OCEB effective rebated consumption]

Max under proposal: 250,000
pre-tax effective rebate: 0.08
Proposal effective rebated consumption: 250,000*0.08 = 20,000

(20,000-4068)/4068 = **3.9164**

Commented [SK5]: This is a general/classic economic comment on the preference of broad consumption taxes vs taxes for particular items.
TPD might have a better way to communicate this, if applicable.

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Commented [JK7]: Let's delete MOF analysis for now.

Commented [SK8R7]: OK

- Ministry staff are in the process of developing a refined estimate of the cost.
- ENERGY's projections indicate a reduction in costs from 2017-18 to 2019-20.
- ~~—~~

2. **Expanding ICI Eligibility to customers above 1MW in all sectors**
   - Not all users with demand above 1MW will be in a position to take full advantage of the ICI expansion (eg. Inability to load shift during peaks).~~Previous expansion of ICI eligibility from 5MW to 3MW users in selected sectors provided those industrial users between 3MW and 5MW the option to enroll in the ICI program~~
     - ~~o —~~
     - ~~o Unclear if this initiative is a similar 'opt-in' proposal or a mandatory enrollment such as the initial ICI program for 5MW customers~~

3. **Updating Rural and Remote Rate Protection**
   - According to ENERGY, the RRRP is a $175M program with the majority of program funding ($125.5M) to Hydro One's lowest-density 'R2' customers
   - Unclear why ~~who the remaining $49.5M is directed towards, nor whether the expended RRRP program would accommodate these customers~~customers on RRRP who are not Hydro One's R2 customers are not also targeted for this benefit.
   - Unclear whether the RRRP would be indexed or trued up on a regularly basis per one of the options ENERGY's ~~FP~~ deck.

4. **~~Redirecting proceed recycling to Commercial and Industrial~~Greenhouse Gas Reduction Account (GGRA)**
   - ~~Unclear on the mechanism of how these proceeds will be directed to Commercial and Industrial users.~~
   - According to the ENERGY deck the GGRA allocated $120M to average residential consumers, $170M to commercial and $40M to industrial consumers. Deck implies more than $60M in savings from 8% Rebate for the RPP consumers.
     - ~~o —~~Unclear, how the redirected amount $60M ($120M-$60M) will be allocated to commercial and industrial users.
     - o

~~Fiscal Impact from Each Proposal ($M)~~

	~~2016-17~~	~~2017-18~~	~~2018-19~~
~~1. 8% Rebate to Regulated Price Plan~~	~~261~~	~~1006~~	~~994~~
~~4. Redirecting proceed recycling to Commercial and Industrial~~	~~-~~	~~-60~~	~~-60~~
~~TOTAL~~	~~261~~	~~946~~	~~934~~

~~[TO BE INSERTED IF NECESSARY, TABLE SUMMARIZING ELECTRICITY PRICE IMPACTS FROM EACH OF THESE 4 COMPONENTS]~~

Commented [SK29]: Delete. Table Key Points above, summarizes this more appropriately.

IV. CABINET COMMITTEE DISCUSSION SUMMARY

n/a

V. Financial Summary

$ Millions	2016-17	2017-18	2018-19
Initiative cost requested	261	~~946~~1,006	~~934~~~~994~~1,0
Requested program base	~~?~~261	~~?~~1,006	1,004~~?~~
Total fiscal impact (draw from c-funds)	261	~~946~~1,006	~~934~~1,004

Commented [JK10]: Update as above?

Commented [SK211R10]: Done

VI. Performance Measures

To estimate the impact of the program, ~~and~~ the savings provided to the various consumers, and any potential for adjustments to the program, information should be provided from ~~the~~ LDCs on consumption profiles and rebate amounts, particularly those affected by the 8% rebate on ~~the~~ Regulated Price Plan Consumers.

Name of analyst:	Shajee Kathirgamanathan (416-325-1402)
Date:	~~August 30~~September 4, 2016
Branch / Division:	Electricity Finance Branch / Corporate and Electricity Finance Division

APPENDIX A: PROPOSED CABINET MINUTE

Commented [JK12]: Let's indicate that this is just work in progress….to be filled out by TBS or Cabinet Office staff.

Commented [SK13R12]: Done.

[WORK IN PROGRESS, TO BE FILLED OUT BY TBS/CO STAFF]

1. ~~Ensure LDCs provide details on consumption profiles and bills to assess the effectiveness of the electricity price relief provided and better inform any future changes in legislation should it be necessary. (Eg. caps, effects on user demands, changes to peak demand forecasts).~~

APPENDIX B: BACKGROUND – ONTARIO CLEAN ENERGY BENEFIT

~~Quick Background: The Ontario Clean Energy Benefit~~

- OCEB was in effect from 2011 to 2015, and provided residential, farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax.
    - Effective September 2012 electricity consumption eligible for the 10 per cent benefit was capped at the first 3,000 kWh of electricity consumed per month.
- OCEB helped Ontario families through the transition to a more reliable and cleaner electricity system, with the monthly cap balancing the fiscal implications of providing electricity relief.
- OCEB costs totalled $1,006 million in 2013-14 and $1,078 million in 2014-15, with a projected cost for 2015-16 of $860 million (for the 9 months remaining in the program).

Eligible Consumers	
Categories Listed in Legislation (coincides with categories eligible for RPP)	
Residential	• a dwelling • a property within the meaning of the Condominium Act, 1998 • a residential complex, within the meaning of the Residential Tenancies Act, 2006 • a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the Co-operative Corporations Act
Farms	• carries on a business that is a farming business for the purposes of the Farm Registration and Farm Organizations Funding Act, 1993, and • holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act
Demand for electricity of 50 kW or less, or consumes not more than 250,000 kWh annually	Would include small business, smaller broader- public-sector entities, and other small users.
Special Cases (not eligible for RPP, but eligible for OCEB)	
Consumers On Retail Contracts	Includes consumers with existing retail contracts and those who sign them during the duration of the program.
Cornwall Electric and Hydro One Remote Communities Inc.	Included since they are licensed distributors.
Other Consumers Prescribed by Regulation	10 First Nations remote unlicensed distributors have been added by regulation.
Exclusions	
Generators	Generation station service and the microFIT distribution service charge are excluded in legislation.

Tab x

CABINET BRIEFING NOTE

Committee:	Cabinet
Meeting Date:	September 14, 2016
Ministry:	ENERGY
Last reviewed by:	**Tracking to:** Cabinet – September 14, 2016

[BASED ON DRAFT CABINET SUBMISSION]

SUBMISSION TITLE:	Electricity Price Mitigation

I. REQUEST/DECISION REQUIRED:

- ~~Since 2010, electricity prices have risen considerably, particularly for households.~~
- The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These measure include:

1. Provide a pre-tax~~n~~ 8% rebate to Regulated Price Plan (RPP) consumers~~; (i.e., residential, small business and farms), similar to OCEB~~.
2. ~~Provide targeted business support by e~~Expanding the Industrial Conservation Initiative (ICI) eligibility ~~threshold~~ to customers above 1MW in all sectors~~;~~.
3. ~~Provide relief to rural customers by u~~Updating Rural ~~and~~ or Remote Rate Protection (RRRP)~~;~~.
4. Using cap and trade proceeds to ensure industrial and commercial consumers are not negatively impacted by cap and trade. Balance of proceeds intended for electricity relief through the Climate Change Action Plan could provide some fiscal offsets (to be confirmed by Energy).

- [Approve in principle an expenditure increase estimated at $261M [estimate subject to refinement from ENERGY] in 2016-17 for the Electricity Price Mitigation, offset from the Treasury Board Contingency Fund.]~~Eliminate proceeds recycling to Regulated Price Plan consumers and increase proceeds recycling to commercial and industrial consumers.~~

Commented [SK21]: Unclear if this is necessary for the cabinet note as the TB/MBC note may be worried more on fiscal implications.

II. KEY POINTS:

Context

Electricity costs have increased as the province has made investments in clean energy generation and modernized electricity infrastructure. Electricity bills are expected to continue to increase as more renewable energy projects come online.

As part of the 2016 Budget, the government committed to mitigating electricity cost impacts that were anticipated from the cap and trade program. The Climate Change Action Plan (CCAP) included up to $1.32B over 4 years to help keep electricity rates affordable for residential and industrial consumers. This included a commitment to provide a modest benefit of up to $2 per month, on average, to residential consumers.

Tab x

The Ontario Clean Energy Benefit (OCEB) expired December 31, 2015, as part of the originally planned, five-year legislated program put in place as a broad-based, transitional measure to a cleaner electricity system. OCEB was also put in place following the implementation of the Harmonised Sales Tax (HST). Unlike the previous provincial Retail Sales Tax (RST), the HST (and GST) included electricity in the taxable base. With the end of OCEB, the government ended the electricity Debt Retirement Charge (DRC) on residential users earlier than planned, as of January 1, 2016, and also put in place the low-income targeted Ontario Electricity Support Program (OESP).

In order to achieve the CCAP commitment and additional price mitigation, the Ministry of Energy has developed price mitigation options that consider tax-based levers, cap and trade proceeds, and shifting costs within the rate-base.

Proposal

- ~~The Ministry of Energy (ENERGY) and Ministry of Finance (MOF) have been asked to explore rate mitigation options, including offsetting the provincial portion of the Harmonized Sales Tax (HST).~~
- ~~There are 4 components to this proposal, each providing relief to different customer classes.~~

	Measure	Targeted Recipients	Annual Impact	
			Fiscal	Rate Base
1.	8% Rebate to Regulated Price Plan	Residential, small business, small farms and other small users	$1B	-
2.	Expanding ICI eligibility to customers above 1MW in all sectors	Intermediate and large-sized industrial, commercial and institutional consumers above 1MW in all sectors	-	$47M/ $82M*
3.	Updating Rural ~~and~~ or Remote Rate Protection	Residents in rural or remote locations: Hydro One's lowest-density R2 customers.	-	$110M
4.	Redirecting proceed recycling to ~~C~~commercial and ~~Industrial~~ industrial~~or~~ and provide fiscal offsets to the 8% rebate	~~TBD~~Commercial and industrial electricity customers	-$60M**	-

~~*Annual numbers from ENERGY.~~

**Short-term/Long-term rate base impact, where short term is one year after expanded eligibility takes place and long-term is expected impact once new customers have time to change behavior.

**To meet the Budget 2016 commitment, the Climate Change Action Plan (CCAP) committed $1.3B from the Greenhouse Gas Reduction Account (GGRA) or about $330M annually. Current proposal will require $60M less or $270M annually.

- ENERGY provided the following overview of bill impacts:

Regulated Price Plan (Residential)*	Class B (Commercial)	Class A (Industrial)

Tab x

Average (750 kWh/month)	Rural** (1000 kWh/month)		Existing	New
-$~~9~~.910/month (-~~7~~6%)	-$45/month (-20%)	-$1/MWh (-1%)	-$1/MWh (-1%)	Up to -$52/MWh (-~~33~~34%)

Note: The impact of cap and trade would not be added to electricity bills until 2017 and impact of ICI would not be added until 2018. All impacts included here for illustrative purposes

*~~NOTE:~~ ENERGY did not provide the monthly impact , for other Regulated Price Plan not classified as Residential (eg. farms, small businesses) that would benefit from the 8% Rebate to Regulated Price Plan.

** Rural customers refers to those Hydro One customers eligible to receive RRRP (R2 rate class customers)

1. 8% Rebate to Regulated Price Plan (RPP)

- An 8% rebate on the pre-tax portion for Regulated Price Plan (RPP) consumers would be equal to the provincial portion of HST and funded by the tax base.
- The $1 billion figure is a 2017 to 2020 calendar year average of cost estimates developed by Ministry of Energy staff, as follows:

$ millions	**2017**	**2018**	**2019**	**2020**
	1,003	1,014	975	1,049
Avg. 2017-20	1,010			

- On a fiscal year basis, the above estimates become:

$ millions	**2016-17**	**2017-18**	**2018-19**	**2019-20**
	261	1,006	1,004	994
3-Year Avg.	1,001			

- Ministry staff are in the process of developing a refined estimate of the cost.

- The rebate would appear directly on bills. As such, Local Distribution Companies (LDC) would be the delivery mechanism for the rebate.
  - While non-Regulated Price Plan consumers would not see a benefit from the 8% rebate under this option, all industrial and commercial consumers would receive proceeds recycling through the Greenhouse Gas Reduction Account (GGRA).
  - Commercial and industrial consumers would also continue to receive input tax credits and Public Service Bodies would continue to receive PSB rebates.
- New legislation would be required and closely mirror the Ontario Clean Energy Benefit (OCEB) Act, 2010. More details further below.
- On-bill rebate delivery would likely require adjustments to Local Distribution Company (LDC) billing systems, which could impact delivery costs and timelines.
- In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
  - One option to address any timing concerns is to allow LDCs to provide retroactive payments if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.
- The rebate would not be directly linked to HST.

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   - Lower threshold for participation in ICI to 1 MW and remove sectoral restrictions.
   - Most newly eligible ICI participants who choose to opt-in to the program would be able to reduce their electricity costs substantially. All other consumers would see a relatively small increase in their bills.
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   - ~~•~~
   - ~~All r~~Residential consumers would see an average cost increase of $0.42/month in the short term and $0.74/month in the long term.

3. **Updating Rural ~~and~~ or Remote Rate Protection**
   - RRRP funding supporting Hydro One R2 (rural) customers capped at current levels since 2004.
   - The current program provides a monthly subsidy of a about $32/month.
   - Proposal will ~~Provide~~ provide an additional $110 million in support to approximately ~~330~~329,000 R2 customers to $235 million annually.
   - Proposal will increase the subsidy by about $28/month and equalize R2 bills with Hydro One R1 (medium) density customers at 1,000 kWh.~~.~~
   - All residential consumers would see an average cost increase of about $0.~~57~~60/month.
   - ENERGY is considering options to periodically adjust the amount of rate protection eg. indexed at inflation or "trued up" on a regular basis.

4. **~~Redirecting proceed recycling to Commercial and Industrial~~Greenhouse Gas Reduction Account (GGRA)**
   - The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers.
   - Ontario's Climate Change Action Plan (CCAP) includes up to $1.32 billion over 4 years to help keep electricity rates affordable for residential and industrial consumers.
   - The GGRA allocated $120M to average residential consumers, $170M to commercial and $40M to industrial consumers.

Tab x

- The 8% rebate to the Regulated Price Plan consumers fulfills the commitment to reduce residential rates by $2/month.
    - Proposal would lead to savings of the $120M in GGRA proceeds previously allocated to residential consumers, and help offset the fiscal impact of the 8% rebate to the Regulated Price Plan consumers.
- To provide price mitigation to commercial and industrial electricity consumers, ENERGY is proposing to direct an additional $60M of cap and trade auction proceeds to industrial and commercial consumers not in the RPP to mitigate impacts.
-
- The current proposal would require an estimated $60 million less per year, or $0.24 billion less over the first compliance period.

~~Would lead to savings~~ ~~Redirecting some of the forecast $1.3 billion in GGRA proceeds previously allocated to from Regulated Price Plan consumers, to commercial and industrial consumers would ensure that the impact of cap and trade and ICI expansion and RRRP update would not increase costs for any large industrial and would result in a benefit to the average industrial and commercial customers~~which ~~would~~ and ~~help offset the fiscal impact of the 8% rebate to the RPP consumers~~.

III. KEY CONSIDERATIONS

- Due to the nature of the ICI Global Adjustment mechanism and cost recovery of the RRRP, the rate base proposal (#2 and #3) while benefiting the targeted recipients, **come at a cost to all other electricity rate payers in Ontario**.
- This request does not align with the 2016 Budget fiscal plan and there are no proposed offsets.
- Other price mitigation measures introduced following the implementation of the HST, as well as the end of OCEB, would continue.
    - Both the energy portion of the Ontario Energy and Property Tax Credit (OEPTC) and NOEC were introduced/ enhanced following the introduction of the HST and have a significant annual fiscal cost (totalling about $500 million annually).
    - The DRC on residential consumers was ended early, as of January 1, 2016 (about a $340 million impact in 2016-17).
    - OESP is a low-income targeted program funded by electricity consumers through the electricity rate base.

1. 8% Rebate to Regulated Price Plan

- The 8% pre-tax rebate would provide a typical residential consumer about an $11 per month benefit on average (about $10, after the impact of RRRP and ICI expansion), exceeding the Budget 2016 $2 per month on average cap and trade commitment.

- This 8% pre-tax rebate is similar to the previous Ontario Clean Energy Benefit (See Appendix for background) which provided a 10% post-tax rebate.
    - The OCEB legislation was set out with an end date, and was subsequently modified to be capped at 3,000 kWh per month for all electricity customers after 8 months of the program.
    - This proposal does not specify any consumption caps nor an end date.
- Due to the lack of a cap, ~~C~~compared to OCEB, this proposal is more generous to the high volume RPP ~~RPP~~ users.
    - OCEB rebate was ~~eligible~~ applicable for up to 36,000 kWh annually (12 months times 3,000 kWh cap per month) while this proposal would be ~~is~~ **more generous for those consuming more than 50,850 kWh** annually.
    - Furthermore, highest volume users in this proposal would receive **up to 392% more** than under the OCEB program.
- Unclear why any proposals for a cap would be any more complex or onerous to LDCs than prior OCEB cap (instituted beginning September 2012 to termination of OCEB program in December 2015).
    - ~~o~~
- Blanket reduction in electricity prices for all users irrespective of consumption amounts hamper efforts to conserve electricity, and mutes TOU price signals.
- ~~Removal of HST (a broad tax) to one particular product distorts and shifts consumption to that area.~~

Commented [SK2]: 36000*0.113/0.08 = 50,850

36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate
0.08 – pre-tax effective rebate (8%)

Commented [SK23]: 36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate

36000*0.113 = 4068 [OCEB effective rebated consumption]

Max under proposal: 250,000
pre-tax effective rebate: 0.08
Proposal's effective rebated consumption: 250,000*0.08 = 20,000

(20,000-4068)/4068 = **3.9164**

Commented [SK4]: This is a general/classic economic comment on the preference of broad consumption taxes vs taxes for particular items.
TPD might have a better way to communicate this, if applicable.

- [Businesses that fall under the Regulated Price Plan pay little to no HST due to the Input Tax Credit. The 8% reduction can be deemed a windfall for these users.]
- While eligibility is intended to align with OCEB consumers, there exist a set of consumers not covered by the RPP (eg. ~~Those~~ those on retail contracts – See Appendix) which were OCEB eligible.
  - Unclear if those other OCEB eligible consumers are also eligible for the 8% rebate.

Commented [SK5]: Will need to verify

2. Expanding ICI Eligibility to customers above 1MW in all sectors

- Not all users with demand above 1MW will be in a position to take full advantage of the ICI expansion (eg. inability to load shift during peaks).~~Previous expansion of ICI eligibility from 5MW to 3MW users in selected sectors provided those industrial users between 3MW and 5MW the option to enroll in the ICI program~~
  - ~~o~~
  - ~~Unclear if this initiative is a similar 'opt-in' proposal or a mandatory enrollment such as the initial ICI program for 5MW customers~~

3. Updating Rural ~~and~~ or Remote Rate Protection

- According to ENERGY, the RRRP is a $175M program with the majority of program funding ($125.5M) to Hydro One's lowest-density 'R2' customers
- Unclear why ~~who the remaining $49.5M is directed towards, nor whether the expended RRRP program would accommodate these customers~~customers on RRRP who are not Hydro One's R2 customers are not also targeted for this benefit.
- ~~Unclear whether the RRRP would be indexed or trued up on a regularly basis per one of the options ENERGY's FP deck.~~

4. ~~Redirecting proceed recycling to Commercial and Industrial~~Greenhouse Gas Reduction Account (GGRA)

- ~~Unclear on the mechanism of how these proceeds will be directed to Commercial and Industrial users.~~
- ~~According to the ENERGY deck the GGRA allocated $120M to average residential consumers, $170M to commercial and $40M to industrial consumers.~~ Deck implies more than $60M in savings from 8% Rebate for the RPP consumers.
  - ~~o~~ Unclear, how the redirected amount $60M ($120M-$60M) will be allocated to commercial and industrial users.
  - o

IV. Cabinet Committee Discussion Summary

n/a

V. Financial Summary

$ Millions	2016-17	2017-18	2018-19
Initiative cost requested	261	1,006	1,004
Requested program base	261	1,006	1,004
Total fiscal impact (draw from c-funds)	261	1,006	1,004

VI. Performance Measures

[To estimate the impact of the program, ~~and~~ the savings provided to the various consumers, and any potential for adjustments to the program, information should be provided from ~~the~~ LDCs on consumption profiles and rebate amounts, particularly those affected by the 8% rebate on ~~the~~ Regulated Price Plan Consumers.]

Name of analyst:	Shajee Kathirgamanathan (416-325-1402)
Date:	September 6, 2016
Branch / Division:	Electricity Finance Branch / Corporate and Electricity Finance Division

APPENDIX A: PROPOSED ~~C~~POLICY~~ABINET~~ MINUTE

[WORK IN PROGRESS, WAITING ON ENERGY'S FINAL SUBMISSION]

CABINET AGREED THAT:

1. THE MINISTRY OF ENERGY (ENERGY), WITH SUPPORT FROM THE MINISTRY OF FINANCE (MOF), SHALL PREPARE LEGISLATION THAT WOULD PROVIDE AN EIGHT PERCENT (8%) REBATE ON THE PRE-TAX COST OF ELECTRICITY FOR THE FOLLOWING CLASSES OF CONSUMERS:
   A. ALL CONSUMERS ELIGIBLE TO BE BILLED UNDER THE ONTARIO ENERGY BOARD'S REGULATED PRICE PLAN; AND
   B. ANY OTHER CONSUMERS WHO WERE ELIGIBLE FOR FINANCIAL ASSISTANCE UNDER THE *ONTARIO CLEAN ENERGY BENEFIT ACT, 2010* (OCEBA) DURING THE PERIOD THAT PROGRAM WAS IN PLACE.

2. THE LEGISLATION SHALL BE GENERALLY MODELLED UPON THE OCEBA, AND WOULD INCLUDE THE FOLLOWING ELEMENTS:
   A. THE REBATE WOULD BE AVAILABLE STARTING JANUARY 1, 2017 AND BEFORE SUCH DATE AS MAY BE PRESCRIBED;
   B. THE REBATE WOULD NOT BE SUBJECT TO A CAP UNLESS A CAP IS PRESCRIBED;
   C. THE LEGISLATION WOULD SPECIFY THE TYPES OF COSTS TO WHICH THE REBATE WOULD OR WOULD NOT BE APPLIED, WITH AUTHORITY TO MAKE CHANGES BY REGULATION;
   D. THE LEGISLATION WOULD ADDRESS INVOICING REQUIREMENTS, INCLUDING AUTHORITY TO PRESCRIBE HOW THE REBATE IS TO APPEAR ON CONSUMER ELECTRICITY BILLS;
   E. THE LEGISLATION WOULD INCLUDE AUTHORITY TO PRESCRIBE THE WAY IN WHICH THE REBATE IS TO BE FLOWED THROUGH TO CONSUMERS, AND THE WAY IN WHICH ELECTRICITY VENDORS PROVIDING THE REBATE ARE TO BE REIMBURSED;
   F. THE LEGISLATION WOULD INCLUDE RECORD-KEEPING REQUIREMENTS FOR ELECTRICITY VENDORS AND ANY OTHER PRESCRIBED PERSONS; AND
   G. THE LEGISLATION WOULD INCLUDE INSPECTION POWERS FOR INSPECTORS APPOINTED BY THE MINISTER OF FINANCE, INCLUDING POWERS RELATED TO RECOVERY OF OVERPAYMENTS.
3. ENERGY AMEND O. REG. 429/04 (ADJUSTMENTS UNDER SECTION 25.33 OF THE ACT) MADE UNDER THE ELECTRICITY ACT, 1998 TO EXPAND ELIGIBILITY FOR CLASS A CONSUMERS AND CLASS A MARKET PARTICIPANTS UNDER THE INDUSTRIAL CONSERVATION INITIATIVE (ICI) TO ALL ELECTRICITY CONSUMERS AND MARKET PARTICIPANTS WITH A PEAK DEMAND ABOVE AN AVERAGE OF ONE MEGAWATT (1MW) WITH NO SECTORAL RESTRICTIONS ON PARTICIPATION.
4. ENERGY AMEND O. REG 442/01 (RURAL OR REMOTE ELECTRICITY RATE PROTECTION) MADE UNDER THE ONTARIO ENERGY BOARD ACT, 1998 TO INCREASE THE TOTAL AMOUNT OF RATE PROTECTION AVAILABLE TO LOW DENSITY HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE RATE PROTECTION PROGRAM BY $110 MILLION, EFFECTIVE JANUARY 1, 2017.
5. ENERGY CONSIDER AND, IF APPROPRIATE, UTILIZE A MECHANISM TO PERIODICALLY ADJUST THE TOTAL ANNUAL AMOUNT OF RATE PROTECTION AVAILABLE TO HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE ELECTRICITY RATE PROTECTION REGULATION / PROGRAM, EFFECTIVE JANUARY 1, 2018.

6. ENERGY TO RECYCLE UP TO AN AVERAGE OF $270 MILLION OF CAP AND TRADE AUCTION PROCEEDS FROM THE GREENHOUSE GAS REDUCTION ACCOUNT PER YEAR OVER THE FIRST COMPLIANCE PERIOD (2017-2020) TO COMMERCIAL AND INDUSTRIAL ELECTRICITY CONSUMERS.
7. ENERGY AND MOF TO WORK WITH CABINET OFFICE (CO) AND PREMIER'S OFFICE (PO) ON COMMUNICATIONS PLAN.

APPENDIX B: BACKGROUND – ONTARIO CLEAN ENERGY BENEFIT

- OCEB was in effect from 2011 to 2015, and provided residential, farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax.
    - Effective September 2012 electricity consumption eligible for the 10 per cent benefit was capped at the first 3,000 kWh of electricity consumed per month.
- OCEB helped Ontario families through the transition to a more reliable and cleaner electricity system, with the monthly cap balancing the fiscal implications of providing electricity relief.
- OCEB costs totalled $1,006 million in 2013-14 and $1,078 million in 2014-15, with a projected cost for 2015-16 of $860 million (for the 9 months remaining in the program).

Eligible Consumers	
Categories Listed in Legislation (coincides with categories eligible for RPP)	
Residential	• a dwelling • a property within the meaning of the Condominium Act, 1998 • a residential complex, within the meaning of the Residential Tenancies Act, 2006 • a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the Co-operative Corporations Act
Farms	• carries on a business that is a farming business for the purposes of the Farm Registration and Farm Organizations Funding Act, 1993, and • holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act
Demand for electricity of 50 kW or less, or consumes not more than 250,000 kWh annually	Would include small business, smaller broader- public-sector entities, and other small users.
Special Cases (not eligible for RPP, but eligible for OCEB)	
Consumers On Retail Contracts	Includes consumers with existing retail contracts and those who sign them during the duration of the program.
Cornwall Electric and Hydro One Remote Communities Inc.	Included since they are licensed distributors.
Other Consumers Prescribed by Regulation	10 First Nations remote unlicensed distributors have been added by regulation.
Exclusions	
Generators	Generation station service and the microFIT distribution service charge are excluded in legislation.

Tab x

CABINET BRIEFING NOTE

Committee:	Cabinet
Meeting Date:	September 14, 2016
Ministry:	ENERGY
Last reviewed by:	**Tracking to:** Cabinet – September 14, 2016

[BASED ON DRAFT CABINET SUBMISSION]

SUBMISSION TITLE:	Electricity Price Mitigation

I. REQUEST/DECISION REQUIRED:

- ~~Since 2010, electricity prices have risen considerably, particularly for households.~~
- The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These measure include:

1. Provide a pre-tax~~n~~ 8% rebate to Regulated Price Plan (RPP) consumers~~; (i.e., residential, small business and farms), similar to OCEB.~~
2. ~~Provide targeted business support by e~~Expanding the Industrial Conservation Initiative (ICI) eligibility ~~threshold~~ to customers above 1MW in all sectors~~;~~.
3. ~~Provide relief to rural customers by u~~Updating Rural ~~and~~ or Remote Rate Protection (RRRP)~~;~~.
4. Using cap and trade proceeds to ensure industrial and commercial consumers are not negatively impacted by cap and trade. Balance of proceeds intended for electricity relief through the Climate Change Action Plan could provide some fiscal offsets (to be confirmed by Energy).

- [Approve in principle an expenditure increase estimated at $261M [estimate subject to refinement from ENERGY] in 2016-17 for the Electricity Price Mitigation, offset from the Treasury Board Contingency Fund.]~~Eliminate proceeds recycling to Regulated Price Plan consumers and increase proceeds recycling to commercial and industrial consumers.~~

Commented [JK1]: This seems very broad with no limit to the amount of C&T proceeds to be used.

Commented [JK2]: Finance?

Commented [SK23]: Unclear if this is necessary for the cabinet note as the TB/MBC note may be worried more on fiscal implications.

II. KEY POINTS:

Context

Electricity costs have increased as the province has made investments in clean energy generation and modernized electricity infrastructure. Electricity bills are expected to continue to increase as more renewable energy projects come online.

As part of the 2016 Budget, the government committed to mitigating electricity cost impacts that were anticipated from the cap and trade program. The Climate Change Action Plan (CCAP) included up to $1.32B over 4 years to help keep electricity rates affordable for residential and industrial consumers. This included a commitment to provide a modest benefit of up to $2 per month, on average, to residential consumers.

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   - ~~•~~
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   - The current program provides a monthly subsidy of a about $32/month.
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Tab x

- The 8% rebate to the Regulated Price Plan consumers fulfills the commitment to reduce residential rates by $2/month.
    - Proposal would lead to savings of the $120M in GGRA proceeds previously allocated to residential consumers, and help offset the fiscal impact of the 8% rebate to the Regulated Price Plan consumers.
- To provide price mitigation to commercial and industrial electricity consumers, ENERGY is proposing to direct an additional $60M of cap and trade auction proceeds to industrial and commercial consumers not in the RPP to mitigate impacts.
-
- The current proposal would require an estimated $60 million less per year, or $0.24 billion less over the first compliance period.

~~Would lead to savings~~ ~~Redirecting some of the forecast $1.3 billion in GGRA proceeds previously allocated to from Regulated Price Plan consumers, to commercial and industrial consumers would ensure that the impact of cap and trade and ICI expansion and RRRP update would not increase costs for any large industrial and would result in a benefit to the average industrial and commercial customerswhich would and help offset the fiscal impact of the 8% rebate to the RPP consumers.~~

III. KEY CONSIDERATIONS

- Due to the nature of the ICI Global Adjustment mechanism and cost recovery of the RRRP, the rate base proposal (#2 and #3), while benefiting the targeted recipients, would **come at a cost to all other electricity rate payers in Ontario**.
- This request does not align with the 2016 Budget fiscal plan and there are no proposed offsets.
- Other price mitigation measures introduced following the implementation of the HST, as well as the end of OCEB, would continue.
    - Both the energy portion of the Ontario Energy and Property Tax Credit (OEPTC) and NOEC were introduced/ enhanced following the introduction of the HST and have a significant annual fiscal cost (totalling about $500 million annually).
    - The DRC on residential consumers was ended early, as of January 1, 2016 (about a $340 million impact in 2016-17).
    - OESP is a low-income targeted program funded by electricity consumers through the electricity rate base.

1. 8% Rebate to Regulated Price Plan

- The 8% pre-tax rebate would provide a typical residential consumer about an $11 per month benefit on average (about $10, after the impact of RRRP and ICI expansion), exceeding the Budget 2016 $2 per month on average cap and trade commitment.

- This 8% pre-tax rebate is similar to the previous Ontario Clean Energy Benefit (See Appendix for background) which provided a 10% post-tax rebate.
    - The OCEB legislation was set out with an end date, and was subsequently modified to be capped at 3,000 kWh per month for all electricity customers after 8 months of the program.
    - This proposal does not specify any consumption caps nor an end date.
- Due to the lack of a cap, ~~C~~compared to OCEB, this proposal is more generous to the high volume RPP ~~RPP~~ users.
    - OCEB rebate was ~~eligible~~ applicable for up to 36,000 kWh annually (12 months times 3,000 kWh cap per month) while this proposal would be ~~is~~ **more generous for those consuming more than 50,850 kWh** annually.
    - Furthermore, highest volume users in this proposal would receive **up to 392% more** than under the OCEB program.
- Unclear why any proposals for a cap would be any more complex or onerous to LDCs than prior OCEB cap (instituted beginning September 2012 to termination of OCEB program in December 2015).

    - ~~o~~
- Blanket reduction in electricity prices for all users irrespective of consumption amounts hamper efforts to conserve electricity, and mutes TOU price signals.
- ~~Removal of HST (a broad tax) to one particular product distorts and shifts consumption to that area.~~

Commented [SK4]: 36000*0.113/0.08 = 50,850

36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate
0.08 – pre-tax effective rebate (8%)

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36000*0.113 = 4068 [OCEB effective rebated consumption]

Max under proposal: 250,000
pre-tax effective rebate: 0.08
Proposal's effective rebated consumption: 250,000*0.08 = 20,000

(20,000-4068)/4068 = **3.9164**

Commented [SK6]: This is a general/classic economic comment on the preference of broad consumption taxes vs taxes for particular items.
TPD might have a better way to communicate this, if applicable.

- [Businesses that fall under the Regulated Price Plan pay little to no HST due to the Input Tax Credit. The 8% reduction can be deemed a windfall for these users.]
- While eligibility is intended to align with OCEB consumers, there exist a set of consumers not covered by the RPP (eg. ~~Those~~ those on retail contracts – See Appendix) which were OCEB eligible.
    - o Unclear if those other OCEB eligible consumers are also eligible for the 8% rebate.

2. Expanding ICI Eligibility to customers above 1MW in all sectors

- Not all users with demand above 1MW will be in a position to take full advantage of the ICI expansion (eg. inability to load shift during peaks).~~Previous expansion of ICI eligibility from 5MW to 3MW users in selected sectors provided those industrial users between 3MW and 5MW the option to enroll in the ICI program~~
    - ~~o~~
    - ~~o Unclear if this initiative is a similar 'opt-in' proposal or a mandatory enrollment such as the initial ICI program for 5MW customers~~

3. Updating Rural ~~and~~ or Remote Rate Protection

- According to ENERGY, the RRRP is a $175M program with the majority of program funding ($125.5M) to Hydro One's lowest-density 'R2' customers
- Unclear why ~~who the remaining $49.5M is directed towards, nor whether the expended RRRP program would accommodate these customers~~customers on RRRP who are not Hydro One's R2 customers are not also targeted for this benefit.
- ~~Unclear whether the RRRP would be indexed or trued up on a regularly basis per one of the options ENERGY's FP deck.~~

4. ~~Redirecting proceed recycling to Commercial and Industrial~~Greenhouse Gas Reduction Account (GGRA)

- ~~Unclear on the mechanism of how these proceeds will be directed to Commercial and Industrial users.~~
- ~~According to the ENERGY deck the GGRA allocated $120M to average residential consumers, $170M to commercial and $40M to industrial consumers.~~ Deck implies $60M in savings from 8% Rebate for the RPP consumers.
    - ~~o~~ Unclear, how the redirected amount $60M ($120M-$60M) will be allocated to commercial and industrial users.
    - o A fiscal offset to the initiative would materialize only if the $60M is diverted to in-plan initiatives.

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IV. Cabinet Committee Discussion Summary

n/a

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Requested program base	261	1,006	1,004
Total fiscal impact (draw from c-funds)	261	1,006	1,004

VI. Performance Measures

[To estimate the impact of the program, ~~and~~ the savings provided to the various consumers, and any potential for adjustments to the program, information should be provided from ~~the~~ LDCs on consumption profiles and rebate amounts, particularly those affected by the 8% rebate on ~~the~~ Regulated Price Plan Consumers.]

Name of analyst:	Shajee Kathirgamanathan (416-325-1402)
Date:	September 6, 2016
Branch / Division:	Electricity Finance Branch / Corporate and Electricity Finance Division

APPENDIX A: PROPOSED ~~C~~POLICY~~ABINET~~ MINUTE

[WORK IN PROGRESS, WAITING ON ENERGY'S FINAL SUBMISSION]

CABINET AGREED THAT:

1. THE MINISTRY OF ENERGY (ENERGY), WITH SUPPORT FROM THE MINISTRY OF FINANCE (MOF), SHALL PREPARE LEGISLATION THAT WOULD PROVIDE AN EIGHT PERCENT (8%) REBATE ON THE PRE-TAX COST OF ELECTRICITY FOR THE FOLLOWING CLASSES OF CONSUMERS:
   A. ALL CONSUMERS ELIGIBLE TO BE BILLED UNDER THE ONTARIO ENERGY BOARD'S REGULATED PRICE PLAN; AND
   B. ANY OTHER CONSUMERS WHO WERE ELIGIBLE FOR FINANCIAL ASSISTANCE UNDER THE *ONTARIO CLEAN ENERGY BENEFIT ACT, 2010* (OCEBA) DURING THE PERIOD THAT PROGRAM WAS IN PLACE.

2. THE LEGISLATION SHALL BE GENERALLY MODELLED UPON THE OCEBA, AND WOULD INCLUDE THE FOLLOWING ELEMENTS:
   A. THE REBATE WOULD BE AVAILABLE STARTING JANUARY 1, 2017 AND BEFORE SUCH DATE AS MAY BE PRESCRIBED;
   B. THE REBATE WOULD NOT BE SUBJECT TO A CAP UNLESS A CAP IS PRESCRIBED;
   C. THE LEGISLATION WOULD SPECIFY THE TYPES OF COSTS TO WHICH THE REBATE WOULD OR WOULD NOT BE APPLIED, WITH AUTHORITY TO MAKE CHANGES BY REGULATION;
   D. THE LEGISLATION WOULD ADDRESS INVOICING REQUIREMENTS, INCLUDING AUTHORITY TO PRESCRIBE HOW THE REBATE IS TO APPEAR ON CONSUMER ELECTRICITY BILLS;
   E. THE LEGISLATION WOULD INCLUDE AUTHORITY TO PRESCRIBE THE WAY IN WHICH THE REBATE IS TO BE FLOWED THROUGH TO CONSUMERS, AND THE WAY IN WHICH ELECTRICITY VENDORS PROVIDING THE REBATE ARE TO BE REIMBURSED;
   F. THE LEGISLATION WOULD INCLUDE RECORD-KEEPING REQUIREMENTS FOR ELECTRICITY VENDORS AND ANY OTHER PRESCRIBED PERSONS; AND
   G. THE LEGISLATION WOULD INCLUDE INSPECTION POWERS FOR INSPECTORS APPOINTED BY THE MINISTER OF FINANCE, INCLUDING POWERS RELATED TO RECOVERY OF OVERPAYMENTS.
3. ENERGY AMEND O. REG. 429/04 (ADJUSTMENTS UNDER SECTION 25.33 OF THE ACT) MADE UNDER THE ELECTRICITY ACT, 1998 TO EXPAND ELIGIBILITY FOR CLASS A CONSUMERS AND CLASS A MARKET PARTICIPANTS UNDER THE INDUSTRIAL CONSERVATION INITIATIVE (ICI) TO ALL ELECTRICITY CONSUMERS AND MARKET PARTICIPANTS WITH A PEAK DEMAND ABOVE AN AVERAGE OF ONE MEGAWATT (1MW) WITH NO SECTORAL RESTRICTIONS ON PARTICIPATION.
4. ENERGY AMEND O. REG 442/01 (RURAL OR REMOTE ELECTRICITY RATE PROTECTION) MADE UNDER THE ONTARIO ENERGY BOARD ACT, 1998 TO INCREASE THE TOTAL AMOUNT OF RATE PROTECTION AVAILABLE TO LOW DENSITY HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE RATE PROTECTION PROGRAM BY $110 MILLION, EFFECTIVE JANUARY 1, 2017.
5. ENERGY CONSIDER AND, IF APPROPRIATE, UTILIZE A MECHANISM TO PERIODICALLY ADJUST THE TOTAL ANNUAL AMOUNT OF RATE PROTECTION AVAILABLE TO HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE ELECTRICITY RATE PROTECTION REGULATION / PROGRAM, EFFECTIVE JANUARY 1, 2018.

6. ENERGY TO RECYCLE UP TO AN AVERAGE OF $270 MILLION OF CAP AND TRADE AUCTION PROCEEDS FROM THE GREENHOUSE GAS REDUCTION ACCOUNT PER YEAR OVER THE FIRST COMPLIANCE PERIOD (2017-2020) TO COMMERCIAL AND INDUSTRIAL ELECTRICITY CONSUMERS.
7. ENERGY AND MOF TO WORK WITH CABINET OFFICE (CO) AND PREMIER'S OFFICE (PO) ON COMMUNICATIONS PLAN.

APPENDIX B: BACKGROUND – ONTARIO CLEAN ENERGY BENEFIT

- OCEB was in effect from 2011 to 2015, and provided residential, farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax.
    - Effective September 2012 electricity consumption eligible for the 10 per cent benefit was capped at the first 3,000 kWh of electricity consumed per month.
- OCEB helped Ontario families through the transition to a more reliable and cleaner electricity system, with the monthly cap balancing the fiscal implications of providing electricity relief.
- OCEB costs totalled $1,006 million in 2013-14 and $1,078 million in 2014-15, with a projected cost for 2015-16 of $860 million (for the 9 months remaining in the program).

Eligible Consumers	
Categories Listed in Legislation (coincides with categories eligible for RPP)	
Residential	• a dwelling • a property within the meaning of the Condominium Act, 1998 • a residential complex, within the meaning of the Residential Tenancies Act, 2006 • a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the Co-operative Corporations Act
Farms	• carries on a business that is a farming business for the purposes of the Farm Registration and Farm Organizations Funding Act, 1993, and • holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act
Demand for electricity of 50 kW or less, or consumes not more than 250,000 kWh annually	Would include small business, smaller broader- public-sector entities, and other small users.
Special Cases (not eligible for RPP, but eligible for OCEB)	
Consumers On Retail Contracts	Includes consumers with existing retail contracts and those who sign them during the duration of the program.
Cornwall Electric and Hydro One Remote Communities Inc.	Included since they are licensed distributors.
Other Consumers Prescribed by Regulation	10 First Nations remote unlicensed distributors have been added by regulation.
Exclusions	
Generators	Generation station service and the microFIT distribution service charge are excluded in legislation.

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CABINET BRIEFING NOTE

Committee:	Cabinet
Meeting Date:	September 14, 2016
Ministry:	ENERGY
Last reviewed by:	**Tracking to:** Cabinet – September 14, 2016

[BASED ON DRAFT CABINET SUBMISSION]

SUBMISSION TITLE:	Electricity Price Mitigation

I. REQUEST/DECISION REQUIRED:

- The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These measure include:

  1. Provide a pre-tax 8% rebate to Regulated Price Plan (RPP) consumers;
  2. Expanding the Industrial Conservation Initiative (ICI) eligibility to customers above 1MW in all sectors;
  3. Updating Rural or Remote Rate Protection (RRRP);
  4. Recycle cap and trade proceeds to commercial and industrial electricity consumers to provide a modest reduction in rates.

  ~~Using cap and trade proceeds to ensure industrial and commercial consumers are not negatively impacted by cap and trade. Balance of proceeds intended for electricity relief through the Climate Change Action Plan could provide some fiscal offsets (to be confirmed by Energy).~~

- [Approve in principle an expenditure increase estimated at $261M [estimate subject to refinement from ENERGY] in 2016-17 for the Electricity Price Mitigation, offset from the Treasury Board Contingency Fund.]

Commented [JK1]: This seems very broad with no limit to the amount of C&T proceeds to be used.

Commented [SK22R1]: Updated to be consistent with revised deck.

The Minute specifies $270M, so there is a limit for this request.

Commented [JK3]: Finance?

Commented [SK24R3]: From old deck. Deleted.

Commented [SK25]: Unclear if this is necessary for the cabinet note as the TB/MBC note may be worried more on fiscal implications.

II. KEY POINTS:

Context

Electricity costs have increased as the province has made investments in clean energy generation and modernized electricity infrastructure. Electricity bills are expected to continue to increase as more renewable energy projects come online.

As part of the 2016 Budget, the government committed to mitigating electricity cost impacts that were anticipated from the cap and trade program. The Climate Change Action Plan (CCAP) included up to $1.32B over 4 years to help keep electricity rates affordable for residential and industrial consumers. This included a commitment to provide a modest benefit of up to $2 per month, on average, to residential consumers.

The Ontario Clean Energy Benefit (OCEB) expired December 31, 2015, as part of the originally planned, five-year legislated program put in place as a broad-based, transitional measure to a

cleaner electricity system. OCEB was also put in place following the implementation of the Harmonised Sales Tax (HST). Unlike the previous provincial Retail Sales Tax (RST), the HST (and GST) included electricity in the taxable base. With the end of OCEB, the government ended the electricity Debt Retirement Charge (DRC) on residential users earlier than planned, as of January 1, 2016, and also put in place the low-income targeted Ontario Electricity Support Program (OESP).

In order to achieve the CCAP commitment and additional price mitigation, the Ministry of Energy has developed price mitigation options that consider tax-based levers, cap and trade proceeds, and shifting costs within the rate-base.

Proposal

	Measure	Targeted Recipients	Impact (annually)	
			Fiscal	Rate Base
1.	8% Rebate to Regulated Price Plan	Residential, small business, small farms and other small users	$1B	-
2.	Expanding ICI eligibility to customers above 1MW in all sectors	Intermediate and large-sized industrial, commercial and institutional consumers above 1MW in all sectors	-	$47M/ $82M*
3.	Updating Rural or Remote Rate Protection	Residents in rural or remote locations: Hydro One's lowest-density R2 customers.	-	$110M
4.	Redirecting cap and trade proceeds recycling ~~to commercial and industrial; and~~ provide fiscal offsets to the 8% rebate	Commercial and industrial electricity customers	-$60M**	-

*Short-term/Long-term rate base impact, where short term is one year after expanded eligibility takes place and long-term is expected impact once new customers have time to change behavior.
**To meet the Budget 2016 commitment, the Climate Change Action Plan (CCAP) committed $1.3B from the Greenhouse Gas Reduction Account (GGRA) or about $330M annually. Current proposal will require $60M less or $270M annually. Assumes the $60M is diverted to in-plan initiatives.

- ENERGY provided the following overview of bill impacts:

Regulated Price Plan (Residential)*		Class B (Commercial)	Class A (Industrial)	
Average (750 kWh/month)	Rural** (1000 kWh/month)		Existing	New
-$10/month (-6%)	-$45/month (-20%)	-$1/MWh (-1%)	-$1/MWh (-1%)	Up to -$52/MWh (-34%)

Note: The impact of cap and trade would not be added to electricity bills until 2017 and impact of ICI would not be added until 2018. All impacts included here for illustrative purposes
* ENERGY did not provide the monthly impact for other Regulated Price Plan not classified as Residential (eg. farms, small businesses) that would benefit from the 8% Rebate to Regulated Price Plan.
** Rural customers refers to those Hydro One customers eligible to receive RRRP (R2 rate class customers)

Tab x

1. **8% Rebate to Regulated Price Plan (RPP)**
   - An 8% rebate on the pre-tax portion for Regulated Price Plan (RPP) consumers would be equal to the provincial portion of HST and funded by the tax base.
   - The $1 billion figure is a 2017 to 2020 calendar year average of cost estimates developed by Ministry of Energy staff, as follows:

$ millions	**2017**	**2018**	**2019**	**2020**
	1,003	1,014	975	1,049
Avg. 2017-20	1,010			

   - On a fiscal year basis, the above estimates become:

$ millions	**2016-17**	**2017-18**	**2018-19**	**2019-20**
	261	1,006	1,004	994
3-Year Avg.	1,001			

   - Ministry staff are in the process of developing a refined estimate of the cost.
   - The rebate would appear directly on bills. As such, Local Distribution Companies (LDC) would be the delivery mechanism for the rebate.
     - While non-Regulated Price Plan consumers would not see a benefit from the 8% rebate under this option, all industrial and commercial consumers would receive proceeds recycling through the Greenhouse Gas Reduction Account (GGRA).
     - Commercial and industrial consumers would also continue to receive input tax credits and Public Service Bodies would continue to receive PSB rebates.
   - New legislation would be required and closely mirror the Ontario Clean Energy Benefit (OCEB) Act, 2010. More details further below.
   - On-bill rebate delivery would likely require adjustments to Local Distribution Company (LDC) billing systems, which could impact delivery costs and timelines.
   - In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
     - One option to address any timing concerns is to allow LDCs to provide retroactive payments if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.
   - The rebate would not be directly linked to HST.

2. **Expanding ICI Eligibility to customers above 1MW in all sectors**
   - Lower threshold for participation in ICI to 1 MW and remove sectoral restrictions.
   - Most newly eligible ICI participants who choose to opt-in to the program would be able to reduce their electricity costs substantially. All other consumers would see a relatively small increase in their bills.
   - Expanding the ICI will reduce electricity peak demand by incenting more consumers to lower their electricity demand during peak periods (80MW in the short term and 165 MW in the long term)
   - Bill savings to new participants up to 21% in the short term and up to 34% long-term.

- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
    - Companies that would become eligible under such an expansion include Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.
- Class B consumers would have a collective increase in the Global Adjustment of $47M in the short term and $87M in the long term from this initiative.
- Residential consumers would see an average cost increase of $0.42/month in the short term and $0.74/month in the long term.

3. Updating Rural or Remote Rate Protection

- RRRP funding supporting Hydro One R2 (rural) customers capped at current levels since 2004.
- The current program provides a monthly subsidy of a about $32/month.
- Proposal will provide an additional $110 million in support to approximately 329,000 R2 customers to $235 million annually.
- Proposal will increase the subsidy by about $28/month and equalize R2 bills with Hydro One R1 (medium) density customers at 1,000 kWh.
- All residential consumers would see an average cost increase of about $0.60/month.
- ENERGY is considering options to periodically adjust the amount of rate protection eg. indexed at inflation or “trued up” on a regular basis.

4. Redirect Cap and Trade Proceeds Recycling ~~Redirecting proceed recycling to Commercial and Industrial~~Greenhouse Gas Reduction Account (GGRA)

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers.
- Ontario’s Climate Change Action Plan (CCAP) includes up to $1.32 billion over 4 years to help keep electricity rates affordable for residential and industrial consumers.
- The GGRA allocated $120M to average residential consumers, $170M to commercial and $40M to industrial consumers.
- The 8% rebate to the Regulated Price Plan consumers fulfills the commitment to reduce residential rates by $2/month.
    - Proposal would lead to savings of the $120M in GGRA proceeds previously allocated to residential consumers, and help offset the fiscal impact of the 8% rebate to the Regulated Price Plan consumers.
- To provide price mitigation to commercial and industrial electricity consumers, ENERGY is proposing to direct an additional $60M of cap and trade auction proceeds to industrial and commercial consumers not in the RPP to mitigate impacts.
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III. KEY CONSIDERATIONS

- Due to the nature of the ICI Global Adjustment mechanism and cost recovery of the RRRP, the rate base proposal (#2 and #3), while benefiting the targeted recipients, would **come at a cost to all other electricity rate payers in Ontario**.
- This request does not align with the 2016 Budget fiscal plan and there are no proposed offsets.
- Other price mitigation measures introduced following the implementation of the HST, as well as the end of OCEB, would continue.
    - Both the energy portion of the Ontario Energy and Property Tax Credit (OEPTC) and NOEC were introduced/ enhanced following the introduction of the HST and have a significant annual fiscal cost (totalling about $500 million annually).
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1. 8% Rebate to Regulated Price Plan

- The 8% pre-tax rebate would provide a typical residential consumer about an $11 per month benefit on average (about $10, after the impact of RRRP and ICI expansion), exceeding the Budget 2016 $2 per month on average cap and trade commitment.

- This 8% pre-tax rebate is similar to the previous Ontario Clean Energy Benefit (See Appendix for background) which provided a 10% post-tax rebate.
    - The OCEB legislation was set out with an end date, and was subsequently modified to be capped at 3,000 kWh per month for all electricity customers after 8 months of the program.
    - This proposal does not specify any consumption caps nor an end date.
- Due to the lack of a cap, compared to OCEB, this proposal is more generous to the high volume RPP users.
    - OCEB rebate was applicable for up to 36,000 kWh annually (12 months times 3,000 kWh cap per month) while this proposal would be **more generous for those consuming more than 50,850 kWh** annually.
    - Furthermore, highest volume users in this proposal would receive **up to 392% more** than under the OCEB program.
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2. **Expanding ICI Eligibility to customers above 1MW in all sectors**
   - Not all users with demand above 1MW will be in a position to take full advantage of the ICI expansion (eg. inability to load shift during peaks).
   - Consumers in the commercial sector currently do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
     - Expansion of the ICI can give commercial consumers who are able to shift demand during peak hours, the opportunity to opt-in and benefit.

3. **Updating Rural or Remote Rate Protection**
   - According to ENERGY, the RRRP is a $175M program with the majority of program funding ($125.5M) to Hydro One's lowest-density 'R2' customers
   - Unclear why customers on RRRP who are not Hydro One's R2 customers are not also targeted for this benefit.

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Commented [SK210R9]: This is a general statement.

Slide 32 in the 20160902_330pm deck.

IV. Cabinet Committee Discussion Summary

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Name of analyst:	Shajee Kathirgamanathan (416-325-1402)
Date:	September 6, 2016
Branch / Division:	Electricity Finance Branch / Corporate and Electricity Finance Division

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   D. THE LEGISLATION WOULD ADDRESS INVOICING REQUIREMENTS, INCLUDING AUTHORITY TO PRESCRIBE HOW THE REBATE IS TO APPEAR ON CONSUMER ELECTRICITY BILLS;
   E. THE LEGISLATION WOULD INCLUDE AUTHORITY TO PRESCRIBE THE WAY IN WHICH THE REBATE IS TO BE FLOWED THROUGH TO CONSUMERS, AND THE WAY IN WHICH ELECTRICITY VENDORS PROVIDING THE REBATE ARE TO BE REIMBURSED;
   F. THE LEGISLATION WOULD INCLUDE RECORD-KEEPING REQUIREMENTS FOR ELECTRICITY VENDORS AND ANY OTHER PRESCRIBED PERSONS; AND
   G. THE LEGISLATION WOULD INCLUDE INSPECTION POWERS FOR INSPECTORS APPOINTED BY THE MINISTER OF FINANCE, INCLUDING POWERS RELATED TO RECOVERY OF OVERPAYMENTS.
3. ENERGY AMEND O. REG. 429/04 (ADJUSTMENTS UNDER SECTION 25.33 OF THE ACT) MADE UNDER THE ELECTRICITY ACT, 1998 TO EXPAND ELIGIBILITY FOR CLASS A CONSUMERS AND CLASS A MARKET PARTICIPANTS UNDER THE INDUSTRIAL CONSERVATION INITIATIVE (ICI) TO ALL ELECTRICITY CONSUMERS AND MARKET PARTICIPANTS WITH A PEAK DEMAND ABOVE AN AVERAGE OF ONE MEGAWATT (1MW) WITH NO SECTORAL RESTRICTIONS ON PARTICIPATION.
4. ENERGY AMEND O. REG 442/01 (RURAL OR REMOTE ELECTRICITY RATE PROTECTION) MADE UNDER THE ONTARIO ENERGY BOARD ACT, 1998 TO INCREASE THE TOTAL AMOUNT OF RATE PROTECTION AVAILABLE TO LOW DENSITY HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE RATE PROTECTION PROGRAM BY $110 MILLION, EFFECTIVE JANUARY 1, 2017.
5. ENERGY CONSIDER AND, IF APPROPRIATE, UTILIZE A MECHANISM TO PERIODICALLY ADJUST THE TOTAL ANNUAL AMOUNT OF RATE PROTECTION AVAILABLE TO HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE ELECTRICITY RATE PROTECTION REGULATION / PROGRAM, EFFECTIVE JANUARY 1, 2018.

6. ENERGY TO RECYCLE UP TO AN AVERAGE OF $270 MILLION OF CAP AND TRADE AUCTION PROCEEDS FROM THE GREENHOUSE GAS REDUCTION ACCOUNT PER YEAR OVER THE FIRST COMPLIANCE PERIOD (2017-2020) TO COMMERCIAL AND INDUSTRIAL ELECTRICITY CONSUMERS.
7. ENERGY AND MOF TO WORK WITH CABINET OFFICE (CO) AND PREMIER'S OFFICE (PO) ON COMMUNICATIONS PLAN.

APPENDIX B: BACKGROUND – ONTARIO CLEAN ENERGY BENEFIT

- OCEB was in effect from 2011 to 2015, and provided residential, farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax.
    - Effective September 2012 electricity consumption eligible for the 10 per cent benefit was capped at the first 3,000 kWh of electricity consumed per month.
- OCEB helped Ontario families through the transition to a more reliable and cleaner electricity system, with the monthly cap balancing the fiscal implications of providing electricity relief.
- OCEB costs totalled $1,006 million in 2013-14 and $1,078 million in 2014-15, with a projected cost for 2015-16 of $860 million (for the 9 months remaining in the program).

Eligible Consumers	
Categories Listed in Legislation (coincides with categories eligible for RPP)	
Residential	• a dwelling • a property within the meaning of the Condominium Act, 1998 • a residential complex, within the meaning of the Residential Tenancies Act, 2006 • a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the Co-operative Corporations Act
Farms	• carries on a business that is a farming business for the purposes of the Farm Registration and Farm Organizations Funding Act, 1993, and • holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act
Demand for electricity of 50 kW or less, or consumes not more than 250,000 kWh annually	Would include small business, smaller broader- public-sector entities, and other small users.
Special Cases (not eligible for RPP, but eligible for OCEB)	
Consumers On Retail Contracts	Includes consumers with existing retail contracts and those who sign them during the duration of the program.
Cornwall Electric and Hydro One Remote Communities Inc.	Included since they are licensed distributors.
Other Consumers Prescribed by Regulation	10 First Nations remote unlicensed distributors have been added by regulation.
Exclusions	
Generators	Generation station service and the microFIT distribution service charge are excluded in legislation.

Tab x

CABINET BRIEFING NOTE

Committee:	Cabinet
Meeting Date:	September 14, 2016
Ministry:	ENERGY
Last reviewed by:	**Tracking to:** Cabinet – September 14, 2016

[BASED ON DRAFT CABINET SUBMISSION]

SUBMISSION TITLE:	Electricity Price Mitigation

I. REQUEST/DECISION REQUIRED:

- The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These measure include:

  1. Provide a pre-tax 8% rebate to Regulated Price Plan (RPP) consumers;
  2. Expanding the Industrial Conservation Initiative (ICI) eligibility to customers above 1MW in all sectors;
  3. Updating Rural or Remote Rate Protection (RRRP);
  4. Recycle cap and trade proceeds to commercial and industrial electricity consumers to provide a modest 1% reduction in rates, with modest savings from proceeds intended for electricity relief through the Climate Change Action Plan to provide fiscal offsets.

  ~~Using cap and trade proceeds to ensure industrial and commercial consumers are not negatively impacted by cap and trade. Balance of proceeds intended for electricity relief through the Climate Change Action Plan could provide some fiscal offsets (to be confirmed by Energy).~~

- [Approve in principle an expenditure increase estimated at $261M [estimate subject to refinement from ENERGY] in 2016-17 for the Electricity Price Mitigation, offset from the Treasury Board Contingency Fund.]

II. KEY POINTS:

Context

Electricity costs have increased as the province has made investments in clean energy generation and modernized electricity infrastructure. Electricity bills are expected to continue to increase as more renewable energy projects come online.

As part of the 2016 Budget, the government committed to mitigating electricity cost impacts that were anticipated from the cap and trade program. The Climate Change Action Plan (CCAP) included up to $1.32B over 4 years to help keep electricity rates affordable for residential and industrial consumers. This included a commitment to provide a modest benefit of up to $2 per month, on average, to residential consumers.

Commented [JK1]: This seems very broad with no limit to the amount of C&T proceeds to be used.

Commented [SK22R1]: Updated to be consistent with revised deck.

The Minute specifies $270M, so there is a limit for this request.

Commented [JK3]: Finance?

Commented [SK24R3]: From old deck. Deleted.

Commented [SK25]: Unclear if this is necessary for the cabinet note as the TB/MBC note may be worried more on fiscal implications.

Tab x

The Ontario Clean Energy Benefit (OCEB) expired December 31, 2015, as part of the originally planned, five-year legislated program put in place as a broad-based, transitional measure to a cleaner electricity system. OCEB was also put in place following the implementation of the Harmonised Sales Tax (HST). Unlike the previous provincial Retail Sales Tax (RST), the HST (and GST) included electricity in the taxable base. With the end of OCEB, the government ended the electricity Debt Retirement Charge (DRC) on residential users earlier than planned, as of January 1, 2016, and also put in place the low-income targeted Ontario Electricity Support Program (OESP).

In order to achieve the CCAP commitment and additional price mitigation, the Ministry of Energy has developed price mitigation options that consider tax-based levers, cap and trade proceeds, and shifting costs within the rate-base.

Proposal

	Measure	Targeted Recipients	Impact (annually)	
			Fiscal	Rate Base
1.	8% Rebate to Regulated Price Plan	Residential, small business, small farms and other small users	$1B	-
2.	Expanding ICI eligibility to customers above 1MW in all sectors	Intermediate and large-sized industrial, commercial and institutional consumers above 1MW in all sectors	-	$47M/ $82M*
3.	Updating Rural or Remote Rate Protection	Residents in rural or remote locations: Hydro One's lowest-density R2 customers.	-	$110M
4.	Redirecting cap and trade proceeds recycling ~~to commercial and industrial; and~~ provide fiscal offsets to the 8% rebate	Commercial and industrial electricity customers	-$60M**	-

*Short-term/Long-term rate base impact, where short term is one year after expanded eligibility takes place and long-term is expected impact once new customers have time to change behavior.
**To meet the Budget 2016 commitment, the Climate Change Action Plan (CCAP) committed $1.3B from the Greenhouse Gas Reduction Account (GGRA) or about $330M annually. Current proposal will require $60M less or $270M annually. Assumes the $60M is diverted to in-plan initiatives.

- ENERGY provided the following overview of bill impacts:

Regulated Price Plan (Residential)*		Class B (Commercial)	Class A (Industrial)	
Average (750 kWh/month)	Rural** (1000 kWh/month)		Existing	New
-$10/month (-6%)	-$45/month (-20%)	-$1/MWh (-1%)	-$1/MWh (-1%)	Up to -$52/MWh (-34%)

Note: The impact of cap and trade would not be added to electricity bills until 2017 and impact of ICI would not be added until 2018. All impacts included here for illustrative purposes
* ENERGY did not provide the monthly impact for other Regulated Price Plan not classified as Residential (eg. farms, small businesses) that would benefit from the 8% Rebate to Regulated Price Plan.
** Rural customers refers to those Hydro One customers eligible to receive RRRP (R2 rate class customers)

Tab x

1. **8% Rebate to Regulated Price Plan (RPP)**
   - An 8% rebate on the pre-tax portion for Regulated Price Plan (RPP) consumers would be equal to the provincial portion of HST and funded by the tax base.
   - The $1 billion figure is a 2017 to 2020 calendar year average of cost estimates developed by Ministry of Energy staff, as follows:

$ millions	**2017**	**2018**	**2019**	**2020**
	1,003	1,014	975	1,049
Avg. 2017-20	1,010			

   - On a fiscal year basis, the above estimates become:

$ millions	**2016-17**	**2017-18**	**2018-19**	**2019-20**
	261	1,006	1,004	994
3-Year Avg.	1,001			

   - Ministry staff are in the process of developing a refined estimate of the cost.

   - The rebate would appear directly on bills. As such, Local Distribution Companies (LDC) would be the delivery mechanism for the rebate.
     - While non-Regulated Price Plan consumers would not see a benefit from the 8% rebate under this option, all industrial and commercial consumers would receive proceeds recycling through the Greenhouse Gas Reduction Account (GGRA).
     - Commercial and industrial consumers would also continue to receive input tax credits and Public Service Bodies would continue to receive PSB rebates.
   - New legislation would be required and closely mirror the Ontario Clean Energy Benefit (OCEB) Act, 2010. More details further below.
   - On-bill rebate delivery would likely require adjustments to Local Distribution Company (LDC) billing systems, which could impact delivery costs and timelines.
   - In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
     - One option to address any timing concerns is to allow LDCs to provide retroactive payments if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.
   - The rebate would not be directly linked to HST.

2. **Expanding ICI Eligibility to customers above 1MW in all sectors**
   - Lower threshold for participation in ICI to 1 MW and remove sectoral restrictions.
   - Most newly eligible ICI participants who choose to opt-in to the program would be able to reduce their electricity costs substantially. All other consumers would see a relatively small increase in their bills.
   - Expanding the ICI will reduce electricity peak demand by incenting more consumers to lower their electricity demand during peak periods (80MW in the short term and 165 MW in the long term)
   - Bill savings to new participants up to 21% in the short term and up to 34% long-term.

- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
    - Companies that would become eligible under such an expansion include Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.
- Class B consumers would have a collective increase in the Global Adjustment of $47M in the short term and $87M in the long term from this initiative.
- Residential consumers would see an average cost increase of $0.42/month in the short term and $0.74/month in the long term.

3. Updating Rural or Remote Rate Protection

- RRRP funding supporting Hydro One R2 (rural) customers capped at current levels since 2004.
- The current program provides a monthly subsidy of a about $32/month.
- Proposal will provide an additional $110 million in support to approximately 329,000 R2 customers to $235 million annually.
- Proposal will increase the subsidy by about $28/month and equalize R2 bills with Hydro One R1 (medium) density customers at 1,000 kWh.
- All residential consumers would see an average cost increase of about $0.60/month.
- ENERGY is considering options to periodically adjust the amount of rate protection eg. indexed at inflation or “trued up” on a regular basis.

4. Redirect Cap and Trade Proceeds Recycling ~~Redirecting proceed recycling to Commercial and Industrial~~Greenhouse Gas Reduction Account (GGRA)

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers.
- Ontario’s Climate Change Action Plan (CCAP) includes up to $1.32 billion over 4 years to help keep electricity rates affordable for residential and industrial consumers.
- The GGRA allocated $120M to average residential consumers, $170M to commercial and $40M to industrial consumers.
- The 8% rebate to the Regulated Price Plan consumers fulfills the commitment to reduce residential rates by $2/month.
    - Proposal would lead to savings of the $120M in GGRA proceeds previously allocated to residential consumers, and help offset the fiscal impact of the 8% rebate to the Regulated Price Plan consumers.
- To provide price mitigation to commercial and industrial electricity consumers, ENERGY is proposing to direct an additional $60M of cap and trade auction proceeds to industrial and commercial consumers not in the RPP to mitigate impacts.
- The current proposal would require an estimated $60 million less per year, or $0.24 billion less over the first compliance period.

III. KEY CONSIDERATIONS

- Due to the nature of the ICI Global Adjustment mechanism and cost recovery of the RRRP, the rate base proposal (#2 and #3), while benefiting the targeted recipients, would **come at a cost to all other electricity rate payers in Ontario**.
- This request does not align with the 2016 Budget fiscal plan and there are no proposed offsets.
- Other price mitigation measures introduced following the implementation of the HST, as well as the end of OCEB, would continue.
    - Both the energy portion of the Ontario Energy and Property Tax Credit (OEPTC) and NOEC were introduced/ enhanced following the introduction of the HST and have a significant annual fiscal cost (totalling about $500 million annually).
    - The DRC on residential consumers was ended early, as of January 1, 2016 (about a $340 million impact in 2016-17).
    - OESP is a low-income targeted program funded by electricity consumers through the electricity rate base.

1. 8% Rebate to Regulated Price Plan

- The 8% pre-tax rebate would provide a typical residential consumer about an $11 per month benefit on average (about $10, after the impact of RRRP and ICI expansion), exceeding the Budget 2016 $2 per month on average cap and trade commitment.

- This 8% pre-tax rebate is similar to the previous Ontario Clean Energy Benefit (See Appendix for background) which provided a 10% post-tax rebate.
    - The OCEB legislation was set out with an end date, and was subsequently modified to be capped at 3,000 kWh per month for all electricity customers after 8 months of the program.
    - This proposal does not specify any consumption caps nor an end date.
- Due to the lack of a cap, compared to OCEB, this proposal is more generous to the high volume RPP users.
    - OCEB rebate was applicable for up to 36,000 kWh annually (12 months times 3,000 kWh cap per month) while this proposal would be **more generous for those consuming more than 50,850 kWh** annually.
    - Furthermore, highest volume users in this proposal would receive **up to 392% more** than under the OCEB program.
- Unclear why any proposals for a cap would be any more complex or onerous to LDCs than prior OCEB cap (instituted beginning September 2012 to termination of OCEB program in December 2015).

- Blanket reduction in electricity prices for all users irrespective of consumption amounts hamper efforts to conserve electricity, and mutes TOU price signals.
- [Businesses that fall under the Regulated Price Plan pay little to no HST due to the Input Tax Credit. The 8% reduction can be deemed a windfall for these users.]

Commented [SK6]: 36000*0.113/0.08 = 50,850

36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate
0.08 – pre-tax effective rebate (8%)

Commented [SK27]: 36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate

36000*0.113 = 4068 [OCEB effective rebated consumption]

Max under proposal: 250,000
pre-tax effective rebate: 0.08
Proposal's effective rebated consumption: 250,000*0.08 = 20,000

(20,000-4068)/4068 = **3.9164**

Commented [SK8]: Will need to verify

- ~~While eligibility is intended to align with OCEB consumers, there exist a set of consumers not covered by the RPP (eg. those on retail contracts – See Appendix) which were OCEB eligible.~~
  - ~~Unclear if those other OCEB eligible consumers are also eligible for the 8% rebate.~~

2. **Expanding ICI Eligibility to customers above 1MW in all sectors**
   - Not all users with demand above 1MW will be in a position to take full advantage of the ICI expansion (eg. inability to load shift during peaks).
   - Consumers in the commercial sector currently do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
     - Expansion of the ICI can give commercial consumers who are able to shift demand during peak hours, the opportunity to opt-in and benefit.

3. **Updating Rural or Remote Rate Protection**
   - According to ENERGY, the RRRP is a $175M program with the majority of program funding ($125.5M) to Hydro One's lowest-density 'R2' customers
   - Unclear why customers on RRRP who are not Hydro One's R2 customers are not also targeted for this benefit.

4. **Redirect Cap and Trade Proceeds Recycling~~Redirecting proceed recycling to Commercial and Industrial~~~~Greenhouse Gas Reduction Account (GGRA)~~**
   - Deck implies $60M in savings from 8% Rebate for the RPP consumers.
     - Unclear, how the redirected amount $60M ($120M-$60M) will be allocated to commercial and industrial users.
     - A fiscal offset to the initiative would materialize only if the $60M is diverted to in-plan initiatives.

Commented [JK9]: Which sectors? There was a deck recently that showed the composition of GA in the bills paid by sectors. I believe it was one of the price mitigation decks.

Commented [SK210R9]: This is a general statement.

Slide 32 in the 20160902_330pm deck.

IV. Cabinet Committee Discussion Summary

n/a

V. Financial Summary

$ Millions	2016-17	2017-18	2018-19
Initiative cost requested	261	1,006	1,004
Requested program base	261	1,006	1,004
Total fiscal impact (draw from c-funds)	261	1,006	1,004

VI. Performance Measures

[To estimate the impact of the program, the savings provided to the various consumers, and any potential for adjustments to the program, information should be provided from LDCs on consumption profiles and rebate amounts, particularly those affected by the 8% rebate on Regulated Price Plan Consumers.]

Name of analyst:	Shajee Kathirgamanathan (416-325-1402)
Date:	September 6, 2016
Branch / Division:	Electricity Finance Branch / Corporate and Electricity Finance Division

APPENDIX A: PROPOSED POLICY MINUTE

[WORK IN PROGRESS, WAITING ON ENERGY'S FINAL SUBMISSION]

CABINET AGREED THAT:

1. THE MINISTRY OF ENERGY (ENERGY), WITH SUPPORT FROM THE MINISTRY OF FINANCE (MOF), SHALL PREPARE LEGISLATION THAT WOULD PROVIDE AN EIGHT PERCENT (8%) REBATE ON THE PRE-TAX COST OF ELECTRICITY FOR THE FOLLOWING CLASSES OF CONSUMERS:
   A. ALL CONSUMERS ELIGIBLE TO BE BILLED UNDER THE ONTARIO ENERGY BOARD'S REGULATED PRICE PLAN; AND
   B. ANY OTHER CONSUMERS WHO WERE ELIGIBLE FOR FINANCIAL ASSISTANCE UNDER THE *ONTARIO CLEAN ENERGY BENEFIT ACT, 2010* (OCEBA) DURING THE PERIOD THAT PROGRAM WAS IN PLACE.

2. THE LEGISLATION SHALL BE GENERALLY MODELLED UPON THE OCEBA, AND WOULD INCLUDE THE FOLLOWING ELEMENTS:
   A. THE REBATE WOULD BE AVAILABLE STARTING JANUARY 1, 2017 AND BEFORE SUCH DATE AS MAY BE PRESCRIBED;
   B. THE REBATE WOULD NOT BE SUBJECT TO A CAP UNLESS A CAP IS PRESCRIBED;
   C. THE LEGISLATION WOULD SPECIFY THE TYPES OF COSTS TO WHICH THE REBATE WOULD OR WOULD NOT BE APPLIED, WITH AUTHORITY TO MAKE CHANGES BY REGULATION;
   D. THE LEGISLATION WOULD ADDRESS INVOICING REQUIREMENTS, INCLUDING AUTHORITY TO PRESCRIBE HOW THE REBATE IS TO APPEAR ON CONSUMER ELECTRICITY BILLS;
   E. THE LEGISLATION WOULD INCLUDE AUTHORITY TO PRESCRIBE THE WAY IN WHICH THE REBATE IS TO BE FLOWED THROUGH TO CONSUMERS, AND THE WAY IN WHICH ELECTRICITY VENDORS PROVIDING THE REBATE ARE TO BE REIMBURSED;
   F. THE LEGISLATION WOULD INCLUDE RECORD-KEEPING REQUIREMENTS FOR ELECTRICITY VENDORS AND ANY OTHER PRESCRIBED PERSONS; AND
   G. THE LEGISLATION WOULD INCLUDE INSPECTION POWERS FOR INSPECTORS APPOINTED BY THE MINISTER OF FINANCE, INCLUDING POWERS RELATED TO RECOVERY OF OVERPAYMENTS.
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5. ENERGY CONSIDER AND, IF APPROPRIATE, UTILIZE A MECHANISM TO PERIODICALLY ADJUST THE TOTAL ANNUAL AMOUNT OF RATE PROTECTION AVAILABLE TO HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE ELECTRICITY RATE PROTECTION REGULATION / PROGRAM, EFFECTIVE JANUARY 1, 2018.

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Committee:	Cabinet
Meeting Date:	September 14, 2016
Ministry:	ENERGY
Last reviewed by:	**Tracking to:** Cabinet – September 14, 2016

[BASED ON DRAFT CABINET SUBMISSION]

SUBMISSION TITLE:	Electricity Price Mitigation

I. REQUEST/DECISION REQUIRED:

- The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These measure include:

    1. Provide a pre-tax 8% rebate to Regulated Price Plan (RPP) consumers;
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    3. Updating Rural or Remote Rate Protection (RRRP);
    4. Recycle cap and trade proceeds to commercial and industrial electricity consumers to provide a modest 1% reduction in rates, with modest savings from proceeds intended for electricity relief through the Climate Change Action Plan to provide fiscal offsets.

- [Approve in principle an expenditure increase estimated at $261M [estimate subject to refinement from ENERGY] in 2016-17 for the Electricity Price Mitigation, offset from the Treasury Board Contingency Fund.]

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II. KEY POINTS:

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Electricity costs have increased as the province has made investments in clean energy generation and modernized electricity infrastructure. Electricity bills are expected to continue to increase as more renewable energy projects come online.

As part of the 2016 Budget, the government committed to mitigating electricity cost impacts that were anticipated from the cap and trade program. The Climate Change Action Plan (CCAP) included up to $1.32B over 4 years to help keep electricity rates affordable for residential and industrial consumers. This included a commitment to provide a modest benefit of up to $2 per month, on average, to residential consumers.

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ended the electricity Debt Retirement Charge (DRC) on residential users earlier than planned, as of January 1, 2016, and also put in place the low-income targeted Ontario Electricity Support Program (OESP).

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4.	Redirecting cap and trade proceeds recycling; provide fiscal offsets to the 8% rebate	Commercial and industrial electricity customers	-$60M**	-

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** Rural customers refers to those Hydro One customers eligible to receive RRRP (R2 rate class customers)

1. 8% Rebate to Regulated Price Plan (RPP)

- An 8% rebate on the pre-tax portion for Regulated Price Plan (RPP) consumers would be equal to the provincial portion of HST and funded by the tax base.

- The $1 billion figure is a 2017 to 2020 calendar year average of cost estimates developed by Ministry of Energy staff, as follows:

$ millions	**2017**	**2018**	**2019**	**2020**
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Avg. 2017-20	1,010			

- On a fiscal year basis, the above estimates become:

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	261	1,006	1,004	994
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    - Commercial and industrial consumers would also continue to receive input tax credits and Public Service Bodies would continue to receive PSB rebates.
- New legislation would be required and closely mirror the Ontario Clean Energy Benefit (OCEB) Act, 2010. More details further below.
- On-bill rebate delivery would likely require adjustments to Local Distribution Company (LDC) billing systems, which could impact delivery costs and timelines.
- In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
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- The rebate would not be directly linked to HST.

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- Lower threshold for participation in ICI to 1 MW and remove sectoral restrictions.
- Most newly eligible ICI participants who choose to opt-in to the program would be able to reduce their electricity costs substantially. All other consumers would see a relatively small increase in their bills.
- Expanding the ICI will reduce electricity peak demand by incenting more consumers to lower their electricity demand during peak periods (80MW in the short term and 165 MW in the long term)
- Bill savings to new participants up to 21% in the short term and up to 34% long-term.
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
    - Companies that would become eligible under such an expansion include Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.

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- Residential consumers would see an average cost increase of $0.42/month in the short term and $0.74/month in the long term.

3. Updating Rural or Remote Rate Protection

- RRRP funding supporting Hydro One R2 (rural) customers capped at current levels since 2004.
- The current program provides a monthly subsidy of a about $32/month.
- Proposal will provide an additional $110 million in support to approximately 329,000 R2 customers to $235 million annually.
- Proposal will increase the subsidy by about $28/month and equalize R2 bills with Hydro One R1 (medium) density customers at 1,000 kWh.
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- ENERGY is considering options to periodically adjust the amount of rate protection eg. indexed at inflation or “trued up” on a regular basis.

4. Redirect Cap and Trade Proceeds Recycling

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers.
- Ontario’s Climate Change Action Plan (CCAP) includes up to $1.32 billion over 4 years to help keep electricity rates affordable for residential and industrial consumers.
- The GGRA allocated $120M to average residential consumers, $170M to commercial and $40M to industrial consumers.
- The 8% rebate to the Regulated Price Plan consumers fulfills the commitment to reduce residential rates by $2/month.
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- To provide price mitigation to commercial and industrial electricity consumers, ENERGY is proposing to direct an additional $60M of cap and trade auction proceeds to industrial and commercial consumers not in the RPP to mitigate impacts.
- The current proposal would require an estimated $60 million less per year, or $0.24 billion less over the first compliance period.

III. KEY CONSIDERATIONS

- Due to the nature of the ICI Global Adjustment mechanism and cost recovery of the RRRP, the rate base proposal (#2 and #3), while benefiting the targeted recipients, would **come at a cost to all other electricity rate payers in Ontario**.
- This request does not align with the 2016 Budget fiscal plan and there are no proposed offsets.
- Other price mitigation measures introduced following the implementation of the HST, as well as the end of OCEB, would continue.
    - Both the energy portion of the Ontario Energy and Property Tax Credit (OEPTC) and NOEC were introduced/ enhanced following the introduction of the HST and have a significant annual fiscal cost (totalling about $500 million annually).
    - The DRC on residential consumers was ended early, as of January 1, 2016 (about a $340 million impact in 2016-17).
    - OESP is a low-income targeted program funded by electricity consumers through the electricity rate base.

1. 8% Rebate to Regulated Price Plan

- The 8% pre-tax rebate would provide a typical residential consumer about an $11 per month benefit on average (about $10, after the impact of RRRP and ICI expansion), exceeding the Budget 2016 $2 per month on average cap and trade commitment.

- This 8% pre-tax rebate is similar to the previous Ontario Clean Energy Benefit (See Appendix for background) which provided a 10% post-tax rebate.
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    - OCEB rebate was applicable for up to 36,000 kWh annually (12 months times 3,000 kWh cap per month) while this proposal would be **more generous for those consuming more than 50,850 kWh** annually.
    - Furthermore, highest volume users in this proposal would receive **up to 392% more** than under the OCEB program.
- Unclear why any proposals for a cap would be any more complex or onerous to LDCs than prior OCEB cap (instituted beginning September 2012 to termination of OCEB program in December 2015).

- Blanket reduction in electricity prices for all users irrespective of consumption amounts hamper efforts to conserve electricity, and mutes TOU price signals.
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36000 – max OCEB eligible consumption
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0.08 – pre-tax effective rebate (8%)

Commented [SK23]: 36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate

36000*0.113 = 4068 [OCEB effective rebated consumption]

Max under proposal: 250,000
pre-tax effective rebate: 0.08
Proposal's effective rebated consumption: 250,000*0.08 = 20,000

(20,000-4068)/4068 = **3.9164**

Commented [SK4]: Will need to verify

2. Expanding ICI Eligibility to customers above 1MW in all sectors

- Not all users with demand above 1MW will be in a position to take full advantage of the ICI expansion (eg. inability to load shift during peaks).
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- According to ENERGY, the RRRP is a $175M program with the majority of program funding ($125.5M) to Hydro One's lowest-density 'R2' customers
- Unclear why customers on RRRP who are not Hydro One's R2 customers are not also targeted for this benefit.

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- Deck implies $60M in savings from 8% Rebate for the RPP consumers.
    - Unclear, how the redirected amount $60M ($120M-$60M) will be allocated to commercial and industrial users.
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Slide 32 in the 20160902_330pm deck.

IV. Cabinet Committee Discussion Summary

n/a

V. Financial Summary

$ Millions	2016-17	2017-18	2018-19
Initiative cost requested	261	1,006	1,004
Requested program base	261	1,006	1,004
Total fiscal impact (draw from c-funds)	261	1,006	1,004

VI. Performance Measures

[To estimate the impact of the program, the savings provided to the various consumers, and any potential for adjustments to the program, information should be provided from LDCs on consumption profiles and rebate amounts, particularly those affected by the 8% rebate on Regulated Price Plan Consumers.]

Name of analyst:	Shajee Kathirgamanathan (416-325-1402)
Date:	September 6, 2016
Branch / Division:	Electricity Finance Branch / Corporate and Electricity Finance Division

APPENDIX A: PROPOSED POLICY MINUTE

[WORK IN PROGRESS, WAITING ON ENERGY'S FINAL SUBMISSION]

CABINET AGREED THAT:

1. THE MINISTRY OF ENERGY (ENERGY), WITH SUPPORT FROM THE MINISTRY OF FINANCE (MOF), SHALL PREPARE LEGISLATION THAT WOULD PROVIDE AN EIGHT PERCENT (8%) REBATE ON THE PRE-TAX COST OF ELECTRICITY FOR THE FOLLOWING CLASSES OF CONSUMERS:
   A. ALL CONSUMERS ELIGIBLE TO BE BILLED UNDER THE ONTARIO ENERGY BOARD'S REGULATED PRICE PLAN; AND
   B. ANY OTHER CONSUMERS WHO WERE ELIGIBLE FOR FINANCIAL ASSISTANCE UNDER THE *ONTARIO CLEAN ENERGY BENEFIT ACT, 2010* (OCEBA) DURING THE PERIOD THAT PROGRAM WAS IN PLACE.

2. THE LEGISLATION SHALL BE GENERALLY MODELLED UPON THE OCEBA, AND WOULD INCLUDE THE FOLLOWING ELEMENTS:
   A. THE REBATE WOULD BE AVAILABLE STARTING JANUARY 1, 2017 AND BEFORE SUCH DATE AS MAY BE PRESCRIBED;
   B. THE REBATE WOULD NOT BE SUBJECT TO A CAP UNLESS A CAP IS PRESCRIBED;
   C. THE LEGISLATION WOULD SPECIFY THE TYPES OF COSTS TO WHICH THE REBATE WOULD OR WOULD NOT BE APPLIED, WITH AUTHORITY TO MAKE CHANGES BY REGULATION;
   D. THE LEGISLATION WOULD ADDRESS INVOICING REQUIREMENTS, INCLUDING AUTHORITY TO PRESCRIBE HOW THE REBATE IS TO APPEAR ON CONSUMER ELECTRICITY BILLS;
   E. THE LEGISLATION WOULD INCLUDE AUTHORITY TO PRESCRIBE THE WAY IN WHICH THE REBATE IS TO BE FLOWED THROUGH TO CONSUMERS, AND THE WAY IN WHICH ELECTRICITY VENDORS PROVIDING THE REBATE ARE TO BE REIMBURSED;
   F. THE LEGISLATION WOULD INCLUDE RECORD-KEEPING REQUIREMENTS FOR ELECTRICITY VENDORS AND ANY OTHER PRESCRIBED PERSONS; AND
   G. THE LEGISLATION WOULD INCLUDE INSPECTION POWERS FOR INSPECTORS APPOINTED BY THE MINISTER OF FINANCE, INCLUDING POWERS RELATED TO RECOVERY OF OVERPAYMENTS.
3. ENERGY AMEND O. REG. 429/04 (ADJUSTMENTS UNDER SECTION 25.33 OF THE ACT) MADE UNDER THE ELECTRICITY ACT, 1998 TO EXPAND ELIGIBILITY FOR CLASS A CONSUMERS AND CLASS A MARKET PARTICIPANTS UNDER THE INDUSTRIAL CONSERVATION INITIATIVE (ICI) TO ALL ELECTRICITY CONSUMERS AND MARKET PARTICIPANTS WITH A PEAK DEMAND ABOVE AN AVERAGE OF ONE MEGAWATT (1MW) WITH NO SECTORAL RESTRICTIONS ON PARTICIPATION.
4. ENERGY AMEND O. REG 442/01 (RURAL OR REMOTE ELECTRICITY RATE PROTECTION) MADE UNDER THE ONTARIO ENERGY BOARD ACT, 1998 TO INCREASE THE TOTAL AMOUNT OF RATE PROTECTION AVAILABLE TO LOW DENSITY HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE RATE PROTECTION PROGRAM BY $110 MILLION, EFFECTIVE JANUARY 1, 2017.
5. ENERGY CONSIDER AND, IF APPROPRIATE, UTILIZE A MECHANISM TO PERIODICALLY ADJUST THE TOTAL ANNUAL AMOUNT OF RATE PROTECTION AVAILABLE TO HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE ELECTRICITY RATE PROTECTION REGULATION / PROGRAM, EFFECTIVE JANUARY 1, 2018.

6. ENERGY TO RECYCLE UP TO AN AVERAGE OF $270 MILLION OF CAP AND TRADE AUCTION PROCEEDS FROM THE GREENHOUSE GAS REDUCTION ACCOUNT PER YEAR OVER THE FIRST COMPLIANCE PERIOD (2017-2020) TO COMMERCIAL AND INDUSTRIAL ELECTRICITY CONSUMERS.
7. ENERGY AND MOF TO WORK WITH CABINET OFFICE (CO) AND PREMIER'S OFFICE (PO) ON COMMUNICATIONS PLAN.

APPENDIX B: BACKGROUND – ONTARIO CLEAN ENERGY BENEFIT

- OCEB was in effect from 2011 to 2015, and provided residential, farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax.
    - Effective September 2012 electricity consumption eligible for the 10 per cent benefit was capped at the first 3,000 kWh of electricity consumed per month.
- OCEB helped Ontario families through the transition to a more reliable and cleaner electricity system, with the monthly cap balancing the fiscal implications of providing electricity relief.
- OCEB costs totalled $1,006 million in 2013-14 and $1,078 million in 2014-15, with a projected cost for 2015-16 of $860 million (for the 9 months remaining in the program).

Eligible Consumers	
Categories Listed in Legislation (coincides with categories eligible for RPP)	
Residential	• a dwelling • a property within the meaning of the Condominium Act, 1998 • a residential complex, within the meaning of the Residential Tenancies Act, 2006 • a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the Co-operative Corporations Act
Farms	• carries on a business that is a farming business for the purposes of the Farm Registration and Farm Organizations Funding Act, 1993, and • holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act
Demand for electricity of 50 kW or less, or consumes not more than 250,000 kWh annually	Would include small business, smaller broader- public-sector entities, and other small users.
Special Cases (not eligible for RPP, but eligible for OCEB)	
Consumers On Retail Contracts	Includes consumers with existing retail contracts and those who sign them during the duration of the program.
Cornwall Electric and Hydro One Remote Communities Inc.	Included since they are licensed distributors.
Other Consumers Prescribed by Regulation	10 First Nations remote unlicensed distributors have been added by regulation.
Exclusions	
Generators	Generation station service and the microFIT distribution service charge are excluded in legislation.

Tab x

CABINET BRIEFING NOTE

Committee:	Cabinet
Meeting Date:	September 14, 2016
Ministry:	ENERGY
Last reviewed by:	**Tracking to:** Cabinet – September 14, 2016

[BASED ON DRAFT CABINET SUBMISSION]

SUBMISSION TITLE:	Electricity Price Mitigation

I. REQUEST/DECISION REQUIRED:

- The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These measure include:

    1. Provide a pre-tax 8% rebate to Regulated Price Plan (RPP) consumers;
    2. Expanding the Industrial Conservation Initiative (ICI) eligibility to customers above 1MW in all sectors;
    3. Updating Rural or Remote Rate Protection (RRRP);
    4. Recycle cap and trade proceeds to commercial and industrial electricity consumers to provide a modest 1% reduction in rates, with modest savings from proceeds intended for electricity relief through the Climate Change Action Plan to provide fiscal offsets.

- [Approve in principle an expenditure increase estimated at $261M [estimate subject to refinement from ENERGY] in 2016-17 for the Electricity Price Mitigation, offset from the Treasury Board Contingency Fund.]

Commented [SK21]: Unclear if this is necessary for the cabinet note as the TB/MBC note may be worried more on fiscal implications.

Commented [RK2]: Remove from here, but should be part of fiscal impact part of the note.

II. KEY POINTS:

Context

Electricity costs have increased as the province has made investments in clean energy generation and modernized electricity infrastructure. Electricity bills are expected to continue to increase as more renewable energy projects come online.

As part of the 2016 Budget, the government committed to mitigating electricity cost impacts that were anticipated from the cap and trade program. The Climate Change Action Plan (CCAP) included up to $1.32B over 4 years to help keep electricity rates affordable for residential and industrial consumers. This included a commitment to provide a modest benefit of up to $2 per month, on average, to residential consumers.

The Ontario Clean Energy Benefit (OCEB) expired December 31, 2015, as part of the originally planned, five-year legislated program put in place as a broad-based, transitional measure to a cleaner electricity system. OCEB was also put in place following the implementation of the Harmonised Sales Tax (HST). Unlike the previous provincial Retail Sales Tax (RST), the HST (and GST) included electricity in the taxable base. With the end of OCEB, the government

ended the electricity Debt Retirement Charge (DRC) on residential users earlier than planned, as of January 1, 2016, and also put in place the low-income targeted Ontario Electricity Support Program (OESP).

In order to achieve the CCAP commitment and additional price mitigation, the Ministry of Energy has developed price mitigation options that consider tax-based levers, cap and trade proceeds, and shifting costs within the rate-base.

Proposal

	Measure	Targeted Recipients	Impact (annually)	
			Fiscal	Rate Base
1.	8% Rebate to Regulated Price Plan	Residential, small business, small farms and other small users	$1B	-
2.	Expanding ICI eligibility to customers above 1MW in all sectors	Intermediate and large-sized industrial, commercial and institutional consumers above 1MW in all sectors	-	$47M/ $82M*
3.	Updating Rural or Remote Rate Protection	Residents in rural or remote locations: Hydro One's lowest-density R2 customers.	-	$110M
4.	Redirecting cap and trade proceeds recycling: • As part of the original CCAP policy, $330M of the cap & trade proceeds was to be recycled for electricity price mitigation for residential and non-residential users. • Under this proposal, $270 M would be used to mitigate non-residential users; • provides $60M for potential fiscal offsets to the 8% rebate	Commercial and industrial electricity customers	-($60M)**	-

*Short-term/Long-term rate base impact, where short term is one year after expanded eligibility takes place and long-term is expected impact once new customers have time to change behavior.
**To meet the Budget 2016 commitment, the Climate Change Action Plan (CCAP) committed $1.3B from the Greenhouse Gas Reduction Account (GGRA) or about $330M annually. Current proposal will require $60M less or $270M annually. Assumes the $60M is diverted to in-plan initiatives.

- ENERGY provided the following overview of bill impacts:

Regulated Price Plan (Residential)*		Class B (Commercial)	Class A (Industrial)	
Average (750 kWh/month)	Rural** (1000 kWh/month)		Existing	New
-$10/month (-6%)	-$45/month (-20%)	-$1/MWh (-1%)	-$1/MWh (-1%)	Up to -$52/MWh (-34%)

Note: The impact of cap and trade would not be added to electricity bills until 2017 and impact of ICI would not be added until 2018. All impacts included here for illustrative purposes
* ENERGY did not provide the monthly impact for other Regulated Price Plan not classified as Residential (eg.

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farms, small businesses) that would benefit from the 8% Rebate to Regulated Price Plan.
** Rural customers refers to those Hydro One customers eligible to receive RRRP (R2 rate class customers)

1. 8% Rebate to Regulated Price Plan (RPP)

- An 8% rebate on the pre-tax portion for Regulated Price Plan (RPP) consumers would be equal to the provincial portion of HST and funded by the tax base.
- The $1 billion figure is a 2017 to 2020 calendar year average of cost estimates developed by Ministry of Energy staff, as follows:

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III. KEY CONSIDERATIONS

- This request on an 8% rebate does not align with the 2016 Budget fiscal plan and there are no proposed offsets.
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Total fiscal impact (draw from c-funds)	261	1,006	1,004

VI. Performance Measures

[To estimate the impact of the program, the savings provided to the various consumers, and any potential for adjustments to the program, information should be provided from LDCs on consumption profiles and rebate amounts, particularly those affected by the 8% rebate on Regulated Price Plan Consumers.]

Name of analyst:	Shajee Kathirgamanathan (416-325-1402)
Date:	September 6, 2016
Branch / Division:	Electricity Finance Branch / Corporate and Electricity Finance Division

APPENDIX A: PROPOSED POLICY MINUTE

[WORK IN PROGRESS, WAITING ON ENERGY'S FINAL SUBMISSION]

CABINET AGREED THAT:

1. THE MINISTRY OF ENERGY (ENERGY), WITH SUPPORT FROM THE MINISTRY OF FINANCE (MOF), SHALL PREPARE LEGISLATION THAT WOULD PROVIDE AN EIGHT PERCENT (8%) REBATE ON THE PRE-TAX COST OF ELECTRICITY FOR THE FOLLOWING CLASSES OF CONSUMERS:
   A. ALL CONSUMERS ELIGIBLE TO BE BILLED UNDER THE ONTARIO ENERGY BOARD'S REGULATED PRICE PLAN; AND
   B. ANY OTHER CONSUMERS WHO WERE ELIGIBLE FOR FINANCIAL ASSISTANCE UNDER THE *ONTARIO CLEAN ENERGY BENEFIT ACT, 2010* (OCEBA) DURING THE PERIOD THAT PROGRAM WAS IN PLACE.

2. THE LEGISLATION SHALL BE GENERALLY MODELLED UPON THE OCEBA, AND WOULD INCLUDE THE FOLLOWING ELEMENTS:
   A. THE REBATE WOULD BE AVAILABLE STARTING JANUARY 1, 2017 AND BEFORE SUCH DATE AS MAY BE PRESCRIBED;
   B. THE REBATE WOULD NOT BE SUBJECT TO A CAP UNLESS A CAP IS PRESCRIBED;
   C. THE LEGISLATION WOULD SPECIFY THE TYPES OF COSTS TO WHICH THE REBATE WOULD OR WOULD NOT BE APPLIED, WITH AUTHORITY TO MAKE CHANGES BY REGULATION;
   D. THE LEGISLATION WOULD ADDRESS INVOICING REQUIREMENTS, INCLUDING AUTHORITY TO PRESCRIBE HOW THE REBATE IS TO APPEAR ON CONSUMER ELECTRICITY BILLS;
   E. THE LEGISLATION WOULD INCLUDE AUTHORITY TO PRESCRIBE THE WAY IN WHICH THE REBATE IS TO BE FLOWED THROUGH TO CONSUMERS, AND THE WAY IN WHICH ELECTRICITY VENDORS PROVIDING THE REBATE ARE TO BE REIMBURSED;
   F. THE LEGISLATION WOULD INCLUDE RECORD-KEEPING REQUIREMENTS FOR ELECTRICITY VENDORS AND ANY OTHER PRESCRIBED PERSONS; AND
   G. THE LEGISLATION WOULD INCLUDE INSPECTION POWERS FOR INSPECTORS APPOINTED BY THE MINISTER OF FINANCE, INCLUDING POWERS RELATED TO RECOVERY OF OVERPAYMENTS.
3. ENERGY AMEND O. REG. 429/04 (ADJUSTMENTS UNDER SECTION 25.33 OF THE ACT) MADE UNDER THE ELECTRICITY ACT, 1998 TO EXPAND ELIGIBILITY FOR CLASS A CONSUMERS AND CLASS A MARKET PARTICIPANTS UNDER THE INDUSTRIAL CONSERVATION INITIATIVE (ICI) TO ALL ELECTRICITY CONSUMERS AND MARKET PARTICIPANTS WITH A PEAK DEMAND ABOVE AN AVERAGE OF ONE MEGAWATT (1MW) WITH NO SECTORAL RESTRICTIONS ON PARTICIPATION.
4. ENERGY AMEND O. REG 442/01 (RURAL OR REMOTE ELECTRICITY RATE PROTECTION) MADE UNDER THE ONTARIO ENERGY BOARD ACT, 1998 TO INCREASE THE TOTAL AMOUNT OF RATE PROTECTION AVAILABLE TO LOW DENSITY HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE RATE PROTECTION PROGRAM BY $110 MILLION, EFFECTIVE JANUARY 1, 2017.
5. ENERGY CONSIDER AND, IF APPROPRIATE, UTILIZE A MECHANISM TO PERIODICALLY ADJUST THE TOTAL ANNUAL AMOUNT OF RATE PROTECTION AVAILABLE TO HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE ELECTRICITY RATE PROTECTION REGULATION / PROGRAM, EFFECTIVE JANUARY 1, 2018.

6. ENERGY TO RECYCLE UP TO AN AVERAGE OF $270 MILLION OF CAP AND TRADE AUCTION PROCEEDS FROM THE GREENHOUSE GAS REDUCTION ACCOUNT PER YEAR OVER THE FIRST COMPLIANCE PERIOD (2017-2020) TO COMMERCIAL AND INDUSTRIAL ELECTRICITY CONSUMERS.
7. ENERGY AND MOF TO WORK WITH CABINET OFFICE (CO) AND PREMIER'S OFFICE (PO) ON COMMUNICATIONS PLAN.

APPENDIX B: BACKGROUND – ONTARIO CLEAN ENERGY BENEFIT

- OCEB was in effect from 2011 to 2015, and provided residential, farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax.
    - Effective September 2012 electricity consumption eligible for the 10 per cent benefit was capped at the first 3,000 kWh of electricity consumed per month.
- OCEB helped Ontario families through the transition to a more reliable and cleaner electricity system, with the monthly cap balancing the fiscal implications of providing electricity relief.
- OCEB costs totalled $1,006 million in 2013-14 and $1,078 million in 2014-15, with a projected cost for 2015-16 of $860 million (for the 9 months remaining in the program).

Eligible Consumers	
Categories Listed in Legislation (coincides with categories eligible for RPP)	
Residential	• a dwelling • a property within the meaning of the Condominium Act, 1998 • a residential complex, within the meaning of the Residential Tenancies Act, 2006 • a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the Co-operative Corporations Act
Farms	• carries on a business that is a farming business for the purposes of the Farm Registration and Farm Organizations Funding Act, 1993, and • holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act
Demand for electricity of 50 kW or less, or consumes not more than 250,000 kWh annually	Would include small business, smaller broader- public-sector entities, and other small users.
Special Cases (not eligible for RPP, but eligible for OCEB)	
Consumers On Retail Contracts	Includes consumers with existing retail contracts and those who sign them during the duration of the program.
Cornwall Electric and Hydro One Remote Communities Inc.	Included since they are licensed distributors.
Other Consumers Prescribed by Regulation	10 First Nations remote unlicensed distributors have been added by regulation.
Exclusions	
Generators	Generation station service and the microFIT distribution service charge are excluded in legislation.

Tab x

CABINET BRIEFING NOTE

Committee:	Cabinet
Meeting Date:	September ~~14~~13, 2016
Ministry:	ENERGY
Last reviewed by:	**Tracking to:** Cabinet – September ~~14~~13, 2016

[BASED ON DRAFT CABINET SUBMISSION]

SUBMISSION TITLE: Electricity Price Mitigation (Ontario Rebate for Electricity Consumers)

I. REQUEST/DECISION REQUIRED:

The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These measure include:

1.a. Provide an ~~pre-tax~~ 8% rebate equal to the provincial portion of HST to consumers eligible for the ~~to~~ Regulated Price Plan (RPP) ~~consumers~~;

1.b. Updating Rural or Remote Rate Protection (RRRP);

2.a. Expanding the Industrial Conservation Initiative (ICI) eligibility to customers above 1MW in all sectors;

~~2.b.~~ Recycle cap and trade proceeds to commercial and industrial electricity consumers to provide a modest 1% reduction in rates, with modest savings from proceeds intended for electricity relief through the Climate Change Action Plan to provide fiscal offsets.

~~2.c.~~

~~2.d.~~2.b. ~~[Approve in principle an expenditure increase estimated at $261M [estimate subject to refinement from ENERGY] in 2016-17 for the Electricity Price Mitigation, offset from the Treasury Board Contingency Fund.]~~

Commented [SK21]: Re-ordered/numbered to align with revised deck.

Commented [SK22]: Unclear if this is necessary for the cabinet note as the TB/MBC note may be worried more on fiscal implications.

Commented [RK3]: Remove from here, but should be part of fiscal impact part of the note.

Commented [SK24R3]: Will do. It's in the financial summary section.

II. KEY POINTS:

Context

Electricity costs have increased as the province has made investments in clean energy generation and modernized electricity infrastructure. Electricity bills are expected to continue to increase as more renewable energy projects come online.

As part of the 2016 Budget, the government committed to mitigating electricity cost impacts that were anticipated from the cap and trade program. The Climate Change Action Plan (CCAP) included up to $1.32B over 4 years to help keep electricity rates affordable for residential and industrial consumers. This included a commitment to provide a modest benefit of up to $2 per month, on average, to residential consumers.

The Ontario Clean Energy Benefit (OCEB) expired December 31, 2015, as part of the originally planned, five-year legislated program put in place as a broad-based, transitional measure to a

cleaner electricity system. OCEB was also put in place following the implementation of the Harmonised Sales Tax (HST). Unlike the previous provincial Retail Sales Tax (RST), the HST (and GST) included electricity in the taxable base. With the end of OCEB, the government ended the electricity Debt Retirement Charge (DRC) on residential users earlier than planned, as of January 1, 2016, and also put in place the low-income targeted Ontario Electricity Support Program (OESP).

In order to achieve the CCAP commitment and additional price mitigation, the Ministry of Energy has developed price mitigation options that consider tax-based levers, cap and trade proceeds, and shifting costs within the rate-base.

Proposal

	Measure	Targeted Recipients	Impact (annually)	
			Fiscal	Rate Base
1.a	8% Rebate to Regulated Price Plan eligible consumers	Residential, small business, small farms and other small users	$1B	-
1.b	Updating Rural or Remote Rate Protection	Residents in rural or remote locations: Hydro One's lowest-density R2 customers.	-	$110M
2.a	Expanding ICI eligibility to customers above 1MW in all sectors	Intermediate and large-sized industrial, commercial and institutional consumers above 1MW in all sectors	-	$47M/ $82M*
2.b	Redirecting cap and trade proceeds recycling: • As part of the original CCAP policy, $330M of the cap & trade proceeds was to be recycled for electricity price mitigation for residential and non-residential users. • Under this proposal, $270 M would be used to mitigate non-residential users • provides $60M for potential fiscal offsets to the 8% rebate	Commercial and industrial electricity customers	($60M)**	-

*Short-term/Long-term rate base impact, where short term is one year after expanded eligibility takes place and long-term is expected impact once new customers have time to change behavior.
**To meet the Budget 2016 commitment, the Climate Change Action Plan (CCAP) committed $1.3B from the Greenhouse Gas Reduction Account (GGRA) or about $330M annually. Current proposal will require $60M less or $270M annually. Assumes the $60M is diverted to in-plan initiatives.

- ENERGY provided the following overview of bill impacts:

Regulated Price Plan (Residential) Impact[1]*		Class B (Commercial)[4]	Class A (Industrial)[4]	
Average[2] (750 kWh/month)	Rural[3]** (1000 kWh/month)		Existing	New

Commented [SK25]: Table below from the latest ENERGY Deck (FPC Major Project Morning of Sept 8).

-$~~10~~11/month (-~~6~~8%)	-$45/month (-20%)	-$1/MWh (-1%)	-$1/MWh (-1%)	Up to -$52/MWh (-34%)

~~Note: The impact of cap and trade would not be added to electricity bills until 2017 and impact of ICI would not be added until 2018. All impacts included here for illustrative purposes~~

1~~*~~. ENERGY did not provide the monthly impact for other Regulated Price Plan not classified as Residential (eg. farms, small businesses) that would benefit from the 8% Rebate to Regulated Price Plan.

2. Regulated Price Plan Impact represents the pre-tax values of 8% rebate and does not include the impact of ICI expansion and RRRP update (total impact of $1.31/month based on 750 kWh/month).

3.~~**~~ Rural customers refers to those Hydro One customers eligible to receive RRRP (R2 rate class customers). Impact shown is pre-tax and does not include the impact of ICI expansion and RRRP update (total impact of $1.74/month based on 1000 kWh/month).

4. The impact of cap and trade would not be added to electricity bills until 2017 and impact of ICI would not be added until 2018.

1.a. 8% Rebate to Regulated Price Plan (RPP)

- An 8% rebate ~~on the pre-tax portion~~ for Regulated Price Plan (RPP) eligible consumers would be equal to the provincial portion of HST and funded by the tax base.
- The $1 billion figure is a 2017 to 2020 calendar year average of cost estimates developed by Ministry of Energy staff, as follows:

$ millions	**2017**	**2018**	**2019**	**2020**
	1,003	1,014	975	1,049
Avg. 2017-20	1,010			

- On a fiscal year basis, the above estimates become:

$ millions	**2016-17**	**2017-18**	**2018-19**	**2019-20**
	261	1,006	1,004	994
3-Year Avg.	1,001			

- Ministry of Energy staff are in the process of developing a refined estimate of the cost.

- The rebate would appear directly on bills. As such, Local Distribution Companies (LDC) would be the delivery mechanism for the rebate.
  - While non-Regulated Price Plan eligible consumers would not see a benefit from the 8% rebate under this option, all industrial and commercial consumers would receive proceeds recycling through the Greenhouse Gas Reduction Account (GGRA).
  - Commercial and industrial consumers would also continue to receive input tax credits and Public Service Bodies would continue to receive PSB rebates.
- New legislation would be required and closely mirror the Ontario Clean Energy Benefit (OCEB) Act, 2010. More details further below.
- On-bill rebate delivery would likely require adjustments to Local Distribution Company (LDC) billing systems, which could impact delivery costs and timelines.
- In the past, LDCs have asked for at least six months' notice when implementing billing system changes.

  - One option to address any timing concerns is to allow LDCs to provide retroactive payments if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.
- The rebate would not be directly linked to HST.

1.b. Updating (Increasing) Rural or Remote Rate Protection

- RRRP funding supporting Hydro One R2 (rural) customers capped at current levels since 2004.
- The current program provides a monthly subsidy of ~~a about~~ $~~32~~31.50/month.
- Proposal will provide an additional $110 million in support to approximately 329,000 R2 customers to $235 million annually.
- Proposal will increase the subsidy by about $28/month and equalize R2 bills with Hydro One R1 (medium) density customers at 1,000 kWh.
- All residential consumers would see an average cost increase of about $0.60/month.
- ENERGY is considering options to periodically adjust the amount of rate protection eg. indexed at inflation or “trued up” on a regular basis.

2.a. Expanding ICI Eligibility to customers above 1MW in all sectors

- Lower threshold for participation in ICI to 1 MW and remove sectoral restrictions.
- Most newly eligible ICI participants who choose to opt-in to the program would be able to reduce their electricity costs substantially. All other consumers would see a relatively small increase in their bills.
- Expanding the ICI will reduce electricity peak demand by incenting more consumers to lower their electricity demand during peak periods (80MW in the short term and 165 MW in the long term)
- Bill savings to new participants up to 21% in the short term and up to 34% long-term.
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
  - Companies that would become eligible under such an expansion include Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.
- Class B consumers would have a collective increase in the Global Adjustment of $47M in the short term and $~~87M~~ 82M in the long term from this initiative.
- Residential consumers would see an average cost increase of $0.42/month in the short term and $0.74/month in the long term.

2.b. Redirect Cap and Trade Proceeds Recycling

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers.
- Ontario’s Climate Change Action Plan (CCAP) includes up to $1.32 billion over 4 years to help keep electricity rates affordable for residential and industrial consumers.
- ~~The GGRA allocated $120M to average residential consumers, $170M to commercial and $40M to industrial consumers.~~

Commented [SK26]: Suggest deletion. This breakdown is not in the latest deck. Furthermore the chart on Slide 21 shows $335M original allocation, not $330M.

Tab x

- The 8% rebate to the Regulated Price Plan consumers fulfills the commitment to reduce residential rates by $2/month.
    - Proposal would lead to savings of the $120M in GGRA proceeds previously allocated to residential consumers, and help offset the fiscal impact of the 8% rebate to the Regulated Price Plan consumers.
- To provide price mitigation to commercial and industrial electricity consumers, ENERGY is proposing to direct an additional $60M of cap and trade auction proceeds to industrial and commercial consumers not in the RPP to mitigate impacts.
- The current proposal would require an estimated $60 million less per year, or $0.24 billion less over the first compliance period.

III. KEY CONSIDERATIONS

- This request ~~on~~for an 8% rebate does not align with the 2016 Budget fiscal plan and there are no proposed offsets.

- Due to the nature of the ICI Global Adjustment mechanism and cost recovery of the RRRP, the rate base proposals (~~##~~21b and ~~#3~~#2a), while benefiting the targeted recipients, would **come at a cost to all other electricity rate payers in Ontario**.

- ~~This request does not align with the 2016 Budget fiscal plan and there are no proposed offsets.~~

- Other price mitigation measures introduced following the implementation of the HST, as well as the end of OCEB, would continue.
    - Both the energy portion of the Ontario Energy and Property Tax Credit (OEPTC) and Northern Ontario Energy Credit (NOEC) were introduced/ enhanced following the introduction of the HST and have a significant annual fiscal cost (totalling about $500 million annually).
    - The DRC on residential consumers was ended early, as of January 1, 2016 (about a $340 million impact in 2016-17).
    - OESP is a low-income targeted program funded by electricity consumers through the electricity rate base.

-

8% Rebate to Regulated Price Plan

- The 8% ~~pre-tax~~ rebate would provide a typical residential consumer about an $11 per month benefit on average (about $10, after the impact of RRRP and ICI expansion), exceeding the Budget 2016 $2 per month on average, cap and trade commitment.

- This 8% ~~pre-tax~~ rebate equal to the provincial portion of HST is similar to the previous Ontario Clean Energy Benefit (See Appendix for background) which provided a 10% post-tax rebate.
- The proposal indicates the Regulated Price Plan consumption amount to be 58TWh [Slide 2 in latest, FPC-Major Projects Deck]. Unclear if this applies to all eligible RPP consumers. A p~~P~~reliminary MOF estimate for consumption ~~for~~under the OCEB program approximated annual OCEB-eligible consumption range of 64-68TWh ~~of annual electricity consumption~~ between September 11 and December 2015. [This would represent about 10-17% more in additional program cost to the current estimate of $1 billion per year.]
- The OCEB legislation was set out with an end date, and was subsequently modified to be capped at 3,000 kWh per month for all electricity customers after 8 months of the program.
    - This proposal does not specify any consumption caps nor an end date.
- Due to the lack of a cap, compared to OCEB, this proposal is more generous to the high volume RPP users.

  - OCEB rebate was applicable for up to 36,000 kWh annually (12 months times 3,000 kWh cap per month) while this proposal would be **more generous for those consuming more than 50,850 kWh** annually.
  - Furthermore, highest volume users in this proposal would receive **up to 392% more** than under the OCEB program.
- Unclear why any proposals for a cap would be any more complex or onerous to LDCs than prior OCEB cap (instituted beginning September 2012 to termination of OCEB program in December 2015). However, cap may affect some types of consumers more than others, such as small businesses, condo dwellers in separately-metered units paying for electricity usage in the common elements, and residential consumers heating with electricity.

- ~~Blanket r~~Reduction in electricity prices for all users irrespective of consumption amounts hamper efforts to conserve electricity, and mutes TOU price signals.
- [Businesses ~~that fall under the Regulated Price Plan~~ pay little to no HST due to the Input Tax Credit. For those businesses eligible for the Regulated Price plan, ~~T~~the 8% reduction can be deemed a windfall ~~for these users~~.]

Updating Rural or Remote Rate Protection

- According to ENERGY, the RRRP is a $175M program with the majority of program funding ($125.5M) to Hydro One's lowest-density 'R2' customers
- ~~Unclear why customers on RRRP who are not Hydro One's R2 customers are not also targeted for this benefit.~~

Expanding ICI Eligibility to customers above 1MW in all sectors

- Not all users with demand above 1MW will be in a position to take full advantage of the ICI expansion (eg. inability to load shift during peaks).
- Consumers in the commercial sector currently do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
  - Expansion of the ICI can give commercial consumers who are able to shift demand during peak hours, the opportunity to opt-in and benefit.

Redirect Cap and Trade Proceeds Recycling

- Deck implies $60M in savings ~~from 8% Rebate for the RPP consumers.~~compared to earlier climate change electricity price mitigation recycling plan.
  - ~~Unclear, how the redirected amount $60M ($120M-$60M) will be allocated to commercial and industrial users.~~
  - A fiscal offset to the initiative would materialize only if the $60M is diverted to in-plan initiatives.

IV. Cabinet Committee Discussion Summary

n/a

Commented [SK7]: 36000*0.113/0.08 = 50,850

36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate
0.08 – pre-tax effective rebate (8%)

Commented [SK28]: 36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate

36000*0.113 = 4068 [OCEB effective rebated consumption]

Max under proposal: 250,000
pre-tax effective rebate: 0.08
Proposal's effective rebated consumption: 250,000*0.08 = 20,000

(20,000-4068)/4068 = **3.9164**

Commented [SK29]: Is this referring to the issue with common elements in condos and how they fall under one bill separate from the units?

Commented [SK10]: Will need to verify

Commented [SK211]: I'm trying to say that there's a portion of RRRP customers who will not receive this benefit.

Is there a reason these other customers are not also getting the expansion?

Commented [JK12]: Which sectors? There was a deck recently that showed the composition of GA in the bills paid by sectors. I believe it was one of the price mitigation decks.

Commented [SK213R12]: This is a general statement.

Slide 32 in the 20160902_330pm deck.

V. Financial Summary

$ Millions	2016-17	2017-18	2018-19
Initiative cost requested	261	1,006	1,004
Requested program base	261	1,006	1,004
Total fiscal impact (draw from c-funds)	261	1,006	1,004

VI. Performance Measures

[To estimate the impact of the program, the savings provided to the various consumers, and any potential for adjustments to the program, information should be provided from LDCs on consumption profiles and rebate amounts, particularly those affected by the 8% rebate on Regulated Price Plan Consumers.]

Name of analyst:	Shajee Kathirgamanathan (416-325-1402)
Date:	September ~~6~~8, 2016
Branch / Division:	Electricity Finance Branch / Corporate and Electricity Finance Division

APPENDIX A: PROPOSED POLICY MINUTE

[WORK IN PROGRESS, WAITING ON ENERGY'S FINAL SUBMISSION]

Cabinet agreed that:

1. ENERGY implement electricity price mitigation for residential, commercial and industrial consumers through the following:

i) Provide a rebate of 8% on the pre-tax cost of electricity for all electricity consumers eligible to be billed under the Ontario Energy Board's Regulated Price Plan (RPP); and any other consumers who would be eligible for RPP if their electricity account was with a licensed distributor.

ii) Increase the total amount of rate protection available to R2 with low density electricity consumers under the Rural or Remote Rate Protection Program (RRRP) by increasing the subsidy by $110 million from its current level of $127 million which has been capped since 2004.

iii) Implement a mechanism to periodically adjust the total annual amount of rate protection available to R2 low density electricity consumers under the RRRP, effective on or after January 1, 2018.

iv) Expanding eligibility for participation in the Industrial Conservation Initiative (ICI) to smaller industrial, institutional and commercial customers by lowering the eligibility threshold to 1 MW and removing restrictions on eligible sectors.

2. ENERGY seek necessary TB/MBC approvals.

3. ENERGY seek approvals for:

i) the proposed *Ontario Rebate for Electricity Consumers Act, 2016* – and any supporting regulations under the proposed *Ontario Rebate for Electricity Consumers Act, 2016*, and with other complementary regulatory amendments and consequential legislative amendments to the *Ontario Energy Board Act, 1998* and the *Ontario Clean Energy Benefit Act, 2010*, subject to the Legislature's approval of the Act, including the following elements:

   i. The rebate would be available starting January 1, 2017;
   ii. The legislation would specify the types of costs to which the rebate would or would not be applied, with authority to make changes by regulation;
   iii. The legislation would address invoicing requirements, including authority to prescribe how the rebate is to appear on consumers electricity bills;
   iv. The legislation would include authority to prescribe the way in which the rebate is to be flowed through to consumers, and the way in which electricity vendors providing the rebate are to be reimbursed;

Commented [SK214]: This was from the Policy Minute. I assume this is the 'Minute' we are waiting for.

v. The legislation would include record-keeping requirements for electricity vendors and other prescribed persons;
vi. The legislation would include inspection powers for inspectors appointed by the minister of Finance, including powers related to the recovery of overpayments.
vii. The legislation would provide for regulation-making authority to establish a limitation period for ceasing payments and reimbursement based on past entitlement. Similar amendments would be provided for the *Ontario Clean Energy Benefit Act, 2010* but would allow the ceasing of all payments and reimbursements after a prescribed date.

4. ENERGY notes the following amendments:

i) Amendments to Ontario Regulation 429/04 (Adjustments Under Section 25.33 of the Act) made under the *Electricity Act, 1998* to lower the Industrial Conservation Initiative (ICI) threshold to 1 megawatt and require electricity consumers and market participants between 1 MW and 5 MW to opt in.

ii) Amendments to Ontario Regulation 442/01 (Rural or Remote Electricity Rate Protection) made under the Ontario Energy Board Act, 1998, to increase support through the Rural and Remote Rate Protection Plan to R2 low density rural electricity customers and provide for a periodic adjustment mechanism.

5. ENERGY work with MOECC to recycle an estimated annual average of $270 million of Cap and Trade auction proceeds from the Greenhouse Gas Reduction Account for non-RPP commercial and industrial electricity consumers over the first compliance period (2017-2020) through a volumetric rebate mechanism.

6. ENERGY and MOF work with Cabinet Office, Premier's office to develop a communications plan.

~~CABINET AGREED THAT:~~

~~1. THE MINISTRY OF ENERGY (ENERGY), WITH SUPPORT FROM THE MINISTRY OF FINANCE (MOF), SHALL PREPARE LEGISLATION THAT WOULD PROVIDE AN EIGHT PERCENT (8%) REBATE ON THE PRE-TAX COST OF ELECTRICITY FOR THE FOLLOWING CLASSES OF CONSUMERS:~~
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F. THE LEGISLATION WOULD INCLUDE RECORD-KEEPING REQUIREMENTS FOR ELECTRICITY VENDORS AND ANY OTHER PRESCRIBED PERSONS; AND
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3. ENERGY AMEND O. REG. 429/04 (ADJUSTMENTS UNDER SECTION 25.33 OF THE ACT) MADE UNDER THE ELECTRICITY ACT, 1998 TO EXPAND ELIGIBILITY FOR CLASS A CONSUMERS AND CLASS A MARKET PARTICIPANTS UNDER THE INDUSTRIAL CONSERVATION INITIATIVE (ICI) TO ALL ELECTRICITY CONSUMERS AND MARKET PARTICIPANTS WITH A PEAK DEMAND ABOVE AN AVERAGE OF ONE MEGAWATT (1MW) WITH NO SECTORAL RESTRICTIONS ON PARTICIPATION.
4. ENERGY AMEND O. REG 442/01 (RURAL OR REMOTE ELECTRICITY RATE PROTECTION) MADE UNDER THE ONTARIO ENERGY BOARD ACT, 1998 TO INCREASE THE TOTAL AMOUNT OF RATE PROTECTION AVAILABLE TO LOW DENSITY HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE RATE PROTECTION PROGRAM BY $110 MILLION, EFFECTIVE JANUARY 1, 2017.
5. ENERGY CONSIDER AND, IF APPROPRIATE, UTILIZE A MECHANISM TO PERIODICALLY ADJUST THE TOTAL ANNUAL AMOUNT OF RATE PROTECTION AVAILABLE TO HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE ELECTRICITY RATE PROTECTION REGULATION / PROGRAM, EFFECTIVE JANUARY 1, 2018.
6. ENERGY TO RECYCLE UP TO AN AVERAGE OF $270 MILLION OF CAP AND TRADE AUCTION PROCEEDS FROM THE GREENHOUSE GAS REDUCTION ACCOUNT PER YEAR OVER THE FIRST COMPLIANCE PERIOD (2017-2020) TO COMMERCIAL AND INDUSTRIAL ELECTRICITY CONSUMERS.
7. ENERGY AND MOF TO WORK WITH CABINET OFFICE (CO) AND PREMIER'S OFFICE (PO) ON COMMUNICATIONS PLAN.

Tab x

APPENDIX B: BACKGROUND – ONTARIO CLEAN ENERGY BENEFIT

- OCEB was in effect from 2011 to 2015, and provided residential, farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax.
    - Effective September 2012 electricity consumption eligible for the 10 per cent benefit was capped at the first 3,000 kWh of electricity consumed per month.
- OCEB helped Ontario families through the transition to a more reliable and cleaner electricity system, with the monthly cap balancing the fiscal implications of providing electricity relief.
- OCEB costs totalled $1,006 million in 2013-14 and $1,078 million in 2014-15, with a projected cost for 2015-16 of $860 million (for the 9 months remaining in the program).

Eligible Consumers	
Categories Listed in Legislation (coincides with categories eligible for RPP)	
Residential	• a dwelling • a property within the meaning of the Condominium Act, 1998 • a residential complex, within the meaning of the Residential Tenancies Act, 2006 • a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the Co-operative Corporations Act
Farms	• carries on a business that is a farming business for the purposes of the Farm Registration and Farm Organizations Funding Act, 1993, and • holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act
Demand for electricity of 50 kW or less, or consumes not more than 250,000 kWh annually	Would include small business, smaller broader- public-sector entities, and other small users.
Special Cases (not eligible for RPP, but eligible for OCEB)	
Consumers On Retail Contracts	Includes consumers with existing retail contracts and those who sign them during the duration of the program.
Cornwall Electric and Hydro One Remote Communities Inc.	Included since they are licensed distributors.
Other Consumers Prescribed by Regulation	10 First Nations remote unlicensed distributors have been added by regulation.
Exclusions	
Generators	Generation station service and the microFIT distribution service charge are excluded in legislation.

Tab x

CABINET BRIEFING NOTE

Committee:	Cabinet
Meeting Date:	September ~~14~~13, 2016
Ministry:	ENERGY
Last reviewed by:	**Tracking to:** Cabinet – September ~~14~~13, 2016

[BASED ON DRAFT CABINET SUBMISSION]

SUBMISSION TITLE: Electricity Price Mitigation (Ontario Rebate for Electricity Consumers)

I. REQUEST/DECISION REQUIRED:

The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These measure include:

1.a. Provide an ~~pre-tax~~ 8% rebate, equal to the provincial portion of HST, to consumers eligible for the ~~to~~ Regulated Price Plan (RPP) ~~consumers~~;

1.b. Updating Rural or Remote Rate Protection (RRRP);

2.a. Expanding the Industrial Conservation Initiative (ICI) eligibility to customers above 1MW in all sectors;

~~2.b.~~ Recycle cap and trade proceeds to commercial and industrial electricity consumers to provide a modest 1% reduction in rates, with modest savings from proceeds intended for electricity relief through the Climate Change Action Plan to provide fiscal offsets.

~~2.c.~~

~~2.d.~~2.b. ~~[Approve in principle an expenditure increase estimated at $261M [estimate subject to refinement from ENERGY] in 2016-17 for the Electricity Price Mitigation, offset from the Treasury Board Contingency Fund.]~~

Commented [RK1]: Let's put in the amount of increase -- $110M, to the existing $127M

Commented [RK2]: Let's put in the estimated amount.

Commented [SK23]: Re-ordered/numbered to align with revised deck.

Commented [SK24]: Unclear if this is necessary for the cabinet note as the TB/MBC note may be worried more on fiscal implications.

Commented [RK5]: Remove from here, but should be part of fiscal impact part of the note.

Commented [SK26R5]: Will do. It's in the financial summary section.

II. KEY POINTS:

Context

Electricity costs have increased as the province has made investments in clean energy generation and modernized electricity infrastructure. Electricity bills are expected to continue to increase as more renewable energy projects come online.

As part of the 2016 Budget, the government committed to mitigating electricity cost impacts that were anticipated from the cap and trade program. The Climate Change Action Plan (CCAP) included up to $1.32B over 4 years to help keep electricity rates affordable for residential and industrial consumers. This included a commitment to provide a modest benefit of up to $2 per month, on average, to residential consumers.

The Ontario Clean Energy Benefit (OCEB) expired December 31, 2015, as part of the originally planned, five-year legislated program put in place as a broad-based, transitional measure to a

cleaner electricity system. OCEB was also put in place following the implementation of the Harmonised Sales Tax (HST). Unlike the previous provincial Retail Sales Tax (RST), the HST (and GST) included electricity in the taxable base. With the end of OCEB, the government ended the electricity Debt Retirement Charge (DRC) on residential users earlier than planned, as of January 1, 2016, and also put in place the low-income targeted Ontario Electricity Support Program (OESP).

In order to achieve the CCAP commitment and additional price mitigation, the Ministry of Energy has developed price mitigation options that consider tax-based levers, cap and trade proceeds, and shifting costs within the rate-base.

Proposal

	Measure	Targeted Recipients	Impact (annually)	
			Fiscal	Rate Base
1.a	8% Rebate to Regulated Price Plan eligible consumers	Residential, small business, small farms and other small users	$1B	-
1.b	Updating Rural or Remote Rate Protection	Residents in rural or remote locations: Hydro One's lowest-density R2 customers.	-	$110M
2.a	Expanding ICI eligibility to customers above 1MW in all sectors	Intermediate and large-sized industrial, commercial and institutional consumers above 1MW in all sectors	-	$47M/ $82M*
2.b	Redirecting cap and trade proceeds recycling: • As part of the original CCAP policy, $330M of the cap & trade proceeds was to be recycled for electricity price mitigation for residential and non-residential users. • Under this proposal, a lower total amount of $270 M would be used to mitigate non-residential users. • Therefore, provides $60M for potential fiscal offsets to the 8% rebate.	Commercial and industrial electricity customers	($60M)**	-

*Short-term/Long-term rate base impact, where short term is one year after expanded eligibility takes place and long-term is expected impact once new customers have time to change behavior.
**To meet the Budget 2016 commitment, the Climate Change Action Plan (CCAP) committed $1.3B from the Greenhouse Gas Reduction Account (GGRA) or about $330M annually. Current proposal will require $60M less or $270M annually. Assumes the $60M is diverted to in-plan initiatives.

- ENERGY provided the following overview of bill impacts:

Regulated Price Plan (Residential) Impact[1]*		Class B (Commercial)[4]	Class A (Industrial)[4]	
Average[2] (750 kWh/month)	Rural[3]** (1000 kWh/month)		Existing	New

Commented [SK27]: Table below from the latest ENERGY Deck (FPC Major Project Morning of Sept 8).

-$~~10~~11/month (-~~68~~%)	-$45/month (-20%)	-$1/MWh (-1%)	-$1/MWh (-1%)	Up to -$52/MWh (-34%)

~~Note: The impact of cap and trade would not be added to electricity bills until 2017 and impact of ICI would not be added until 2018. All impacts included here for illustrative purposes~~

1~~*~~. ENERGY did not provide the monthly impact for other Regulated Price Plan not classified as Residential (eg. farms, small businesses) that would benefit from the 8% Rebate to Regulated Price Plan.

2. Regulated Price Plan Impact represents the pre-tax values of 8% rebate and does not include the impact of ICI expansion and RRRP update (total impact of $1.31/month based on 750 kWh/month).

3.~~**~~ Rural customers refers to those Hydro One customers eligible to receive RRRP (R2 rate class customers). Impact shown is pre-tax and does not include the impact of ICI expansion and RRRP update (total impact of $1.74/month based on 1000 kWh/month).

4. The impact of cap and trade would not be added to electricity bills until 2017 and impact of ICI would not be added until 2018.

1.a. 8% Rebate to Regulated Price Plan (RPP)

- An 8% rebate ~~on the pre-tax portion~~ for Regulated Price Plan (RPP) eligible consumers would be equal to the provincial portion of HST and funded by the tax base.
- The $1 billion figure is a 2017 to 2020 calendar year average of cost estimates developed by Ministry of Energy staff, as follows:

$ millions	**2017**	**2018**	**2019**	**2020**
	1,003	1,014	975	1,049
Avg. 2017-20	1,010			

- On a fiscal year basis, the above estimates become:

$ millions	**2016-17**	**2017-18**	**2018-19**	**2019-20**
	261	1,006	1,004	994
3-Year Avg.	1,001			

- Ministry of Energy staff are in the process of developing a refined estimate of the cost.

- The rebate would appear directly on bills. As such, Local Distribution Companies (LDC) would be the delivery mechanism for the rebate.
  - While non-Regulated Price Plan eligible consumers would not see a benefit from the 8% rebate under this option, all industrial and commercial consumers would receive proceeds recycling through the Greenhouse Gas Reduction Account (GGRA).
  - Commercial and industrial consumers would also continue to receive input tax credits and Public Service Bodies would continue to receive PSB rebates.
- New legislation would be required and closely mirror the Ontario Clean Energy Benefit (OCEB) Act, 2010. More details further below.
- On-bill rebate delivery would likely require adjustments to Local Distribution Company (LDC) billing systems, which could impact delivery costs and timelines.
- In the past, LDCs have asked for at least six months' notice when implementing billing system changes.

  - One option to address any timing concerns is to allow LDCs to provide retroactive payments if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.
- The rebate would not be directly linked to HST.

1.b. Updating (Increasing) Rural or Remote Rate Protection

- RRRP funding supporting Hydro One R2 (rural) customers capped at current levels since 2004.
- The current program provides a monthly subsidy of ~~a about~~ $~~32~~31.50/month.
- Proposal will provide an additional $110 million in support to approximately 329,000 R2 customers to $235 million annually.
- Proposal will increase the subsidy by about $28/month and equalize R2 bills with Hydro One R1 (medium) density customers at 1,000 kWh.
- All residential consumers would see an average cost increase of about $0.60/month.
- ENERGY is considering options to periodically adjust the amount of rate protection eg. indexed at inflation or "trued up" on a regular basis.

Commented [RK8]: On what basis?

2.a. Expanding ICI Eligibility to customers above 1MW in all sectors

- Lower threshold for participation in ICI to 1 MW and remove sectoral restrictions.
- Most newly eligible ICI participants who choose to opt-in to the program would be able to reduce their electricity costs substantially. All other consumers would see a relatively small increase in their bills.
- Expanding the ICI will reduce electricity peak demand by incenting more consumers to lower their electricity demand during peak periods (80MW in the short term and 165 MW in the long term)
- Bill savings to new participants up to 21% in the short term and up to 34% long-term.
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
  - Companies that would become eligible under such an expansion include Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.
- Class B consumers would have a collective increase in the Global Adjustment of $47M in the short term and $~~87M~~ 82M in the long term from this initiative.
- Residential consumers would see an average cost increase of $0.42/month in the short term and $0.74/month in the long term.

2.b. Redirect Cap and Trade Proceeds Recycling

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers.
- Ontario's Climate Change Action Plan (CCAP) includes up to $1.32 billion over 4 years to help keep electricity rates affordable for residential and industrial consumers.
- ~~The GGRA allocated $120M to average residential consumers, $170M to commercial and $40M to industrial consumers.~~

Commented [SK29]: Suggest deletion. This breakdown is not in the latest deck. Furthermore the chart on Slide 21 shows $335M original allocation, not $330M.

Tab x

- The 8% rebate to the Regulated Price Plan consumers more than fulfills the commitment to reduce residential rates by $2/month.
    - Proposal would lead to savings of the $120M in GGRA proceeds previously allocated to residential consumers, and help offset the fiscal impact of the 8% rebate to the Regulated Price Plan consumers.
- To provide additional price mitigation to commercial and industrial electricity consumers, ENERGY is proposing to direct an additional $60M annually of cap and trade auction proceeds (to $270M from a previous amount of $210M annually) to industrial and commercial consumers not in the RPP to mitigate impacts.
- The current proposal would require an estimated $60 million less per year, or $0.24 billion less over the first compliance period.

III. KEY CONSIDERATIONS

- This request ~~on~~for an 8% rebate does not align with the 2016 Budget fiscal plan and there are very limited~~no~~ ($60M) proposed offsets.

- Due to the nature of the ICI Global Adjustment mechanism and cost recovery of the RRRP, the rate base proposals (~~##~~21b and ~~#3~~#2a), while benefiting the targeted recipients, would **come at a cost to all other electricity rate payers in Ontario**.

- ~~This request does not align with the 2016 Budget fiscal plan and there are no proposed offsets.~~

- Other price mitigation measures introduced following the implementation of the HST, as well as the end of OCEB, would continue.
    - Both the energy portion of the Ontario Energy and Property Tax Credit (OEPTC) and Northern Ontario Energy Credit (NOEC) were introduced/ enhanced following the introduction of the HST and have a significant annual fiscal cost (totalling about $500 million annually).
    - The DRC on residential consumers was ended early, as of January 1, 2016 (about a $340 million impact in 2016-17).
    - OESP is a low-income targeted program funded by electricity consumers through the electricity rate base.

-

8% Rebate to Regulated Price Plan

- The 8% ~~pre-tax~~ rebate would provide a typical residential consumer about an $11 per month benefit on average (about $10, after the impact of RRRP and ICI expansion), exceeding the Budget 2016 $2 per month on average, cap and trade commitment.

- This 8% ~~pre-tax~~ rebate equal to the provincial portion of HST is similar to the previous Ontario Clean Energy Benefit (See Appendix for background) which provided a 10% post-tax rebate.
- The proposal indicates the Regulated Price Plan consumption amount to be 58TWh [Slide 2 in latest, FPC-Major Projects Deck]. Unclear if this applies to all eligible RPP consumers. A p~~P~~reliminary MOF estimate for consumption ~~for~~under the OCEB program approximated annual OCEB-eligible consumption range of 64-68TWh ~~of annual electricity consumption~~ between September 11 and December 2015. [This would represent about 10-17% more in additional program cost to the current estimate of $1 billion per year.]
- The OCEB legislation was set out with an end date, and was subsequently modified to be capped at 3,000 kWh per month for all electricity customers after 8 months of the program.
    - This proposal does not specify any consumption caps nor an end date.
- Due to the lack of a cap, compared to OCEB, this proposal is more generous to the high volume RPP users.

  - OCEB rebate was applicable for up to 36,000 kWh annually (12 months times 3,000 kWh cap per month) while this proposal would be **more generous for those consuming more than 50,850 kWh** annually.
  - Furthermore, highest volume users in this proposal would receive **up to 392% more** than under the OCEB program.
- Unclear why any proposals for a cap would be any more complex or onerous to LDCs than prior OCEB cap (instituted beginning September 2012 to termination of OCEB program in December 2015). However, cap may affect some types of consumers more than others, such as small businesses, condo dwellers in separately-metered units paying for electricity usage in the common elements, and residential consumers heating with electricity.

- ~~Blanket r~~Reduction in electricity prices for all users irrespective of consumption amounts hamper efforts to conserve electricity, and mutes TOU price signals.
- [Businesses ~~that fall under the Regulated Price Plan~~ pay little to no HST due to the Input Tax Credit. For those businesses eligible for the Regulated Price plan, ~~T~~the 8% reduction can be deemed a windfall ~~for these users~~.]

Updating Rural or Remote Rate Protection

- According to ENERGY, the RRRP is a $175M program with the majority of program funding ($125.5M) to Hydro One's lowest-density 'R2' customers
- ~~Unclear why customers on RRRP who are not Hydro One's R2 customers are not also targeted for this benefit.~~

Expanding ICI Eligibility to customers above 1MW in all sectors

- Not all users with demand above 1MW will be in a position to take full advantage of the ICI expansion (eg. inability to load shift during peaks).
- Consumers in the commercial sector currently do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
  - Expansion of the ICI can give commercial consumers who are able to shift demand during peak hours, the opportunity to opt-in and benefit.

Redirect Cap and Trade Proceeds Recycling

- Deck implies $60M in savings ~~from 8% Rebate for the RPP consumers.~~compared to earlier climate change electricity price mitigation recycling plan.
  - ~~Unclear, how the redirected amount $60M ($120M-$60M) will be allocated to commercial and industrial users.~~
  - A fiscal offset to the initiative would materialize only if the $60M is diverted to in-plan initiatives.

IV. Cabinet Committee Discussion Summary

n/a

Commented [SK10]: 36000*0.113/0.08 = 50,850

36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate
0.08 – pre-tax effective rebate (8%)

Commented [SK211]: 36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate

36000*0.113 = 4068 [OCEB effective rebated consumption]

Max under proposal: 250,000
pre-tax effective rebate: 0.08
Proposal's effective rebated consumption: 250,000*0.08 = 20,000

(20,000-4068)/4068 = **3.9164**

Commented [SK212]: Is this referring to the issue with common elements in condos and how they fall under one bill separate from the units?

Commented [SK13]: Will need to verify

Commented [SK214]: I'm trying to say that there's a portion of RRRP customers who will not receive this benefit.

Is there a reason these other customers are not also getting the expansion?

Commented [JK15]: Which sectors? There was a deck recently that showed the composition of GA in the bills paid by sectors. I believe it was one of the price mitigation decks.

Commented [SK216R15]: This is a general statement.

Slide 32 in the 20160902_330pm deck.

V. Financial Summary

$ Millions	2016-17	2017-18	2018-19
Initiative cost requested	261	1,006	1,004
Requested program base	261	1,006	1,004
Total fiscal impact (draw from c-funds)	261	1,006	1,004

VI. Performance Measures

[To estimate the impact of the program, the savings provided to the various consumers, and any potential for adjustments to the program, information should be provided from LDCs on consumption profiles and rebate amounts, particularly those affected by the 8% rebate on Regulated Price Plan Consumers.]

Name of analyst:	Shajee Kathirgamanathan (416-325-1402)
Date:	September ~~6~~8, 2016
Branch / Division:	Electricity Finance Branch / Corporate and Electricity Finance Division

APPENDIX A: PROPOSED POLICY MINUTE

[WORK IN PROGRESS, WAITING ON ENERGY'S FINAL SUBMISSION]

Cabinet agreed that:

1. ENERGY implement electricity price mitigation for residential, commercial and industrial consumers through the following:

i) Provide a rebate of 8% on the pre-tax cost of electricity for all electricity consumers eligible to be billed under the Ontario Energy Board's Regulated Price Plan (RPP); and any other consumers who would be eligible for RPP if their electricity account was with a licensed distributor.

ii) Increase the total amount of rate protection available to R2 with low density electricity consumers under the Rural or Remote Rate Protection Program (RRRP) by increasing the subsidy by $110 million from its current level of $127 million which has been capped since 2004.

iii) Implement a mechanism to periodically adjust the total annual amount of rate protection available to R2 low density electricity consumers under the RRRP, effective on or after January 1, 2018.

iv) Expanding eligibility for participation in the Industrial Conservation Initiative (ICI) to smaller industrial, institutional and commercial customers by lowering the eligibility threshold to 1 MW and removing restrictions on eligible sectors.

2. ENERGY seek necessary TB/MBC approvals.

3. ENERGY seek approvals for:

i) the proposed *Ontario Rebate for Electricity Consumers Act, 2016* – and any supporting regulations under the proposed *Ontario Rebate for Electricity Consumers Act, 2016*, and with other complementary regulatory amendments and consequential legislative amendments to the *Ontario Energy Board Act, 1998* and the *Ontario Clean Energy Benefit Act, 2010*, subject to the Legislature's approval of the Act, including the following elements:

i. The rebate would be available starting January 1, 2017;
ii. The legislation would specify the types of costs to which the rebate would or would not be applied, with authority to make changes by regulation;
iii. The legislation would address invoicing requirements, including authority to prescribe how the rebate is to appear on consumers electricity bills;
iv. The legislation would include authority to prescribe the way in which the rebate is to be flowed through to consumers, and the way in which electricity vendors providing the rebate are to be reimbursed;

Commented [SK217]: This was from the Policy Minute. I assume this is the 'Minute' we are waiting for.

v. The legislation would include record-keeping requirements for electricity vendors and other prescribed persons;
vi. The legislation would include inspection powers for inspectors appointed by the minister of Finance, including powers related to the recovery of overpayments.
vii. The legislation would provide for regulation-making authority to establish a limitation period for ceasing payments and reimbursement based on past entitlement. Similar amendments would be provided for the *Ontario Clean Energy Benefit Act, 2010* but would allow the ceasing of all payments and reimbursements after a prescribed date.

4. ENERGY notes the following amendments:

i) Amendments to Ontario Regulation 429/04 (Adjustments Under Section 25.33 of the Act) made under the *Electricity Act, 1998* to lower the Industrial Conservation Initiative (ICI) threshold to 1 megawatt and require electricity consumers and market participants between 1 MW and 5 MW to opt in.

ii) Amendments to Ontario Regulation 442/01 (Rural or Remote Electricity Rate Protection) made under the Ontario Energy Board Act, 1998, to increase support through the Rural and Remote Rate Protection Plan to R2 low density rural electricity customers and provide for a periodic adjustment mechanism.

5. ENERGY work with MOECC to recycle an estimated annual average of $270 million of Cap and Trade auction proceeds from the Greenhouse Gas Reduction Account for non-RPP commercial and industrial electricity consumers over the first compliance period (2017-2020) through a volumetric rebate mechanism.

6. ENERGY and MOF work with Cabinet Office, Premier's office to develop a communications plan.

~~CABINET AGREED THAT:~~

~~1. THE MINISTRY OF ENERGY (ENERGY), WITH SUPPORT FROM THE MINISTRY OF FINANCE (MOF), SHALL PREPARE LEGISLATION THAT WOULD PROVIDE AN EIGHT PERCENT (8%) REBATE ON THE PRE-TAX COST OF ELECTRICITY FOR THE FOLLOWING CLASSES OF CONSUMERS:~~
~~A. ALL CONSUMERS ELIGIBLE TO BE BILLED UNDER THE ONTARIO ENERGY BOARD'S REGULATED PRICE PLAN; AND~~
~~B. ANY OTHER CONSUMERS WHO WERE ELIGIBLE FOR FINANCIAL ASSISTANCE UNDER THE *ONTARIO CLEAN ENERGY BENEFIT ACT, 2010* (OCEBA) DURING THE PERIOD THAT PROGRAM WAS IN PLACE.~~

~~2. THE LEGISLATION SHALL BE GENERALLY MODELLED UPON THE OCEBA, AND WOULD INCLUDE THE FOLLOWING ELEMENTS:~~
~~A. THE REBATE WOULD BE AVAILABLE STARTING JANUARY 1, 2017 AND BEFORE SUCH DATE AS MAY BE PRESCRIBED;~~
~~B. THE REBATE WOULD NOT BE SUBJECT TO A CAP UNLESS A CAP IS PRESCRIBED;~~
~~C. THE LEGISLATION WOULD SPECIFY THE TYPES OF COSTS TO WHICH THE REBATE WOULD OR WOULD NOT BE APPLIED, WITH AUTHORITY TO MAKE CHANGES BY REGULATION;~~

D. THE LEGISLATION WOULD ADDRESS INVOICING REQUIREMENTS, INCLUDING AUTHORITY TO PRESCRIBE HOW THE REBATE IS TO APPEAR ON CONSUMER ELECTRICITY BILLS;
E. THE LEGISLATION WOULD INCLUDE AUTHORITY TO PRESCRIBE THE WAY IN WHICH THE REBATE IS TO BE FLOWED THROUGH TO CONSUMERS, AND THE WAY IN WHICH ELECTRICITY VENDORS PROVIDING THE REBATE ARE TO BE REIMBURSED;
F. THE LEGISLATION WOULD INCLUDE RECORD-KEEPING REQUIREMENTS FOR ELECTRICITY VENDORS AND ANY OTHER PRESCRIBED PERSONS; AND
G. THE LEGISLATION WOULD INCLUDE INSPECTION POWERS FOR INSPECTORS APPOINTED BY THE MINISTER OF FINANCE, INCLUDING POWERS RELATED TO RECOVERY OF OVERPAYMENTS.

3. ENERGY AMEND O. REG. 429/04 (ADJUSTMENTS UNDER SECTION 25.33 OF THE ACT) MADE UNDER THE ELECTRICITY ACT, 1998 TO EXPAND ELIGIBILITY FOR CLASS A CONSUMERS AND CLASS A MARKET PARTICIPANTS UNDER THE INDUSTRIAL CONSERVATION INITIATIVE (ICI) TO ALL ELECTRICITY CONSUMERS AND MARKET PARTICIPANTS WITH A PEAK DEMAND ABOVE AN AVERAGE OF ONE MEGAWATT (1MW) WITH NO SECTORAL RESTRICTIONS ON PARTICIPATION.
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Tab x

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Commented [RK18]: What about using the eligibility table in Energy's submission?

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Demand for electricity of 50 kW or less, or consumes not more than 250,000 kWh annually	Would include small business, smaller broader- public-sector entities, and other small users.
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CABINET BRIEFING NOTE

Committee:	Cabinet
Meeting Date:	September ~~14~~13, 2016
Ministry:	ENERGY
Last reviewed by:	**Tracking to:** Cabinet – September ~~14~~13, 2016

[BASED ON DRAFT CABINET SUBMISSION]

SUBMISSION TITLE:	Electricity Price Mitigation (Ontario Rebate for Electricity Consumers)

I. REQUEST/DECISION REQUIRED:

The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These measure include:

1.a. Provide an ~~pre-tax~~ 8% rebate, equal to the provincial portion of HST, to consumers eligible for the ~~to~~ Regulated Price Plan (RPP) ~~consumers~~;

1.b. Updating Rural or Remote Rate Protection (RRRP) by adding additional $110 million in rate-based funding to R2 low density electricity consumers from the current level of $127 million [$125.5 million in the latest Energy deck];

2.a. Expanding the Industrial Conservation Initiative (ICI) eligibility to customers above 1MW in all sectors;

~~2.b.~~ Recycle cap and trade proceeds ($60 million) to commercial and industrial electricity consumers to provide a modest 1% reduction in rates, with modest savings from proceeds intended for electricity relief through the Climate Change Action Plan to provide fiscal offsets ($60 million).

~~2.c.~~

~~2.d.~~2.b. ~~[Approve in principle an expenditure increase estimated at $261M [estimate subject to refinement from ENERGY] in 2016-17 for the Electricity Price Mitigation, offset from the Treasury Board Contingency Fund.]~~

Commented [RK1]: Let's put in the amount of increase -- $110M, to the existing $127M

Commented [JK2]: From the latest minute.

Commented [RK3]: Let's put in the estimated amount.

Commented [SK24]: Re-ordered/numbered to align with revised deck.

Commented [SK25]: Unclear if this is necessary for the cabinet note as the TB/MBC note may be worried more on fiscal implications.

Commented [RK6]: Remove from here, but should be part of fiscal impact part of the note.

Commented [SK27R6]: Will do. It's in the financial summary section.

II. KEY POINTS:

Context

Electricity costs have increased as the province has made investments in clean energy generation and modernized electricity infrastructure. Electricity bills are expected to continue to increase as more renewable energy projects come online.

As part of the 2016 Budget, the government committed to mitigating electricity cost impacts that were anticipated from the cap and trade program. The Climate Change Action Plan (CCAP) included up to $1.32B over 4 years to help keep electricity rates affordable for residential and industrial consumers. This included a commitment to provide a modest benefit of up to $2 per month, on average, to residential consumers.

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The Ontario Clean Energy Benefit (OCEB) expired December 31, 2015, as part of the originally planned, five-year legislated program put in place as a broad-based, transitional measure to a cleaner electricity system. OCEB was also put in place following the implementation of the Harmonised Sales Tax (HST). Unlike the previous provincial Retail Sales Tax (RST), the HST (and GST) included electricity in the taxable base. With the end of OCEB, the government ended the electricity Debt Retirement Charge (DRC) on residential users earlier than planned, as of January 1, 2016, and also put in place the low-income targeted Ontario Electricity Support Program (OESP).

In order to achieve the CCAP commitment and additional price mitigation, the Ministry of Energy has developed price mitigation options that consider tax-based levers, cap and trade proceeds, and shifting costs within the rate-base.

Proposal

	Measure	Targeted Recipients	Impact (annually)	
			Fiscal	Rate Base
1.a	8% Rebate to Regulated Price Plan eligible consumers	Residential, small business, small farms and other small users	$1B	-
1.b	Updating Rural or Remote Rate Protection	Residents in rural or remote locations: Hydro One's lowest-density R2 customers.	-	$110M
2.a	Expanding ICI eligibility to customers above 1MW in all sectors	Intermediate and large-sized industrial, commercial and institutional consumers above 1MW in all sectors	-	$47M/ $82M*
2.b	Redirecting cap and trade proceeds recycling: • As part of the original CCAP policy, $330M of the cap & trade proceeds was to be recycled for electricity price mitigation for residential and non-residential users. • Under this proposal, a lower total amount of $270 M would be used to mitigate non-residential users. • Therefore, provides $60M for potential fiscal offsets to the 8% rebate.	Commercial and industrial electricity customers	($60M)**	-

*Short-term/Long-term rate base impact, where short term is one year after expanded eligibility takes place and long-term is expected impact once new customers have time to change behavior.
**To meet the Budget 2016 commitment, the Climate Change Action Plan (CCAP) committed $1.3B from the Greenhouse Gas Reduction Account (GGRA) or about $330M annually. Current proposal will require $60M less or $270M annually. Assumes the $60M is diverted to in-plan initiatives.

- ENERGY provided the following overview of bill impacts:

Regulated Price Plan (Residential) Impact[1]*	Class B (Commercial)[4]	Class A (Industrial)[4]

Commented [SK28]: Table below from the latest ENERGY Deck (FPC Major Project Morning of Sept 8).

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Average[2] (750 kWh/month)	Rural[3**] (1000 kWh/month)		Existing	New
-$1011/month (-68%)	-$45/month (-20%)	-$1/MWh (-1%)	-$1/MWh (-1%)	Up to -$52/MWh (-34%)

Note: The impact of cap and trade would not be added to electricity bills until 2017 and impact of ICI would not be added until 2018. All impacts included here for illustrative purposes

1*. ENERGY did not provide the monthly impact for other Regulated Price Plan not classified as Residential (eg. farms, small businesses) that would benefit from the 8% Rebate to Regulated Price Plan.

2. Regulated Price Plan Impact represents the pre-tax values of 8% rebate and does not include the impact of ICI expansion and RRRP update (total impact of $1.31/month based on 750 kWh/month).

3.** Rural customers refers to those Hydro One customers eligible to receive RRRP (R2 rate class customers). Impact shown is pre-tax and does not include the impact of ICI expansion and RRRP update (total impact of $1.74/month based on 1000 kWh/month).

4. The impact of cap and trade would not be added to electricity bills until 2017 and impact of ICI would not be added until 2018.

1.a. 8% Rebate to Regulated Price Plan (RPP)

- An 8% rebate ~~on the pre-tax portion~~ for Regulated Price Plan (RPP) eligible consumers would be equal to the provincial portion of HST and funded by the tax base.
- The $1 billion figure is a 2017 to 2020 calendar year average of cost estimates developed by Ministry of Energy staff, as follows:

$ millions	**2017**	**2018**	**2019**	**2020**
	1,003	1,014	975	1,049
Avg. 2017-20	1,010			

- On a fiscal year basis, the above estimates become:

$ millions	**2016-17**	**2017-18**	**2018-19**	**2019-20**
	261	1,006	1,004	994
3-Year Avg.	1,001			

- Ministry of Energy staff are in the process of developing a refined estimate of the cost.

- The rebate would appear directly on bills. As such, Local Distribution Companies (LDC) would be the delivery mechanism for the rebate.
  - While non-Regulated Price Plan eligible consumers would not see a benefit from the 8% rebate under this option, all industrial and commercial consumers would receive proceeds recycling through the Greenhouse Gas Reduction Account (GGRA).
  - Commercial and industrial consumers would also continue to receive input tax credits and Public Service Bodies would continue to receive PSB rebates.
- New legislation would be required and closely mirror the Ontario Clean Energy Benefit (OCEB) Act, 2010. More details further below.
- On-bill rebate delivery would likely require adjustments to Local Distribution Company (LDC) billing systems, which could impact delivery costs and timelines.
- In the past, LDCs have asked for at least six months' notice when implementing billing system changes.

  - One option to address any timing concerns is to allow LDCs to provide retroactive payments if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.
- The rebate would not be directly linked to HST.

1.b. Updating (Increasing) Rural or Remote Rate Protection

- RRRP funding supporting Hydro One R2 (rural) customers capped at current levels since 2004.
- The current program provides a monthly subsidy of ~~a about~~ $~~32~~31.50/month.
- Proposal will provide an additional $110 million in support to approximately 329,000 R2 customers to $235 million annually.
- Proposal will increase the subsidy by about $28/month and equalize R2 bills with Hydro One R1 (medium) density customers at 1,000 kWh.
- All residential consumers would see an average cost increase of about $0.60/month.
- ENERGY is considering options to periodically adjust the amount of rate protection eg. indexed at inflation or "trued up" on a regular basis.

Commented [RK9]: On what basis?

2.a. Expanding ICI Eligibility to customers above 1MW in all sectors

- Lower threshold for participation in ICI to 1 MW and remove sectoral restrictions.
- Most newly eligible ICI participants who choose to opt-in to the program would be able to reduce their electricity costs substantially. All other consumers would see a relatively small increase in their bills.
- Expanding the ICI will reduce electricity peak demand by incenting more consumers to lower their electricity demand during peak periods (80MW in the short term and 165 MW in the long term)
- Bill savings to new participants up to 21% in the short term and up to 34% long-term.
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
  - Companies that would become eligible under such an expansion include Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.
- Class B consumers would have a collective increase in the Global Adjustment of $47M in the short term and $~~87M~~ 82M in the long term from this initiative.
- Residential consumers would see an average cost increase of $0.42/month in the short term and $0.74/month in the long term.

2.b. Redirect Cap and Trade Proceeds Recycling

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers.
- Ontario's Climate Change Action Plan (CCAP) includes up to $1.32 billion over 4 years to help keep electricity rates affordable for residential and industrial consumers.
- ~~The GGRA allocated $120M to average residential consumers, $170M to commercial and $40M to industrial consumers.~~

Commented [SK210]: Suggest deletion. This breakdown is not in the latest deck. Furthermore the chart on Slide 21 shows $335M original allocation, not $330M.

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- The 8% rebate to the Regulated Price Plan consumers more than fulfills the commitment to reduce residential rates by $2/month.
    - Proposal would lead to savings of the $120M in GGRA proceeds previously allocated to residential consumers, and help offset the fiscal impact of the 8% rebate to the Regulated Price Plan consumers.
- To provide additional price mitigation to commercial and industrial electricity consumers, ENERGY is proposing to direct an additional $60M annually of cap and trade auction proceeds (to $270~~M~~ million from a previous amount of $210~~M~~ million annually) to industrial and commercial consumers not in the RPP to mitigate impacts.
- The current proposal would require an estimated $60 million less per year, or $0.24 billion less over the first compliance period.

III. KEY CONSIDERATIONS

- This request ~~on~~for an 8% rebate does not align with the 2016 Budget fiscal plan and there are very limited~~no~~ ($60~~M~~ million) proposed offsets.

- Due to the nature of the ICI Global Adjustment mechanism and cost recovery of the RRRP, the rate base proposals (~~##~~21b and ~~#3~~#2a), while benefiting the targeted recipients, would **come at a cost to all other electricity rate payers in Ontario**.

- ~~This request does not align with the 2016 Budget fiscal plan and there are no proposed offsets.~~

- Other price mitigation measures introduced following the implementation of the HST, as well as the end of OCEB, would continue.
    - Both the energy portion of the Ontario Energy and Property Tax Credit (OEPTC) and Northern Ontario Energy Credit (NOEC) were introduced/ enhanced following the introduction of the HST and have a significant annual fiscal cost (totalling about $500 million annually).
    - The DRC on residential consumers was ended early, as of January 1, 2016 (about a $340 million impact in 2016-17).
    - OESP is a low-income targeted program funded by electricity consumers through the electricity rate base.

-

8% Rebate to Regulated Price Plan

- The 8% ~~pre-tax~~ rebate would provide a typical residential consumer about an $11 per month benefit on average (about $10, after the impact of RRRP and ICI expansion), exceeding the Budget 2016 $2 per month on average, cap and trade commitment.

- This 8% ~~pre-tax~~ rebate equal to the provincial portion of HST is similar to the previous Ontario Clean Energy Benefit (See Appendix for background) which provided a 10% post-tax rebate.
- The proposal indicates the Regulated Price Plan consumption amount to be 58TWh [Slide 2 in latest, FPC-Major Projects Deck]. Unclear if this applies to all eligible RPP consumers. A p~~P~~reliminary MOF estimate for consumption ~~for~~under the OCEB program approximated annual OCEB-eligible consumption range of 64-68TWh ~~of annual electricity consumption~~ between September 2011 and December 2015. [This would represent about 10-17% more in additional program cost to the current estimate of $1 billion per year.]
- The OCEB legislation was set out with an end date, and was subsequently modified to be capped at 3,000 kWh per month for all electricity customers after 8 months of the program.
    - This proposal does not specify any consumption caps nor an end date.
- Due to the lack of a cap, compared to OCEB, this proposal is more generous to the high volume RPP users.

  - OCEB rebate was applicable for up to 36,000 kWh annually (12 months times 3,000 kWh cap per month) while this proposal would be **more generous for those consuming more than 50,850 kWh** annually.
  - Furthermore, highest volume users in this proposal would receive **up to 392% more** than under the OCEB program.
- Unclear why any proposals for a cap would be any more complex or onerous to LDCs than prior OCEB cap (instituted beginning September 2012 to termination of OCEB program in December 2015). However, cap may affect some types of consumers more than others, such as small businesses, condo dwellers in separately-metered units paying for electricity usage in the common elements, and residential consumers heating with electricity.

- ~~Blanket r~~Reduction in electricity prices for all users irrespective of consumption amounts hamper efforts to conserve electricity, and mutes TOU price signals.
- [Businesses ~~that fall under the Regulated Price Plan~~ pay little to no HST due to the Input Tax Credit. For those businesses eligible for the Regulated Price plan, ~~T~~the 8% reduction can be deemed a windfall ~~for these users~~.]

Updating Rural or Remote Rate Protection

- According to ENERGY, the RRRP is a $175M program with the majority of program funding ($125.5M) to Hydro One's lowest-density 'R2' customers
- ~~Unclear why customers on RRRP who are not Hydro One's R2 customers are not also targeted for this benefit.~~

Expanding ICI Eligibility to customers above 1MW in all sectors

- Not all users with demand above 1MW will be in a position to take full advantage of the ICI expansion (eg. inability to load shift during peaks).
- Consumers in the commercial sector currently do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
  - Expansion of the ICI can give commercial consumers who are able to shift demand during peak hours, the opportunity to opt-in and benefit.

Redirect Cap and Trade Proceeds Recycling

- Deck implies $60M in savings ~~from 8% Rebate for the RPP consumers.~~compared to earlier climate change electricity price mitigation recycling plan.
  - ~~Unclear, how the redirected amount $60M ($120M-$60M) will be allocated to commercial and industrial users.~~
  - A fiscal offset to the initiative would materialize only if the $60M is diverted to in-plan initiatives.

IV. Cabinet Committee Discussion Summary

n/a

Commented [SK11]: 36000*0.113/0.08 = 50,850

36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate
0.08 – pre-tax effective rebate (8%)

Commented [SK212]: 36000 – max OCEB eligible consumption
0.113 – pre-tax effective OCEB rebate

36000*0.113 = 4068 [OCEB effective rebated consumption]

Max under proposal: 250,000
pre-tax effective rebate: 0.08
Proposal's effective rebated consumption: 250,000*0.08 = 20,000

(20,000-4068)/4068 = **3.9164**

Commented [SK213]: Is this referring to the issue with common elements in condos and how they fall under one bill separate from the units?

Commented [SK214]: I'm trying to say that there's a portion of RRRP customers who will not receive this benefit.

Is there a reason these other customers are not also getting the expansion?

Commented [JK15]: Which sectors? There was a deck recently that showed the composition of GA in the bills paid by sectors. I believe it was one of the price mitigation decks.

Commented [SK216R15]: This is a general statement.

Slide 32 in the 20160902_330pm deck.

V. Financial Summary

$ Millions	2016-17	2017-18	2018-19
Initiative cost requested	261	1,006	1,004
Requested program base	261	1,006	1,004
Total fiscal impact (draw from c-funds)	261	1,006	1,004

VI. Performance Measures

[To estimate the impact of the program, the savings provided to the various consumers, and any potential for adjustments to the program, information should be provided from LDCs on consumption profiles and rebate amounts, particularly those affected by the 8% rebate on Regulated Price Plan Consumers.]

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Name of analyst:	Shajee Kathirgamanathan (416-325-1402)
Date:	September ~~6~~8, 2016
Branch / Division:	Electricity Finance Branch / Corporate and Electricity Finance Division

APPENDIX A: PROPOSED POLICY MINUTE

[WORK IN PROGRESS, WAITING ON ENERGY'S FINAL SUBMISSION]

Cabinet agreed that:

1. ENERGY implement electricity price mitigation for residential, commercial and industrial consumers through the following:

i) Provide a rebate of 8% on the pre-tax cost of electricity for all electricity consumers eligible to be billed under the Ontario Energy Board's Regulated Price Plan (RPP); and any other consumers who would be eligible for RPP if their electricity account was with a licensed distributor.

ii) Increase the total amount of rate protection available to R2 with low density electricity consumers under the Rural or Remote Rate Protection Program (RRRP) by increasing the subsidy by $110 million from its current level of $127 million which has been capped since 2004.

iii) Implement a mechanism to periodically adjust the total annual amount of rate protection available to R2 low density electricity consumers under the RRRP, effective on or after January 1, 2018.

iv) Expanding eligibility for participation in the Industrial Conservation Initiative (ICI) to smaller industrial, institutional and commercial customers by lowering the eligibility threshold to 1 MW and removing restrictions on eligible sectors.

2. ENERGY seek necessary TB/MBC approvals.

3. ENERGY seek approvals for:

i) the proposed *Ontario Rebate for Electricity Consumers Act, 2016* – and any supporting regulations under the proposed *Ontario Rebate for Electricity Consumers Act, 2016*, and with other complementary regulatory amendments and consequential legislative amendments to the *Ontario Energy Board Act, 1998* and the *Ontario Clean Energy Benefit Act, 2010*, subject to the Legislature's approval of the Act, including the following elements:

   i. The rebate would be available starting January 1, 2017;
   ii. The legislation would specify the types of costs to which the rebate would or would not be applied, with authority to make changes by regulation;
   iii. The legislation would address invoicing requirements, including authority to prescribe how the rebate is to appear on consumers electricity bills;
   iv. The legislation would include authority to prescribe the way in which the rebate is to be flowed through to consumers, and the way in which electricity vendors providing the rebate are to be reimbursed;

Commented [SK217]: This was from the Policy Minute. I assume this is the 'Minute' we are waiting for.

v. The legislation would include record-keeping requirements for electricity vendors and other prescribed persons;
vi. The legislation would include inspection powers for inspectors appointed by the minister of Finance, including powers related to the recovery of overpayments.
vii. The legislation would provide for regulation-making authority to establish a limitation period for ceasing payments and reimbursement based on past entitlement. Similar amendments would be provided for the *Ontario Clean Energy Benefit Act, 2010* but would allow the ceasing of all payments and reimbursements after a prescribed date.

4. ENERGY notes the following amendments:

i) Amendments to Ontario Regulation 429/04 (Adjustments Under Section 25.33 of the Act) made under the *Electricity Act, 1998* to lower the Industrial Conservation Initiative (ICI) threshold to 1 megawatt and require electricity consumers and market participants between 1 MW and 5 MW to opt in.

ii) Amendments to Ontario Regulation 442/01 (Rural or Remote Electricity Rate Protection) made under the Ontario Energy Board Act, 1998, to increase support through the Rural and Remote Rate Protection Plan to R2 low density rural electricity customers and provide for a periodic adjustment mechanism.

5. ENERGY work with MOECC to recycle an estimated annual average of $270 million of Cap and Trade auction proceeds from the Greenhouse Gas Reduction Account for non-RPP commercial and industrial electricity consumers over the first compliance period (2017-2020) through a volumetric rebate mechanism.

6. ENERGY and MOF work with Cabinet Office, Premier's office to develop a communications plan.

~~CABINET AGREED THAT:~~

~~1. THE MINISTRY OF ENERGY (ENERGY), WITH SUPPORT FROM THE MINISTRY OF FINANCE (MOF), SHALL PREPARE LEGISLATION THAT WOULD PROVIDE AN EIGHT PERCENT (8%) REBATE ON THE PRE-TAX COST OF ELECTRICITY FOR THE FOLLOWING CLASSES OF CONSUMERS:~~
~~A. ALL CONSUMERS ELIGIBLE TO BE BILLED UNDER THE ONTARIO ENERGY BOARD'S REGULATED PRICE PLAN; AND~~
~~B. ANY OTHER CONSUMERS WHO WERE ELIGIBLE FOR FINANCIAL ASSISTANCE UNDER THE *ONTARIO CLEAN ENERGY BENEFIT ACT, 2010* (OCEBA) DURING THE PERIOD THAT PROGRAM WAS IN PLACE.~~

~~2. THE LEGISLATION SHALL BE GENERALLY MODELLED UPON THE OCEBA, AND WOULD INCLUDE THE FOLLOWING ELEMENTS:~~
~~A. THE REBATE WOULD BE AVAILABLE STARTING JANUARY 1, 2017 AND BEFORE SUCH DATE AS MAY BE PRESCRIBED;~~
~~B. THE REBATE WOULD NOT BE SUBJECT TO A CAP UNLESS A CAP IS PRESCRIBED;~~
~~C. THE LEGISLATION WOULD SPECIFY THE TYPES OF COSTS TO WHICH THE REBATE WOULD OR WOULD NOT BE APPLIED, WITH AUTHORITY TO MAKE CHANGES BY REGULATION;~~

D. THE LEGISLATION WOULD ADDRESS INVOICING REQUIREMENTS, INCLUDING AUTHORITY TO PRESCRIBE HOW THE REBATE IS TO APPEAR ON CONSUMER ELECTRICITY BILLS;
E. THE LEGISLATION WOULD INCLUDE AUTHORITY TO PRESCRIBE THE WAY IN WHICH THE REBATE IS TO BE FLOWED THROUGH TO CONSUMERS, AND THE WAY IN WHICH ELECTRICITY VENDORS PROVIDING THE REBATE ARE TO BE REIMBURSED;
F. THE LEGISLATION WOULD INCLUDE RECORD-KEEPING REQUIREMENTS FOR ELECTRICITY VENDORS AND ANY OTHER PRESCRIBED PERSONS; AND
G. THE LEGISLATION WOULD INCLUDE INSPECTION POWERS FOR INSPECTORS APPOINTED BY THE MINISTER OF FINANCE, INCLUDING POWERS RELATED TO RECOVERY OF OVERPAYMENTS.

3. ENERGY AMEND O. REG. 429/04 (ADJUSTMENTS UNDER SECTION 25.33 OF THE ACT) MADE UNDER THE ELECTRICITY ACT, 1998 TO EXPAND ELIGIBILITY FOR CLASS A CONSUMERS AND CLASS A MARKET PARTICIPANTS UNDER THE INDUSTRIAL CONSERVATION INITIATIVE (ICI) TO ALL ELECTRICITY CONSUMERS AND MARKET PARTICIPANTS WITH A PEAK DEMAND ABOVE AN AVERAGE OF ONE MEGAWATT (1MW) WITH NO SECTORAL RESTRICTIONS ON PARTICIPATION.
4. ENERGY AMEND O. REG 442/01 (RURAL OR REMOTE ELECTRICITY RATE PROTECTION) MADE UNDER THE ONTARIO ENERGY BOARD ACT, 1998 TO INCREASE THE TOTAL AMOUNT OF RATE PROTECTION AVAILABLE TO LOW DENSITY HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE RATE PROTECTION PROGRAM BY $110 MILLION, EFFECTIVE JANUARY 1, 2017.
5. ENERGY CONSIDER AND, IF APPROPRIATE, UTILIZE A MECHANISM TO PERIODICALLY ADJUST THE TOTAL ANNUAL AMOUNT OF RATE PROTECTION AVAILABLE TO HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE ELECTRICITY RATE PROTECTION REGULATION / PROGRAM, EFFECTIVE JANUARY 1, 2018.
6. ENERGY TO RECYCLE UP TO AN AVERAGE OF $270 MILLION OF CAP AND TRADE AUCTION PROCEEDS FROM THE GREENHOUSE GAS REDUCTION ACCOUNT PER YEAR OVER THE FIRST COMPLIANCE PERIOD (2017-2020) TO COMMERCIAL AND INDUSTRIAL ELECTRICITY CONSUMERS.
7. ENERGY AND MOF TO WORK WITH CABINET OFFICE (CO) AND PREMIER'S OFFICE (PO) ON COMMUNICATIONS PLAN.

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APPENDIX B: BACKGROUND – ONTARIO CLEAN ENERGY BENEFIT

Commented [RK18]: What about using the eligibility table in Energy's submission?

- OCEB was in effect from 2011 to 2015, and provided residential, farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax.
    - Effective September 2012 electricity consumption eligible for the 10 per cent benefit was capped at the first 3,000 kWh of electricity consumed per month.
- OCEB helped Ontario families through the transition to a more reliable and cleaner electricity system, with the monthly cap balancing the fiscal implications of providing electricity relief.
- OCEB costs totalled $1,006 million in 2013-14 and $1,078 million in 2014-15, with a projected cost for 2015-16 of $860 million (for the 9 months remaining in the program).

Eligible Consumers	
Categories Listed in Legislation (coincides with categories eligible for RPP)	
Residential	• a dwelling • a property within the meaning of the Condominium Act, 1998 • a residential complex, within the meaning of the Residential Tenancies Act, 2006 • a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the Co-operative Corporations Act
Farms	• carries on a business that is a farming business for the purposes of the Farm Registration and Farm Organizations Funding Act, 1993, and • holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act
Demand for electricity of 50 kW or less, or consumes not more than 250,000 kWh annually	Would include small business, smaller broader- public-sector entities, and other small users.
Special Cases (not eligible for RPP, but eligible for OCEB)	
Consumers On Retail Contracts	Includes consumers with existing retail contracts and those who sign them during the duration of the program.
Cornwall Electric and Hydro One Remote Communities Inc.	Included since they are licensed distributors.
Other Consumers Prescribed by Regulation	10 First Nations remote unlicensed distributors have been added by regulation.
Exclusions	
Generators	Generation station service and the microFIT distribution service charge are excluded in legislation.

Electricity Price Mitigation

Ministry of Energy

WORKING DRAFT

Date: September 12, 2016

Minister

Deputy Minister

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.

- Ontario has taken action to replace coal-fired generation with cleaner sources of energy. Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished clean generation, including nuclear, natural gas and renewables.
  - This investment represents about 40% of our current supply and has helped decrease electricity sector emissions by approximately 80%.

- Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.

- Since 2010, electricity prices have risen considerably, particularly for households and small businesses. Prices are forecast to continue to increase as additional generation comes online.

- The Ministry of Energy and Ministry of Finance were asked to develop a proposal to provide rate relief to Ontario electricity consumers.

Electricity Consumer Classes

- There are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 3 MW	Above 3 MW*
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

**** Note:** Consumers with peak demand between 3-5 MW in the manufacturing, mining, refrigerated warehousing, greenhouses and data-processing industries are currently eligible for Class A. All other 3-5MW consumers are Class B.

Current Rate Base Mitigation Programs

- Ontario has implemented several programs to help electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers;
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs; and
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.

- These programs have shifted costs amongst electricity consumer classes (i.e., residential, commercial and industrial) as shown in the table below:

Cost Shift Impact	2011	2012	2013	2014	2015	2016
Residential Bill ($/month for 750 kWh)	3.55	4.07	3.85	4.46	5.68	6.55
Commercial – Class B ($/MWh)	4.74	5.43	5.14	5.94	7.57	8.73
Industrial – Class A ($/MWh)	-20.97	-25.26	-22.38	-24.68	-32.56	-31.55

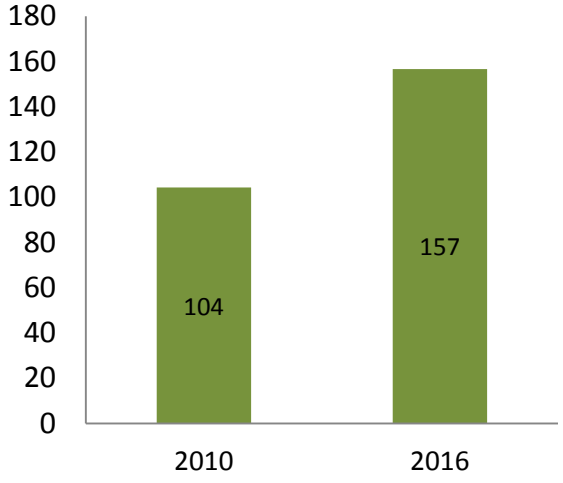
Note: Negative values indicate a benefit; positive values denote an incremental charge.

Prices by Electricity Consumer Class

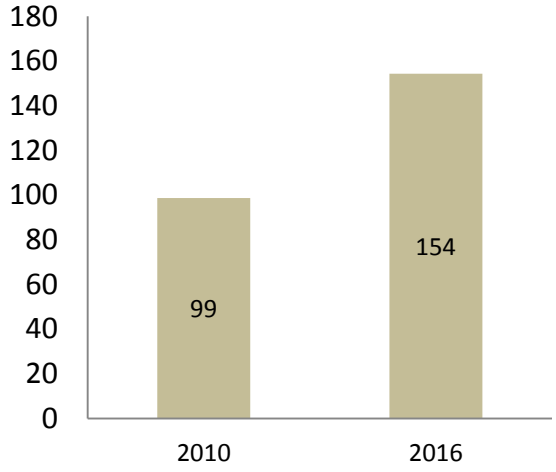
- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50% and rates paid by commercial have increased by 56%.

- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers.

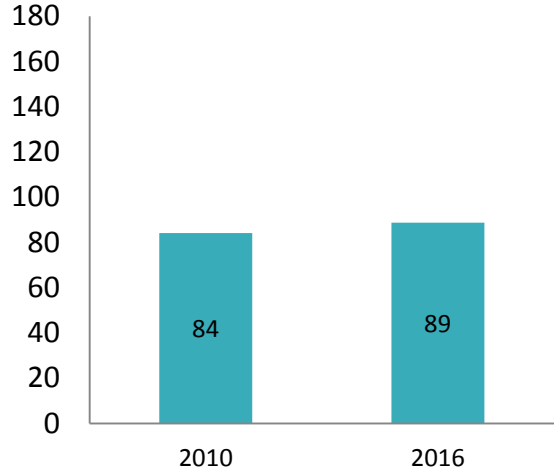
Typical Residential Bill (750/kWh per month)



Typical Class B (Commercial) Price ($/MWh)



Typical Class A (Industrial) Price ($/MWh)



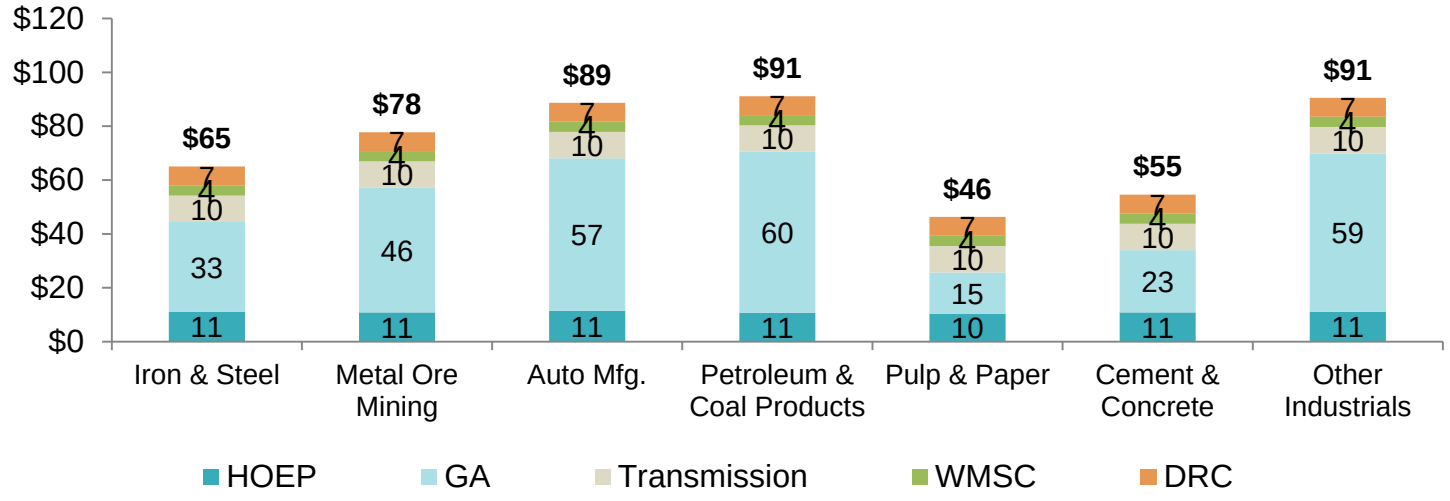
Note: 2016 represents May 2016 for residential and YTD June 2016 for commercial and industrial.

Industrial Electricity Prices Vary by Sector

- While Class A (industrial consumers) benefit from participation in the ICI program, there is a significant amount of variability in the ability to shift away from peak periods across customer classes, impacting the savings achieved.

- The below chart shows the prices paid in 2015 across a number of industrial sectors. Consumers in the north that receive rebates under the Northern Industrial Electricity Rate Program (NIERP) achieve rates that are $20/MWh lower than the below.

Average all-in Class A, Transmission-connected Electricity Prices by Industrial Sector (estimated $/MWh), Year-to-Date June 2016



Note: HOEP = Hourly Ontario Energy Price, GA = Global Adjustment, WMSC = Wholesale Market Service Charges, DRC = Debt Retirement Charge

Recent Actions to Bend the Cost Curve

- Since 2013, a number of actions have been taken to reduce overall electricity system costs:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Removing an expected $3.3 billion in Large Renewable Procurement (LRP) costs relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast, based on the results of the first phase of the LRP.
- Despite these actions to reduce system costs, electricity rates continue to increase for consumers.

Rate Mitigation

- The 2016 Budget committed to offset the impact of cap and trade in Ontario for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers. The Climate Change Action Plan (CCAP) committed $1.3 billion from the Greenhouse Gas Reduction Account (GGRA) over the first compliance period (2017-2020).

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:

  - **Tax-based Lever:**
    - Provide an on-bill rebate funded from the tax-base to all consumers or specific classes of consumers (i.e., the Ontario Clean Energy Benefit (OCEB) provided a rebate for eligible electricity consumers).

  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.

  - **Cap and Trade Proceeds Lever:**
    - Redirect cap and trade proceeds to offset the cost of existing initiatives that help reduce greenhouse gas (GHG) emissions (i.e., the CCAP committed to offset the impact of cap and trade and to keep electricity rates affordable).

Rate Mitigation Proposal

- The Ministry of Energy is proposing to implement the following electricity price mitigation initiatives. The approach identified below would provide relief across all electricity consumer classes:

  1) Provide an 8% rebate equal to the provincial portion of HST to consumers eligible for the Regulated Price Plan* (i.e., residential, small business and farms) and update the Rural and Remote Rate Protection (RRRP) program, to provide relief to rural customers; and

  2) Expand ICI eligibility by lowering the threshold to 1 MW, to provide support to Class B electricity consumers (i.e., commercial, institutional and small industrial) and redirect cap and trade proceeds to commercial and industrial electricity consumers to provide a modest reduction in rates.

- The following slides provide additional information on the above initiatives.

***Note:** Eligibility for the 8% rebate would be similar to OCEB and include some customers not on the Regulated Price Plan (RPP), such as Independent Power Authority consumers and consumers that have opted-out of RPP.

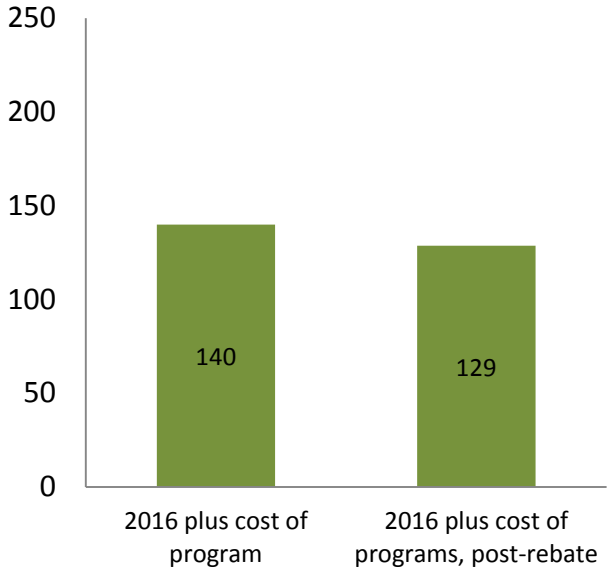
Rate Mitigation Proposal – Illustrative Benefits*

	Average Annual Fiscal Impact	Average Annual Greenhouse Gas Reduction Account (GGRA) Proceeds Impact	Regulated Price Plan (Residential) Benefit		Class B (Commercial) Benefit	Class A (Industrial) Benefit	
			Average (750 kWh/ month)	*Rural*** (1000 kWh/ month)*		*Existing*	*New*
• 8% rebate to Regulated Price Plan eligible consumers • ICI Expansion • RRRP Update • Proceeds Recycling	$1.0 billion annually	$0.27 billion annually (Reduction of $0.06 billion annually or $0.24 billion total from the CCAP commitment)	-$11/ month (-8%)	-$45/ month (-20%)	-$3/MWh (-2%)	-$3/ MWh (-3%)	Up to -$52/MWh (-34%)

- **Notes:** The above benefits do not include the cost of ICI expansion and the RRRP update (total impact of $1.74/MWh. The impact of cap and trade would not be added to electricity bills until 2017 and the impact of ICI would not be added to bills until 2018 due to the time required to implement the expansion and for billing changes. Proceeds recycling is an estimated average over the first compliance period (2017-2020).

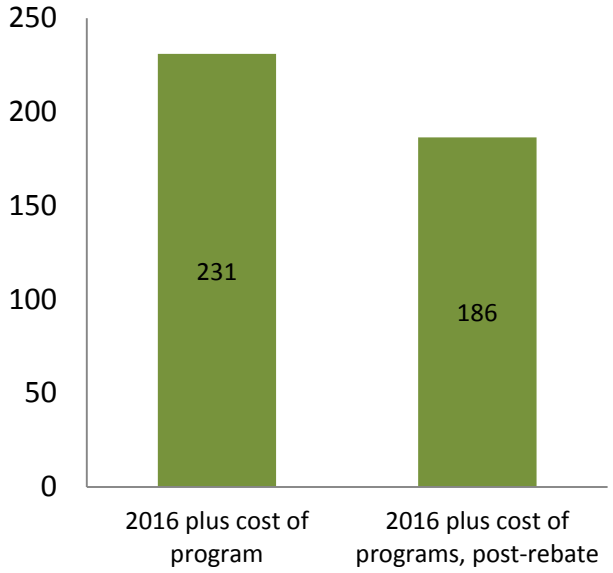
Rate Mitigation Proposal – Illustrative Bill Impacts by Electricity Consumer Class

Typical Residential Bill
750 kWh per month, 8% only



The pre-tax impact is a 8% reduction.

Rural (R2) Residential Bill
1,000 kWh per month, 8% and RRRP Update

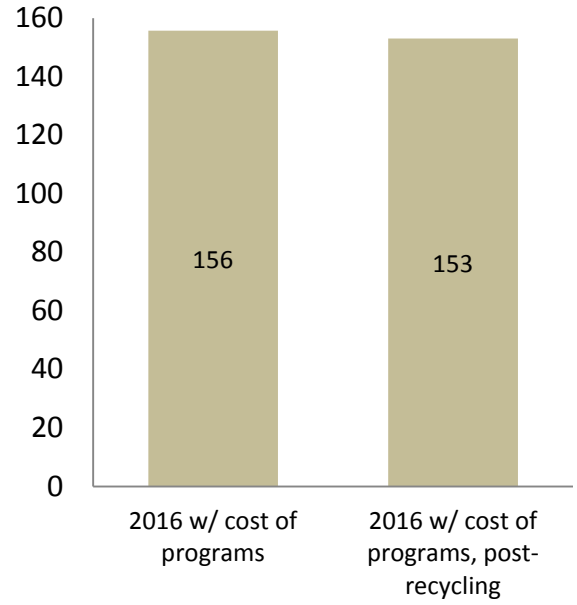


The pre-tax impact of the rate mitigation initiatives is a 20% reduction.

Note: Residential bills reflect electricity rates as per the Regulated Rate Plan (RRP) which came into effect on May 1, 2016.

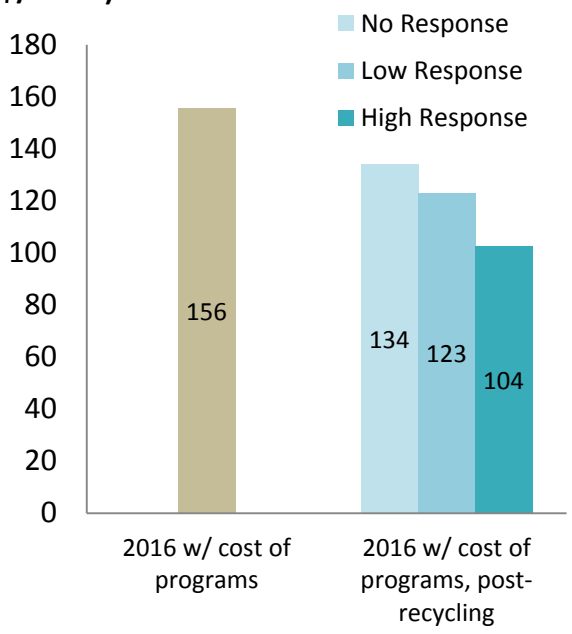
Rate Mitigation Proposal – Illustrative Bill Impacts by Electricity Consumer Class (cont'd)

Typical Class B (Commercial) Price ($/MWh)



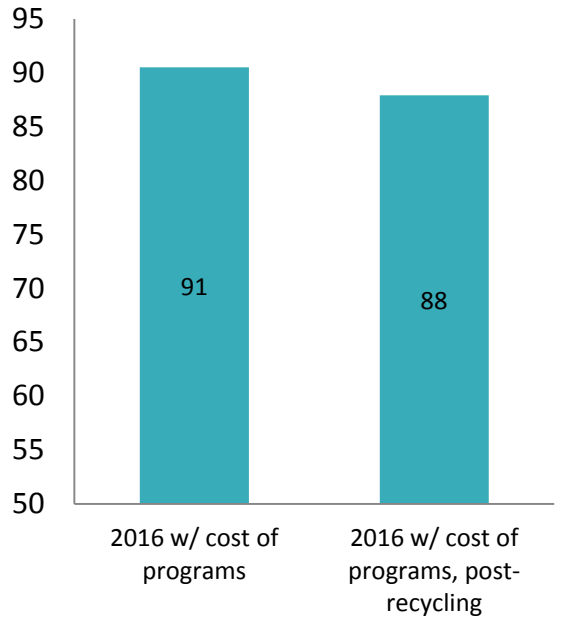
Class B: The benefit is a 2% reduction.

Typical New Class A Price ($/MWh)



New Class A: The benefit is a reduction of 14% to 34%.

Typical Class A (Industrial) Price ($/MWh)



Existing Class A: The benefit of the rate mitigation initiatives is a 3% reduction.

Note: The impact of cap and trade would not be added to electricity bills until 2017 and the impact of ICI would not be added to bills until 2018 due to the time required to implement the expansion and for billing changes. However, both the impact of cap and trade and ICI have been included above for illustrative purposes.

1) Regulated Price Plan Eligible Consumers and Rural or Remote Rate Protection Update

8% Rebate to Regulated Price Plan Eligible Consumers

- Legislation/regulation will be introduced to provide a rebate of 8% to consumers eligible for the Regulated Price Plan. The below table indicates which consumers would or would not receive the benefit.
  - This would be equivalent to the provincial portion of the HST*.

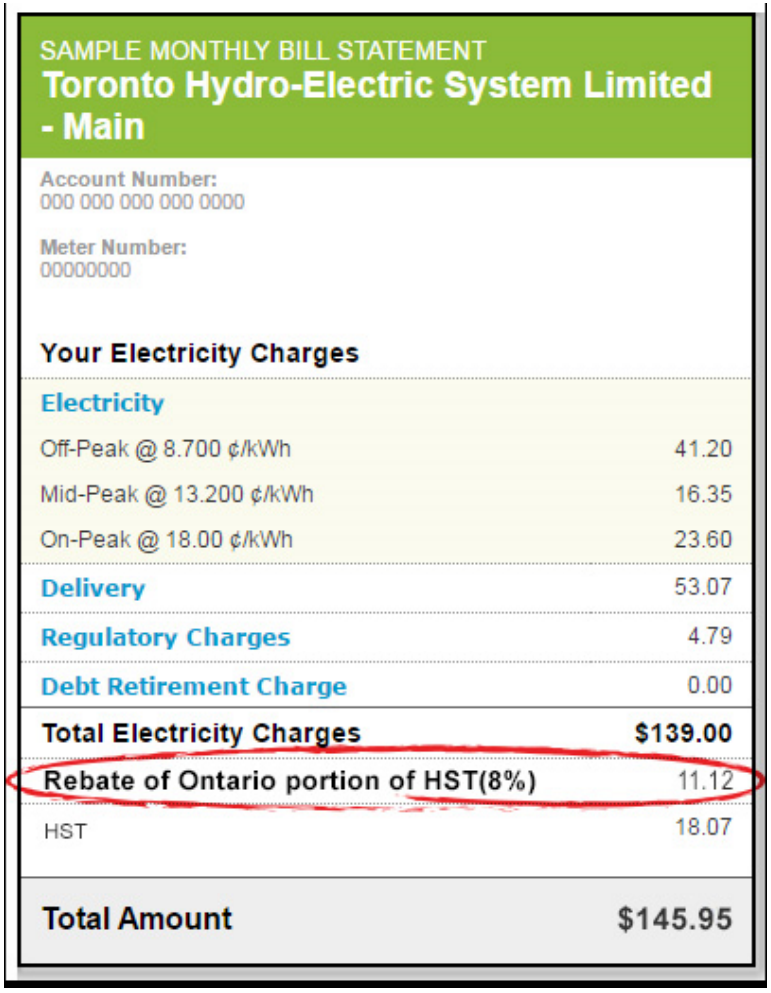
Eligible for the 8% rebate (< 50 kW or < 250,000 kWh/year)	**Not eligible for the 8% rebate** (> 50 kW or > 250,000 kWh/year)

• Residential Regulated Price Plan consumers
• Residential retail consumers
• Multi-unit residential buildings and other facilities used as residential rental units
• Long-term care homes and school residences
• Regulated Price Plan eligible farms
• Small businesses
  − Coffee / snack retailer
  − Convenience store
  − Apparel store
  − Hair salon
  − Small insurance office
	• Class A consumers
	  − Manufacturer
	  − Large grocery store
	  − Mines
	  − Auto assembly plants
	• Class B consumers (except farms that have opted out of the Regulated Price Plan)
	  − Commercial offices (low rise)
	  − Hotel
	  − General warehousing

- Those ineligible to receive the 8% rebate will benefit from one or more of the other initiatives under this proposal (e.g., ICI expansion, proceeds recycling, etc).

***Note:** An HST exemption would require federal approval. Engaging in discussions with the federal government would take time and would likely result in not meeting the targeted implementation date.

Illustrative Electricity Bill Mock-Up



SAMPLE MONTHLY BILL STATEMENT

Toronto Hydro-Electric System Limited - Main

Account Number:
000 000 000 000 0000

Meter Number:
00000000

Your Electricity Charges

Electricity	
Off-Peak @ 8.700 ¢/kWh	41.20
Mid-Peak @ 13.200 ¢/kWh	16.35
On-Peak @ 18.00 ¢/kWh	23.60
Delivery	53.07
Regulatory Charges	4.79
Debt Retirement Charge	0.00
Total Electricity Charges	**$139.00**
Rebate of Ontario portion of HST(8%)	11.12
HST	18.07
Total Amount	**$145.95**

Note: Final bill presentment pending submission to LRC.

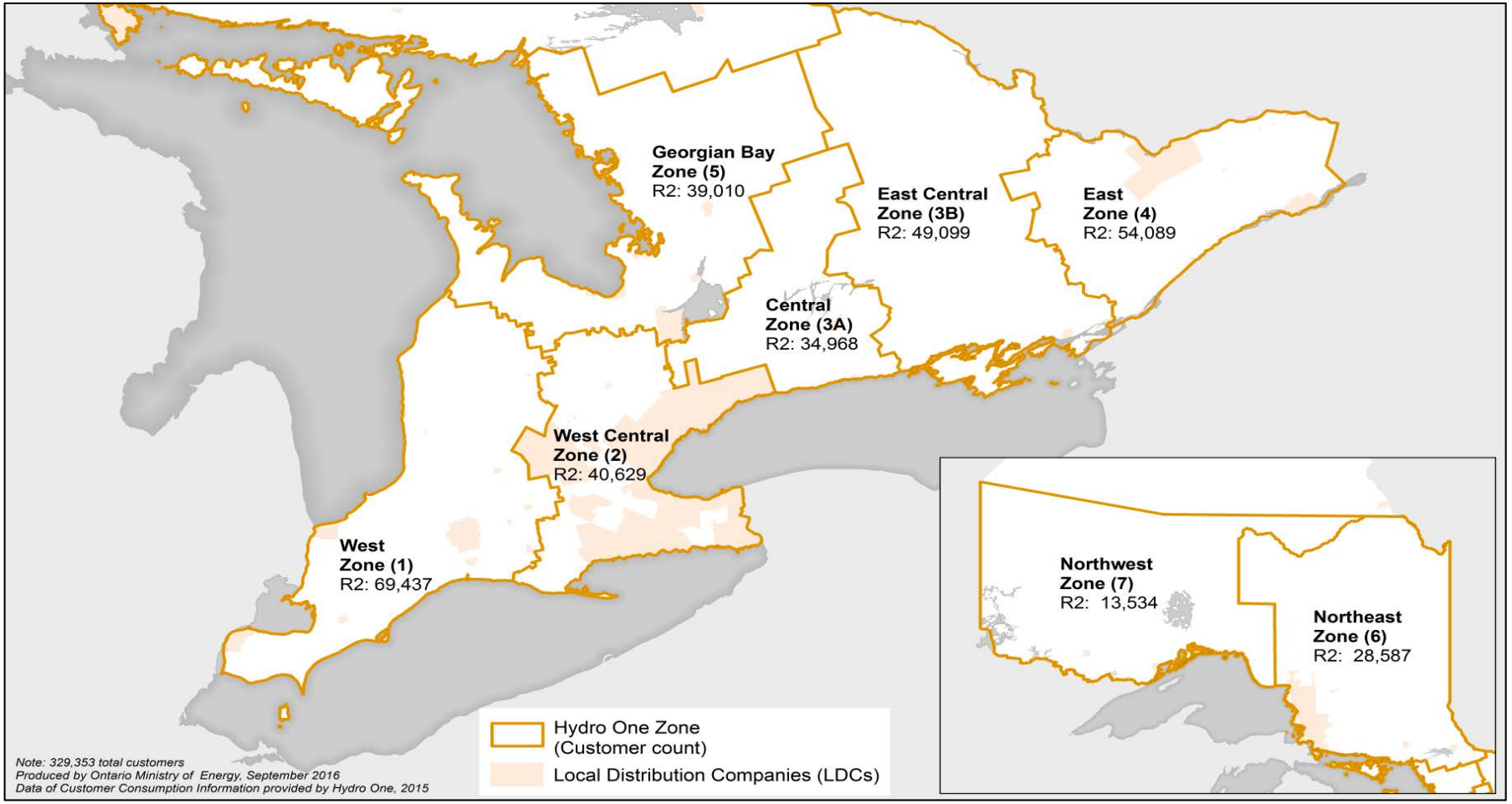
Rural or Remote Rate Protection (RRRP) Update

- ENERGY is proposing to amend O.Reg 442/01 to provide an additional $110 million in rate protection to eligible rural or remote electricity consumers, and consider options to periodically adjust the amount of rate protection available to these consumers going forward.

- RRRP is a rate-based funded program that helps offset the higher costs to distribute electricity to Ontario residents who live in rural or remote locations all across the Province.
  - Today, RRRP is a $175-million program. For an average residential customer, the cost of supporting RRRP is roughly $1 per month. For other customers, the cost can range from $65 for a greenhouse to $8,000 for a medium industrial.
  - The majority of the program funding ($125.5 million) is provided to Hydro One's lowest-density customers – classified as R2 customers. There are approximately 329,000 R2 customers. The current program provides a rebate of $31.50. The proposed update to the program would increase the benefit to $60/month.
  - RRRP funding supporting R2 customers has been capped at the current level since 2004. As a result, the impact of its assistance has diluted over time as electricity costs have risen.

- An additional $110 million in program funding would see an increased benefit of ~$28 /month. This would bring R2 bills in line with Hydro One R1 (medium density) bills at 1000kWh.
  - This would increase the R2 portion of the RRRP to $235 million with a monthly impact on an average residential consumer of ~$0.60.
  - The RRRP could be indexed at inflation or "trued up" on a regular basis to ensure the benefit remains constant.

Rural or Remote Rate Protection (RRRP) Update – R2 Customers by Region



2) Expand Industrial Conservation Initiative and Redirect Cap and Trade Proceeds

Industrial Conservation Initiative (ICI) Expansion

- ENERGY is proposing to amend O. Reg. 429/04 to expand ICI eligibility. The base setting period for the expanded program would begin in 2017, with the benefit seen by consumers starting in 2018.

- Currently, electricity consumers over 5 MW and consumers from 3-5 MW in certain energy intensive sectors are eligible for ICI (i.e., approximately 300 Class A consumers).
  - Consumers participating in ICI include the following sectors: pulp and paper, auto, manufacturing, chemicals and mines.

- ICI would be expanded so that all consumers over 1 MW are eligible for the program, which would:
  - Reduce electricity peak demand and electricity system costs by incenting more consumers to lower their electricity demand during peak periods;
  - Reduce electricity bills for new ICI participants who are able to reduce their electricity demand during peak demand periods; and
  - Increase the electricity bills for non-ICI participants to ensure full cost recovery in the electricity system.

ICI Expansion – Projected Impact

	Benefit to New ICI Participants	System Benefit	Financial Impact	Residential Bill Impact
	Bill Savings	Peak Demand Reduction (MW)	GA shifted to Class B ($M)	
Short-term	Up to 21%	80	47	Increase of $0.42/month
Long-term	Up to 34%	165	82	Increase of $0.74/month

- The different impacts refer to the amount of time it takes for new Class A consumers to respond to the expanded ICI eligibility
  - Short-term refers to the expected impact once ICI billing begins for new Class A consumers (one year after expanded eligibility takes place).
  - Long-term is the expected impact once new Class A consumers have had time to significantly change their behaviour and investment decisions in response to the ICI.

- The bill impacts assume a 25% uptake, which would increase Class A consumption by roughly 3 TWh, leaving an estimated 54 TWh in Class B that are either between 0.05-1 MW or choose not to opt in to ICI. This would represent an estimated 300 additional consumers in ICI, though they would represent a much smaller share of the consumption than the 300 consumers currently participating.

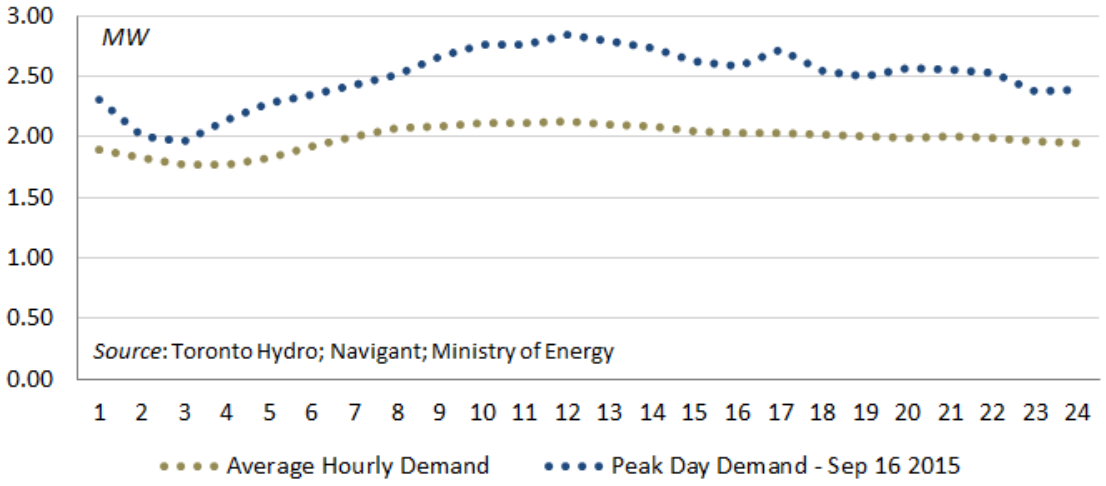
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
  - A few examples of companies that would become eligible under such an expansion would be Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.

ICI Expansion – Illustrative Example of Newly Eligible Consumer

- Plastics manufacturers, such as Poly Five Plastics in Toronto, are among the consumers that would become eligible if the threshold was lowered.
- Such manufacturers fall under NAICS* code 32 and have relatively flat load profiles, reflecting around the clock production. This means they would be beneficiaries of ICI even with no change in consumption behaviour.
- Companies like Poly Five Plastics could expect to see greater savings if they are willing and able to respond to the higher prices during high demand hours.

Typical Demand Profile, 2-3 MW Consumer

Manufacturer, NAICS Code 32 - Nov 2014 to Oct 2015



Illustrative Bill Savings, 2-3 MW Consumer

	Status Quo	*No Price Response*	*Short Term Response*	*Long Term Response*
	Class B	**Class A**	**Class A**	**Class A**
GA	75.26	58.06	43.55	32.03
Total bill	**126.28**	**109.09**	**94.58**	**83.06**
Savings		*-14%*	*-25%*	*-34%*

Source: Navigant; Ministry of Energy

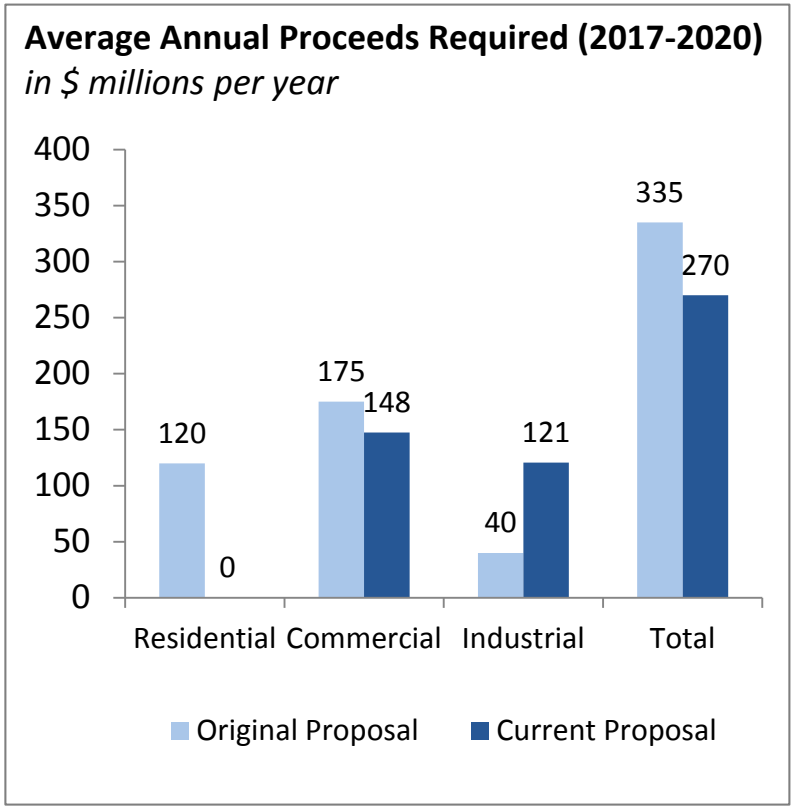
*** Note:** North American Industry Classification System (NAICS) is the standard used by statistical agencies in classifying business establishments.

Redirect Cap and Trade Proceeds Recycling

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial consumers, while also providing a benefit of up to $2 per month for residential consumers.
  - To meet the 2016 Budget commitment, the Climate Change Action Plan (CCAP), committed $1.3 billion from the GGRA over the first compliance period (2017-2020).

- However, providing a 8% rebate to Regulated Price Plan consumers would allow for GGRA proceeds previously committed to residential consumers to be redirected to other consumers classes and/or GHG reduction initiatives in the fiscal plan.

- The current proposal would provide additional recycling to commercial and industrial consumers, while requiring an estimated $60 million less per year (i.e., a reduction of $0.24 billion over the first compliance period).



Note: The original proposal was to offset the impact of cap and trade via GA to the average industrial, and would provide a benefit to commercial and residential consumers. Current proposal would recycle proceeds volumetrically to industrial and commercial consumers.

Redirect Cap and Trade Proceeds Recycling

- Redirecting cap and trade auction proceeds to lower the cost of electricity would offset consumers' contributions to non-emitting generation.

- Redirecting helps pay for committed investments/initiatives which reduce GHGs (e.g., non-emitting generation and conservation programs).
  - Due to the long-term nature (typically 20 years) of electricity generation contracts and conservation programs, the associated costs are ongoing and are expected to be about $7 billion dollars annually during the first cap and trade compliance period. These costs will continue well beyond the timelines described in the CCAP.

- Redirecting cap and trade auction proceeds volumetrically to Class B (commercial) and Class A (industrial) consumers maintains the incentive to shift consumption from on-peak to off-peak hours.

- Using cap and trade auction proceeds to lower the cost of electricity would make it more competitive with traditionally cheaper fossil fuels.

- By using the proceeds to lower the cost of electricity, there is potential to incent fuel-switching away from fossil fuels toward much cleaner grid-connected electricity and support CCAP goals of electrification.

Considerations

Implementation

- On September 15, 2016, ENERGY is proposing to introduce the *Ontario Rebate for Electricity Consumers Act, 2016*.
  - If passed, the legislation would require a general regulation.
  - Amendments would also be required to various regulations to expand ICI and RRRP.

- On-bill rebate delivery would likely require adjustments to LDC billing systems, which could impact delivery costs and timelines. ENERGY (possibly through Ontario Energy Board) will consult with LDCs to accurately assess these impacts once the program has been announced.
  - In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
  - Timing concerns may be alleviated by allowing LDCs to provide retroactive rebates if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.

- Detailed messaging on bills (for "low-volume" consumer bills) could be implemented by amending O. Reg. 275/04 (made under the Ontario Energy Board Act, 1998).
  - The rebate would not be directly linked to HST.
  - With electricity invoices containing multiple line items and LDC bill presentment varying widely, direction on rebate presentment will need to be flexible to allow LDCs to incorporate easily while ensuring government-preferred branding and messaging is conveyed.

- While the impact of cap and trade would be added to electricity bills as of January 2017, the offsetting effect of proceeds recycling may not occur immediately depending on implementation and potential alignment with the first auction expected in March 2017.
  - Should there be low demand for carbon allowances, auction proceeds would be less than the amount projected in the CCAP. This could mean a short-fall for proceeds recycling as proposed. However, natural gas utilities are expected to purchase allowances quarterly equal to their emissions.

- ENERGY will need to continue to consult with the Independent Electricity System Operator (IESO), Ontario Energy Board (OEB) and LDCs regarding implementation of proceeds recycling.

Fiscal

- The Climate Change Action Plan (CCAP) committed about $1.3 billion over four years for electricity mitigation for industrial, commercial and residential consumers from GGRA proceeds.
  - The current rate mitigation proposal requires approximately 20% less in proceeds, saving approximately $0.24 billion relative to the CCAP commitment over the first compliance period (2017-2020).

- The 8% rebate is expected to cost about $1 billion per year (i.e., $4 billion from 2017-2020), representing an additional pressure on the fiscal plan.
  - Consideration could be given to allocating the $0.24 billion in reduced proceeds required towards other existing initiatives in the fiscal plan that also reduce greenhouse gas (GHG) emissions, thereby providing an overall fiscal plan offset.
  - If cap and trade auctions are under-subscribed, the $0.24 billion may not be available for reallocation to the fiscal plan.

- In the absence of any offset strategies, the full cost of the rate mitigation approach would add to the pressures and risks that need to be managed in order for the government to balance the budget in 2017-18 and stay balanced in 2018-19 and beyond.

Legal

- In order to avoid characterization as an unconstitutional tax, a non-tax levy must have a sufficient nexus between those who pay and the regulatory scheme in the sense that those who pay have caused the need for or benefit from the regulatory scheme. Although the case law is not developed on the extent to which some regulated actors can be required to subsidize others, risk is reduced to the extent that any cross-subsidization serves true regulatory goals rather than revenue re-distribution goals.

- ~~HST~~ 8% Rebate of the pre-tax electricity costs (shift costs from rate-base to tax base by providing a rebate equal to the provincial portion of HST):
  - Providing the contemplated rebate under the proposed Bill does not, in and of itself, give rise to legal issues. As policy direction is given on the specifics of supporting regulations, any associated legal risks can be identified.

- ICI Expansion (shift costs within rate-base by expanding eligibility for the ICI program to consumers of >1 MW):
  - Shifting costs to some consumers to lower rates for others without more carries the risk that the charge would be characterized as an unconstitutional tax. To establish that the charge is legitimate, it must be established that the purpose and effect of the charge is to facilitate the maintenance of a financially viable electricity system by way of load management or some other feature under which those who are subsidized provide an overall system benefit enjoyed by those who subsidize them.

- RRRP Update (shift costs within the rate-base by increasing the RRRP benefit paid to rural and remote customers):
  - Increasing the amount of revenue devoted to the RRRP or expanding the scope of consumers eligible for the program does not raise new legal risk. There is a good argument that the RRRP is a regulatory charge, as it socializes some of the costs of distributing electricity to rural consumers. Overall the risk that the RRRP would be characterized as a tax is assessed as moderate (meaning equally good arguments on both sides).

- Cap and Trade Proceeds Recycling (reduce impact on rate base and tax base by directing cap and trade auction proceeds to industrial consumers):
  - To be characterized as regulatory charges under the cap and trade program, auction revenues should be spent on programs that reduce GHGs.

Communications

- Public high-profile communications would coincide with introduction of legislation (September 2016).
  - Stakeholder outreach/technical briefings with LDCs, Ontario Chamber of Commerce, AMPCO, OEB low-income table, AMO, etc.
  - Echo public announcements in southwest and north; proactive provincial/local media.

- **Positioning:**
  - A fiscally prudent plan to benefit all ratepayers in a lasting, meaningful way.
  - Rural customers will receive the largest single rate relief ever.
  - Businesses across Ontario will have even more opportunity to be competitive and manage their energy costs.

- **Issues Considerations:**
  - Significant benefit for rural and remote residential customers; net gain for all residential customers.
  - More complex to communicate, but can be presented as a full plan that includes reforms and improvements to the system.
  - Consistent with cap-and-trade commitment that no business sector will be left worse off, though small businesses outside ICI will benefit the least.

Pending Update

Ontario

Key Messages

- We are taking unprecedented action to help people in their everyday lives.
- Residential ratepayers and other RPP eligible ratepayers will receive an eight per cent rebate on their electricity bill, equivalent to the provincial portion of the HST.
- Modernizing the RRRP will benefit 330,000 families in rural Ontario with significant reductions to their electricity bills – $28 a month, in addition to the eight per cent rebate.
- Over a thousand more Ontario businesses will be eligible to benefit from the ICI program, helping them stay competitive and grow.
- These actions will assist over five million families, farms and small businesses across Ontario.
- These actions today join our many existing initiatives too help keep electricity in Ontario clean, reliable and affordable.

Proposed Cabinet Minute

Cabinet agreed that:

1. ENERGY implement electricity price mitigation for residential, commercial and industrial consumers through the following:

   i. Provide a rebate of 8% ~~on~~ of the pre-tax cost of electricity for all electricity consumers eligible to be billed under the Ontario Energy Board's Regulated Price Plan (RPP); and any other consumers who would be eligible for RPP if their electricity account was with a licensed distributor.

   ii. Increase the total amount of rate protection available to R2 low density electricity consumers under the Rural or Remote Rate Protection Program (RRRP) by increasing the subsidy by $110 million from its current level of $127 million which has been capped since 2004.

   iii. Implement a mechanism to periodically adjust the total annual amount of rate protection available to R2 low density electricity consumers under the RRRP, effective on or after January 1, 2018.

   iv. Expand eligibility for participation in the Industrial Conservation Initiative (ICI) to smaller industrial, institutional and commercial customers by lowering the eligibility threshold to 1 MW and removing restrictions on eligible sectors.

Proposed Cabinet Minute (cont'd)

2. ENERGY seek necessary TB/MBC approvals. **[TBD]**

3. ENERGY seek approvals for the proposed *Ontario Rebate for Electricity Consumers Act, 2016* which would, subject to the Legislature's approval of the Act, include the following elements:
   i. The rebate would be available starting January 1, 2017;
   ii. The legislation would specify the types of costs to which the rebate would or would not be applied, with authority to make changes by regulation;
   iii. The legislation would address invoicing requirements, including authority to prescribe how the rebate is to appear on consumers' electricity bills;
   iv. The legislation would include authority to prescribe the way in which the rebate is to be flowed through to consumers, and the way in which electricity vendors providing the rebate are to be reimbursed;
   v. The legislation would include record-keeping requirements for electricity vendors and other prescribed persons;
   vi. The legislation would include inspection powers for inspectors appointed by the minister of Finance, including powers related to the recovery of overpayments; and
   vii. The legislation would include consequential amendments to the *Ontario Energy Board Act, 1998* and the *Ontario Clean Energy Benefit Act, 2010*; and
   viii. The legislation would provide for regulation-making authority to establish a limitation period for ceasing payments and reimbursement based on past entitlement. Similar amendments would be provided for the *Ontario Clean Energy Benefit Act, 2010* but would allow the ceasing of all payments and reimbursements after a prescribed date

Proposed Cabinet Minute (cont'd)

4. ENERGY to report back to LRC and Cabinet for approval of any supporting regulations under the proposed *Ontario Rebate for Electricity Consumers Act, 2016*, and with other complementary regulatory amendments.

5. ENERGY notes the following amendments:

   i. Amendments to Ontario Regulation 429/04 (Adjustments Under Section 25.33 of the Act) made under the *Electricity Act, 1998* to lower the Industrial Conservation Initiative (ICI) threshold to 1 megawatt and require electricity consumers and market participants between 1 MW and 5 MW to opt in.

   ii. Amendments to Ontario Regulation 442/01 (Rural or Remote Electricity Rate Protection) made under the Ontario Energy Board Act, 1998, to increase support through the Rural and Remote Rate Protection Plan to R2 low density electricity customers and provide for a periodic adjustment mechanism.

6. ENERGY work with MOECC to recycle an estimated annual average of $270 million of Cap and Trade auction proceeds from the Greenhouse Gas Reduction Account for non-RPP commercial and industrial electricity consumers over the first compliance period (2017-2020) through a volumetric rebate mechanism.

7. ENERGY and MOF work with Cabinet Office, Premier's office to develop a communications plan

Proposed Cabinet Minute (cont'd)

Cabinet approved version of the proposed *Ontario Rebate for Electricity Consumers Act, 2016* for introduction, subject to the following:

1. The Office of Legislative Counsel is authorized to prepare a French version and to make minor adjustments to the English version, for the purpose of ensuring consistency between the two versions and making other improvements or correcting mistakes discovered in the translation process.

Appendix

Illustrative Bill Impacts

	Current Bill (after cost of new programs, before tax)	Current Rate mitigation initiatives*	New Rate Mitigation initiatives	New Bill (after cost of new programs, before tax)
Average Residential (Toronto – 750 kWh/month)	$140 /month	N/A	8% ~~pre-tax~~ rebate: - $11	$129 /month
Rural Residential (Hydro One R2 – 1000 kWh/month)	$231 /month	RRRP: –$32	8% ~~pre-tax~~ rebate + Updated RRRP: - $45	$186 /month
Low-income Residential ** (Toronto – 750 kWh/month)	$102 /month	OESP: -$38	8% ~~pre-ta~~x rebate: - $8	$94 /month
Small Business (Toronto – 403,200 kWh/month)	$150 /MWh	N/A	8% ~~pre-tax~~ rebate: - $12/MWh	$138 /MWh
Small Farm (Hydro One R1 – 4,000 kWh/month)	$204 /MWh	N/A	8% ~~pre-ta~~x rebate: - $16/MWh	$188 /MWh

***Note:** Some residential consumers ~~can~~ may also receive relief for sales tax on home energy of up to $224 for 2016 through the ~~tax credits based on income, age and geography (Northern Ontario Energy Credit and~~ Ontario Energy and Property Tax Credit~~)~~. People who live in the North may receive additional relief for home energy costs of up to $224 for 2016 through the Northern Ontario Energy Credit. These credits are delivered through the Ontario Trillium Benefit ~~Tax Credit and can be as high as $1,332 per year for a family~~.
** income of less than $28,000, family of 4.

Totals may not add due to rounding.

Illustrative Bill Impacts (cont'd)

	Current Rate	Current Rate mitigation initiatives*	Cost of new initiatives (RRRP and ICI)	New Rate Mitigation initiatives	Net Impact,	New Rate,
Large Institutional (Toronto – distribution-connected, 10 MW)	$108 /MWh	ICI: -$49/MWh	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh (2017-2020 average)	-$0.90 /MWh (-1%)	$107 /MWh
Large Industrial (Timmins – transmission-connected, 10 MW)	$69 /MWh	ICI + NIERP: -$69/MWh	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh	-$0.90 /MWh (-1%)	$68 /MWh
Small Industrial – opt-in to ICI (Toronto – 2 MW)	$152 /MWh	N/A	$1.74 /MWh	Proceeds Recycling + ICI: -$53.90/MWh	-$52 /MWh (-34%)	$100 /MWh
Large Commercial – does not opt-in to ICI (Toronto – 2 MW)	$152 /MWh	N/A	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh	-$0.90 /MWh (-1%)	$151 /MWh
Small Institutional (Toronto – 500 kw)	$154 /MWh	N/A	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh	-$0.90 /MWh	$153 /MWh

Notes:

1) There is the potential for a consumer eligible for the Regulated Price Plan to opt-out of the Regulated Price Plan to opt-in to Class A and receive all three benefits (i.e., Regulated Price Plan, ICI and proceeds recycling).

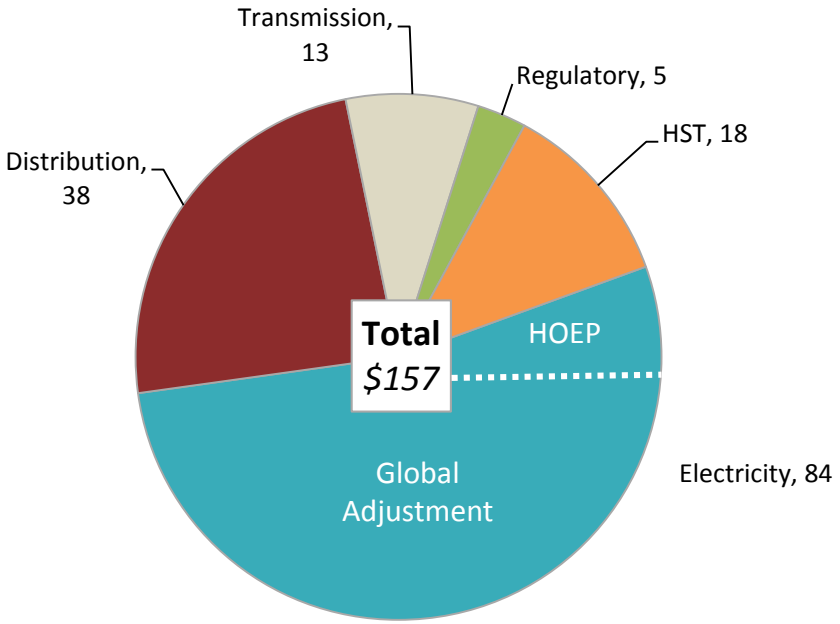
2) The impact of cap and trade would not be added to electricity bills until 2017 and varies per year over the course of the first compliance period. For illustrative purposes, the estimated average benefit of proceeds recycling is shown above.

Residential Electricity Prices

- There are approximately 5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of May 1, 2016 (750 kWh/month)



Source: OEB, Toronto Hydro

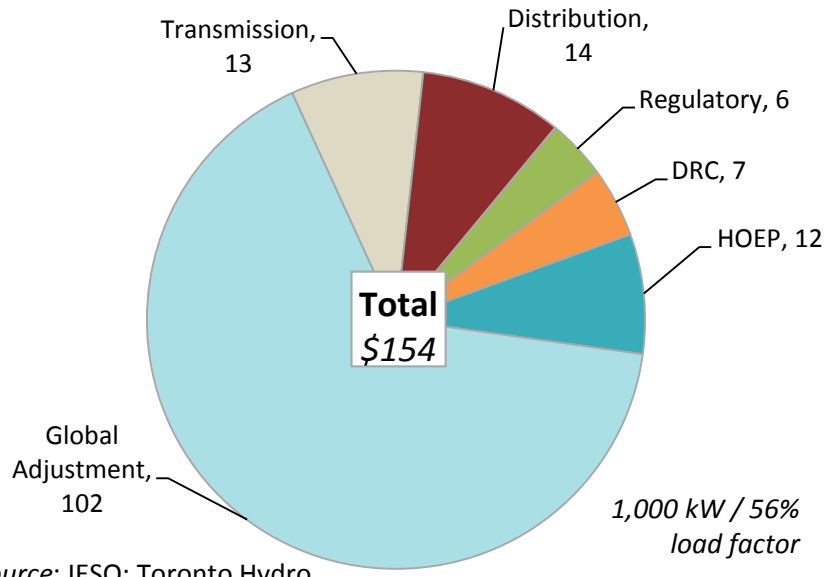
Commercial Electricity Prices

- There are approximately 400,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.

- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



Source: IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.

- Targeted pricing programs are currently not available for Class B consumers.

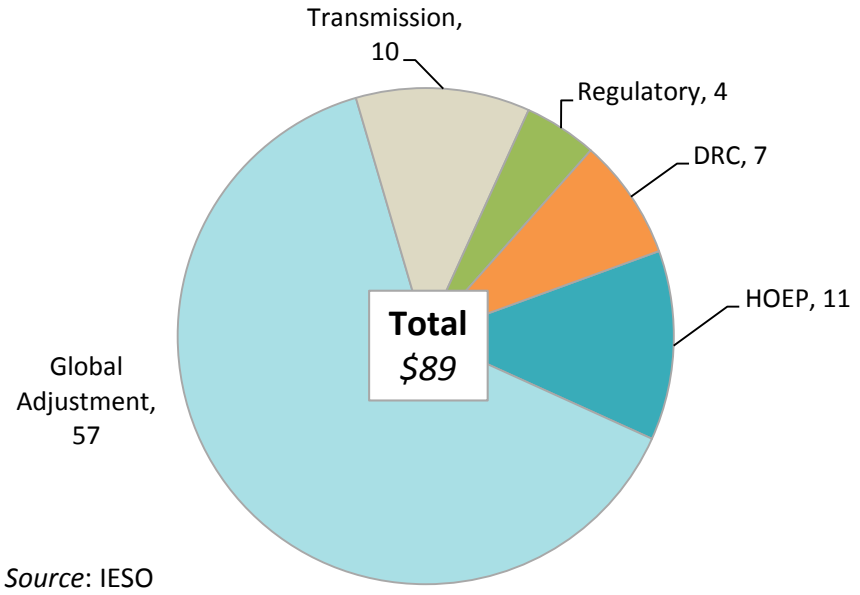
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



Source: IESO

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $64/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Sales Tax Treatment in Other Jurisdictions

Jurisdiction	Tax	Tax Paid by Business Consumers	Tax Paid by Residential Consumers	Comment
British Columbia	PST	Yes – 7%	No	• PST does not apply to residential energy, including electricity, acquired solely for residential use in a residential dwelling • BC's carbon tax does not apply to electricity bills.
Alberta	None	N/A	N/A	• Alberta does not have a provincial sales tax.
Saskatchewan	PST	Yes – 5% Except for electricity purchased to heat a building.	No	• PST does not apply to electricity purchased for use in a residential dwelling. • PST does not apply to electricity purchased for use in heating a building that is heated solely by the electricity.
Manitoba	PST	Yes – 8% Reduced rate of 1.6% applies to electricity used by a qualifying business to operate machinery	Yes – 8% Electricity purchased for mixed use, 80% of which is home heating, has a reduced rate of 1.4%. Electricity solely to heat the purchaser's home is exempt.	• Winnipeg also applies a tax of 2.5% on residential and 5% on commercial.
Ontario	HST	Yes (less ITC (input tax credits))	Yes – 8%	
Quebec	QST	Yes (less ITCs)	Yes – 9.975%	
Nova Scotia	HST	Yes (less ITCs)	Yes – 10% less provincially administered rebate.	• Rebate is equal to the provincial portion of the HST, and is administered similar to OCEB, but applies to many energy sources.
New Brunswick	HST	Yes (less ITCs)	Yes – 10%	
Prince Edward Island	HST	Yes (less ITCs)	Yes – 9% (10% beginning Oct 1, 2016)	
Newfoundland and Labrador	HST	Yes (less ITCs)	Yes – 10%	• Had a provincially administered Home Heating Rebate program until July 2015.
Federal	GST	Yes (less ITCs)	Yes – 5%	

Electricity Price Mitigation

Ministry of Energy

WORKING DRAFT

Date: September 12, 2016

Minister

Deputy Minister

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.

- Ontario has taken action to replace coal-fired generation with cleaner sources of energy. Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished clean generation, including nuclear, natural gas and renewables.
  - This investment represents about 40% of our current supply and has helped decrease electricity sector emissions by approximately 80%.

- Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.

- Since 2010, electricity prices have risen considerably, particularly for households and small businesses. Prices are forecast to continue to increase as additional generation comes online.

- The Ministry of Energy and Ministry of Finance were asked to develop a proposal to provide rate relief to Ontario electricity consumers.

Electricity Consumer Classes

- There are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 3 MW	Above 3 MW*
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

**** Note:** Consumers with peak demand between 3-5 MW in the manufacturing, mining, refrigerated warehousing, greenhouses and data-processing industries are currently eligible for Class A. All other 3-5MW consumers are Class B.

Current Rate Base Mitigation Programs

- Ontario has implemented several programs to help electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers;
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs; and
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.

- These programs have shifted costs amongst electricity consumer classes (i.e., residential, commercial and industrial) as shown in the table below:

Cost Shift Impact	2011	2012	2013	2014	2015	2016
Residential Bill ($/month for 750 kWh)	3.55	4.07	3.85	4.46	5.68	6.55
Commercial – Class B ($/MWh)	4.74	5.43	5.14	5.94	7.57	8.73
Industrial – Class A ($/MWh)	-20.97	-25.26	-22.38	-24.68	-32.56	-31.55

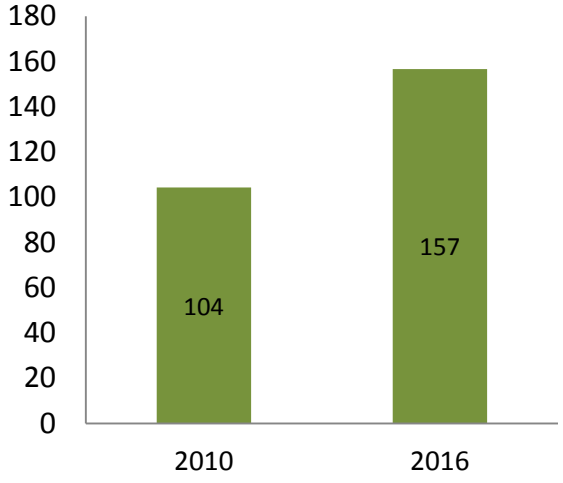
Note: Negative values indicate a benefit; positive values denote an incremental charge.

Prices by Electricity Consumer Class

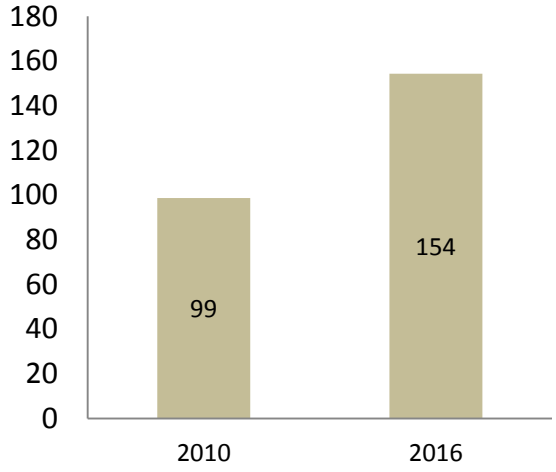
- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50% and rates paid by commercial have increased by 56%.

- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers.

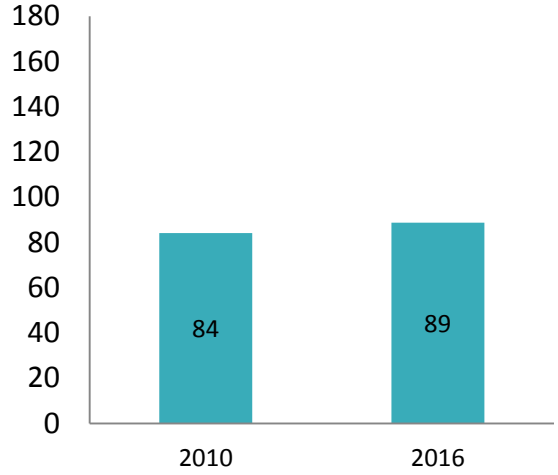
Typical Residential Bill (750/kWh per month)



Typical Class B (Commercial) Price ($/MWh)



Typical Class A (Industrial) Price ($/MWh)



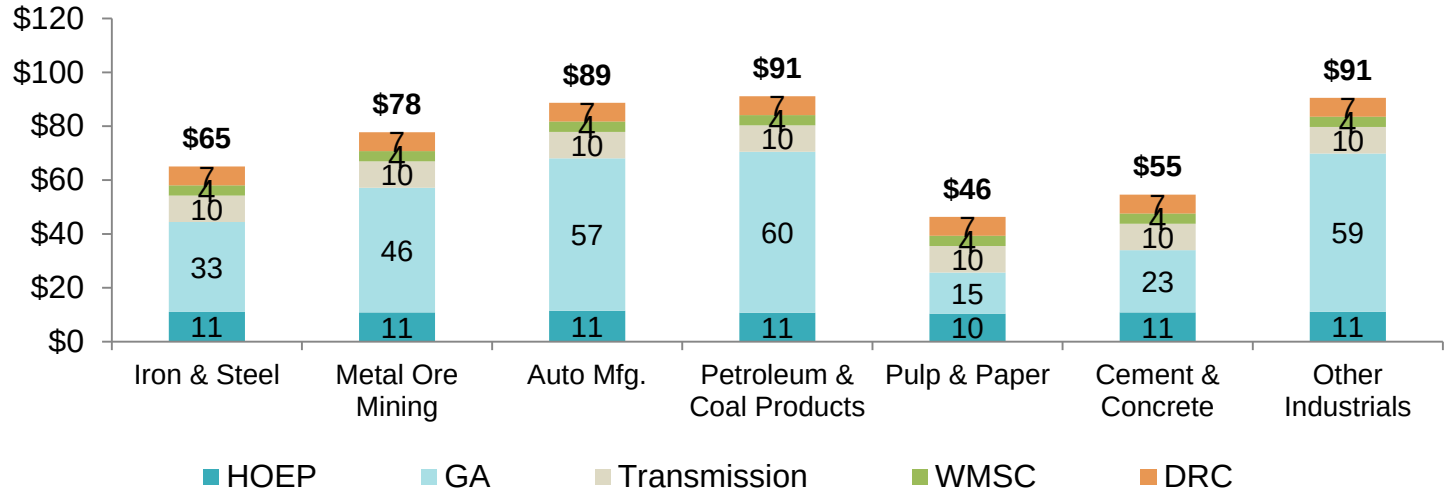
Note: 2016 represents May 2016 for residential and YTD June 2016 for commercial and industrial.

Industrial Electricity Prices Vary by Sector

- While Class A (industrial consumers) benefit from participation in the ICI program, there is a significant amount of variability in the ability to shift away from peak periods across customer classes, impacting the savings achieved.

- The below chart shows the prices paid in 2015 across a number of industrial sectors. Consumers in the north that receive rebates under the Northern Industrial Electricity Rate Program (NIERP) achieve rates that are $20/MWh lower than the below.

Average all-in Class A, Transmission-connected Electricity Prices by Industrial Sector (estimated $/MWh), Year-to-Date June 2016



Note: HOEP = Hourly Ontario Energy Price, GA = Global Adjustment, WMSC = Wholesale Market Service Charges, DRC = Debt Retirement Charge

Recent Actions to Bend the Cost Curve

- Since 2013, a number of actions have been taken to reduce overall electricity system costs:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Removing an expected $3.3 billion in Large Renewable Procurement (LRP) costs relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast, based on the results of the first phase of the LRP.
- Despite these actions to reduce system costs, electricity rates continue to increase for consumers.

Rate Mitigation

- The 2016 Budget committed to offset the impact of cap and trade in Ontario for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers. The Climate Change Action Plan (CCAP) committed $1.3 billion from the Greenhouse Gas Reduction Account (GGRA) over the first compliance period (2017-2020).

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:

  - **Tax-based Lever:**
    - Provide an on-bill rebate funded from the tax-base to all consumers or specific classes of consumers (i.e., the Ontario Clean Energy Benefit (OCEB) provided a rebate for eligible electricity consumers).

  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.

  - **Cap and Trade Proceeds Lever:**
    - Redirect cap and trade proceeds to offset the cost of existing initiatives that help reduce greenhouse gas (GHG) emissions (i.e., the CCAP committed to offset the impact of cap and trade and to keep electricity rates affordable).

Rate Mitigation Proposal

- The Ministry of Energy is proposing to implement the following electricity price mitigation initiatives. The approach identified below would provide relief across all electricity consumer classes:

  1) Provide an 8% rebate equal to the provincial portion of HST to consumers eligible for the Regulated Price Plan* (i.e., residential, small business and farms) and update the Rural and Remote Rate Protection (RRRP) program, to provide relief to rural customers; and

  2) Expand ICI eligibility by lowering the threshold to 1 MW, to provide support to Class B electricity consumers (i.e., commercial, institutional and small industrial) and redirect cap and trade proceeds to commercial and industrial electricity consumers to provide a modest reduction in rates.

- The following slides provide additional information on the above initiatives.

***Note:** Eligibility for the 8% rebate would be similar to OCEB and include some customers not on the Regulated Price Plan (RPP), such as Independent Power Authority consumers and consumers that have opted-out of RPP.

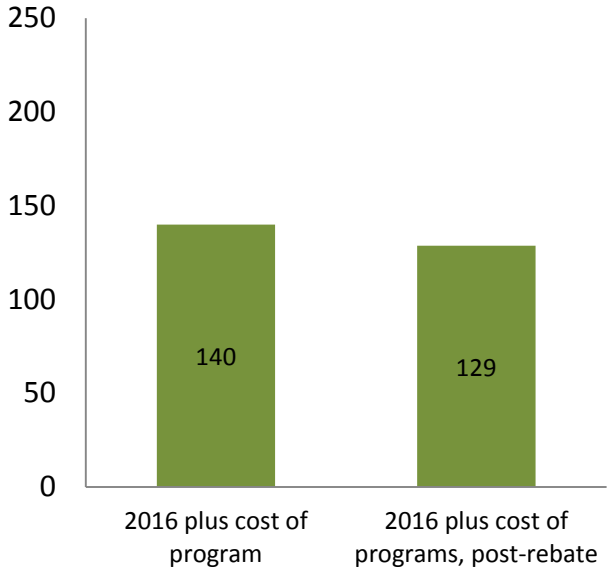
Rate Mitigation Proposal – Illustrative Benefits*

	Average Annual Fiscal Impact	Average Annual Greenhouse Gas Reduction Account (GGRA) Proceeds Impact	Regulated Price Plan (Residential) Benefit		Class B (Commercial) Benefit	Class A (Industrial) Benefit	
			Average (750 kWh/ month)	*Rural*** (1000 kWh/ month)*		*Existing*	*New*
• 8% rebate to Regulated Price Plan eligible consumers • ICI Expansion • RRRP Update • Proceeds Recycling	$1.0 billion annually	$0.27 billion annually (Reduction of $0.06 billion annually or $0.24 billion total from the CCAP commitment)	-$11/ month (-8%)	-$45/ month (-20%)	-$3/MWh (-2%)	-$3/ MWh (-3%)	Up to -$52/MWh (-34%)

- **Notes:** The above benefits do not include the cost of ICI expansion and the RRRP update (total impact of $1.74/MWh. The impact of cap and trade would not be added to electricity bills until 2017 and the impact of ICI would not be added to bills until 2018 due to the time required to implement the expansion and for billing changes. Proceeds recycling is an estimated average over the first compliance period (2017-2020).

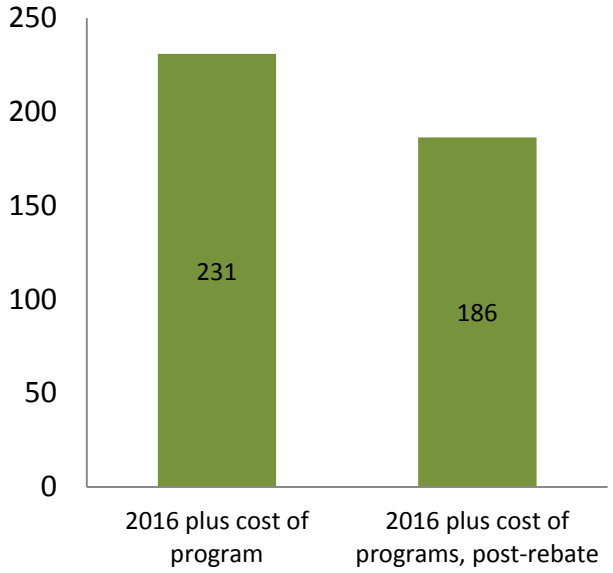
Rate Mitigation Proposal – Illustrative Bill Impacts by Electricity Consumer Class

Typical Residential Bill
750 kWh per month, 8% only



The pre-tax impact is a 8% reduction.

Rural (R2) Residential Bill
1,000 kWh per month, 8% and RRRP Update

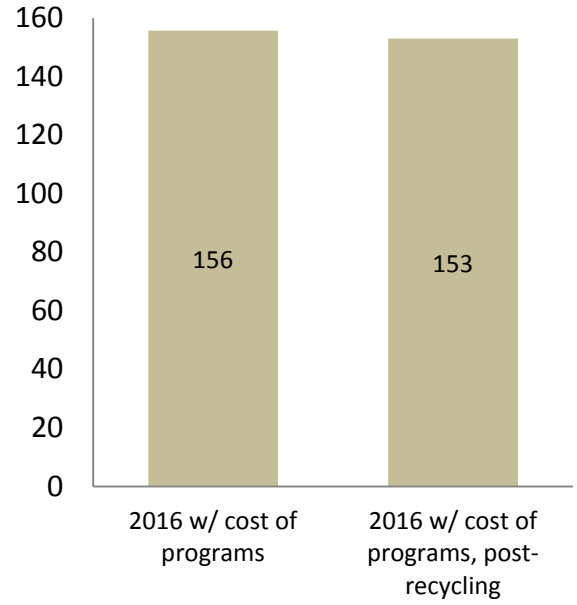


The pre-tax impact of the rate mitigation initiatives is a 20% reduction.

Note: Residential bills reflect electricity rates as per the Regulated Rate Plan (RRP) which came into effect on May 1, 2016.

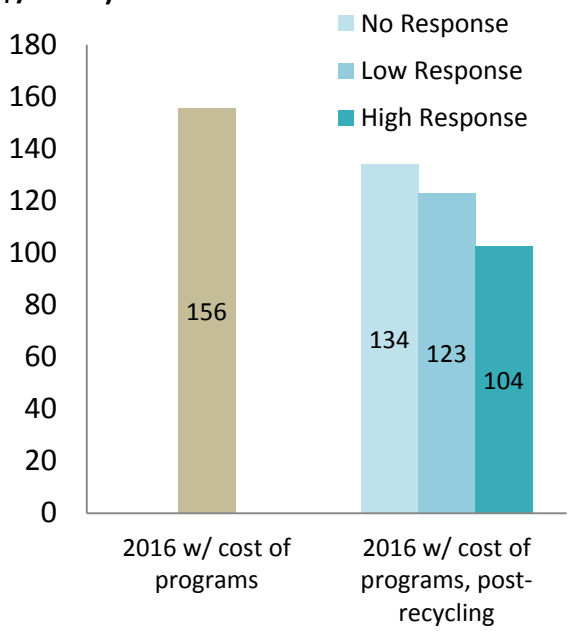
Rate Mitigation Proposal – Illustrative Bill Impacts by Electricity Consumer Class (cont'd)

Typical Class B (Commercial) Price ($/MWh)



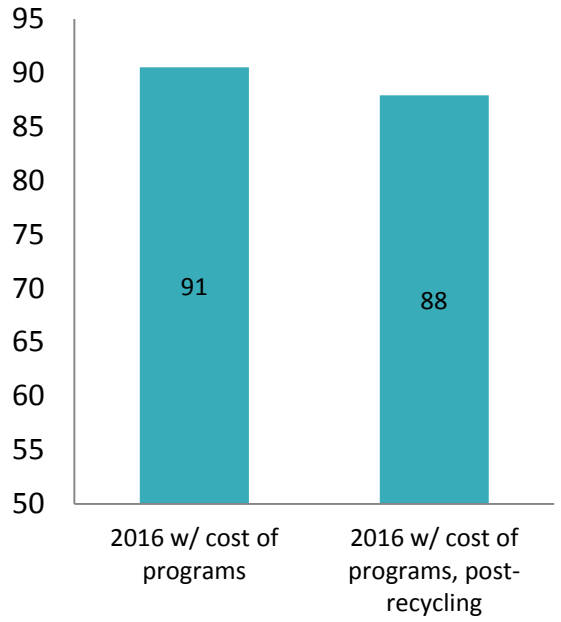
Class B: The benefit is a 2% reduction.

Typical New Class A Price ($/MWh)



New Class A: The benefit is a reduction of 14% to 34%.

Typical Class A (Industrial) Price ($/MWh)



Existing Class A: The benefit of the rate mitigation initiatives is a 3% reduction.

Note: The impact of cap and trade would not be added to electricity bills until 2017 and the impact of ICI would not be added to bills until 2018 due to the time required to implement the expansion and for billing changes. However, both the impact of cap and trade and ICI have been included above for illustrative purposes.

1) Regulated Price Plan Eligible Consumers and Rural or Remote Rate Protection Update

8% Rebate to Regulated Price Plan Eligible Consumers

- Legislation/regulation will be introduced to provide a rebate of 8% to consumers eligible for the Regulated Price Plan. The below table indicates which consumers would or would not receive the benefit.
  - This would be equivalent to the provincial portion of the HST*.

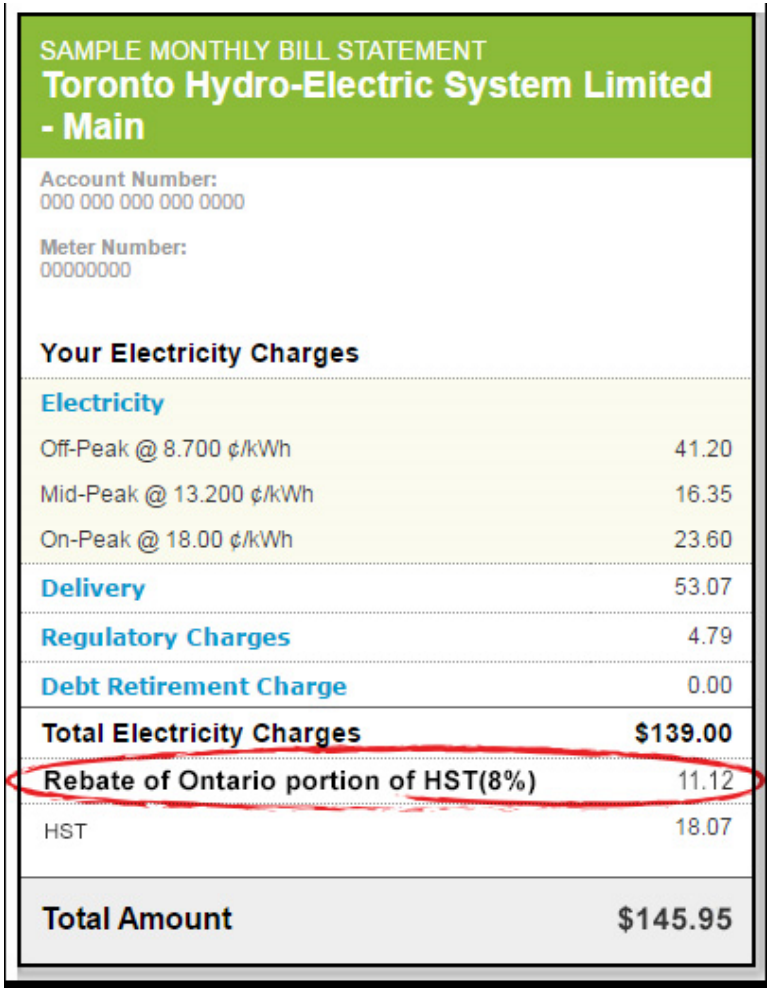
Eligible for the 8% rebate (< 50 kW or < 250,000 kWh/year)	**Not eligible for the 8% rebate** (> 50 kW or > 250,000 kWh/year)

• Residential Regulated Price Plan consumers
• Residential retail consumers
• Multi-unit residential buildings and other facilities used as residential rental units
• Long-term care homes and school residences
• Regulated Price Plan eligible farms
• Small businesses
  − Coffee / snack retailer
  − Convenience store
  − Apparel store
  − Hair salon
  − Small insurance office
	• Class A consumers
	  − Manufacturer
	  − Large grocery store
	  − Mines
	  − Auto assembly plants
	• Class B consumers (except farms that have opted out of the Regulated Price Plan)
	  − Commercial offices (low rise)
	  − Hotel
	  − General warehousing

- Those ineligible to receive the 8% rebate will benefit from one or more of the other initiatives under this proposal (e.g., ICI expansion, proceeds recycling, etc).

***Note:** An HST exemption would require federal approval. Engaging in discussions with the federal government would take time and would likely result in not meeting the targeted implementation date.

Illustrative Electricity Bill Mock-Up



SAMPLE MONTHLY BILL STATEMENT

Toronto Hydro-Electric System Limited - Main

Account Number:
000 000 000 000 0000

Meter Number:
00000000

Your Electricity Charges

Electricity	
Off-Peak @ 8.700 ¢/kWh	41.20
Mid-Peak @ 13.200 ¢/kWh	16.35
On-Peak @ 18.00 ¢/kWh	23.60
Delivery	53.07
Regulatory Charges	4.79
Debt Retirement Charge	0.00
Total Electricity Charges	**$139.00**
Rebate of Ontario portion of HST(8%)	11.12
HST	18.07
Total Amount	**$145.95**

Note: Final bill presentment pending submission to LRC.

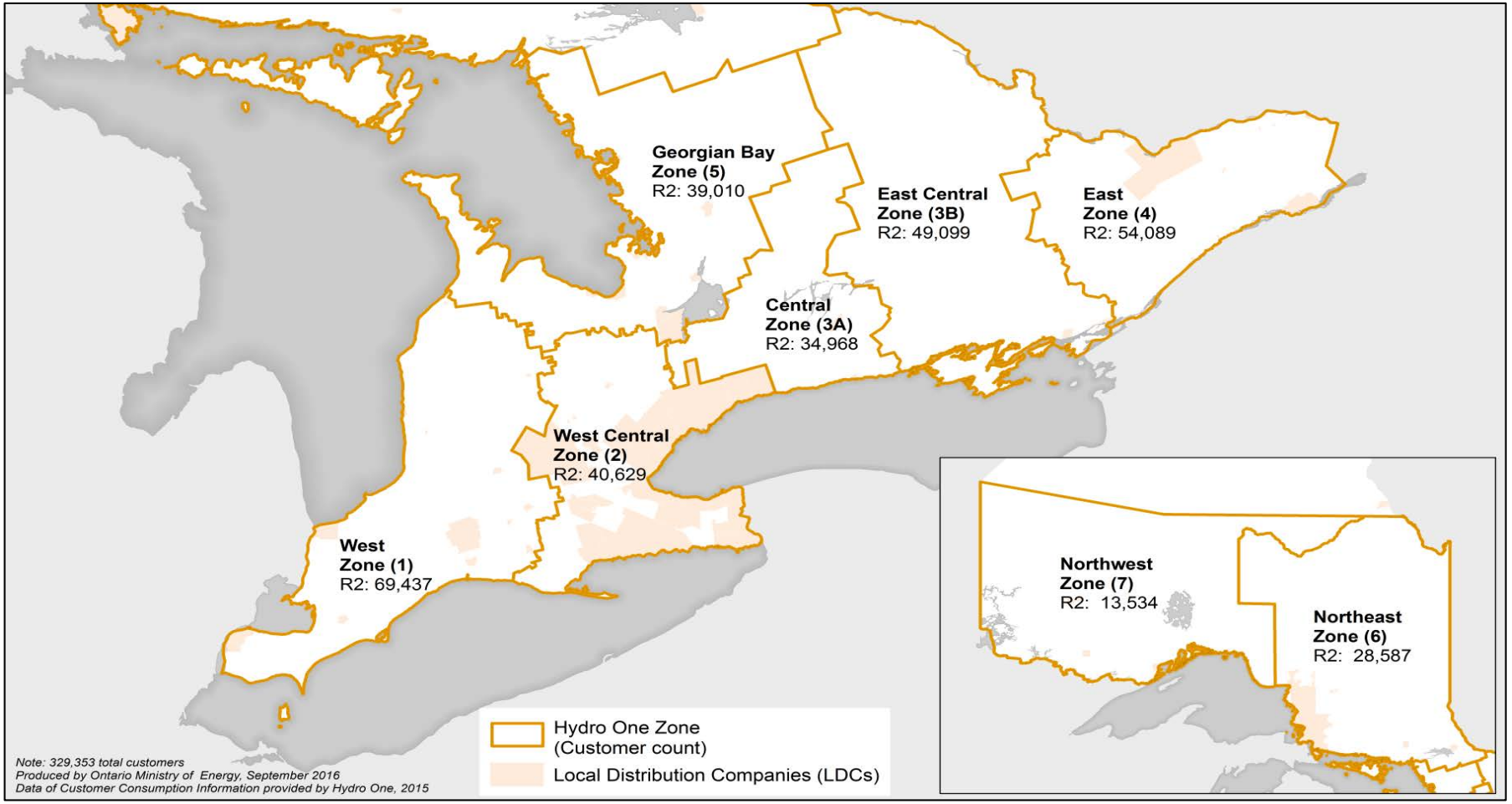
Rural or Remote Rate Protection (RRRP) Update

- ENERGY is proposing to amend O.Reg 442/01 to provide an additional $110 million in rate protection to eligible rural or remote electricity consumers, and consider options to periodically adjust the amount of rate protection available to these consumers going forward.

- RRRP is a rate-based funded program that helps offset the higher costs to distribute electricity to Ontario residents who live in rural or remote locations all across the Province.
  - Today, RRRP is a $175-million program. For an average residential customer, the cost of supporting RRRP is roughly $1 per month. For other customers, the cost can range from $65 for a greenhouse to $8,000 for a medium industrial.
  - The majority of the program funding ($125.5 million) is provided to Hydro One's lowest-density customers – classified as R2 customers. There are approximately 329,000 R2 customers. The current program provides a rebate of $31.50. The proposed update to the program would increase the benefit to $60/month.
  - RRRP funding supporting R2 customers has been capped at the current level since 2004. As a result, the impact of its assistance has diluted over time as electricity costs have risen.

- An additional $110 million in program funding would see an increased benefit of ~$28 /month. This would bring R2 bills in line with Hydro One R1 (medium density) bills at 1000kWh.
  - This would increase the R2 portion of the RRRP to $235 million with a monthly impact on an average residential consumer of ~$0.60.
  - The RRRP could be indexed at inflation or "trued up" on a regular basis to ensure the benefit remains constant.

Rural or Remote Rate Protection (RRRP) Update – R2 Customers by Region



2) Expand Industrial Conservation Initiative and Redirect Cap and Trade Proceeds

Industrial Conservation Initiative (ICI) Expansion

- ENERGY is proposing to amend O. Reg. 429/04 to expand ICI eligibility. The base setting period for the expanded program would begin in 2017, with the benefit seen by consumers starting in 2018.

- Currently, electricity consumers over 5 MW and consumers from 3-5 MW in certain energy intensive sectors are eligible for ICI (i.e., approximately 300 Class A consumers).
  - Consumers participating in ICI include the following sectors: pulp and paper, auto, manufacturing, chemicals and mines.

- ICI would be expanded so that all consumers over 1 MW are eligible for the program, which would:
  - Reduce electricity peak demand and electricity system costs by incenting more consumers to lower their electricity demand during peak periods;
  - Reduce electricity bills for new ICI participants who are able to reduce their electricity demand during peak demand periods; and
  - Increase the electricity bills for non-ICI participants to ensure full cost recovery in the electricity system.

ICI Expansion – Projected Impact

	Benefit to New ICI Participants	System Benefit	Financial Impact	Residential Bill Impact
	Bill Savings	Peak Demand Reduction (MW)	GA shifted to Class B ($M)	
Short-term	Up to 21%	80	47	Increase of $0.42/month
Long-term	Up to 34%	165	82	Increase of $0.74/month

- The different impacts refer to the amount of time it takes for new Class A consumers to respond to the expanded ICI eligibility
  - Short-term refers to the expected impact once ICI billing begins for new Class A consumers (one year after expanded eligibility takes place).
  - Long-term is the expected impact once new Class A consumers have had time to significantly change their behaviour and investment decisions in response to the ICI.

- The bill impacts assume a 25% uptake, which would increase Class A consumption by roughly 3 TWh, leaving an estimated 54 TWh in Class B that are either between 0.05-1 MW or choose not to opt in to ICI. This would represent an estimated 300 additional consumers in ICI, though they would represent a much smaller share of the consumption than the 300 consumers currently participating.

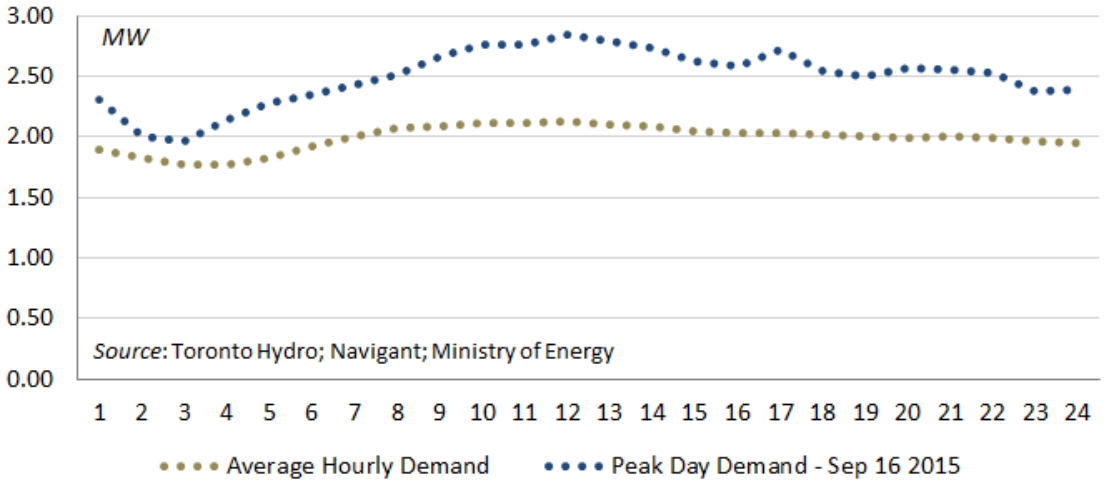
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
  - A few examples of companies that would become eligible under such an expansion would be Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.

ICI Expansion – Illustrative Example of Newly Eligible Consumer

- Plastics manufacturers, such as Poly Five Plastics in Toronto, are among the consumers that would become eligible if the threshold was lowered.
- Such manufacturers fall under NAICS* code 32 and have relatively flat load profiles, reflecting around the clock production. This means they would be beneficiaries of ICI even with no change in consumption behaviour.
- Companies like Poly Five Plastics could expect to see greater savings if they are willing and able to respond to the higher prices during high demand hours.

Typical Demand Profile, 2-3 MW Consumer

Manufacturer, NAICS Code 32 - Nov 2014 to Oct 2015



Illustrative Bill Savings, 2-3 MW Consumer

	Status Quo	*No Price Response*	*Short Term Response*	*Long Term Response*
	Class B	**Class A**	**Class A**	**Class A**
GA	75.26	58.06	43.55	32.03
Total bill	**126.28**	**109.09**	**94.58**	**83.06**
Savings		*-14%*	*-25%*	*-34%*

Source: Navigant; Ministry of Energy

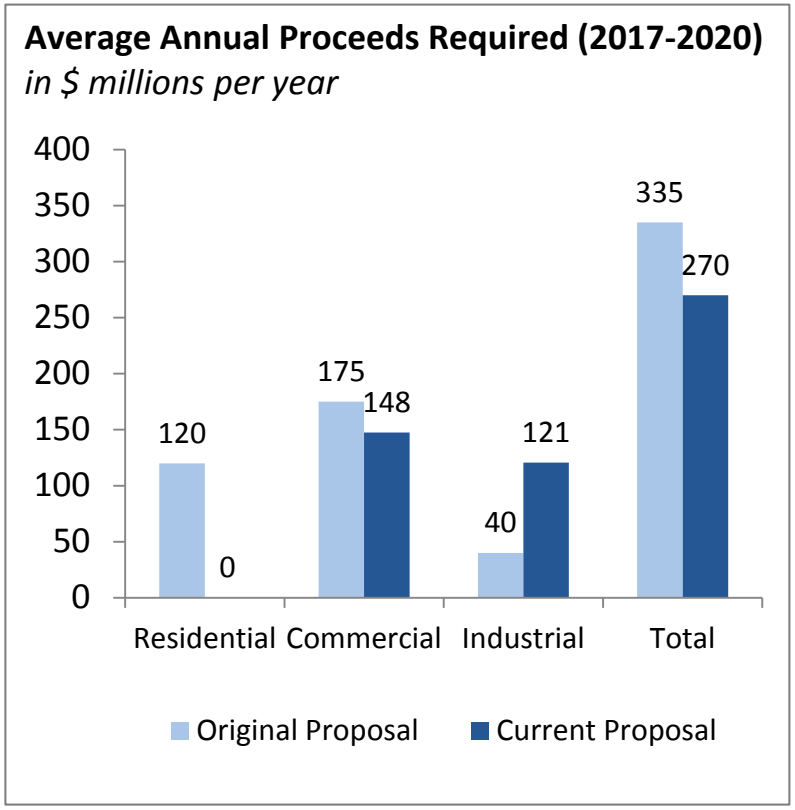
*** Note:** North American Industry Classification System (NAICS) is the standard used by statistical agencies in classifying business establishments.

Redirect Cap and Trade Proceeds Recycling

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial consumers, while also providing a benefit of up to $2 per month for residential consumers.
  - To meet the 2016 Budget commitment, the Climate Change Action Plan (CCAP), committed $1.3 billion from the GGRA over the first compliance period (2017-2020).

- However, providing a 8% rebate to Regulated Price Plan consumers would allow for GGRA proceeds previously committed to residential consumers to be redirected to other consumers classes and/or GHG reduction initiatives in the fiscal plan.

- The current proposal would provide additional recycling to commercial and industrial consumers, while requiring an estimated $60 million less per year (i.e., a reduction of $0.24 billion over the first compliance period).



Note: The original proposal was to offset the impact of cap and trade via GA to the average industrial, and would provide a benefit to commercial and residential consumers. Current proposal would recycle proceeds volumetrically to industrial and commercial consumers.

Redirect Cap and Trade Proceeds Recycling

- Redirecting cap and trade auction proceeds to lower the cost of electricity would offset consumers' contributions to non-emitting generation.

- Redirecting helps pay for committed investments/initiatives which reduce GHGs (e.g., non-emitting generation and conservation programs).
  - Due to the long-term nature (typically 20 years) of electricity generation contracts and conservation programs, the associated costs are ongoing and are expected to be about $7 billion dollars annually during the first cap and trade compliance period. These costs will continue well beyond the timelines described in the CCAP.

- Redirecting cap and trade auction proceeds volumetrically to Class B (commercial) and Class A (industrial) consumers maintains the incentive to shift consumption from on-peak to off-peak hours.

- Using cap and trade auction proceeds to lower the cost of electricity would make it more competitive with traditionally cheaper fossil fuels.

- By using the proceeds to lower the cost of electricity, there is potential to incent fuel-switching away from fossil fuels toward much cleaner grid-connected electricity and support CCAP goals of electrification.

Considerations

Implementation

- On September 15, 2016, ENERGY is proposing to introduce the *Ontario Rebate for Electricity Consumers Act, 2016*.
  - If passed, the legislation would require a general regulation.
  - Amendments would also be required to various regulations to expand ICI and RRRP.

- On-bill rebate delivery would likely require adjustments to LDC billing systems, which could impact delivery costs and timelines. ENERGY (possibly through Ontario Energy Board) will consult with LDCs to accurately assess these impacts once the program has been announced.
  - In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
  - Timing concerns may be alleviated by allowing LDCs to provide retroactive rebates if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.

- Detailed messaging on bills (for "low-volume" consumer bills) could be implemented by amending O. Reg. 275/04 (made under the Ontario Energy Board Act, 1998).
  - The rebate would not be directly linked to HST.
  - With electricity invoices containing multiple line items and LDC bill presentment varying widely, direction on rebate presentment will need to be flexible to allow LDCs to incorporate easily while ensuring government-preferred branding and messaging is conveyed.

- While the impact of cap and trade would be added to electricity bills as of January 2017, the offsetting effect of proceeds recycling may not occur immediately depending on implementation and potential alignment with the first auction expected in March 2017.
  - Should there be low demand for carbon allowances, auction proceeds would be less than the amount projected in the CCAP. This could mean a short-fall for proceeds recycling as proposed. However, natural gas utilities are expected to purchase allowances quarterly equal to their emissions.

- ENERGY will need to continue to consult with the Independent Electricity System Operator (IESO), Ontario Energy Board (OEB) and LDCs regarding implementation of proceeds recycling.

Fiscal

- The Climate Change Action Plan (CCAP) committed about $1.3 billion over four years for electricity mitigation for industrial, commercial and residential consumers from GGRA proceeds.
  - The current rate mitigation proposal requires approximately 20% less in proceeds, saving approximately $0.24 billion relative to the CCAP commitment over the first compliance period (2017-2020).

- The 8% rebate is expected to cost about $1 billion per year (i.e., $4 billion from 2017-2020), representing an additional pressure on the fiscal plan.
  - Consideration could be given to allocating the $0.24 billion in reduced proceeds required towards other existing initiatives in the fiscal plan that also reduce greenhouse gas (GHG) emissions, thereby providing an overall fiscal plan offset.
  - If cap and trade auctions are under-subscribed, the $0.24 billion may not be available for reallocation to the fiscal plan.

- In the absence of any offset strategies, the full cost of the rate mitigation approach would add to the pressures and risks that need to be managed in order for the government to balance the budget in 2017-18 and stay balanced in 2018-19 and beyond.

Legal

- In order to avoid characterization as an unconstitutional tax, a non-tax levy must have a sufficient nexus between those who pay and the regulatory scheme in the sense that those who pay have caused the need for or benefit from the regulatory scheme. Although the case law is not developed on the extent to which some regulated actors can be required to subsidize others, risk is reduced to the extent that any cross-subsidization serves true regulatory goals rather than revenue re-distribution goals.

- ~~HST~~ 8% Rebate of the pre-tax electricity costs (shift costs from rate-base to tax base by providing a rebate equal to the provincial portion of HST):
  - Providing the contemplated rebate under the proposed Bill does not, in and of itself, give rise to legal issues. As policy direction is given on the specifics of supporting regulations, any associated legal risks can be identified.

- ICI Expansion (shift costs within rate-base by expanding eligibility for the ICI program to consumers of >1 MW):
  - Shifting costs to some consumers to lower rates for others without more carries the risk that the charge would be characterized as an unconstitutional tax. To establish that the charge is legitimate, it must be established that the purpose and effect of the charge is to facilitate the maintenance of a financially viable electricity system by way of load management or some other feature under which those who are subsidized provide an overall system benefit enjoyed by those who subsidize them.

- RRRP Update (shift costs within the rate-base by increasing the RRRP benefit paid to rural and remote customers):
  - Increasing the amount of revenue devoted to the RRRP or expanding the scope of consumers eligible for the program does not raise new legal risk. There is a good argument that the RRRP is a regulatory charge, as it socializes some of the costs of distributing electricity to rural consumers. Overall the risk that the RRRP would be characterized as a tax is assessed as moderate (meaning equally good arguments on both sides).

- Cap and Trade Proceeds Recycling (reduce impact on rate base and tax base by directing cap and trade auction proceeds to industrial consumers):
  - To be characterized as regulatory charges under the cap and trade program, auction revenues should be spent on programs that reduce GHGs.

Communications

- Public high-profile communications would coincide with introduction of legislation (September 2016).
  - Stakeholder outreach/technical briefings with LDCs, Ontario Chamber of Commerce, AMPCO, OEB low-income table, AMO, etc.
  - Echo public announcements in southwest and north; proactive provincial/local media.

- **Positioning:**
  - A fiscally prudent plan to benefit all ratepayers in a lasting, meaningful way.
  - Rural customers will receive the largest single rate relief ever.
  - Businesses across Ontario will have even more opportunity to be competitive and manage their energy costs.

- **Issues Considerations:**
  - Significant benefit for rural and remote residential customers; net gain for all residential customers.
  - More complex to communicate, but can be presented as a full plan that includes reforms and improvements to the system.
  - Consistent with cap-and-trade commitment that no business sector will be left worse off, though small businesses outside ICI will benefit the least.

Pending Update

Ontario

Key Messages

- We are taking unprecedented action to help people in their everyday lives.
- Residential ratepayers and other RPP eligible ratepayers will receive an eight per cent rebate on their electricity bill, equivalent to the provincial portion of the HST.
- Modernizing the RRRP will benefit 330,000 families in rural Ontario with significant reductions to their electricity bills – $28 a month, in addition to the eight per cent rebate.
- Over a thousand more Ontario businesses will be eligible to benefit from the ICI program, helping them stay competitive and grow.
- These actions will assist over five million families, farms and small businesses across Ontario.
- These actions today join our many existing initiatives too help keep electricity in Ontario clean, reliable and affordable.

Proposed Cabinet Minute

Cabinet agreed that:

1. ENERGY implement electricity price mitigation for residential, commercial and industrial consumers through the following:

   i. Provide a rebate of 8% ~~on~~ of the pre-tax cost of electricity for all electricity consumers eligible to be billed under the Ontario Energy Board's Regulated Price Plan (RPP); and any other consumers who would be eligible for RPP if their electricity account was with a licensed distributor.

   ii. Increase the total amount of rate protection available to R2 low density electricity consumers under the Rural or Remote Rate Protection Program (RRRP) by increasing the subsidy by $110 million from its current level of $127 million which has been capped since 2004.

   iii. Implement a mechanism to periodically adjust the total annual amount of rate protection available to R2 low density electricity consumers under the RRRP, effective on or after January 1, 2018.

   iv. Expand eligibility for participation in the Industrial Conservation Initiative (ICI) to smaller industrial, institutional and commercial customers by lowering the eligibility threshold to 1 MW and removing restrictions on eligible sectors.

Proposed Cabinet Minute (cont'd)

2. ENERGY seek necessary TB/MBC approvals. **[TBD]**

3. ENERGY seek approvals for the proposed *Ontario Rebate for Electricity Consumers Act, 2016* which would, subject to the Legislature's approval of the Act, include the following elements:
   i. The rebate would be available starting January 1, 2017;
   ii. The legislation would specify the types of costs to which the rebate would or would not be applied, with authority to make changes by regulation;
   iii. The legislation would address invoicing requirements, including authority to prescribe how the rebate is to appear on consumers' electricity bills;
   iv. The legislation would include authority to prescribe the way in which the rebate is to be flowed through to consumers, and the way in which electricity vendors providing the rebate are to be reimbursed;
   v. The legislation would include record-keeping requirements for electricity vendors and other prescribed persons;
   vi. The legislation would include inspection powers for inspectors appointed by the minister of Finance, including powers related to the recovery of overpayments; and
   vii. The legislation would include consequential amendments to the *Ontario Energy Board Act, 1998* and the *Ontario Clean Energy Benefit Act, 2010*; and
   viii. The legislation would provide for regulation-making authority to establish a limitation period for ceasing payments and reimbursement based on past entitlement. Similar amendments would be provided for the *Ontario Clean Energy Benefit Act, 2010* but would allow the ceasing of all payments and reimbursements after a prescribed date

Proposed Cabinet Minute (cont'd)

4. ENERGY to report back to LRC and Cabinet for approval of any supporting regulations under the proposed *Ontario Rebate for Electricity Consumers Act, 2016*, and with other complementary regulatory amendments.

5. ENERGY notes the following amendments:

   i. Amendments to Ontario Regulation 429/04 (Adjustments Under Section 25.33 of the Act) made under the *Electricity Act, 1998* to lower the Industrial Conservation Initiative (ICI) threshold to 1 megawatt and require electricity consumers and market participants between 1 MW and 5 MW to opt in.

   ii. Amendments to Ontario Regulation 442/01 (Rural or Remote Electricity Rate Protection) made under the Ontario Energy Board Act, 1998, to increase support through the Rural and Remote Rate Protection Plan to R2 low density electricity customers and provide for a periodic adjustment mechanism.

6. ENERGY work with MOECC to recycle an estimated annual average of $270 million of Cap and Trade auction proceeds from the Greenhouse Gas Reduction Account for non-RPP commercial and industrial electricity consumers over the first compliance period (2017-2020) through a volumetric rebate mechanism.

7. ENERGY and MOF work with Cabinet Office, Premier's office to develop a communications plan

Proposed Cabinet Minute (cont'd)

Cabinet approved version of the proposed *Ontario Rebate for Electricity Consumers Act, 2016* for introduction, subject to the following:

1. The Office of Legislative Counsel is authorized to prepare a French version and to make minor adjustments to the English version, for the purpose of ensuring consistency between the two versions and making other improvements or correcting mistakes discovered in the translation process.

Appendix

Illustrative Bill Impacts

	Current Bill (after cost of new programs, before tax)	Current Rate mitigation initiatives*	New Rate Mitigation initiatives	New Bill (after cost of new programs, before tax)
Average Residential (Toronto – 750 kWh/month)	$140 /month	N/A	8% ~~pre-tax~~ rebate: - $11	$129 /month
Rural Residential (Hydro One R2 – 1000 kWh/month)	$231 /month	RRRP: –$32	8% ~~pre-tax~~ rebate + Updated RRRP: - $45	$186 /month
Low-income Residential ** (Toronto – 750 kWh/month)	$102 /month	OESP: -$38	8% ~~pre-ta~~x rebate: - $8	$94 /month
Small Business (Toronto – 403,200 kWh/month)	$150 /MWh	N/A	8% ~~pre-tax~~ rebate: - $12/MWh	$138 /MWh
Small Farm (Hydro One R1 – 4,000 kWh/month)	$204 /MWh	N/A	8% ~~pre-ta~~x rebate: - $16/MWh	$188 /MWh

***Note:** Some residential consumers ~~can~~ may also receive relief for sales tax on home energy of up to $224 for 2016 through the ~~tax credits based on income, age and geography (Northern Ontario Energy Credit and~~ Ontario Energy and Property Tax Credit~~)~~. People who live in the North may receive additional relief for home energy costs of up to $224 for 2016 through the Northern Ontario Energy Credit. These credits are delivered through the Ontario Trillium Benefit ~~Tax Credit and can be as high as $1,332 per year for a family~~.
** income of less than $28,000, family of 4.

Totals may not add due to rounding.

Illustrative Bill Impacts (cont'd)

	Current Rate	Current Rate mitigation initiatives*	Cost of new initiatives (RRRP and ICI)	New Rate Mitigation initiatives	Net Impact,	New Rate,
Large Institutional (Toronto – distribution-connected, 10 MW)	$108 /MWh	ICI: -$49/MWh	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh (2017-2020 average)	-$0.90 /MWh (-1%)	$107 /MWh
Large Industrial (Timmins – transmission-connected, 10 MW)	$69 /MWh	ICI + NIERP: -$69/MWh	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh	-$0.90 /MWh (-1%)	$68 /MWh
Small Industrial – opt-in to ICI (Toronto – 2 MW)	$152 /MWh	N/A	$1.74 /MWh	Proceeds Recycling + ICI: -$53.90/MWh	-$52 /MWh (-34%)	$100 /MWh
Large Commercial – does not opt-in to ICI (Toronto – 2 MW)	$152 /MWh	N/A	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh	-$0.90 /MWh (-1%)	$151 /MWh
Small Institutional (Toronto – 500 kw)	$154 /MWh	N/A	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh	-$0.90 /MWh	$153 /MWh

Notes:

1) There is the potential for a consumer eligible for the Regulated Price Plan to opt-out of the Regulated Price Plan to opt-in to Class A and receive all three benefits (i.e., Regulated Price Plan, ICI and proceeds recycling).

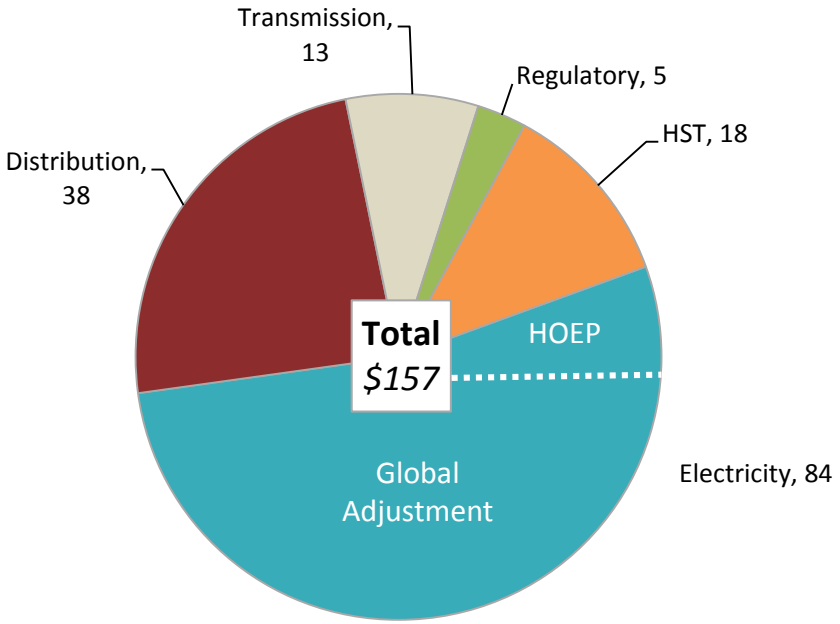
2) The impact of cap and trade would not be added to electricity bills until 2017 and varies per year over the course of the first compliance period. For illustrative purposes, the estimated average benefit of proceeds recycling is shown above.

Residential Electricity Prices

- There are approximately 5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of May 1, 2016 (750 kWh/month)



Source: OEB, Toronto Hydro

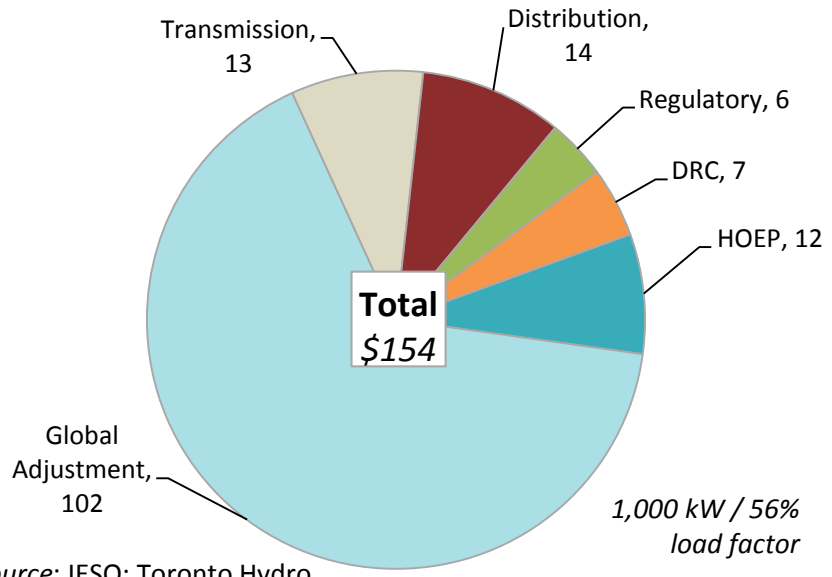
Commercial Electricity Prices

- There are approximately 400,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.

- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



Source: IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.

- Targeted pricing programs are currently not available for Class B consumers.

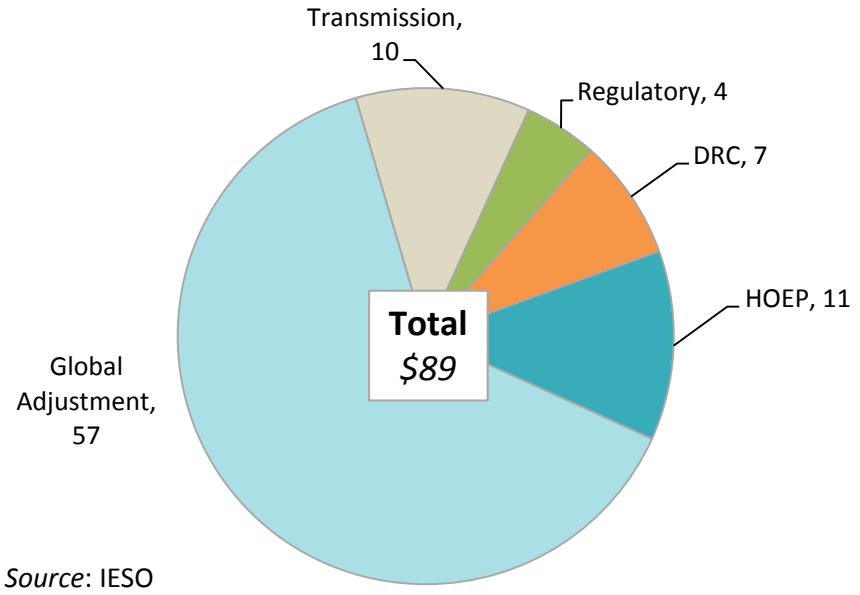
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



Source: IESO

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $64/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Sales Tax Treatment in Other Jurisdictions

Jurisdiction	Tax	Tax Paid by Business Consumers	Tax Paid by Residential Consumers	Comment
British Columbia	PST	Yes – 7%	No	• PST does not apply to residential energy, including electricity, acquired solely for residential use in a residential dwelling • BC's carbon tax does not apply to electricity bills.
Alberta	None	N/A	N/A	• Alberta does not have a provincial sales tax.
Saskatchewan	PST	Yes – 5% Except for electricity purchased to heat a building.	No	• PST does not apply to electricity purchased for use in a residential dwelling. • PST does not apply to electricity purchased for use in heating a building that is heated solely by the electricity.
Manitoba	PST	Yes – 8% Reduced rate of 1.6% applies to electricity used by a qualifying business to operate machinery	Yes – 8% Electricity purchased for mixed use, 80% of which is home heating, has a reduced rate of 1.4%. Electricity solely to heat the purchaser's home is exempt.	• Winnipeg also applies a tax of 2.5% on residential and 5% on commercial.
Ontario	HST	Yes (less ITC (input tax credits))	Yes – 8%	
Quebec	QST	Yes (less ITCs)	Yes – 9.975%	
Nova Scotia	HST	Yes (less ITCs)	Yes – 10% less provincially administered rebate.	• Rebate is equal to the provincial portion of the HST, and is administered similar to OCEB, but applies to many energy sources.
New Brunswick	HST	Yes (less ITCs)	Yes – 10%	
Prince Edward Island	HST	Yes (less ITCs)	Yes – 9% (10% beginning Oct 1, 2016)	
Newfoundland and Labrador	HST	Yes (less ITCs)	Yes – 10%	• Had a provincially administered Home Heating Rebate program until July 2015.
Federal	GST	Yes (less ITCs)	Yes – 5%	

Electricity Price Mitigation

Ministry of Energy

WORKING DRAFT

Date: September 12, 2016

Minister

Deputy Minister

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.

- Ontario has taken action to replace coal-fired generation with cleaner sources of energy. Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished clean generation, including nuclear, natural gas and renewables.
  - This investment represents about 40% of our current supply and has helped decrease electricity sector emissions by approximately 80%.

- Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.

- Since 2010, electricity prices have risen considerably, particularly for households and small businesses. Prices are forecast to continue to increase as additional generation comes online.

- The Ministry of Energy and Ministry of Finance were asked to develop a proposal to provide rate relief to Ontario electricity consumers.

Electricity Consumer Classes

- There are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 3 MW	Above 3 MW*
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

**** Note:** Consumers with peak demand between 3-5 MW in the manufacturing, mining, refrigerated warehousing, greenhouses and data-processing industries are currently eligible for Class A. All other 3-5MW consumers are Class B.

Current Rate Base Mitigation Programs

- Ontario has implemented several programs to help electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers;
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs; and
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.

- These programs have shifted costs amongst electricity consumer classes (i.e., residential, commercial and industrial) as shown in the table below:

Cost Shift Impact	2011	2012	2013	2014	2015	2016
Residential Bill ($/month for 750 kWh)	3.55	4.07	3.85	4.46	5.68	6.55
Commercial – Class B ($/MWh)	4.74	5.43	5.14	5.94	7.57	8.73
Industrial – Class A ($/MWh)	-20.97	-25.26	-22.38	-24.68	-32.56	-31.55

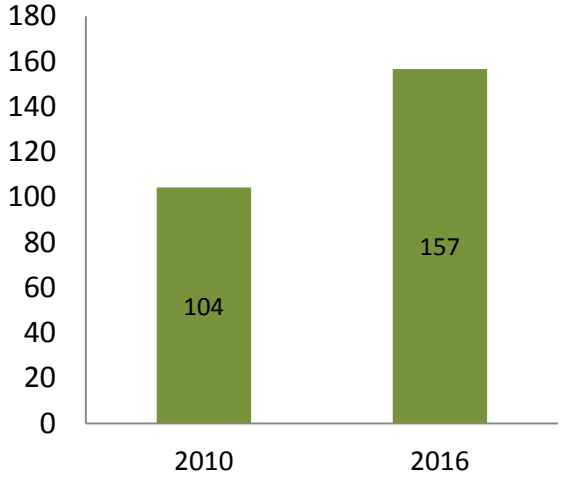
Note: Negative values indicate a benefit; positive values denote an incremental charge.

Prices by Electricity Consumer Class

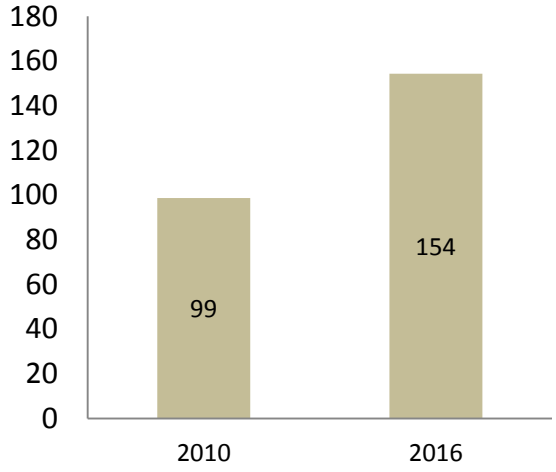
- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50% and rates paid by commercial have increased by 56%.

- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers.

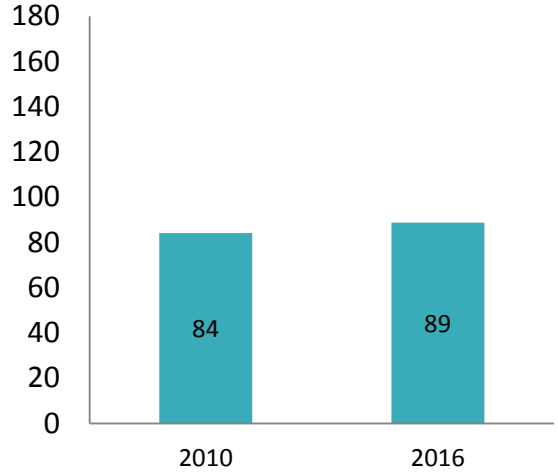
Typical Residential Bill (750/kWh per month)



Typical Class B (Commercial) Price ($/MWh)



Typical Class A (Industrial) Price ($/MWh)



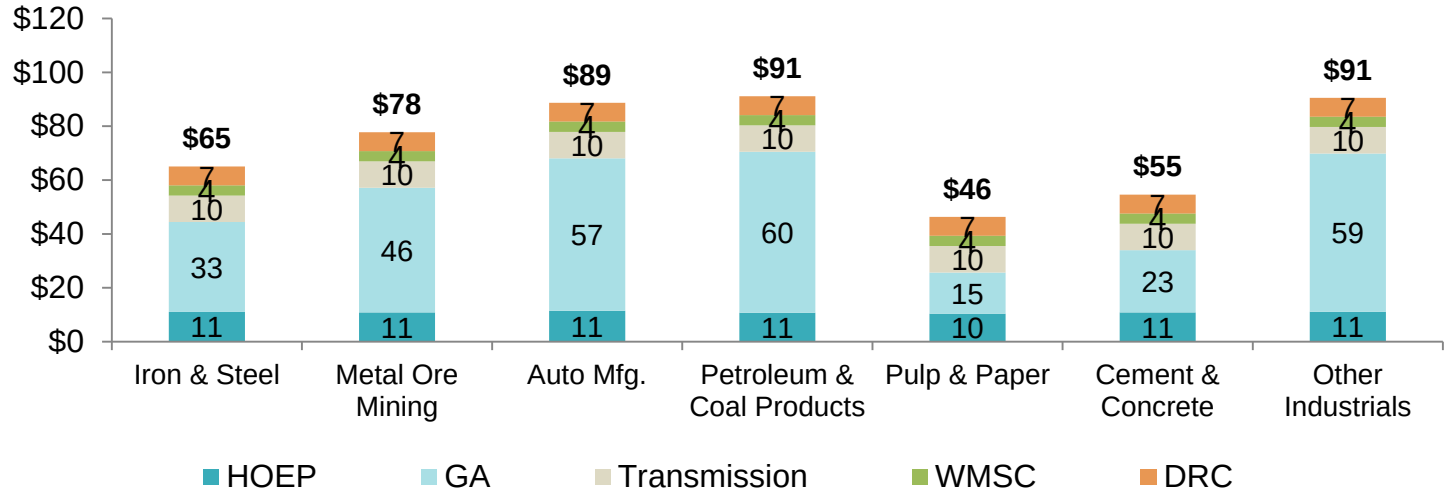
Note: 2016 represents May 2016 for residential and YTD June 2016 for commercial and industrial.

Industrial Electricity Prices Vary by Sector

- While Class A (industrial consumers) benefit from participation in the ICI program, there is a significant amount of variability in the ability to shift away from peak periods across customer classes, impacting the savings achieved.

- The below chart shows the prices paid in 2015 across a number of industrial sectors. Consumers in the north that receive rebates under the Northern Industrial Electricity Rate Program (NIERP) achieve rates that are $20/MWh lower than the below.

Average all-in Class A, Transmission-connected Electricity Prices by Industrial Sector (estimated $/MWh), Year-to-Date June 2016



Note: HOEP = Hourly Ontario Energy Price, GA = Global Adjustment, WMSC = Wholesale Market Service Charges, DRC = Debt Retirement Charge

Recent Actions to Bend the Cost Curve

- Since 2013, a number of actions have been taken to reduce overall electricity system costs:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Removing an expected $3.3 billion in Large Renewable Procurement (LRP) costs relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast, based on the results of the first phase of the LRP.
- Despite these actions to reduce system costs, electricity rates continue to increase for consumers.

Rate Mitigation

- The 2016 Budget committed to offset the impact of cap and trade in Ontario for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers. The Climate Change Action Plan (CCAP) committed $1.3 billion from the Greenhouse Gas Reduction Account (GGRA) over the first compliance period (2017-2020).

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:

  - **Tax-based Lever:**
    - Provide an on-bill rebate funded from the tax-base to all consumers or specific classes of consumers (i.e., the Ontario Clean Energy Benefit (OCEB) provided a rebate for eligible electricity consumers).

  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.

  - **Cap and Trade Proceeds Lever:**
    - Redirect cap and trade proceeds to offset the cost of existing initiatives that help reduce greenhouse gas (GHG) emissions (i.e., the CCAP committed to offset the impact of cap and trade and to keep electricity rates affordable).

Rate Mitigation Proposal

- The Ministry of Energy is proposing to implement the following electricity price mitigation initiatives. The approach identified below would provide relief across all electricity consumer classes:

  1) Provide an 8% rebate equal to the provincial portion of HST to consumers eligible for the Regulated Price Plan* (i.e., residential, small business and farms) and update the Rural and Remote Rate Protection (RRRP) program, to provide relief to rural customers; and

  2) Expand ICI eligibility by lowering the threshold to 1 MW, to provide support to Class B electricity consumers (i.e., commercial, institutional and small industrial) and redirect cap and trade proceeds to commercial and industrial electricity consumers to provide a modest reduction in rates.

- The following slides provide additional information on the above initiatives.

***Note:** Eligibility for the 8% rebate would be similar to OCEB and include some customers not on the Regulated Price Plan (RPP), such as Independent Power Authority consumers and consumers that have opted-out of RPP.

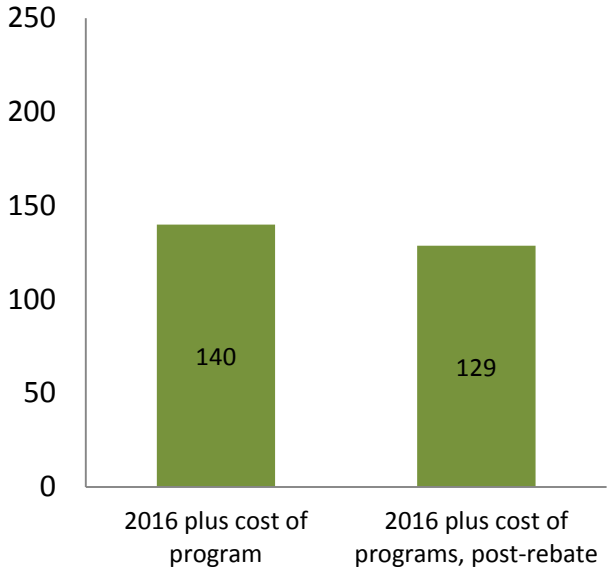
Rate Mitigation Proposal – Illustrative Benefits*

	Average Annual Fiscal Impact	Average Annual Greenhouse Gas Reduction Account (GGRA) Proceeds Impact	Regulated Price Plan (Residential) Benefit		Class B (Commercial) Benefit	Class A (Industrial) Benefit	
			Average (750 kWh/ month)	*Rural*** (1000 kWh/ month)*		*Existing*	*New*
• 8% rebate to Regulated Price Plan eligible consumers • ICI Expansion • RRRP Update • Proceeds Recycling	$1.0 billion annually	$0.27 billion annually (Reduction of $0.06 billion annually or $0.24 billion total from the CCAP commitment)	-$11/ month (-8%)	-$45/ month (-20%)	-$3/MWh (-2%)	-$3/ MWh (-3%)	Up to -$52/MWh (-34%)

- **Notes:** The above benefits do not include the cost of ICI expansion and the RRRP update (total impact of $1.74/MWh. The impact of cap and trade would not be added to electricity bills until 2017 and the impact of ICI would not be added to bills until 2018 due to the time required to implement the expansion and for billing changes. Proceeds recycling is an estimated average over the first compliance period (2017-2020).

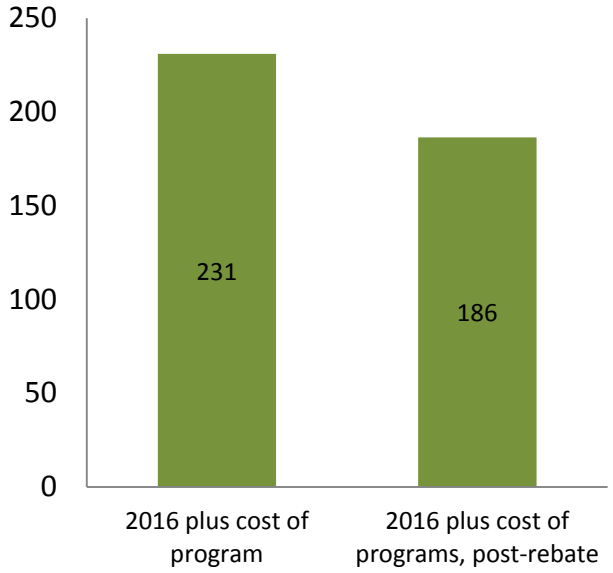
Rate Mitigation Proposal – Illustrative Bill Impacts by Electricity Consumer Class

Typical Residential Bill
750 kWh per month, 8% only



The pre-tax impact is a 8% reduction.

Rural (R2) Residential Bill
1,000 kWh per month, 8% and RRRP Update

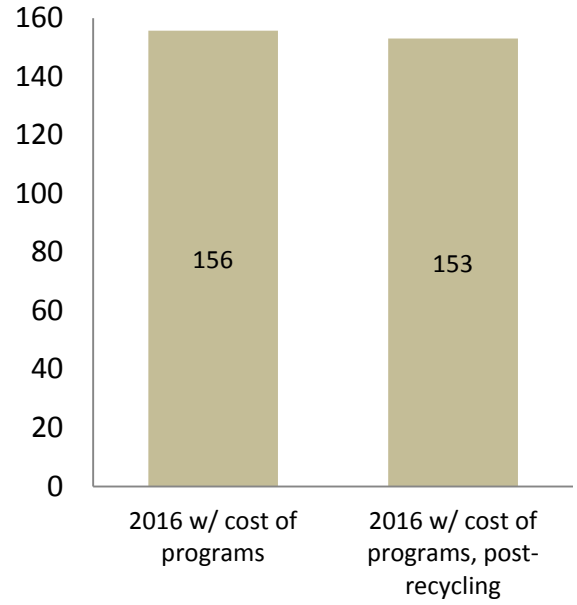


The pre-tax impact of the rate mitigation initiatives is a 20% reduction.

Note: Residential bills reflect electricity rates as per the Regulated Rate Plan (RRP) which came into effect on May 1, 2016.

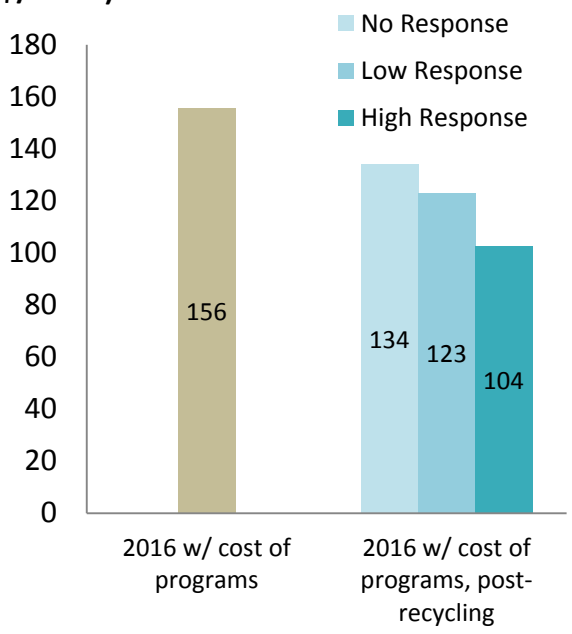
Rate Mitigation Proposal – Illustrative Bill Impacts by Electricity Consumer Class (cont'd)

Typical Class B (Commercial) Price ($/MWh)



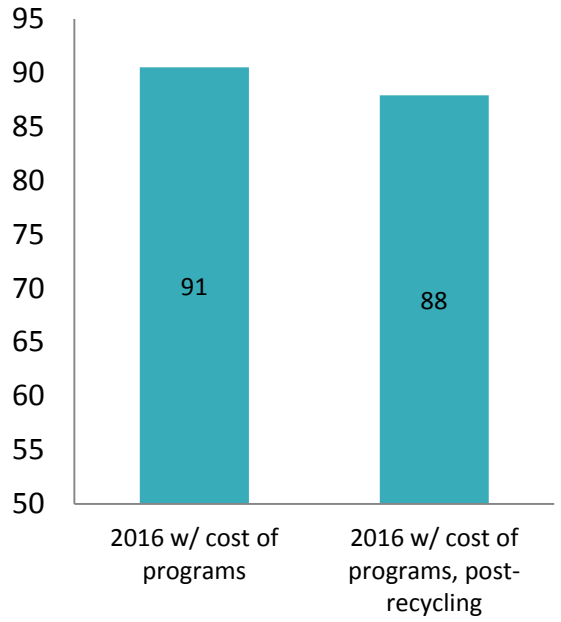
Class B: The benefit is a 2% reduction.

Typical New Class A Price ($/MWh)



New Class A: The benefit is a reduction of 14% to 34%.

Typical Class A (Industrial) Price ($/MWh)



Existing Class A: The benefit of the rate mitigation initiatives is a 3% reduction.

Note: The impact of cap and trade would not be added to electricity bills until 2017 and the impact of ICI would not be added to bills until 2018 due to the time required to implement the expansion and for billing changes. However, both the impact of cap and trade and ICI have been included above for illustrative purposes.

1) Regulated Price Plan Eligible Consumers and Rural or Remote Rate Protection Update

8% Rebate to Regulated Price Plan Eligible Consumers

- Legislation/regulation will be introduced to provide a rebate of 8% to consumers eligible for the Regulated Price Plan. The below table indicates which consumers would or would not receive the benefit.
  - This would be equivalent to the provincial portion of the HST*.

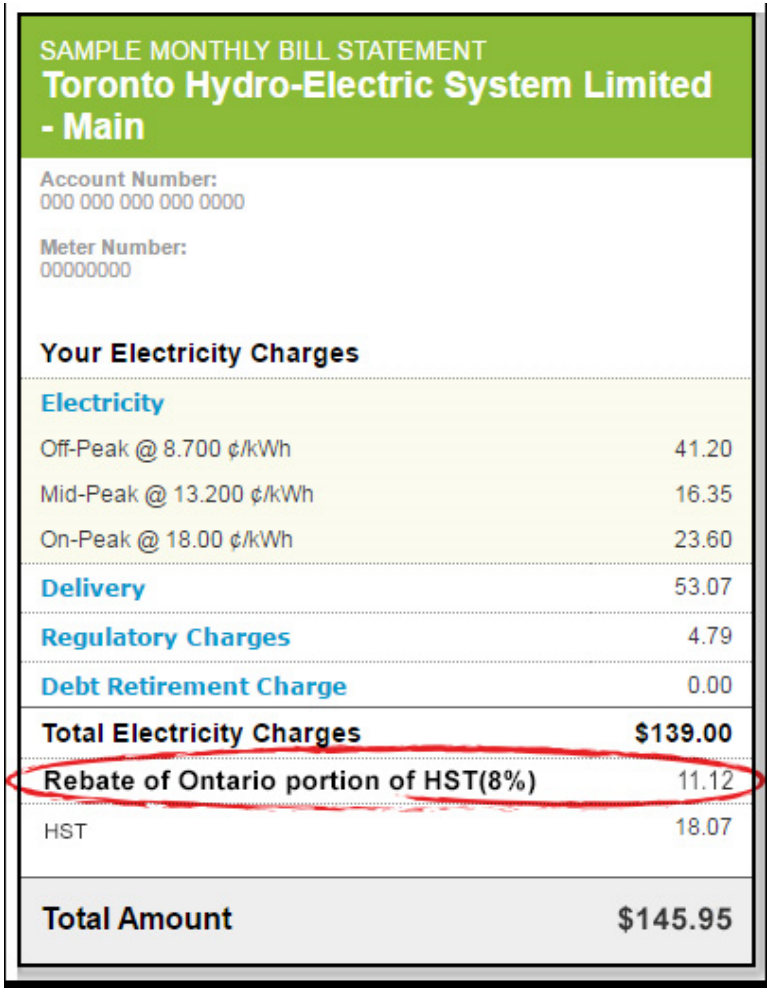
Eligible for the 8% rebate (< 50 kW or < 250,000 kWh/year)	**Not eligible for the 8% rebate** (> 50 kW or > 250,000 kWh/year)

• Residential Regulated Price Plan consumers
• Residential retail consumers
• Multi-unit residential buildings and other facilities used as residential rental units
• Long-term care homes and school residences
• Regulated Price Plan eligible farms
• Small businesses
  − Coffee / snack retailer
  − Convenience store
  − Apparel store
  − Hair salon
  − Small insurance office
	• Class A consumers
	  − Manufacturer
	  − Large grocery store
	  − Mines
	  − Auto assembly plants
	• Class B consumers (except farms that have opted out of the Regulated Price Plan)
	  − Commercial offices (low rise)
	  − Hotel
	  − General warehousing

- Those ineligible to receive the 8% rebate will benefit from one or more of the other initiatives under this proposal (e.g., ICI expansion, proceeds recycling, etc).

***Note:** An HST exemption would require federal approval. Engaging in discussions with the federal government would take time and would likely result in not meeting the targeted implementation date.

Illustrative Electricity Bill Mock-Up



SAMPLE MONTHLY BILL STATEMENT

Toronto Hydro-Electric System Limited - Main

Account Number:
000 000 000 000 0000

Meter Number:
00000000

Your Electricity Charges

Electricity	
Off-Peak @ 8.700 ¢/kWh	41.20
Mid-Peak @ 13.200 ¢/kWh	16.35
On-Peak @ 18.00 ¢/kWh	23.60
Delivery	53.07
Regulatory Charges	4.79
Debt Retirement Charge	0.00
Total Electricity Charges	**$139.00**
Rebate of Ontario portion of HST(8%)	11.12
HST	18.07
Total Amount	**$145.95**

Note: Final bill presentment pending submission to LRC.

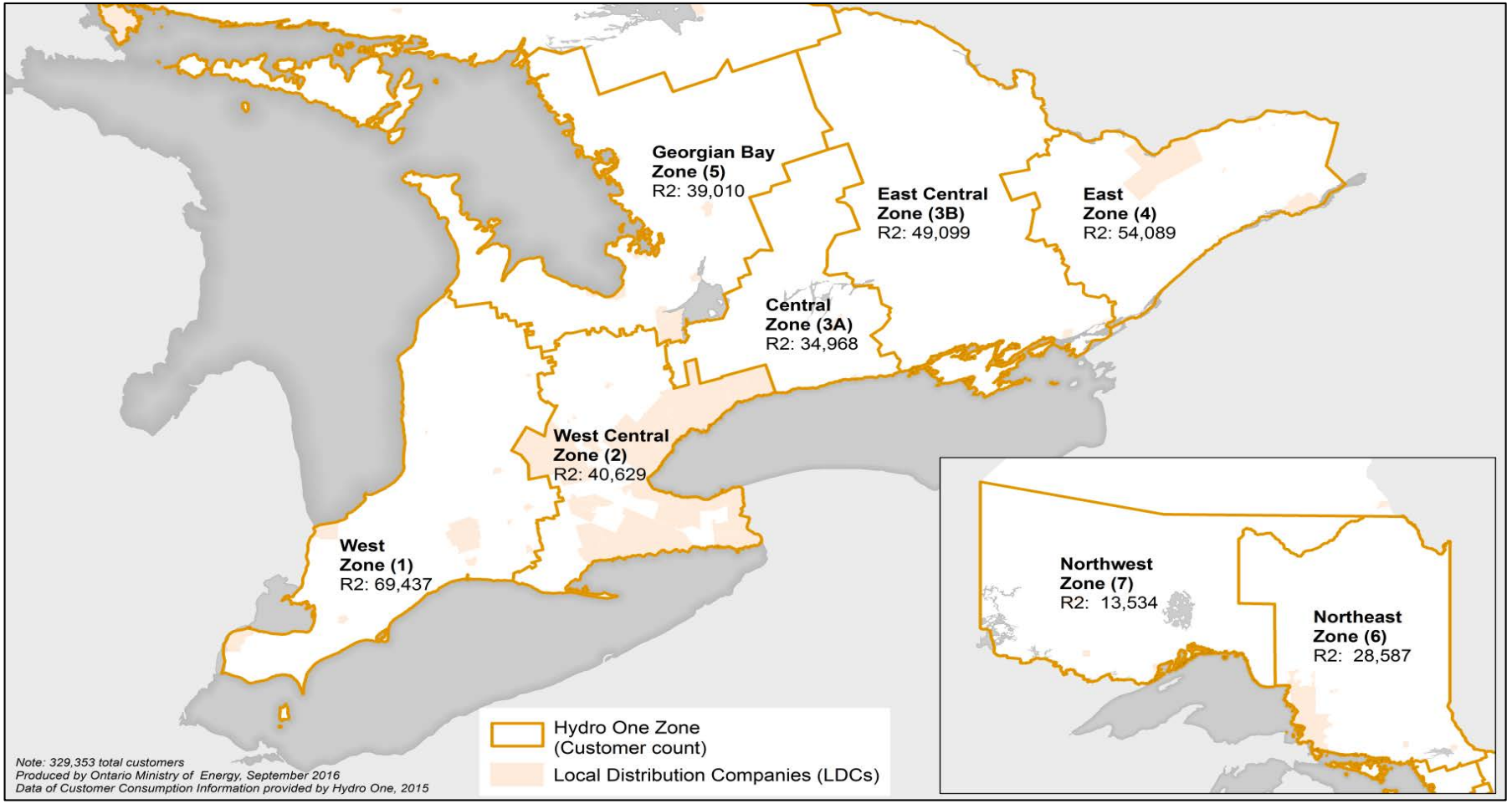
Rural or Remote Rate Protection (RRRP) Update

- ENERGY is proposing to amend O.Reg 442/01 to provide an additional $110 million in rate protection to eligible rural or remote electricity consumers, and consider options to periodically adjust the amount of rate protection available to these consumers going forward.

- RRRP is a rate-based funded program that helps offset the higher costs to distribute electricity to Ontario residents who live in rural or remote locations all across the Province.
  - Today, RRRP is a $175-million program. For an average residential customer, the cost of supporting RRRP is roughly $1 per month. For other customers, the cost can range from $65 for a greenhouse to $8,000 for a medium industrial.
  - The majority of the program funding ($125.5 million) is provided to Hydro One's lowest-density customers – classified as R2 customers. There are approximately 329,000 R2 customers. The current program provides a rebate of $31.50. The proposed update to the program would increase the benefit to $60/month.
  - RRRP funding supporting R2 customers has been capped at the current level since 2004. As a result, the impact of its assistance has diluted over time as electricity costs have risen.

- An additional $110 million in program funding would see an increased benefit of ~$28 /month. This would bring R2 bills in line with Hydro One R1 (medium density) bills at 1000kWh.
  - This would increase the R2 portion of the RRRP to $235 million with a monthly impact on an average residential consumer of ~$0.60.
  - The RRRP could be indexed at inflation or "trued up" on a regular basis to ensure the benefit remains constant.

Rural or Remote Rate Protection (RRRP) Update – R2 Customers by Region



2) Expand Industrial Conservation Initiative and Redirect Cap and Trade Proceeds

Industrial Conservation Initiative (ICI) Expansion

- ENERGY is proposing to amend O. Reg. 429/04 to expand ICI eligibility. The base setting period for the expanded program would begin in 2017, with the benefit seen by consumers starting in 2018.

- Currently, electricity consumers over 5 MW and consumers from 3-5 MW in certain energy intensive sectors are eligible for ICI (i.e., approximately 300 Class A consumers).
  - Consumers participating in ICI include the following sectors: pulp and paper, auto, manufacturing, chemicals and mines.

- ICI would be expanded so that all consumers over 1 MW are eligible for the program, which would:
  - Reduce electricity peak demand and electricity system costs by incenting more consumers to lower their electricity demand during peak periods;
  - Reduce electricity bills for new ICI participants who are able to reduce their electricity demand during peak demand periods; and
  - Increase the electricity bills for non-ICI participants to ensure full cost recovery in the electricity system.

ICI Expansion – Projected Impact

	Benefit to New ICI Participants	System Benefit	Financial Impact	Residential Bill Impact
	Bill Savings	Peak Demand Reduction (MW)	GA shifted to Class B ($M)	
Short-term	Up to 21%	80	47	Increase of $0.42/month
Long-term	Up to 34%	165	82	Increase of $0.74/month

- The different impacts refer to the amount of time it takes for new Class A consumers to respond to the expanded ICI eligibility
  - Short-term refers to the expected impact once ICI billing begins for new Class A consumers (one year after expanded eligibility takes place).
  - Long-term is the expected impact once new Class A consumers have had time to significantly change their behaviour and investment decisions in response to the ICI.

- The bill impacts assume a 25% uptake, which would increase Class A consumption by roughly 3 TWh, leaving an estimated 54 TWh in Class B that are either between 0.05-1 MW or choose not to opt in to ICI. This would represent an estimated 300 additional consumers in ICI, though they would represent a much smaller share of the consumption than the 300 consumers currently participating.

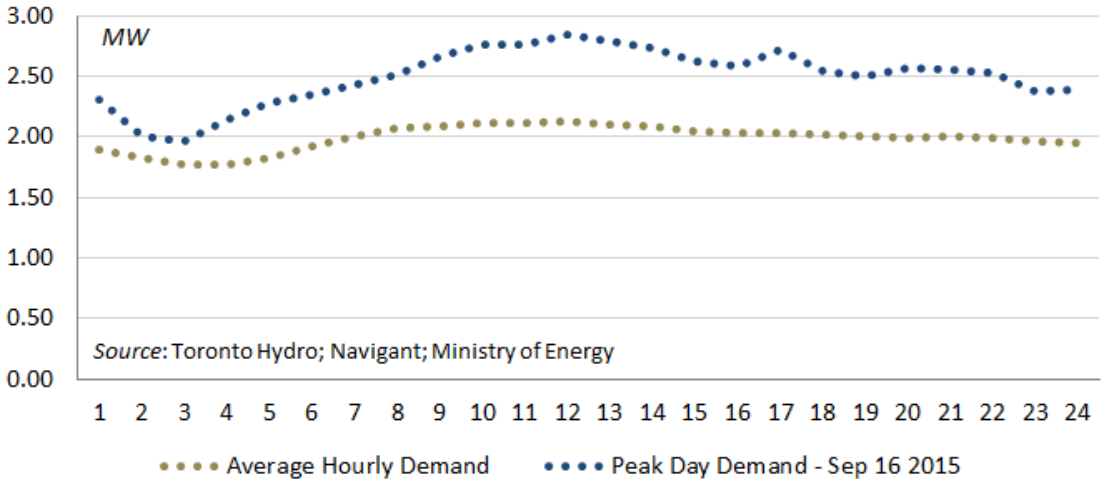
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
  - A few examples of companies that would become eligible under such an expansion would be Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.

ICI Expansion – Illustrative Example of Newly Eligible Consumer

- Plastics manufacturers, such as Poly Five Plastics in Toronto, are among the consumers that would become eligible if the threshold was lowered.
- Such manufacturers fall under NAICS* code 32 and have relatively flat load profiles, reflecting around the clock production. This means they would be beneficiaries of ICI even with no change in consumption behaviour.
- Companies like Poly Five Plastics could expect to see greater savings if they are willing and able to respond to the higher prices during high demand hours.

Typical Demand Profile, 2-3 MW Consumer

Manufacturer, NAICS Code 32 - Nov 2014 to Oct 2015



Illustrative Bill Savings, 2-3 MW Consumer

	Status Quo	*No Price Response*	*Short Term Response*	*Long Term Response*
	Class B	**Class A**	**Class A**	**Class A**
GA	75.26	58.06	43.55	32.03
Total bill	**126.28**	**109.09**	**94.58**	**83.06**
Savings		*-14%*	*-25%*	*-34%*

Source: Navigant; Ministry of Energy

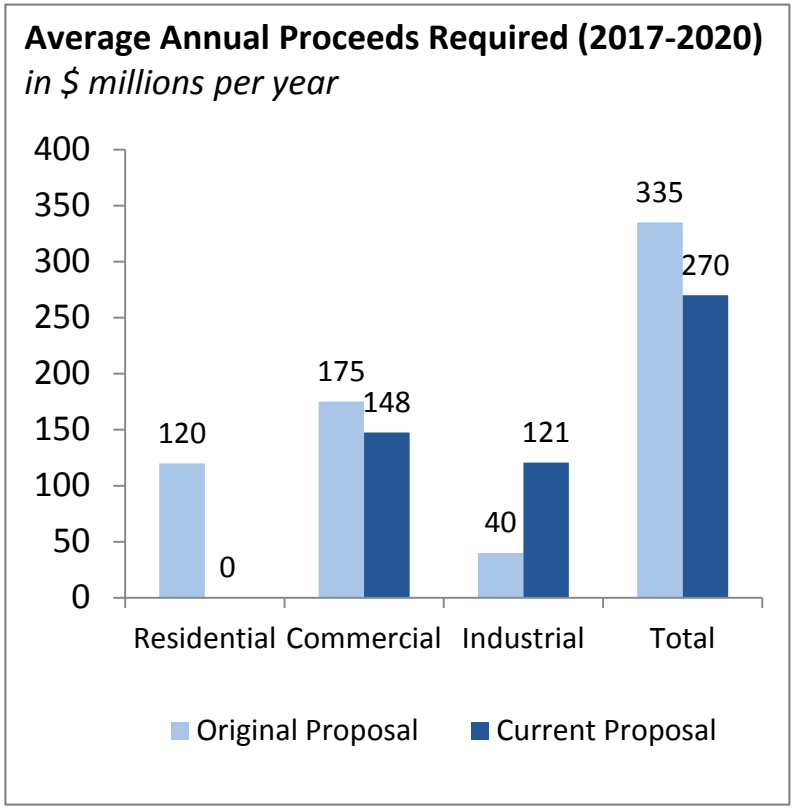
*** Note:** North American Industry Classification System (NAICS) is the standard used by statistical agencies in classifying business establishments.

Redirect Cap and Trade Proceeds Recycling

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial consumers, while also providing a benefit of up to $2 per month for residential consumers.
  - To meet the 2016 Budget commitment, the Climate Change Action Plan (CCAP), committed $1.3 billion from the GGRA over the first compliance period (2017-2020).

- However, providing a 8% rebate to Regulated Price Plan consumers would allow for GGRA proceeds previously committed to residential consumers to be redirected to other consumers classes and/or GHG reduction initiatives in the fiscal plan.

- The current proposal would provide additional recycling to commercial and industrial consumers, while requiring an estimated $60 million less per year (i.e., a reduction of $0.24 billion over the first compliance period).



Note: The original proposal was to offset the impact of cap and trade via GA to the average industrial, and would provide a benefit to commercial and residential consumers. Current proposal would recycle proceeds volumetrically to industrial and commercial consumers.

Redirect Cap and Trade Proceeds Recycling

- Redirecting cap and trade auction proceeds to lower the cost of electricity would offset consumers' contributions to non-emitting generation.

- Redirecting helps pay for committed investments/initiatives which reduce GHGs (e.g., non-emitting generation and conservation programs).
  - Due to the long-term nature (typically 20 years) of electricity generation contracts and conservation programs, the associated costs are ongoing and are expected to be about $7 billion dollars annually during the first cap and trade compliance period. These costs will continue well beyond the timelines described in the CCAP.

- Redirecting cap and trade auction proceeds volumetrically to Class B (commercial) and Class A (industrial) consumers maintains the incentive to shift consumption from on-peak to off-peak hours.

- Using cap and trade auction proceeds to lower the cost of electricity would make it more competitive with traditionally cheaper fossil fuels.

- By using the proceeds to lower the cost of electricity, there is potential to incent fuel-switching away from fossil fuels toward much cleaner grid-connected electricity and support CCAP goals of electrification.

Considerations

Implementation

- On September 15, 2016, ENERGY is proposing to introduce the *Ontario Rebate for Electricity Consumers Act, 2016*.
  - If passed, the legislation would require a general regulation.
  - Amendments would also be required to various regulations to expand ICI and RRRP.

- On-bill rebate delivery would likely require adjustments to LDC billing systems, which could impact delivery costs and timelines. ENERGY (possibly through Ontario Energy Board) will consult with LDCs to accurately assess these impacts once the program has been announced.
  - In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
  - Timing concerns may be alleviated by allowing LDCs to provide retroactive rebates if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.

- Detailed messaging on bills (for "low-volume" consumer bills) could be implemented by amending O. Reg. 275/04 (made under the Ontario Energy Board Act, 1998).
  - The rebate would not be directly linked to HST.
  - With electricity invoices containing multiple line items and LDC bill presentment varying widely, direction on rebate presentment will need to be flexible to allow LDCs to incorporate easily while ensuring government-preferred branding and messaging is conveyed.

- While the impact of cap and trade would be added to electricity bills as of January 2017, the offsetting effect of proceeds recycling may not occur immediately depending on implementation and potential alignment with the first auction expected in March 2017.
  - Should there be low demand for carbon allowances, auction proceeds would be less than the amount projected in the CCAP. This could mean a short-fall for proceeds recycling as proposed. However, natural gas utilities are expected to purchase allowances quarterly equal to their emissions.

- ENERGY will need to continue to consult with the Independent Electricity System Operator (IESO), Ontario Energy Board (OEB) and LDCs regarding implementation of proceeds recycling.

Fiscal

- The Climate Change Action Plan (CCAP) committed about $1.3 billion over four years for electricity mitigation for industrial, commercial and residential consumers from GGRA proceeds.
  - The current rate mitigation proposal requires approximately 20% less in proceeds, saving approximately $0.24 billion relative to the CCAP commitment over the first compliance period (2017-2020).

- The 8% rebate is expected to cost about $1 billion per year (i.e., $4 billion from 2017-2020), representing an additional pressure on the fiscal plan.
  - Consideration could be given to allocating the $0.24 billion in reduced proceeds required towards other existing initiatives in the fiscal plan that also reduce greenhouse gas (GHG) emissions, thereby providing an overall fiscal plan offset.
  - If cap and trade auctions are under-subscribed, the $0.24 billion may not be available for reallocation to the fiscal plan.

- In the absence of any offset strategies, the full cost of the rate mitigation approach would add to the pressures and risks that need to be managed in order for the government to balance the budget in 2017-18 and stay balanced in 2018-19 and beyond.

Legal

- In order to avoid characterization as an unconstitutional tax, a non-tax levy must have a sufficient nexus between those who pay and the regulatory scheme in the sense that those who pay have caused the need for or benefit from the regulatory scheme. Although the case law is not developed on the extent to which some regulated actors can be required to subsidize others, risk is reduced to the extent that any cross-subsidization serves true regulatory goals rather than revenue re-distribution goals.

- HST Rebate (shift costs from rate-base to tax base by providing a rebate equal to the provincial portion of HST):
  - Providing the contemplated rebate under the proposed Bill does not, in and of itself, give rise to legal issues. As policy direction is given on the specifics of supporting regulations, any associated legal risks can be identified.

- ICI Expansion (shift costs within rate-base by expanding eligibility for the ICI program to consumers of >1 MW):
  - Shifting costs to some consumers to lower rates for others without more carries the risk that the charge would be characterized as an unconstitutional tax. To establish that the charge is legitimate, it must be established that the purpose and effect of the charge is to facilitate the maintenance of a financially viable electricity system by way of load management or some other feature under which those who are subsidized provide an overall system benefit enjoyed by those who subsidize them.

- RRRP Update (shift costs within the rate-base by increasing the RRRP benefit paid to rural and remote customers):
  - Increasing the amount of revenue devoted to the RRRP or expanding the scope of consumers eligible for the program does not raise new legal risk. There is a good argument that the RRRP is a regulatory charge, as it socializes some of the costs of distributing electricity to rural consumers. Overall the risk that the RRRP would be characterized as a tax is assessed as moderate (meaning equally good arguments on both sides).

- Cap and Trade Proceeds Recycling (reduce impact on rate base and tax base by directing cap and trade auction proceeds to industrial consumers):
  - To be characterized as regulatory charges under the cap and trade program, auction revenues should be spent on programs that reduce GHGs.

Communications

- Public high-profile communications would coincide with introduction of legislation (September 2016).
  - Stakeholder outreach/technical briefings with LDCs, Ontario Chamber of Commerce, AMPCO, OEB low-income table, AMO, etc.
  - Echo public announcements in southwest and north; proactive provincial/local media.

- **Positioning:**
  - A fiscally prudent plan to benefit all ratepayers in a lasting, meaningful way.
  - Rural customers will receive the largest single rate relief ever.
  - Businesses across Ontario will have even more opportunity to be competitive and manage their energy costs.

- **Issues Considerations:**
  - Significant benefit for rural and remote residential customers; net gain for all residential customers.
  - More complex to communicate, but can be presented as a full plan that includes reforms and improvements to the system.
  - Consistent with cap-and-trade commitment that no business sector will be left worse off, though small businesses outside ICI will benefit the least.

Pending Update

Ontario

Key Messages

- We are taking unprecedented action to help people in their everyday lives.
- Residential ratepayers and other RPP eligible ratepayers will receive an eight per cent rebate on their electricity bill, equivalent to the provincial portion of the HST.
- Modernizing the RRRP will benefit 330,000 families in rural Ontario with significant reductions to their electricity bills – $28 a month, in addition to the eight per cent rebate.
- Over a thousand more Ontario businesses will be eligible to benefit from the ICI program, helping them stay competitive and grow.
- These actions will assist over five million families, farms and small businesses across Ontario.
- These actions today join our many existing initiatives too help keep electricity in Ontario clean, reliable and affordable.

Proposed Cabinet Minute

Cabinet agreed that:

1. ENERGY implement electricity price mitigation for residential, commercial and industrial consumers through the following:

    i. Provide a rebate of 8% on the pre-tax cost of electricity for all electricity consumers eligible to be billed under the Ontario Energy Board's Regulated Price Plan (RPP); and any other consumers who would be eligible for RPP if their electricity account was with a licensed distributor.

    ii. Increase the total amount of rate protection available to R2 low density electricity consumers under the Rural or Remote Rate Protection Program (RRRP) by increasing the subsidy by $110 million from its current level of $127 million which has been capped since 2004.

    iii. Implement a mechanism to periodically adjust the total annual amount of rate protection available to R2 low density electricity consumers under the RRRP, effective on or after January 1, 2018.

    iv. Expand eligibility for participation in the Industrial Conservation Initiative (ICI) to smaller industrial, institutional and commercial customers by lowering the eligibility threshold to 1 MW and removing restrictions on eligible sectors.

Proposed Cabinet Minute (cont'd)

2. ENERGY seek necessary TB/MBC approvals. **[TBD]**

3. ENERGY seek approvals for the proposed *Ontario Rebate for Electricity Consumers Act, 2016* which would, subject to the Legislature's approval of the Act, include the following elements:
   i. The rebate would be available starting January 1, 2017;
   ii. The legislation would specify the types of costs to which the rebate would or would not be applied, with authority to make changes by regulation;
   iii. The legislation would address invoicing requirements, including authority to prescribe how the rebate is to appear on consumers' electricity bills;
   iv. The legislation would include authority to prescribe the way in which the rebate is to be flowed through to consumers, and the way in which electricity vendors providing the rebate are to be reimbursed;
   v. The legislation would include record-keeping requirements for electricity vendors and other prescribed persons;
   vi. The legislation would include inspection powers for inspectors appointed by the minister of Finance, including powers related to the recovery of overpayments; and
   vii. The legislation would include consequential amendments to the *Ontario Energy Board Act, 1998* and the *Ontario Clean Energy Benefit Act, 2010*; and
   viii. The legislation would provide for regulation-making authority to establish a limitation period for ceasing payments and reimbursement based on past entitlement. Similar amendments would be provided for the *Ontario Clean Energy Benefit Act, 2010* but would allow the ceasing of all payments and reimbursements after a prescribed date

Proposed Cabinet Minute (cont'd)

4. ENERGY to report back to LRC and Cabinet for approval of any supporting regulations under the proposed *Ontario Rebate for Electricity Consumers Act, 2016*, and with other complementary regulatory amendments.

5. ENERGY notes the following amendments:

   i. Amendments to Ontario Regulation 429/04 (Adjustments Under Section 25.33 of the Act) made under the *Electricity Act, 1998* to lower the Industrial Conservation Initiative (ICI) threshold to 1 megawatt and require electricity consumers and market participants between 1 MW and 5 MW to opt in.

   ii. Amendments to Ontario Regulation 442/01 (Rural or Remote Electricity Rate Protection) made under the Ontario Energy Board Act, 1998, to increase support through the Rural and Remote Rate Protection Plan to R2 low density electricity customers and provide for a periodic adjustment mechanism.

6. ENERGY work with MOECC to recycle an estimated annual average of $270 million of Cap and Trade auction proceeds from the Greenhouse Gas Reduction Account for non-RPP commercial and industrial electricity consumers over the first compliance period (2017-2020) through a volumetric rebate mechanism.

7. ENERGY and MOF work with Cabinet Office, Premier's office to develop a communications plan

Proposed Cabinet Minute (cont'd)

Cabinet approved version of the proposed *Ontario Rebate for Electricity Consumers Act, 2016* for introduction, subject to the following:

1. The Office of Legislative Counsel is authorized to prepare a French version and to make minor adjustments to the English version, for the purpose of ensuring consistency between the two versions and making other improvements or correcting mistakes discovered in the translation process.

Appendix

Illustrative Bill Impacts

	Current Bill (after cost of new programs, before tax)	Current Rate mitigation initiatives*	New Rate Mitigation initiatives	New Bill (after cost of new programs, before tax)
Average Residential (Toronto – 750 kWh/month)	$140 /month	N/A	8% pre-tax rebate: - $11	$129 /month
Rural Residential (Hydro One R2 – 1000 kWh/month)	$231 /month	RRRP: –$32	8% pre-tax rebate + Updated RRRP: - $45	$186 /month
Low-income Residential ** (Toronto – 750 kWh/month)	$102 /month	OESP: -$38	8% pre-tax rebate: - $8	$94 /month
Small Business (Toronto – 403,200 kWh/month)	$150 /MWh	N/A	8% pre-tax rebate: - $12/MWh	$138 /MWh
Small Farm (Hydro One R1 – 4,000 kWh/month)	$204 /MWh	N/A	8% pre-tax rebate: - $16/MWh	$188 /MWh

***Note:** Some residential consumers can also receive tax credits based on income, age and geography (Northern Ontario Energy Credit and Ontario Energy and Property Tax Credit). These credits are delivered through the Trillium Tax Credit and can be as high as $1,332 per year for a family.
** income of less than $28,000, family of 4.

Totals may not add due to rounding.

Illustrative Bill Impacts (cont'd)

	Current Rate	Current Rate mitigation initiatives*	Cost of new initiatives (RRRP and ICI)	New Rate Mitigation initiatives	Net Impact,	New Rate,
Large Institutional (Toronto – distribution-connected, 10 MW)	$108 /MWh	ICI: -$49/MWh	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh (2017-2020 average)	-$0.90 /MWh (-1%)	$107 /MWh
Large Industrial (Timmins – transmission-connected, 10 MW)	$69 /MWh	ICI + NIERP: -$69/MWh	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh	-$0.90 /MWh (-1%)	$68 /MWh
Small Industrial – opt-in to ICI (Toronto – 2 MW)	$152 /MWh	N/A	$1.74 /MWh	Proceeds Recycling + ICI: -$53.90/MWh	-$52 /MWh (-34%)	$100 /MWh
Large Commercial – does not opt-in to ICI (Toronto – 2 MW)	$152 /MWh	N/A	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh	-$0.90 /MWh (-1%)	$151 /MWh
Small Institutional (Toronto – 500 kw)	$154 /MWh	N/A	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh	-$0.90 /MWh	$153 /MWh

Notes:

1) There is the potential for a consumer eligible for the Regulated Price Plan to opt-out of the Regulated Price Plan to opt-in to Class A and receive all three benefits (i.e., Regulated Price Plan, ICI and proceeds recycling).

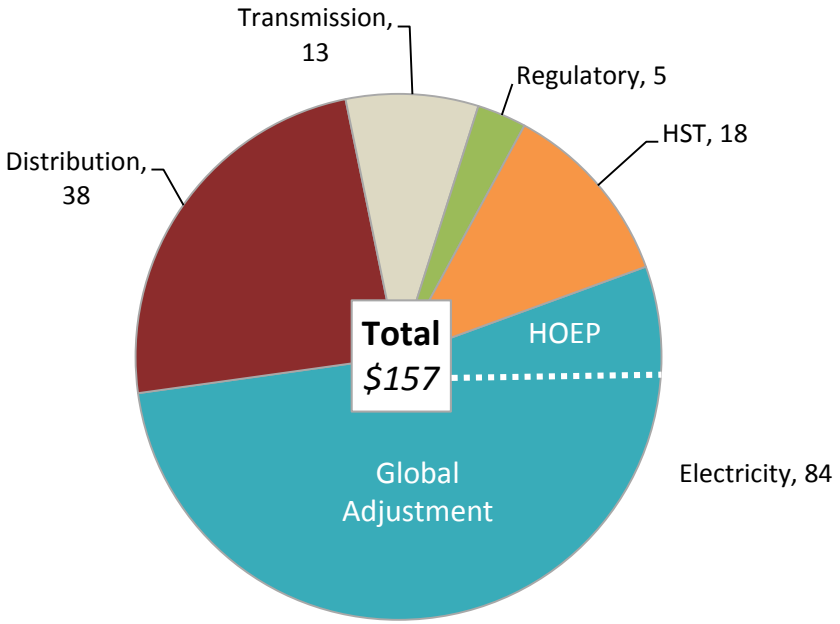
2) The impact of cap and trade would not be added to electricity bills until 2017 and varies per year over the course of the first compliance period. For illustrative purposes, the estimated average benefit of proceeds recycling is shown above.

Residential Electricity Prices

- There are approximately 5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of May 1, 2016 (750 kWh/month)



Source: OEB, Toronto Hydro

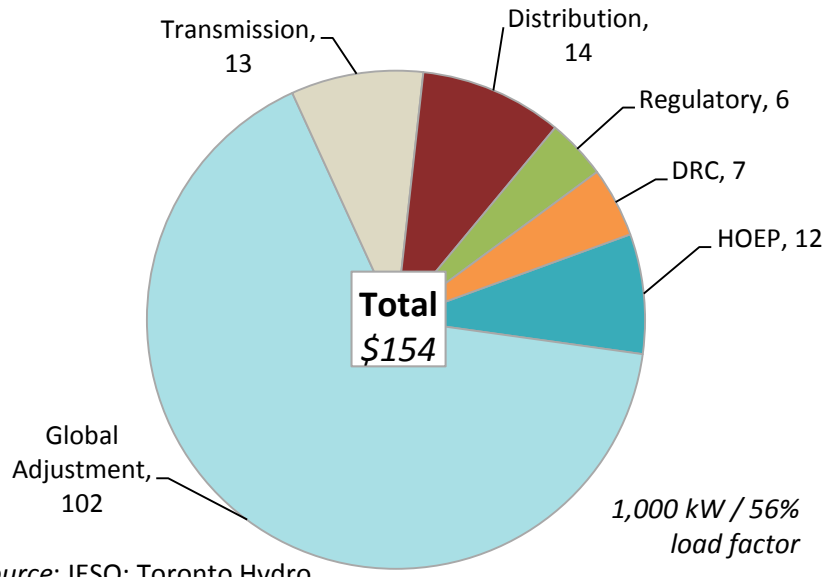
Commercial Electricity Prices

- There are approximately 400,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.

- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



Source: IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.

- Targeted pricing programs are currently not available for Class B consumers.

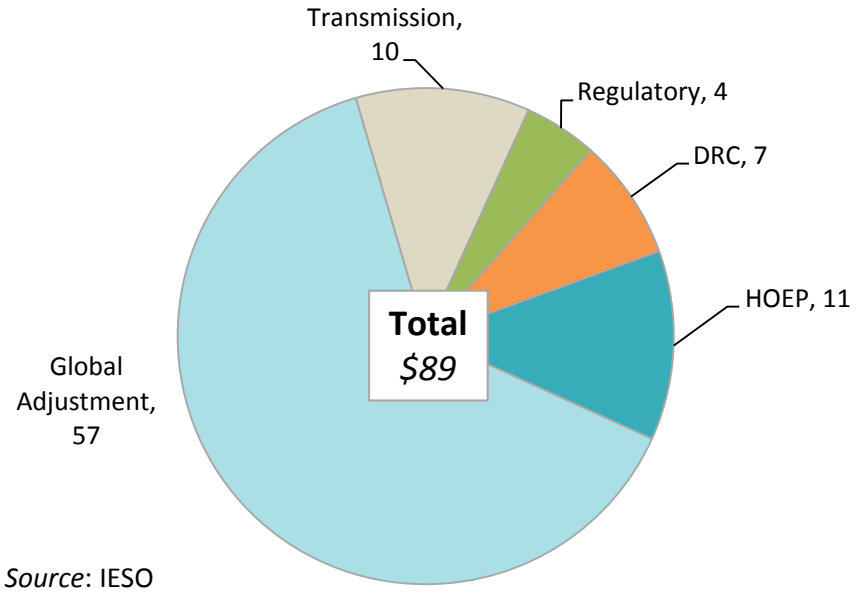
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



Source: IESO

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $64/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Sales Tax Treatment in Other Jurisdictions

Jurisdiction	Tax	Tax Paid by Business Consumers	Tax Paid by Residential Consumers	Comment
British Columbia	PST	Yes – 7%	No	• PST does not apply to residential energy, including electricity, acquired solely for residential use in a residential dwelling • BC's carbon tax does not apply to electricity bills.
Alberta	None	N/A	N/A	• Alberta does not have a provincial sales tax.
Saskatchewan	PST	Yes – 5% Except for electricity purchased to heat a building.	No	• PST does not apply to electricity purchased for use in a residential dwelling. • PST does not apply to electricity purchased for use in heating a building that is heated solely by the electricity.
Manitoba	PST	Yes – 8% Reduced rate of 1.6% applies to electricity used by a qualifying business to operate machinery	Yes – 8% Electricity purchased for mixed use, 80% of which is home heating, has a reduced rate of 1.4%. Electricity solely to heat the purchaser's home is exempt.	• Winnipeg also applies a tax of 2.5% on residential and 5% on commercial.
Ontario	HST	Yes (less ITC (input tax credits))	Yes – 8%	
Quebec	QST	Yes (less ITCs)	Yes – 9.975%	
Nova Scotia	HST	Yes (less ITCs)	Yes – 10% less provincially administered rebate.	• Rebate is equal to the provincial portion of the HST, and is administered similar to OCEB, but applies to many energy sources.
New Brunswick	HST	Yes (less ITCs)	Yes – 10%	
Prince Edward Island	HST	Yes (less ITCs)	Yes – 9% (10% beginning Oct 1, 2016)	
Newfoundland and Labrador	HST	Yes (less ITCs)	Yes – 10%	• Had a provincially administered Home Heating Rebate program until July 2015.
Federal	GST	Yes (less ITCs)	Yes – 5%	

Electricity Price Mitigation

Ministry of Energy

WORKING DRAFT

Date: September 14, 2016

Minister

Deputy Minister

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.

- Ontario has taken action to replace coal-fired generation with cleaner sources of energy. Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished clean generation, including nuclear, natural gas and renewables.
  - This investment represents about 40% of our current supply and has helped decrease electricity sector emissions by approximately 80%.

- Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.

- Since 2010, electricity prices have risen considerably, particularly for households and small businesses. Prices are forecast to continue to increase as additional generation comes online.

- The Ministry of Energy and Ministry of Finance were asked to develop a proposal to provide rate relief to Ontario electricity consumers.

Context – Electricity Consumer Classes

- There are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 3 MW	Above 3 MW*
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

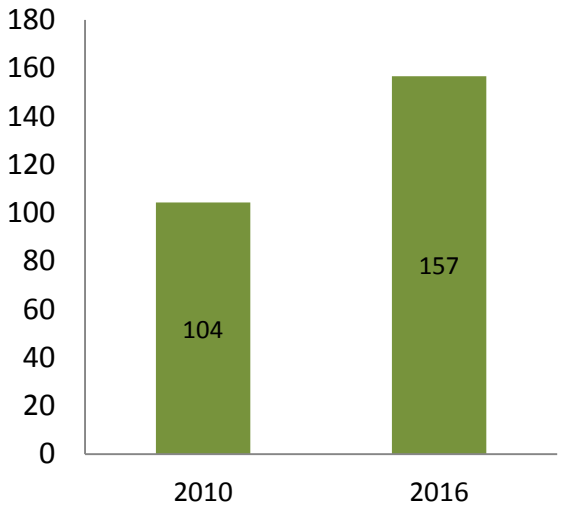
- The following slide provide further information on the prices paid by different classes of electricity consumers.

**** Note:** Consumers with peak demand between 3-5 MW in the manufacturing, mining, refrigerated warehousing, greenhouses and data-processing industries are currently eligible for Class A. All other 3-5MW consumers are Class B.

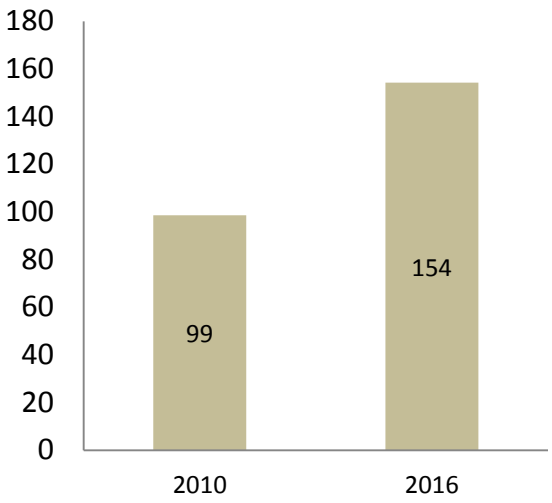
Context – Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates paid by commercial and industrial electricity consumers have increased by 56% and 6% respectively over the same period.

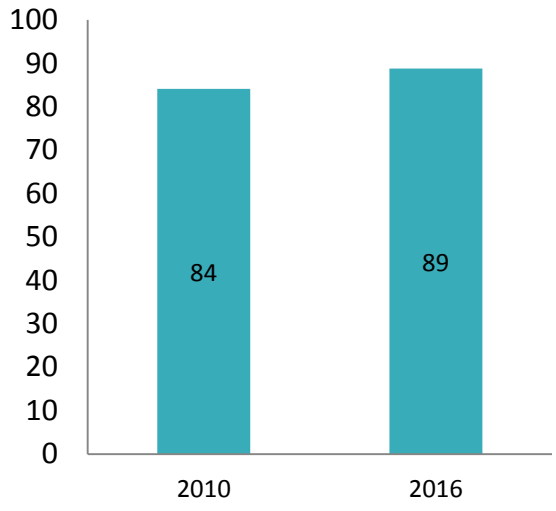
Typical Residential Bill (750/kWh per month)



Typical Commercial Price ($/MWh)



Typical Industrial Price ($/MWh)



Note: 2016 represents May 2016 for residential and YTD June 2016 for commercial and industrial.

Existing Rate Mitigation

- Ontario currently provides rate mitigation to various electricity consumer classes through a combination of tax-based and rate-based programs.
  - For example, Northern Ontario residential electricity consumers receive tax credits in recognition of higher electricity costs in the north and rural consumers receive a subsidy funded through the rate-base due to the higher cost of delivering power to rural areas.

- As of 2016, the government removed the Debt Retirement Charge (DRC) from residential electricity bills. While this saves a typical residential electricity ratepayer about $60 per year, it is less than the benefit previously provided through the Ontario Clean Energy Benefit (OCEB).
  - OCEB provided a tax-base rebate of 10% rebate on the total cost of electricity charges related to electricity consumption on eligible bills between 2011 and 2015.

- Because electricity costs must be fully recovered from electricity consumers, rate mitigation funded through the rate-base often represents a shifting of costs from one consumer group to another (i.e., industrial to residential and commercial consumers).
  - Rate-based initiatives are generally associated with incenting changes in behaviour that provide electricity system benefits (i.e., shifting electricity consumption from on-peak to off-peak periods).

- The following slides provide an overview of the programs currently available to different electricity consumer classes along with the cost shift associated with several of the programs.

Existing Rate Mitigation (cont'd)

Program	Consumer Type	Rate/Tax-based	Description
Northern Ontario Energy Credit	**Residential**	Tax	Delivered as part of the Ontario Trillium Benefit, provides individuals living in northern Ontario with a credit of up to $146 per year for the 2016 benefit year.
Ontario Energy and Property Tax Credit		Tax	Also delivered as part of the Ontario Trillium Benefit, provides up to $1,008 per year for low-to moderate-income individuals and families.
Ontario Electricity Support Program		Rate	Provides ongoing assistance directly on the bills of eligible low-income electricity consumers.
Rural or Remote Rate Protection		Rate	Provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
saveONenergy Conservation Programs (including Home Assistance Program for low income customers)		Rate	Delivered by LDCs which provide financial incentives for electricity-saving measures like LEDs, ENERGYSTAR certified ceiling fans, baseboard programmable thermostats, clotheslines, and advanced powerbars.
saveONenergy Conservation Programs (including Retrofit Program for Buildings and other programs)	**Commercial**	Rate	saveONenergy suite of electricity conservation programs for commercial customers offered by local distribution companies (LDCs) help businesses save energy to better manage their electricity consumption and reduce their annual electricity costs. See Appendix for more information.
Industrial Conservation Initiative	**Industrial**	Rate	Encourages Ontario's largest consumers to reduce consumption during peak periods to save on average 25% on their electricity bills.
Industrial Accelerator Program		Rate	Provides financial incentives of up to $10 million to transmission-connected electricity consumers, to invest in energy-efficiency or self-generation which would reduce the amount of electricity withdrawn from the provincial grid.
Industrial Electricity Incentive		Rate	Provides reduced electricity rates for companies starting or expanding operations in Ontario.
Northern Industrial Electricity Rate Program		Tax	Provides $20 megawatt per hour (MWh) rebate for qualifying large northern industrial consumers.
Demand Response		Rate	Provides payments to businesses and industry to shift consumption at times when the electricity system is stressed. DR currently provides ~500 MW of capacity to the system.

Current Cost Shifts in Ontario's Electricity System

- Ontario has implemented several programs that have shifted costs amongst electricity consumer classes (i.e., residential, commercial and industrial).

- The table below shows the estimated cost shifts in the province's electricity system that result from three existing government programs (i.e., ICI, RRRP and OESP):

Cost Shift Impact	2011	2012	2013	2014	2015	2016
Residential Bill ($/month for 750 kWh)	3.55	4.07	3.85	4.46	5.68	6.55
Commercial – Class B ($/MWh)	4.74	5.43	5.14	5.94	7.57	8.73
Industrial – Class A ($/MWh)	-20.97	-25.26	-22.38	-24.68	-32.56	-31.55

Note: Negative values indicate a benefit; positive values denote an incremental charge.

2016 Budget Commitment – Overview

- The 2016 Budget committed to offset the impact of cap and trade in Ontario for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers.

- To meet the 2016 Budget commitment, the Climate Change Action Plan (CCAP) committed $1.3 billion from the Greenhouse Gas Reduction Account (GGRA) over the first compliance period (2017-2020).

- The $1.3 billion was estimated to go to different electricity consumer classes as follows:
  - $120 million for residential consumers;
  - $170 million for commercial consumers; and
  - $40 for industrial consumers.

Electricity System Cost Reduction Initiatives

- A number of actions have and are being taken to reduce overall electricity system costs:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million.
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Removing an expected $3.3 billion in Large Renewable Procurement (LRP) costs relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast, based on the results of the first phase of the LRP.
- Despite these actions to reduce system costs, electricity rates continue to increase for consumers.

Context – Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:

  - **Tax-based Lever:**
    - Provide an on-bill rebate funded from the tax-base to all consumers or specific classes of consumers (i.e., the Ontario Clean Energy Benefit (OCEB) provided a rebate for eligible electricity consumers).

  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.

  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds to offset the cost of existing initiatives that help reduce greenhouse gas (GHG) emissions (i.e., the CCAP committed to offset the impact of cap and trade and to keep electricity rates affordable).

Rate Mitigation Proposal – Overview

- The Ministry of Energy is proposing to implement the following electricity price mitigation initiatives. The approach identified below would provide relief across all electricity consumer classes:

  1) Provide an 8% rebate to consumers eligible for the Regulated Price Plan* (i.e., residential, small business and farms), equivalent to the provincial portion of HST;

  2) Expand ICI eligibility by lowering the threshold to 1 MW, to provide support to Class B electricity consumers (i.e., commercial, institutional and small industrial);

  3) Update the Rural and Remote Rate Protection (RRRP) program, to provide relief to rural customers; and

  4) Recycle cap and trade proceeds to commercial and industrial electricity consumers to provide a modest reduction in rates.

- The following slides provide additional information on the above initiatives.

***Note:** Eligibility for the 8% rebate would be similar to OCEB and include some customers not on the Regulated Price Plan (RPP), such as Independent Power Authority consumers and consumers that have opted-out of RPP.

Rate Mitigation Proposal – Illustrative* Impacts

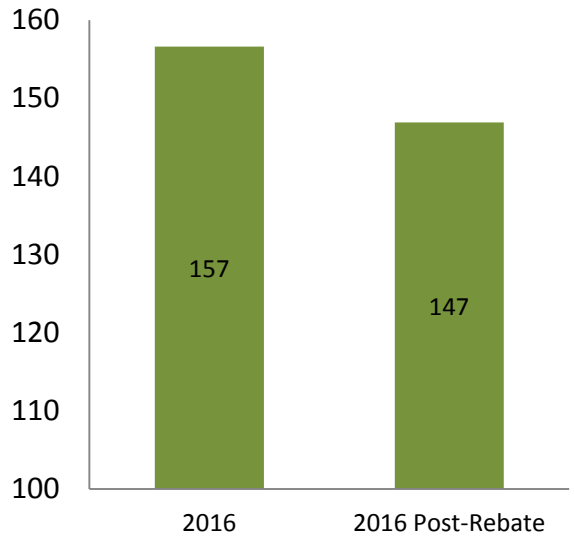
	Average Annual Fiscal Impact	Average Annual Greenhouse Gas Reduction Account (GGRA) Proceeds Impact	Regulated Price Plan (Residential) Impact		Class B (Commercial) Impact	Class A (Industrial) Impact	
			Average (750 kWh/ month)	*Rural** (1000 kWh/ month)*		*Existing*	*New*
• 8% rebate to Regulated Price Plan consumers • ICI Expansion • RRRP Update • Proceeds Recycling	$1.0 billion	$270 million annually	-$10/ month (-6%)	-$45/ month (-20%)	-$1/MWh (-1%)	-$1/ MWh (-1%)	Up to -$52/MWh (-34%)

***Note:** The impact of cap and trade would not be added to electricity bills until 2017 and the impact of ICI would not be added to bills until 2018 due to the time required to implement the expansion and for billing changes. However, both the impact of cap and trade and ICI have been included above for illustrative purposes.

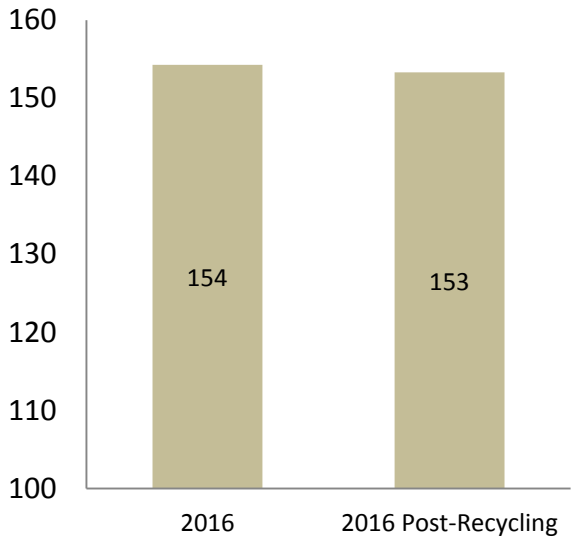
****Note**: Rural customers refers to customers of Hydro One eligible to receive RRRP (R2 rate class customers)

Rate Mitigation Proposal – Illustrative Bill Impacts by Electricity Consumer Class

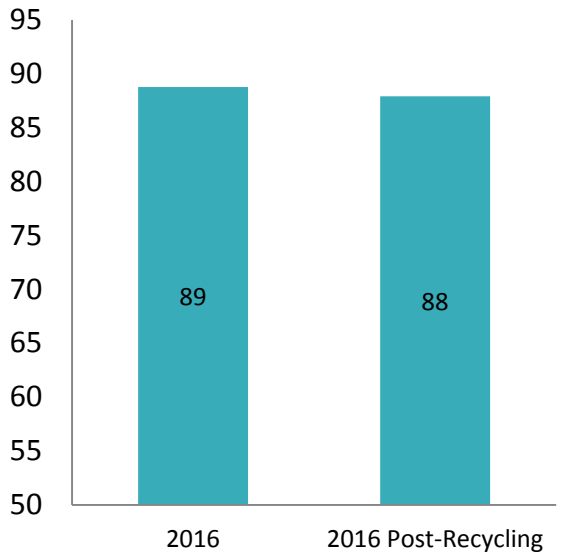
Typical Residential Bill
750/kWh per month



Typical Commercial Price ($/MWh)



Typical Industrial Price ($/MWh)



Residential: The net impact of the 8% rebate is a 6% reduction.

Commercial: The net impact of proceeds recycling is a 1% reduction.

Industrial: The net impact of proceeds recycling is a 1% reduction.

Note: Residential bills reflect electricity rates as per the Regulated Rate Plan (RRP) which came into effect on May 1, 2016. Commercial and industrial electricity prices reflect YTD June 2016. The impact of cap and trade would not be added to electricity bills until 2017 and the impact of ICI would not be added to bills until 2018 due to the time required to implement the expansion and for billing changes. However, both the impact of cap and trade and ICI have been included above for illustrative purposes.

1) 8% Rebate to Regulated Price Plan Eligible Consumers

- ENERGY is proposing to introduce legislation/regulation by X [placeholder for date] to provide a rebate of 8% to consumers eligible for the Regulated Price Plan. The below table indicates which consumers would or would not receive the benefit.
  - This would be equivalent to the provincial portion of the HST*.

Eligible for the 8% rebate (< 50 kW or < 250,000 kWh/year)	**Not eligible for the 8% rebate** (> 50 kW or > 250,000 kWh/year)

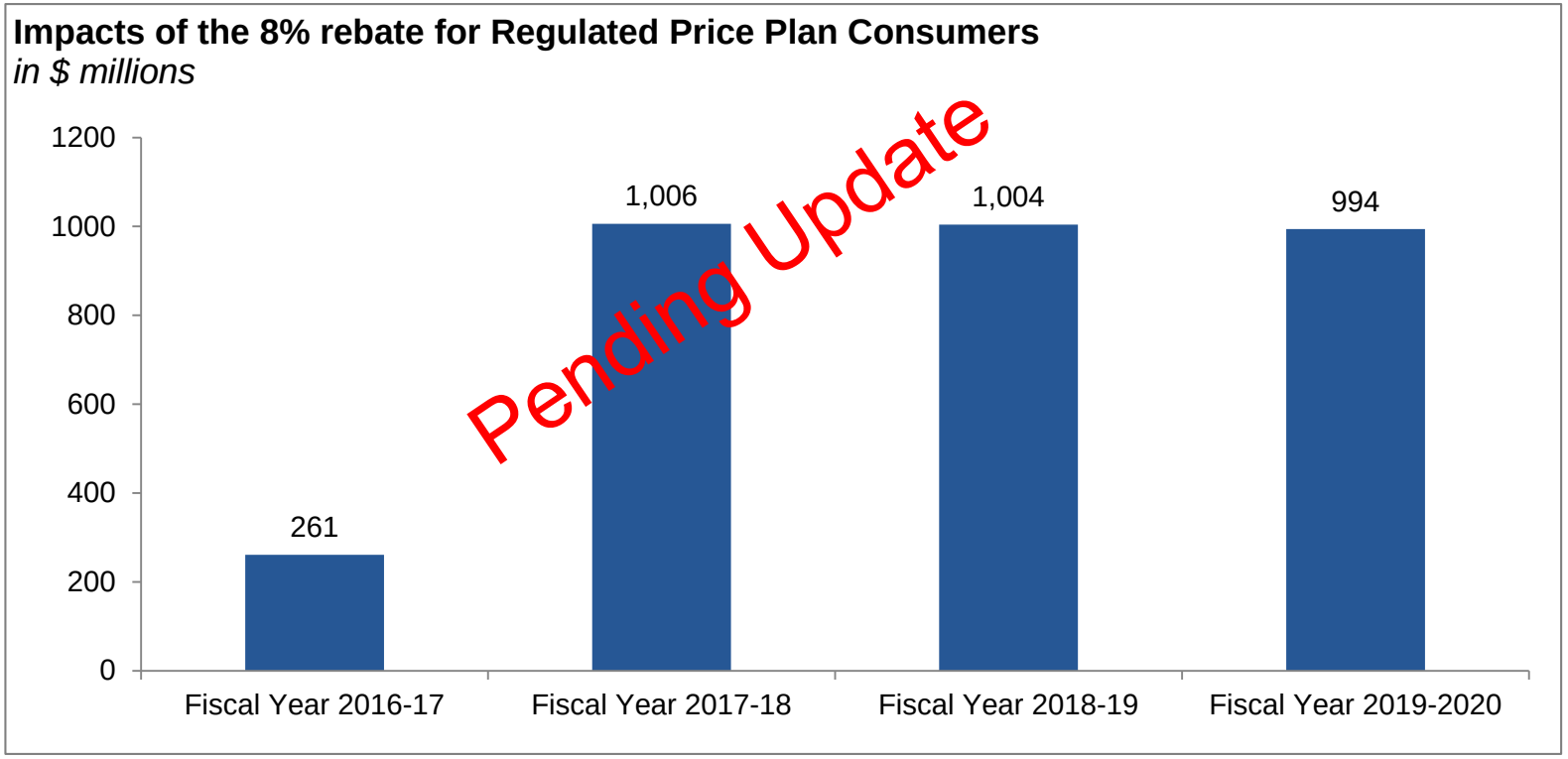
• Residential Regulated Price Plan consumers
• Residential retail consumers
• Multi-unit residential buildings and other facilities used as residential rental units
• Long-term care homes and school residences
• Regulated Price Plan eligible farms
• Small businesses
  − Coffee / snack retailer
  − Convenience store
  − Apparel store
  − Hair salon
  − Small insurance office
	• Class A consumers
	  − Manufacturer
	  − Large grocery store
	  − Mines
	  − Auto assembly plants
	• Class B consumers (except farms that have opted out of the Regulated Price Plan)
	  − Commercial offices (low rise)
	  − Hotel
	  − General warehousing

- Those ineligible to receive the 8% rebate will benefit from one or more of the other initiatives under this proposal (e.g., ICI expansion, proceeds recycling, etc).

***Note:** An HST exemption would require federal approval. Engaging in discussions with the federal government would take time and would likely result in not meeting the targeted implementation date.

1) 8% Rebate to Regulated Price Plan Eligible Consumers – Projected Impact

- ENERGY estimates that the average annual cost of an 8% rebate to consumers eligible for Regulated Price Plan consumers would be approximately $1.0 billion between 2017 and 2020.



2) Industrial Conservation Initiative (ICI) Expansion

- ENERGY is proposing to amend O. Reg. 429/04 to expand ICI eligibility effective [X placeholder date].

- Currently, electricity consumers over 5 MW and consumers from 3-5 MW in certain energy intensive sectors are eligible for ICI (i.e., approximately 300 Class A consumers).
  - Consumers participating in ICI include the following sectors: pulp and paper, auto, manufacturing, chemicals and mines.

- ICI would be expanded so that all consumers over 1 MW are eligible for the program, which would:
  - Reduce electricity peak demand by incenting more consumers to lower their electricity demand during peak periods;
  - Reduce electricity bills for new ICI participants who are able to reduce their electricity demand during peak demand periods; and
  - Increase the electricity bills for non-ICI participants to ensure full cost recovery in the electricity system.

2) ICI Expansion – Projected Impact

	Benefit to New ICI Participants	System Benefit	Financial Impact	Residential Bill Impact
	Bill Savings	Peak Demand Reduction (MW)	GA shifted to Class B ($M)	
Short-term	Up to 21%	80	47	Increase of $0.42/month
Long-term	Up to 34%	165	82	Increase of $0.74/month

- The different impacts refer to the amount of time it takes for new Class A consumers to respond to the expanded ICI eligibility
  - Short-term refers to the expected impact once ICI billing begins for new Class A consumers (one year after expanded eligibility takes place).
  - Long-term is the expected impact once new Class A consumers have had time to significantly change their behaviour and investment decisions in response to the ICI.

- The bill impacts assume a 25% uptake, which would increase Class A consumption by roughly 3 TWh, leaving an estimated 54 TWh in Class B that are either between 0.05-1 MW or choose not to opt in to ICI. This would represent an estimated 300 additional consumers in ICI, though they would represent a much smaller share of the consumption than the 300 consumers currently participating.

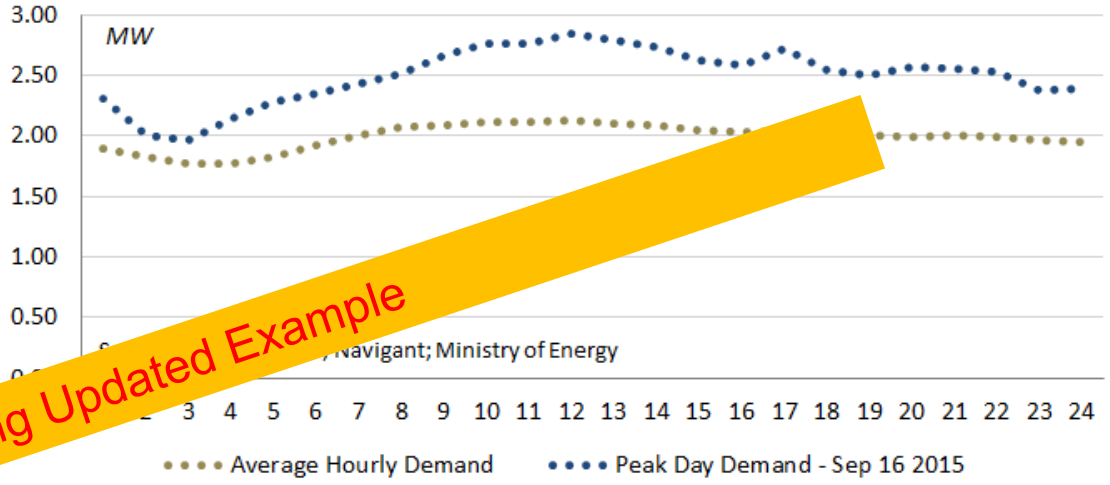
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
  - A few examples of companies that would become eligible under such an expansion would be Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.

2) ICI Expansion – Illustrative Example of Newly Eligible Consumer

- Plastics manufacturers, such as Poly Five Plastics in Toronto, are among the consumers that would become eligible if the threshold was lowered.
- Such manufacturers fall under NAICS* code 32 and have relatively flat load profiles, reflecting around the clock production. This means they would be beneficiaries of ICI even with no change in consumption behaviour.
- Companies like Poly Fi… could expect to … vings if they a… …ble to respond to …ces during high demand …

Typical Demand Profile, 2-3 MW Consumer

Manufacturer, NAICS Code 32 - Nov 2014 to Oct 2015



Pending Updated Example

Illustrative Bill Savings, 2-3 MW Consumer

Manufacturer, NAICS code 32

	Status Quo	*No Price Response*	*Short Term Response*	*Long Term Response*
	Class B	**Class A**	**Class A**	**Class A**
GA	75.26	58.06	43.55	29.03
Total bill	**126.28**	**109.09**	**94.58**	**80.06**
Savings		*-14%*	*-25%*	*-37%*

Source: Navigant; Ministry of Energy

*** Note:** North American Industry Classification System (NAICS) is the standard used by statistical agencies in classifying business establishments.

3) Rural or Remote Rate Protection (RRRP) Update

- ENERGY is proposing to amend O.Reg 442/01 to provide an additional $110 million in rate protection to eligible rural or remote electricity consumers, and consider options to periodically adjust the amount of rate protection available to these consumers going forward.

- RRRP is a rate-based funded subsidy program that helps offset the higher costs to distribute electricity to Ontario residents who live in rural or remote locations all across the Province.
  - Today, RRRP is a $175-million program. For an average residential customer, the cost of supporting RRRP is roughly $1 per month. For other customers, the cost can range from $65 for a greenhouse to $8,000 for a medium industrial.
  - The majority of the program funding ($125.5 million) provides a subsidy to Hydro One's lowest-density customers – classified as R2 customers. There are approximately 329,000 R2 customers. The current program provides a monthly subsidy for R2 customers of $31.50.
  - RRRP funding supporting R2 customers has been capped at the current level since 2004. As a result, the impact of its assistance has diluted over time as electricity costs have risen.

- An additional $110 million in program funding would see an increased subsidy of ~$28 /month. This would bring R2 bills in line with Hydro One R1 (medium density) bills at 1000kWh.
  - This would increase the R2 portion of the RRRP to $235 million with a monthly impact on an average residential consumer of ~$0.60.
  - The RRRP could be indexed at inflation or "trued up" on a regular basis to ensure the subsidy remains constant.

3) Rural or Remote Rate Protection (RRRP) Update

Bill Comparisons @ 1000kWh/month (Pre-HST)		
	Total Current Delivery** Charge**	**Total Current Bill**
Hydro One R2 (Current RRRP Subsidy Levels)	~$111	~$229
Hydro One R2 (With Proposed RRRP Expansion)	~$83	~$201
Hydro One R1	~$82.50	~$201
Algoma Power (Receives RRRP)	~$79.50	~$197
Provincial Average*	~$51	~$169
Lowest Cost Total Bill LDC**	~$48	~$149*
Lowest Cost Delivery Charge LDC***	~$36	~$154

**Average Bill of Ontario municipal LDCs and non-municipal Algoma Power, CNPI, and Hydro One Urban. Excludes Hydro One Remote, Hydro One R1 and Cornwall Electric.*

***The LDC with the lowest total bill is Fort Frances Power Corporation (FFPC). However, FFPC does not have the lowest delivery costs in the province. FFPC customers who are not enrolled with a retailer receive a $0.0125/kwh discount on power due to a historic (1905) mill agreement. In order to maintain the discount, FFPC maintains its ROE at 0%.*

****Hydro Hawkesbury has the lowest delivery rates at ~$36 per month*

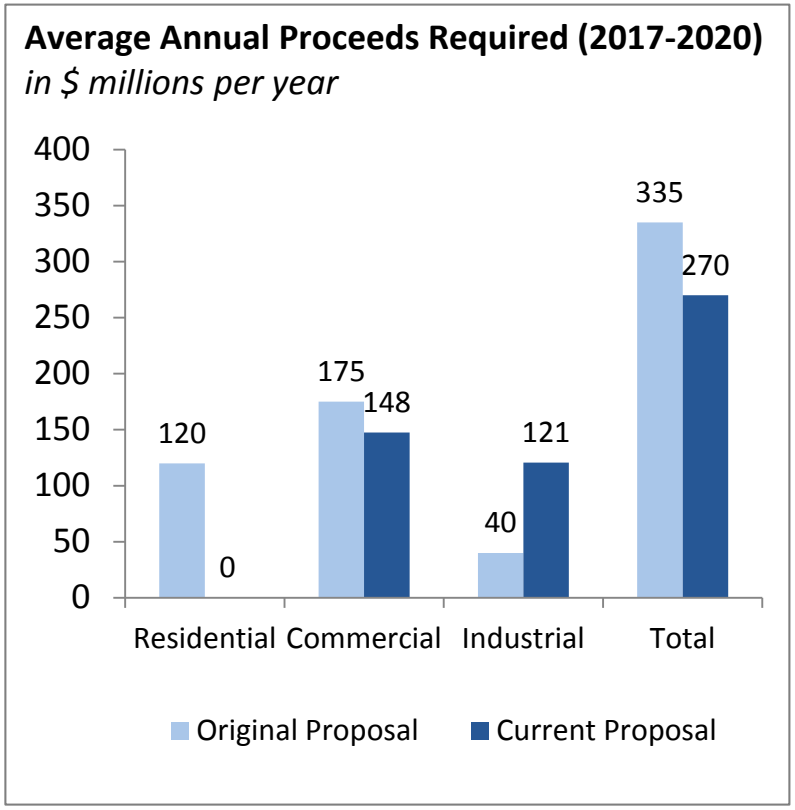
*****Delivery charges include distribution rates (fixed and variable), transmission, and line loss.*

4) Redirect Cap and Trade Proceeds Recycling

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial consumers, while also providing a benefit of up to $2 per month for residential consumers.
  - To meet the 2016 Budget commitment, the Climate Change Action Plan (CCAP), committed $1.3 billion from the GGRA over the first compliance period (2017-2020).

- However, providing a 8% rebate to Regulated Price Plan consumers would allow for GGRA proceeds previously committed to residential consumers to be redirected to other consumers classes and/or GHG reduction initiatives in the fiscal plan.

- The current proposal would provide additional recycling to commercial and industrial consumers, while requiring an estimated $60 million less per year (i.e., a reduction of $0.24 billion over the first compliance period).



Note: The original proposal was to offset the impact of cap and trade via GA to the average industrial, and would provide a benefit to commercial and residential consumers. Current proposal would recycle proceeds volumetrically to industrial and commercial consumers.

Considerations – Implementation

- New legislation would be required to enable the 8% rebate proposal. Legislation would closely mirror the Ontario Clean Energy Benefit Act, 2010.
  - If passed, the legislation would require a general regulation.
  - Amendments would also be required to various regulations to expand ICI and RRRP.

- On-bill rebate delivery would likely require adjustments to LDC billing systems, which could impact delivery costs and timelines. ENERGY (possibly through Ontario Energy Board) will consult with LDCs to accurately assess these impacts once the program has been announced.
  - In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
  - Timing concerns may be alleviated by allowing LDCs to provide retroactive ~~payments~~ rebates if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.

- Detailed messaging on bills (for "low-volume" consumer bills) could be implemented by amending O. Reg. 275/04 (made under the Ontario Energy Board Act, 1998). See appendix for bill mock-up.
  - The rebate would not be directly linked to HST.
  - With electricity invoices containing multiple line items and LDC bill presentment varying widely, direction on rebate presentment will need to be flexible to allow LDCs to incorporate easily while ensuring government-preferred branding and messaging is conveyed.

- ENERGY will need to continue to consult with the Independent Electricity System Operator (IESO), Ontario Energy Board (OEB) and LDCs regarding implementation of proceeds recycling.

Considerations – Fiscal

- The Climate Change Action Plan (CCAP) committed about $1.3 billion over four years for electricity mitigation for industrial, commercial and residential consumers from GGRA proceeds.
  - The current rate mitigation proposal requires approximately 20% less in proceeds, saving approximately $240 million relative to the CCAP commitment over the first compliance period (2017-2020).

- The 8% rebate is expected to cost about $1 billion per year (i.e., $4 billion from 2017-2020), representing an additional pressure on the fiscal plan.
  - Consideration could be given to allocating the $240 million in reduced proceeds required towards other existing initiatives in the fiscal plan that also reduce greenhouse gas (GHG) emissions, thereby providing an overall fiscal plan offset.

Considerations – Legal

- In order to avoid characterization as an unconstitutional tax, a non-tax levy must have a sufficient nexus between those who pay and the regulatory scheme in the sense that those who pay have caused the need for or benefit from the regulatory scheme. Although the case law is not developed on the extent to which some regulated actors can be required to subsidize others, risk is reduced to the extent that any cross-subsidization serves true regulatory goals rather than revenue re-distribution goals.

- HST Rebate (shift costs from rate-base to tax base by providing a rebate equal to the provincial portion of HST):
  - Providing the contemplated rebate under the proposed Bill does not, in and of itself, give rise to legal issues. As policy direction is given on the specifics of supporting regulations, any associated legal risks can be identified.

- ICI Expansion (shift costs within rate-base by expanding eligibility for the ICI program to consumers of >1 MW):
  - Shifting costs to some consumers to lower rates for others without more carries the risk that the charge would be characterized as an unconstitutional tax. To establish that the charge is legitimate, it must be established that the purpose and effect of the charge is to facilitate the maintenance of a financially viable electricity system by way of load management or some other feature under which those who are subsidized provide an overall system benefit enjoyed by those who subsidize them.

- RRRP Update (shift costs within the rate-base by increasing the RRRP benefit paid to rural and remote customers):
  - Increasing the amount of revenue devoted to the RRRP or expanding the scope of consumers eligible for the program does not raise new legal risk. There is a good argument that the RRRP is a regulatory charge, as it socializes some of the costs of distributing electricity to rural consumers. Overall the risk that the RRRP would be characterized as a tax is assessed as moderate (meaning equally good arguments on both sides).

- Cap and Trade Proceeds Recycling (reduce impact on rate base and tax base by directing cap and trade auction proceeds to industrial consumers):
  - To be characterized as regulatory charges under the cap and trade program, auction revenues should be spent on programs that reduce GHGs.

Communications

- Public high-profile communications would coincide with introduction of legislation (September 2016).
  - Stakeholder outreach/technical briefings with LDCs, Ontario Chamber of Commerce, AMPCO, OEB low-income table, AMO, etc.
  - Echo public announcements in southwest and north; proactive provincial/local media.

- **Positioning:**
  - A fiscally prudent plan to benefit all ratepayers in a lasting, meaningful way.
  - Rural customers will receive the largest single rate relief ever.
  - Businesses across Ontario will have even more opportunity to be competitive and manage their energy costs.

- **Issues Considerations:**
  - Significant benefit for rural and remote residential customers; net gain for all residential customers.
  - More complex to communicate, but can be presented as a full plan that includes reforms and improvements to the system.
  - Consistent with cap-and-trade commitment that no business sector will be left worse off, though small businesses outside ICI will benefit the least.

Communications – Key Messages

- [Placeholder]

Proposed Cabinet Minute

CABINET AGREED THAT:

1. THE MINISTRY OF ENERGY (ENERGY), WITH SUPPORT FROM THE MINISTRY OF FINANCE (MOF), SHALL PREPARE LEGISLATION THAT WOULD PROVIDE AN EIGHT PERCENT (8%) REBATE ON THE PRE-TAX COST OF ELECTRICITY FOR THE FOLLOWING CLASSES OF CONSUMERS:
   A. ALL CONSUMERS ELIGIBLE TO BE BILLED UNDER THE ONTARIO ENERGY BOARD'S REGULATED PRICE PLAN; AND
   B. ANY OTHER CONSUMERS WHO WERE ELIGIBLE FOR FINANCIAL ASSISTANCE UNDER THE *ONTARIO CLEAN ENERGY BENEFIT ACT, 2010* (OCEBA) DURING THE PERIOD THAT PROGRAM WAS IN PLACE.

2. THE LEGISLATION SHALL BE GENERALLY MODELLED UPON THE OCEBA, AND WOULD INCLUDE THE FOLLOWING ELEMENTS:
   A. THE REBATE WOULD BE AVAILABLE STARTING JANUARY 1, 2017 AND BEFORE SUCH DATE AS MAY BE PRESCRIBED;
   B. THE REBATE WOULD NOT BE SUBJECT TO A CAP UNLESS A CAP IS PRESCRIBED;
   C. THE LEGISLATION WOULD SPECIFY THE TYPES OF COSTS TO WHICH THE REBATE WOULD OR WOULD NOT BE APPLIED, WITH AUTHORITY TO MAKE CHANGES BY REGULATION;
   D. THE LEGISLATION WOULD ADDRESS INVOICING REQUIREMENTS, INCLUDING AUTHORITY TO PRESCRIBE HOW THE REBATE IS TO APPEAR ON CONSUMER ELECTRICITY BILLS;
   E. THE LEGISLATION WOULD INCLUDE AUTHORITY TO PRESCRIBE THE WAY IN WHICH THE REBATE IS TO BE FLOWED THROUGH TO CONSUMERS, AND THE WAY IN WHICH ELECTRICITY VENDORS PROVIDING THE REBATE ARE TO BE REIMBURSED;
   F. THE LEGISLATION WOULD INCLUDE RECORD-KEEPING REQUIREMENTS FOR ELECTRICITY VENDORS AND ANY OTHER PRESCRIBED PERSONS; AND
   G. THE LEGISLATION WOULD INCLUDE INSPECTION POWERS FOR INSPECTORS APPOINTED BY THE MINISTER OF FINANCE, INCLUDING POWERS RELATED TO RECOVERY OF OVERPAYMENTS.

Pending Update

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Proposed Cabinet Minute (cont'd)

3. ENERGY AMEND O. REG. 429/04 (ADJUSTMENTS UNDER SECTION 25.33 OF THE ACT) MADE UNDER THE *ELECTRICITY ACT, 1998* TO EXPAND ELIGIBILITY FOR CLASS A CONSUMERS AND CLASS A MARKET PARTICIPANTS UNDER THE INDUSTRIAL CONSERVATION INITIATIVE (ICI) TO ALL ELECTRICITY CONSUMERS AND MARKET PARTICIPANTS WITH A PEAK DEMAND ABOVE AN AVERAGE OF ONE MEGAWATT (1MW) WITH NO SECTORAL RESTRICTIONS ON PARTICIPATION.

4. ENERGY AMEND O. REG 442/01 (RURAL OR REMOTE ELECTRICITY RATE PROTECTION) MADE UNDER THE *ONTARIO ENERGY BOARD ACT, 1998* TO INCREASE THE TOTAL AMOUNT OF RATE PROTECTION AVAILABLE TO LOW DENSITY HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE RATE PROTECTION PROGRAM BY $110 MILLION, EFFECTIVE JANUARY 1, 2017.

5. ENERGY CONSIDER AND, IF APPROPRIATE, UTILIZE A MECHANISM TO PERIODICALLY ADJUST THE TOTAL ANNUAL AMOUNT OF RATE PROTECTION AVAILABLE TO HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE ELECTRICITY RATE PROTECTION REGULATION / PROGRAM, EFFECTIVE JANUARY 1, 2018.

Pending Update

6. ENERGY TO RECYCLE UP TO AN AVERAGE OF $270 MILLION OF CAP AND TRADE AUCTION PROCEEDS FROM THE *GREENHOUSE GAS REDUCTION ACCOUNT* PER YEAR OVER THE FIRST COMPLIANCE PERIOD (2017-2020) TO COMMERCIAL AND INDUSTRIAL ELECTRICITY CONSUMERS.

7. ENERGY AND MOF TO WORK WITH CABINET OFFICE (CO) AND PREMIER'S OFFICE (PO) ON COMMUNICATIONS PLAN.

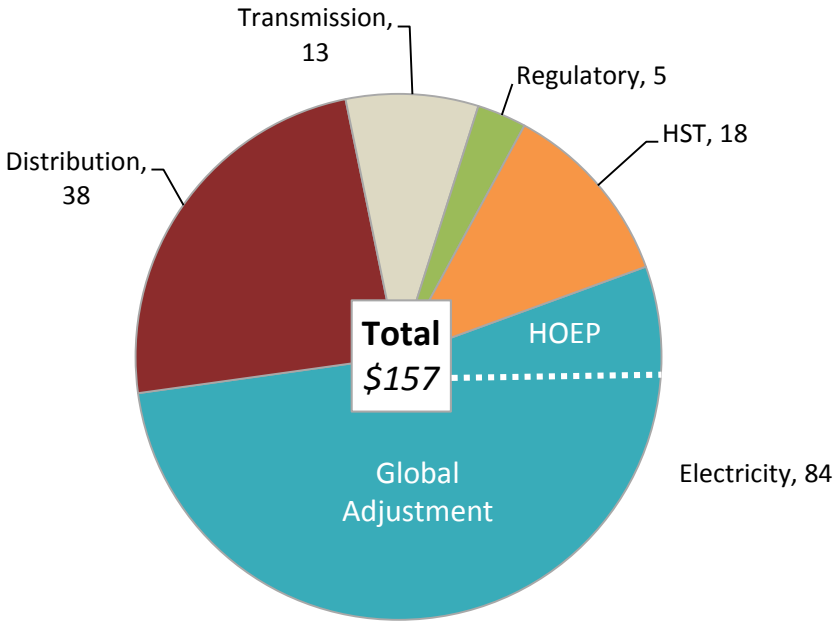
Appendix

Residential Electricity Prices

- There are approximately 5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of May 1, 2016 (750 kWh/month)



Source: OEB, Toronto Hydro

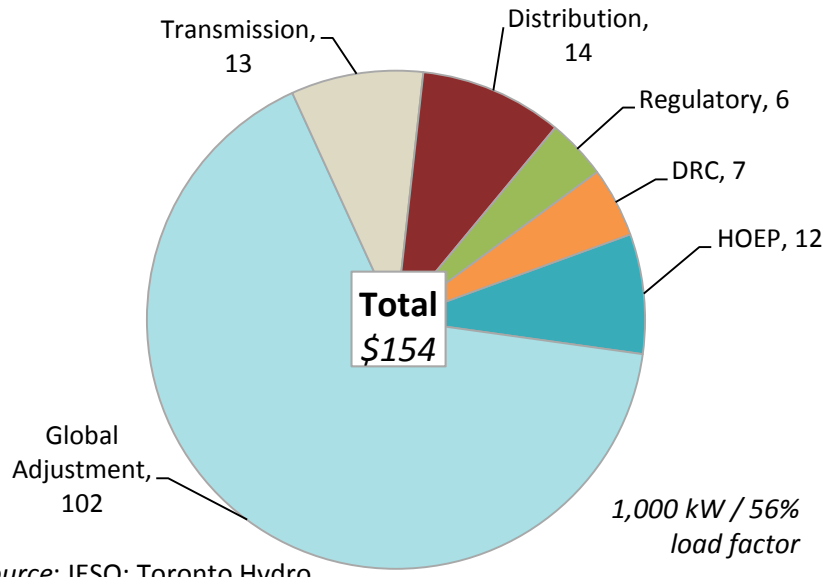
Commercial Electricity Prices

- There are approximately 400,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.

- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



Source: IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.

- Targeted pricing programs are currently not available for Class B consumers.

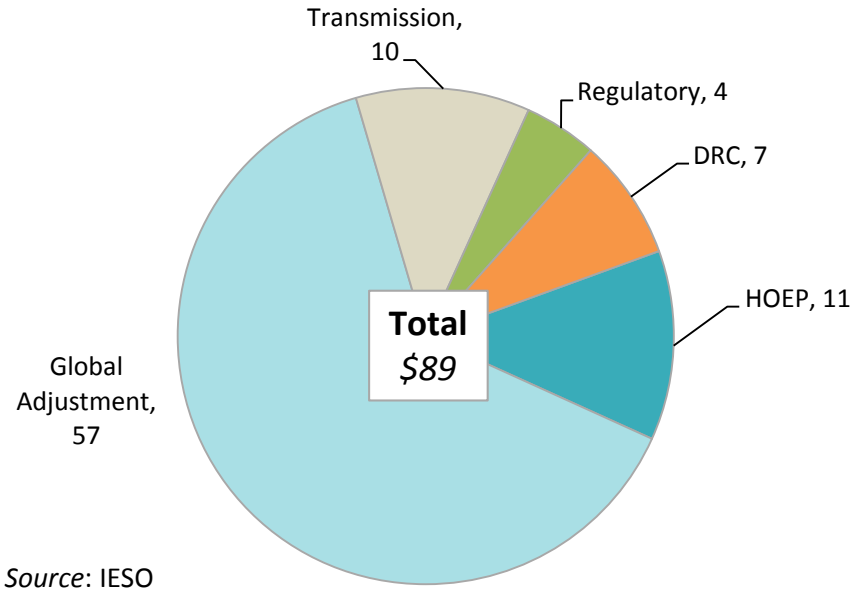
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



Source: IESO

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $64/MWh for these consumers. The program is funded through the tax base.

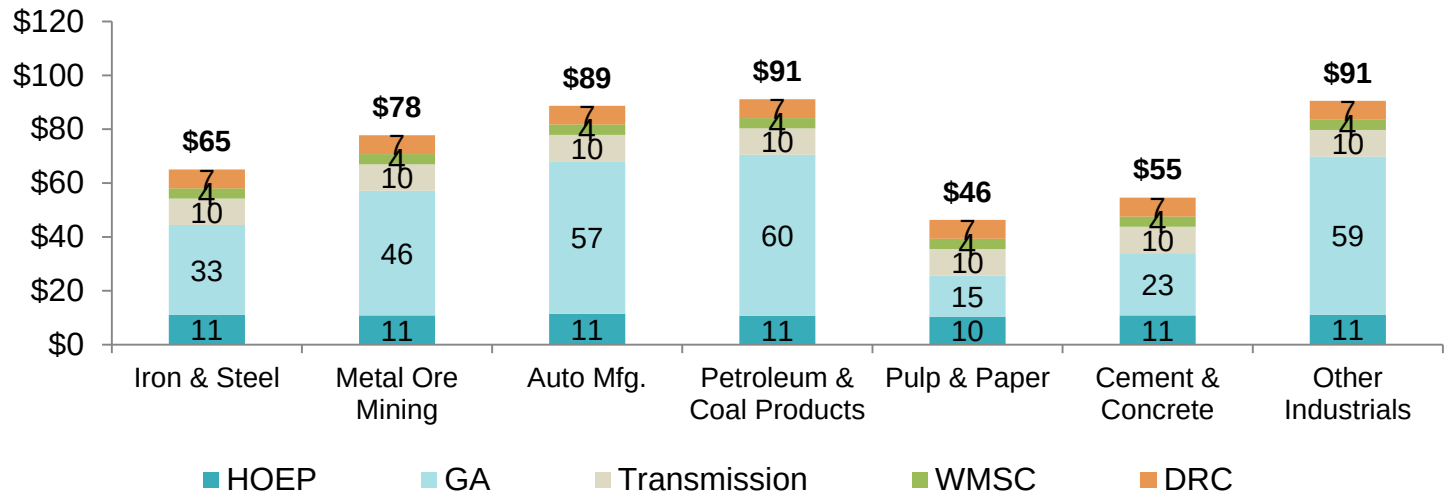
*** Note:** Industrial consumers receive input tax credits for their HST.

Industrial Electricity Prices by Sector

- While industrial consumers (Class A) benefit from participation in the ICI program, there is a significant amount of variability in the ability to shift away from peak periods across customer classes, impacting the savings achieved.

- The below chart shows the prices paid in 2015 across a number of industrial sectors. Consumers in the north that receive rebates under the Northern Industrial Electricity Rate Program (NIERP) achieve rates that are $20/MWh lower than the below.

Average all-in Class A, Transmission-connected Electricity Prices by Industrial Sector (estimated $/MWh), Year-to-Date June 2016



Note: HOEP = Hourly Ontario Energy Price, GA = Global Adjustment, WMSC = Wholesale Market Service Charges, DRC = Debt Retirement Charge

saveONenergy Conservation Programs

Program	Consumer Type	Description
Heating and Cooling Initiative	**Residential**	Provides rebates to help offset the cost of purchasing and installing new heating and cooling equipment in the home.
Coupons		Available in-store for one month in the spring and fall and can be downloaded year-round to use at participating retailers to help Ontarians save on a wide range of energy-efficient products including LED bulbs, power bars with integrated timers and more.
Audit Funding	**Business**	Up to 50% of the cost of an energy audit to identify opportunities for energy efficiency upgrades and eligible incentives.
Retrofit Program		Provides various incentives for as much as 50 per cent of project costs, and advanced funding for assisted and social housing buildings, for updating old or inefficient equipment, including lighting, motors, unitary AC or packaged rooftop units.
Small Business Lighting		Provides incentives for new energy efficient lighting.
New Home Construction		Designed to encourage home builders and renovators to construct energy-efficient homes, and includes incentives for installation of energy-efficient measures.
Training and Support		Helps provide access to the most up-to-date training, such as in building commissioning, certified measurement and verification, and how to be an energy manager.
Process and Systems		Provides up to $50,000 for engineering studies and up to 70% of capital costs for energy efficiency upgrades.
Industrial Accelerator Program		Assists eligible transmission-connected companies to fast track capital investment in major energy conservation projects.

HST – Overview

- The HST is a value-added tax. Unlike a sales tax, under a value-added tax most businesses effectively do not pay tax on their inputs because they are able to claim input tax credits (ITCs).
  - Through ITCs, the HST removes embedded sales taxes paid by businesses.
  - Only HST registrants that have taxable sales can claim ITCs. Businesses selling HST-exempt goods or services (such as financial services) are not eligible to claim input tax credits.

- Unlike businesses engaged in commercial activities, Public Service Bodies (PSBs) are generally not eligible to claim input tax credits. Instead, they can recover a portion of the HST paid by applying for PSB rebates from the Canada Revenue Agency.
  - PSBs consist of municipalities, universities, public colleges, school authorities, hospital authorities and charities and qualifying non-profit organizations.
  - See Appendix for additional information.

- To help low- to moderate-income individuals and families with the sales tax they pay on home energy costs (including electricity), Ontario provides tax relief through the energy component of the Ontario Energy and Property Tax Credit (OEPTC).
  - For the 2016 benefit year, eligible families and single people could get up to $224 to help with these costs, totalling about $445 million in tax relief.

- Ontario also provides tax relief through the Ontario Sales Tax Credit (OSTC), which was enhanced in 2010 to help low- to moderate- income individuals and families with the overall sales taxes they pay.
  - For the 2016 benefit year, eligible individuals can get up to $291 plus additional amounts of up to $291 for their spouse and each of their dependant children under age 19.
  - The 2016 OSTC is estimated to provide about $1.3 billion in tax relief.

Placeholder – HST Exemptions in Other Jurisdictions

Jurisdiction	Tax	Business	Residential	Comment
British Columbia	PST	Yes – 7%	No	• PST does not apply to residential energy, including electricity, acquired solely for residential use in a residential dwelling • BC's carbon tax does not apply to electricity bills.
Alberta	None	N/A	N/A	• Alberta does not have a provincial sales tax.
Saskatchewan	PST	Yes – 5% Except for electricity purchased to heat a building.	No	• PST does not apply to electricity purchased for use in a residential dwelling. • PST does not apply to electricity purchased for use in heating a building that is heated solely by the electricity.
Manitoba	PST	Yes – 8% Reduced rate of 1.6% applies to electricity used by a qualifying business to operate machinery	Yes – 8% Electricity purchased for mixed use, 80% of which is home heating, has a reduced rate of 1.4%. Electricity solely to heat the purchaser's home is exempt.	• Winnipeg also applies a tax of 2.5% on residential and 5% on commercial.
Ontario	HST	Yes (less ITC (input tax credits))	Yes – 8%	
Quebec	QST	Yes (less ITCs)	Yes – 9.975%	
Nova Scotia	HST	Yes (less ITCs)	Yes – 10% less provincially administered rebate.	• Rebate is equal to the provincial portion of the HST, and is administered similar to OCEB, but applies to many energy sources.
New Brunswick	HST	Yes (less ITCs)	Yes – 10%	
Prince Edward Island	HST	Yes (less ITCs)	Yes – 9% (10% beginning Oct 1, 2016)	
Newfoundland and Labrador	HST	Yes (less ITCs)	Yes – 10%	• Had a provincially administered Home Heating Rebate program until July 2015.
Federal	GST	Yes (less ITCs)	Yes – 5%	

HST – Considerations

- An across-the-board 8% rebate could be criticized as providing HST relief to those who effectively do not pay HST (businesses) as well as to those who receive HST relief through Public Service Body rebates or income tax relief.

- Providing a rebate equivalent to the 8% provincial portion of the HST on electricity, could lead to pressure to provide similar relief for other fuels and energy sources.
  - Ontarians who heat their homes with electricity will benefit from the provincial rebate, while Ontarians who heat their homes with natural gas, heating oil, propane, etc. would continue to pay the full 13% HST on those other energy sources.
  - The costs of natural gas, heating oil, propane, etc. are expected to increase as a result of Ontario's forthcoming cap and trade program.

- The provincial rebate would be an amount equal to the 8% provincial portion of the HST on electricity. OCEB, in contrast, was 10% of the bill including HST.

- The Province may also need to change the reporting for the cost of the energy component of the Ontario Energy and Property Tax Credit, which provides relief for HST on home energy. The energy component is reported as an offset of HST revenue.
  - Ministry program expenses could increase by as much as $445 million (TBC).

- The greater degree of complexity in the design of the program, the more difficult it will be to draft, implement and administer.

- To improve the province's ability to track impacts and program outcomes, subsequent legislative amendments to enable exchanges of data with LDCs could be considered.

Additional Information – Public Service Bodies

- Unlike businesses engaged in commercial activities, Public Service Bodies (PSBs) are generally not eligible to claim input tax credits. Instead, they can recover a portion of the HST paid by applying for PSB rebates from the Canada Revenue Agency.

- Ontario's rebate rates are intended to keep these sectors fiscally neutral relative to the Retail Sales Tax they paid on their inputs under the former RST system.

REBATE RATES FOR PSBs		
PSB Type	**Ontario (8%)**	**Federal (5%)**
Municipalities	78%	100%
Universities & Public Colleges	78%	67%
School Authorities	93%	68%
Hospital Authorities	87%	83%
Charities and Qualifying Non-Profit Organizations*	82%	50%

**A qualifying non-profit organization receives at least 40% of its funding from government.*

Placeholder – Electricity Bill Mock-Up

Industrial Conservation Initiative (ICI) – Overview

- In January 2011, Ontario amended O.Reg. 429/04 to implement the Industrial Conservation Initiative (ICI). This initiative established two classes of consumers:
  - "Class A" consumers are those with monthly peak demand exceeding 5 MW. They are charged global adjustment (GA) on the basis of their contribution to system peak demand during the highest 5 system demand hours of the year.
  - "Class B" consumers are all other consumers. They continue to be charged GA as a flat rate applied to their consumption.
- In May 2014, O.Reg. 429/04 was further amended to admit all consumers with monthly peak demand between 3 and 5 MW within certain energy-intensive industrial sectors into the ICI.
- This change has been successful in:
  - Incenting large consumers to significantly reduce their peak demand during the highest demand hours of the year, and
  - Providing large industrials with the ability to manage their electricity costs and remain competitive with competing jurisdictions.

Expected Numbers of Newly Eligible ICI Consumers

- As part of its ICI survey, Navigant collected data on the number of consumers in the 1-2 MW, 2-3 MW and 3-5 MW categories. Navigant's response rate for the survey was approximately 76%. Approximately 300 consumers are currently participating in ICI.

- The table below sets out the number of consumers in each tranche from the survey along with an "adjusted number" which estimates the actual total number of customers in each tranche in the province (i.e., it accounts for the response rate).

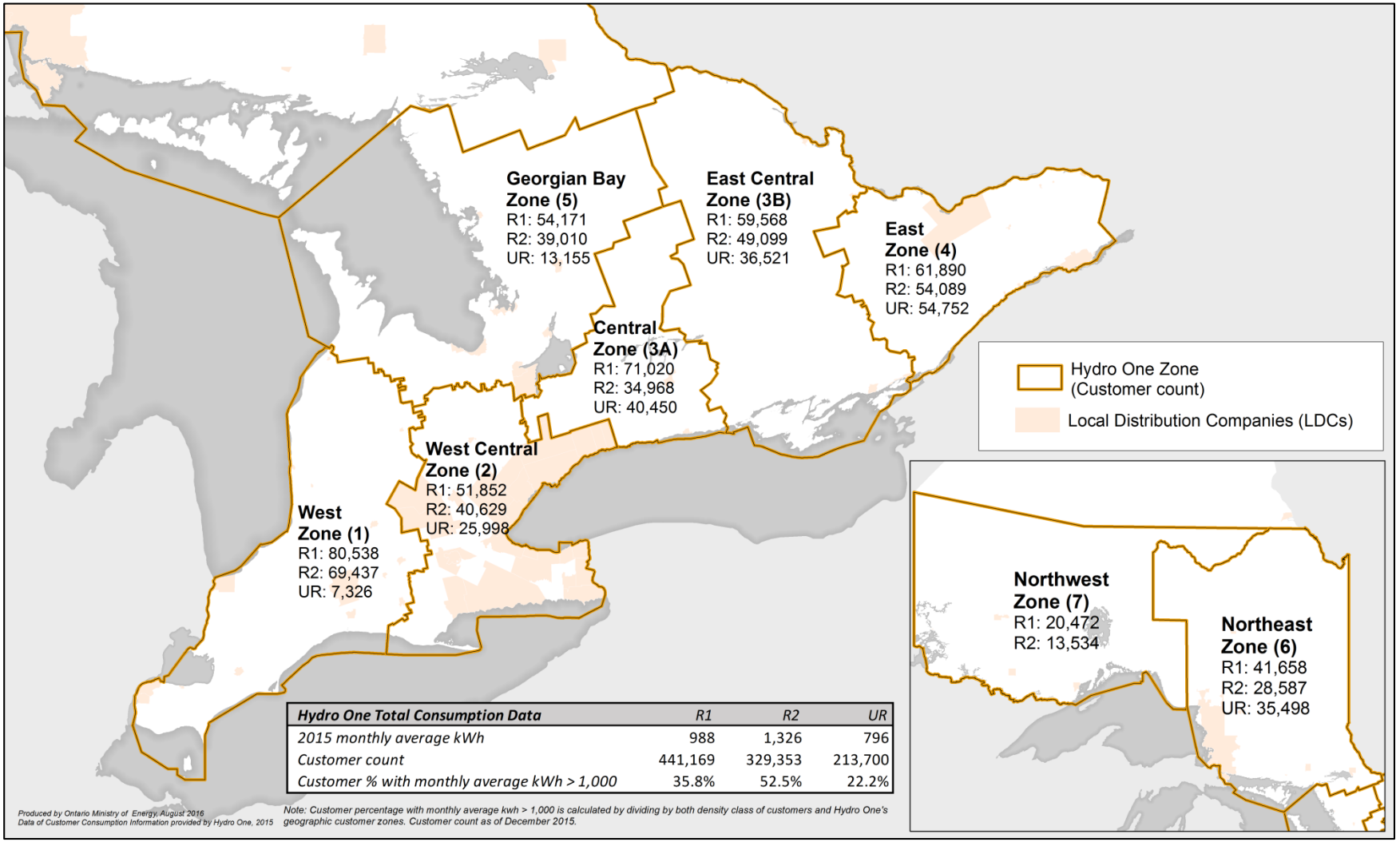
- As expected, there are a greater number of consumers in the 1 -2 MW category than in the 2 – 3 MW category.

	1-2 MW	**2-3 MW**	**3-5 MW***
# of customers – ICI survey	649	197	171
# of customers – Adjusted for response rate	854	259	225

Source: Navigant; Ministry of Energy

* Includes consumers that are already eligible for and participating in ICI. ENERGY estimates that approximately 75 of 225 estimated consumers in the 3-5 MW category are participating in ICI.

Hydro One Consumers by Customers Class

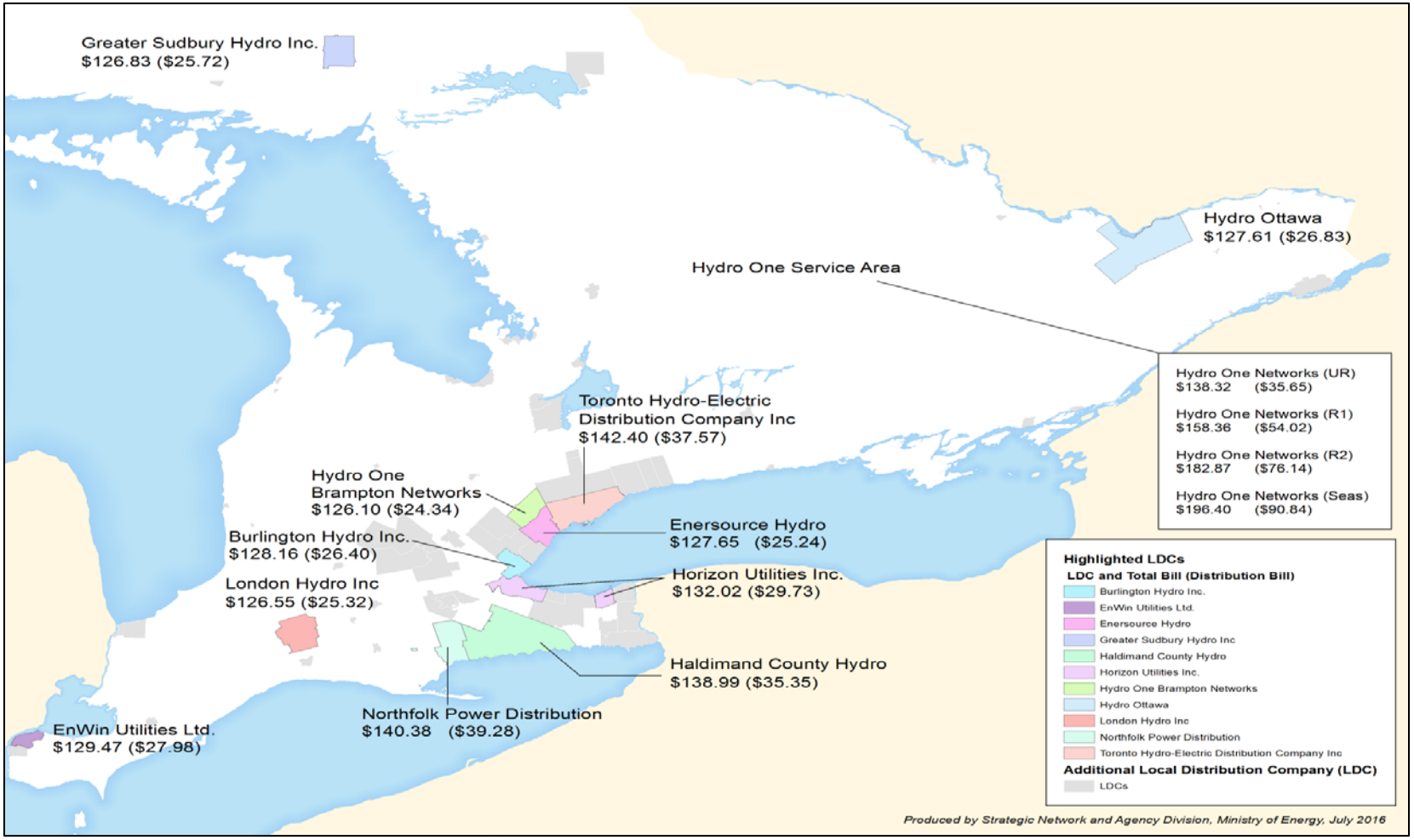


Hydro One Total Consumption Data	*R1*	*R2*	*UR*
2015 monthly average kWh	988	1,326	796
Customer count	441,169	329,353	213,700
Customer % with monthly average kWh > 1,000	35.8%	52.5%	22.2%

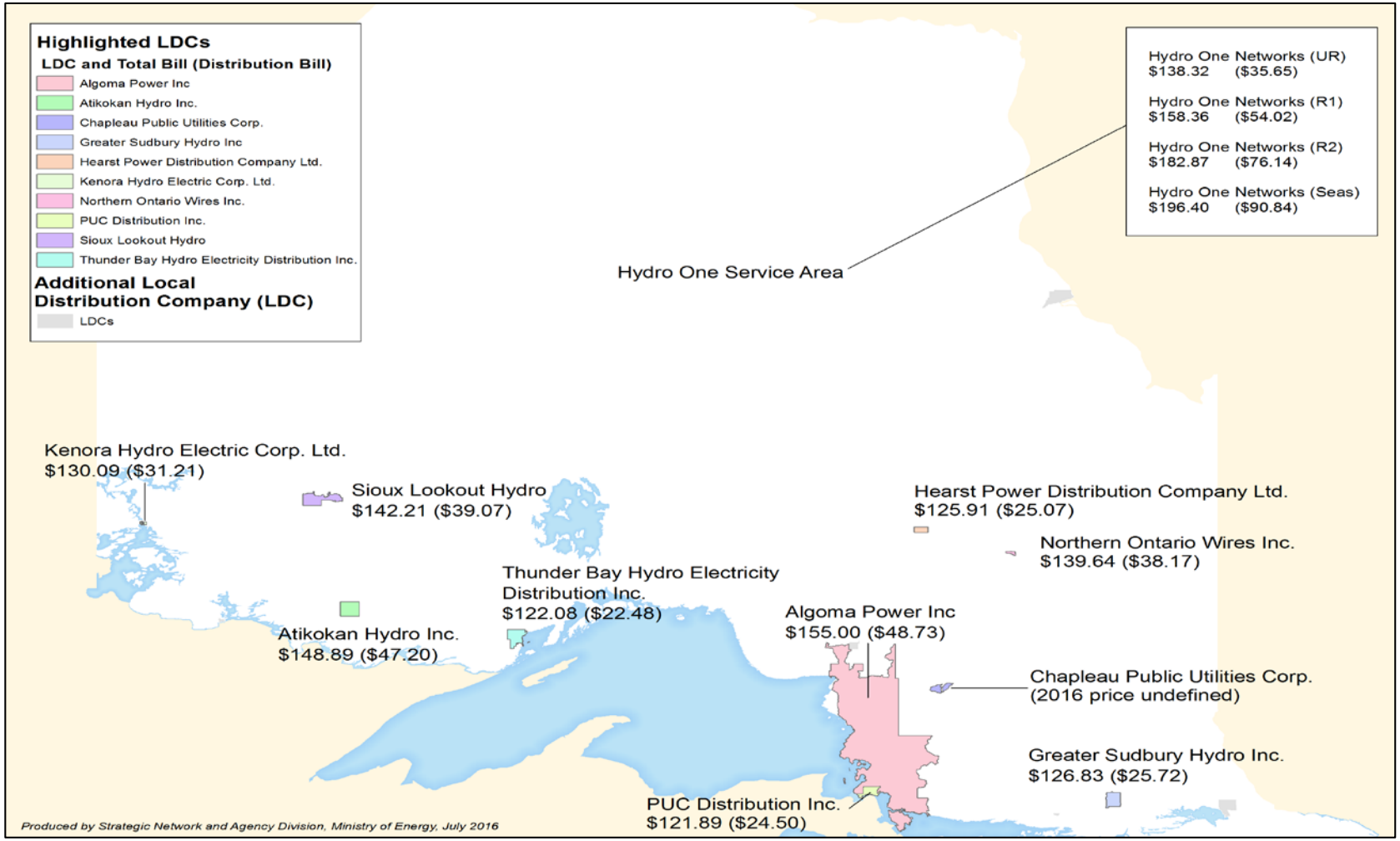
Produced by Ontario Ministry of Energy, August 2016
Data of Customer Consumption Information provided by Hydro One, 2015

Note: Customer percentage with monthly average kwh > 1,000 is calculated by dividing by both density class of customers and Hydro One's geographic customer zones. Customer count as of December 2015.

Selected Rate Comparison – Total Bill and Distribution Rate



Selected Rate Comparison – Total Bill and Distribution Rate



Alignment With Climate Change Action Plan

- Ontario's Climate Change Action Plan (CCAP) commits $6.0 – 8.3 billion over 4 years to greenhouse gas (GHG) reduction initiatives, funded by Cap and Trade auction proceeds.

- The CCAP includes up to $1.32 billion over 4 years to help keep electricity rates affordable for residential and industrial consumers. This initiative is estimated to reduce up to 3,000,000 tonnes of greenhouse gas (GHG) emmissions by 2020.

$ Billions	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**Total**
Total Committed in CCAP	**$1.5 – 2.1**	**$1.5 – 2.1**	**$1.5 – 2.1**	**$1.5 – 2.1**	**$6.0 – 8.3**
Electricity Price Mitigation	*Up to 0.3*	*Up to 0.3*	*Up to 0.3*	*Up to 0.3*	*Up to 1.3*

- Ontario's *Climate Change Mitigation and Low-carbon Economy Act, 2016* requires that all proceeds generated from Cap and Trade be used to help reduce greenhouse gas emissions.

- Should a portion of CCAP funding currently allocated to Electricity Price Mitigation be used to offset rate increases for certain industrial consumers, the remaining CCAP funding could provide a fiscal plan offset to the overall initiative by funding other existing initiatives that help reduce greenhouse gas emissions – for example:
  - Regional Express Rail;
  - Hamilton LRT;
  - Hurontario LRT; and
  - Energy efficiency in schools.

Electricity Price Mitigation

Ministry of Energy

WORKING DRAFT

Date: September 14, 2016

Minister

Deputy Minister

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.

- Ontario has taken action to replace coal-fired generation with cleaner sources of energy. Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished clean generation, including nuclear, natural gas and renewables.
  - This investment represents about 40% of our current supply and has helped decrease electricity sector emissions by approximately 80%.

- Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.

- Since 2010, electricity prices have risen considerably, particularly for households and small businesses. Prices are forecast to continue to increase as additional generation comes online.

- The Ministry of Energy and Ministry of Finance were asked to develop a proposal to provide rate relief to Ontario electricity consumers.

Note: Throughout the deck, language will stay “Class B (Commercial)” and “Class A (Industrial) for clarity.

Ontario

Electricity Consumer Classes

- There are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 3 MW	Above 3 MW*
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

- The following slide provide further information on the prices paid by different classes of electricity consumers.

**** Note:** Consumers with peak demand between 3-5 MW in the manufacturing, mining, refrigerated warehousing, greenhouses and data-processing industries are currently eligible for Class A. All other 3-5MW consumers are Class B.

Keep this slide as introduces ICI, RRRP, OESP

Current Rate Base Cost Shift Programs

- Ontario has implemented several programs to help electricity consumers
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Industrial Conservation Initiative (ICI) Encourages Ontario's largest consumers to reduce consumption during peak periods to save on average 25% on their electricity bills.
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
- These programs have shifted costs amongst electricity consumer classes (i.e., residential, commercial and industrial) as shown in the table below.

Cost Shift Impact	2011	2012	2013	2014	2015	2016
Residential Bill ($/month for 750 kWh)	3.55	4.07	3.85	4.46	5.68	6.55
Commercial – Class B ($/MWh)	4.74	5.43	5.14	5.94	7.57	8.73
Industrial – Class A ($/MWh)	-20.97	-25.26	-22.38	-24.68	-32.56	-31.55

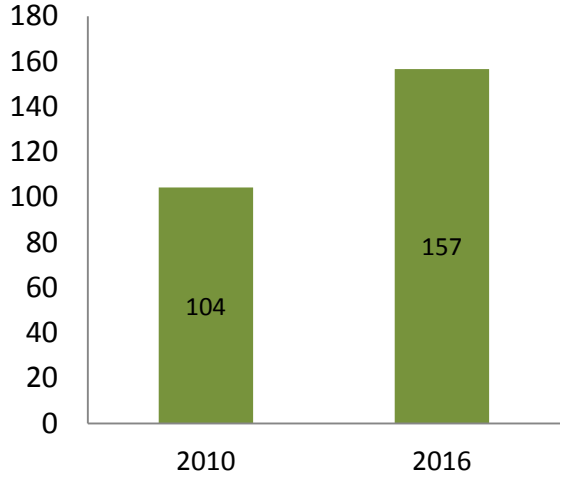
Note: Negative values indicate a benefit; positive values denote an incremental charge.

Prices by Electricity Consumer Class

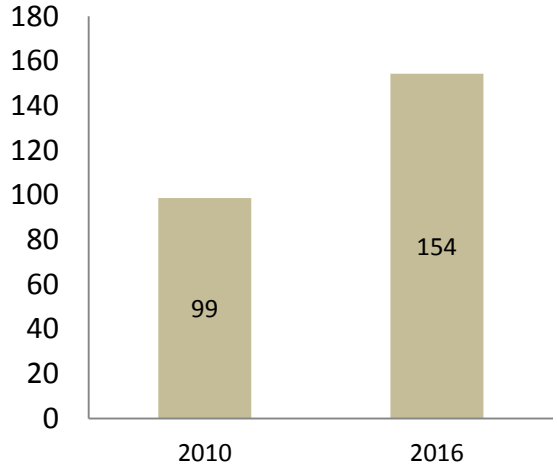
- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50% and rates paid by commercial have increased by 56%.

- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers.

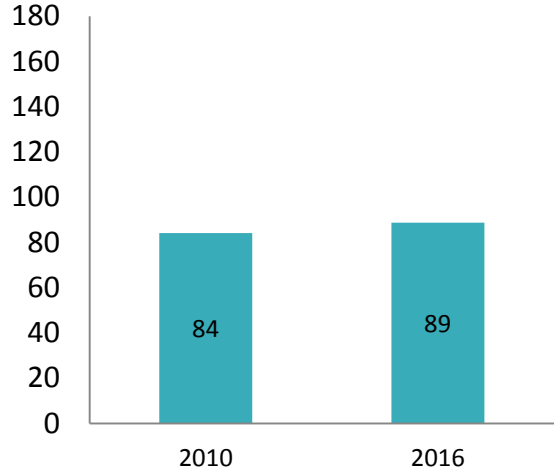
Typical Residential Bill (750/kWh per month)



Typical Commercial Price (Class B) ($/MWh)



Typical Industrial Price (Class A) ($/MWh)



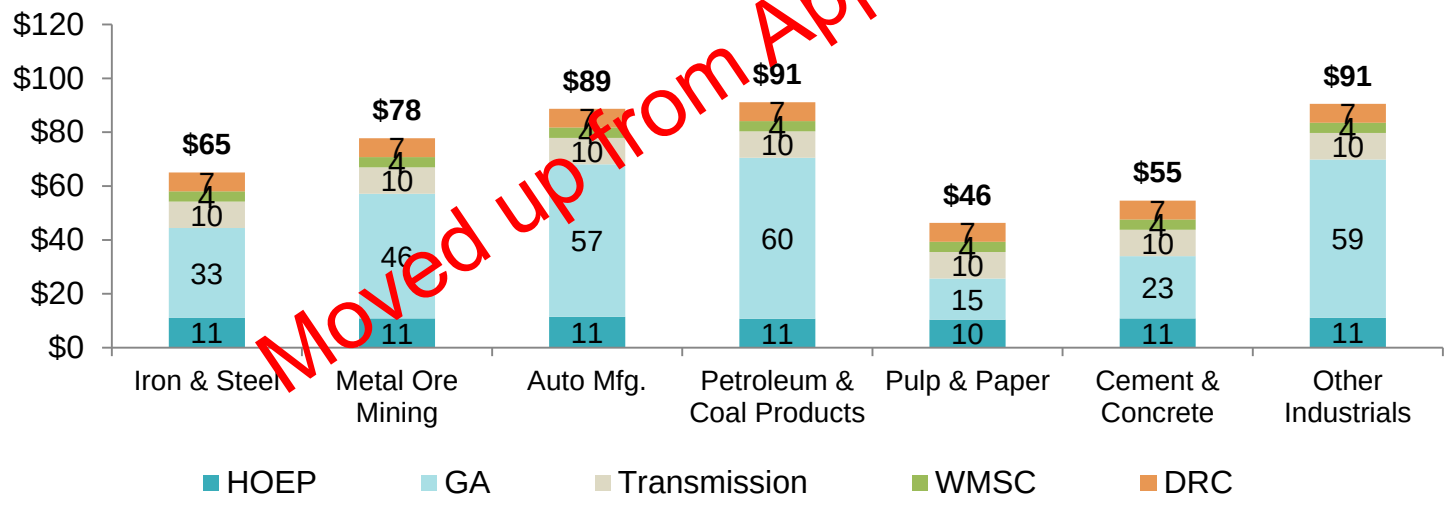
Note: 2016 represents May 2016 for residential and YTD June 2016 for commercial and industrial.

Industrial Electricity Prices Vary by Sector

- While Class A (industrial consumers) benefit from participation in the ICI program, there is a significant amount of variability in the ability to shift away from peak periods across customer classes, impacting the savings achieved.

- The below chart shows the prices paid in 2015 across a number of industrial sectors. Consumers in the north that receive rebates under the Northern Industrial Electricity Rate Program (NIERP) achieve rates that are $20/MWh lower than the below.

Average all-in Class A, Transmission-connected Electricity Prices by Industrial Sector (estimated $/MWh), Year-to-Date June 2016



Moved up from Appendix

Note: HOEP = Hourly Ontario Energy Price, GA = Global Adjustment, WMSC = Wholesale Market Service Charges, DRC = Debt Retirement Charge

Existing Rate Mitigation

- Ontario currently provides rate mitigation to various electricity consumer classes through a combination of tax-based and rate-based programs.
  - For example, Northern Ontario residential electricity consumers receive tax credits in recognition of higher electricity costs in the north and rural consumers receive a subsidy funded through the rate-base due to the higher cost of delivering power to rural areas.

- As of 2016, the government removed the Debt Retirement Charge (DRC) ~~from~~ for certain residential electricity consumption ~~bills~~. While this saves a typical residential electricity ratepayer about $60 per year, it is less than the benefit previously provided through the Ontario Clean Energy Benefit (OCEB).
  - OCEB provided a tax-base rebate of 10% rebate on the total cost of electricity charges related to electricity consumption on eligible bills between 2011 and 2015.

MOVED to APPENDIX

- Because electricity costs must be fully recovered from electricity consumers, rate mitigation funded through the rate-base often represents a shifting of costs from one consumer group to another (i.e., industrial to residential and commercial consumers).
  - Rate-based initiatives are generally associated with incenting changes in behaviour that provide electricity system benefits (i.e., shifting electricity consumption from on-peak to off-peak periods).

- The following slides provide an overview of the programs currently available to different electricity consumer classes along with the cost shift associated with several of the programs.

Existing Rate Mitigation (cont'd)

Program	Consumer Type	Rate/Tax -based	Description
Northern Ontario Energy Credit	**Residential**	Tax	Delivered as part of the Ontario Trillium Benefit, provides individuals living in northern Ontario with a credit of up to $146 per year for the 2016 benefit year.
Ontario Energy and Property Tax Credit		Tax	Also delivered as part of the Ontario Trillium Benefit, provides up to $1,008 per year for low-to moderate-income individuals and families.
Ontario Electricity Support Program		Rate	Provides ongoing assistance directly on the bills of eligible low-income electricity consumers.
Rural or Remote Rate Protection		Rate	Provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
saveONenergy Conservation Programs (including Home Assistance Program for low income customers)		Rate	Delivered by LDCs which provide financial incentives for electricity-saving measures like LEDs, ENERGY STAR certified ceiling fans, baseboard programmable thermostats, clotheslines, and advanced powerbars.
saveONenergy Conservation Programs (including Retrofit Program for Buildings and other programs)	**Commercial**	Rate	saveONenergy suite of electricity conservation programs for commercial customers offered by local distribution companies (LDCs) help businesses save energy to better manage their electricity consumption and reduce their annual electricity costs. See Appendix for more information.
Industrial Conservation Initiative	**Industrial**	Rate	Encourages Ontario's largest consumers to reduce consumption during peak periods to save on average 25% on their electricity bills.
Industrial Accelerator Program		Rate	Provides financial incentives of up to $10 million to transmission-connected electricity consumers, to invest in energy-efficiency or self-generation which would reduce the amount of electricity withdrawn from the provincial grid.
Industrial Electricity Incentive		Rate	Provides reduced electricity rates for companies starting or expanding operations in Ontario.
Northern Industrial Electricity Rate Program		Tax	Provides $20 megawatt per hour (MWh) rebate for qualifying large northern industrial consumers.
Demand Response		Rate	Provides payments to businesses and industry to shift consumption at times when the electricity system is stressed. DR currently provides ~500 MW of capacity to the system.

MOVED to APPENDIX

Keep this slide as introduces important context

Ontario

Actions to Bend the Cost Curve

- A number of actions have and are being taken to reduce overall electricity system costs:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million.
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Removing an expected $3.3 billion in Large Renewable Procurement (LRP) costs relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast, based on the results of the first phase of the LRP.
- Despite these actions to reduce system costs, electricity rates continue to increase for consumers.

2016 Budget Committed to Recycling CCAP Proceeds

- The 2016 Budget committed to offset the impact of cap and trade in Ontario for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers.

- To meet the 2016 Budget commitment, the Climate Change Action Plan (CCAP) committed $1.3 billion from the Greenhouse Gas Reduction Account (GGRA) over the first compliance period (2017-2020).

- The $1.3 billion was estimated to go to different electricity consumer classes as follows:
  - $120 million for residential consumers;
  - $170 million for commercial consumers; and
  - $40 million for industrial consumers.

~~Context –~~ Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:

  - **Tax-based Lever:**
    - Provide an on-bill rebate funded from the tax-base to all consumers or specific classes of consumers (i.e., the Ontario Clean Energy Benefit (OCEB) provided a rebate for eligible electricity consumers).

  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.

  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds to offset the cost of existing initiatives that help reduce greenhouse gas (GHG) emissions (i.e., the CCAP committed to offset the impact of cap and trade and to keep electricity rates affordable).

Rate Mitigation Proposal

- The Ministry of Energy is proposing to implement the following electricity price mitigation initiatives. The approach identified below would provide relief across all electricity consumer classes:

  1) Offset an amount equal to the provincial portion of HST ~~Provide an 8% rebate~~ to consumers eligible for the Regulated Price Plan* (i.e., residential, small business and farms~~), equivalent to the provincial portion of HST~~ by providing a 8% rebate and update the Rural and Remote Rate Protection (RRRP) program, to provide relief to rural customers

  1) Expand ICI eligibility by lowering the threshold to 1 MW, to provide support to Class B electricity consumers (i.e., commercial, institutional and small industrial) and recycle cap and trade proceeds to commercial and industrial electricity consumers to provide a modest reduction in rates.

- The following slides provide additional information on the above initiatives.

***Notes:**
Eligibility for the 8% rebate would be similar to OCEB and include some customers not on the Regulated Price Plan (RPP), such as Independent Power Authority consumers and consumers that have opted-out of RPP.
See Appendix for discussion on HST considerations.

Note: Shows after-tax for RPP consumers.

Rate Mitigation Proposal – Illustrative* Impacts

	Average Annual Fiscal Impact	Average Annual Greenhouse Gas Reduction Account (GGRA) Proceeds Impact	Regulated Price Plan (Residential) Impact**		Class B (Commercial) Impact	Class A (Industrial) Impact	
			Average (750 kWh/ month)	*Rural*** (1000 kWh/ month)*		*Existing*	*New*
• 8% rebate to Regulated Price Plan eligible consumers • ICI Expansion • RRRP Update • Proceeds Recycling	$1.0 billion annually	$0.27 billion annually (Reduction of $0.06 billion annually or $0.24 billion total from the CCAP commitment)	-$10/ month (-6%)	-$46/ month (-18%)	-$1/MWh (-1%)	-$1/ MWh (-1%)	Up to -$52/MWh (-34%)

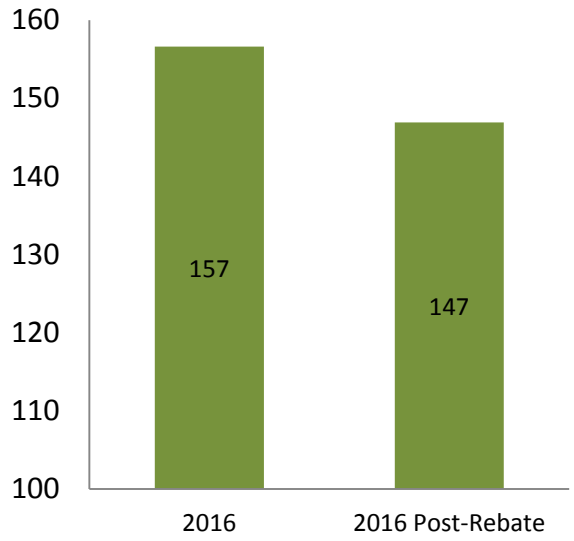
***Note:** The impact of cap and trade would not be added to electricity bills until 2017 and the impact of ICI would not be added to bills until 2018 due to the time required to implement the expansion and for billing changes. However, both the impact of cap and trade and ICI have been included above for illustrative purposes.

** Regulated Price Plan Impact represents an after-tax value of the rate mitigation proposal.

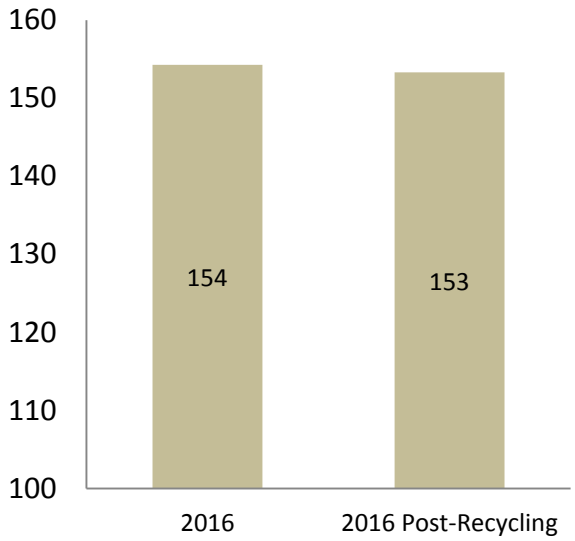
*****Note**: Rural customers refers to customers of Hydro One eligible to receive RRRP (R2 rate class customers)

Rate Mitigation Proposal – Illustrative Bill Impacts by Electricity Consumer Class

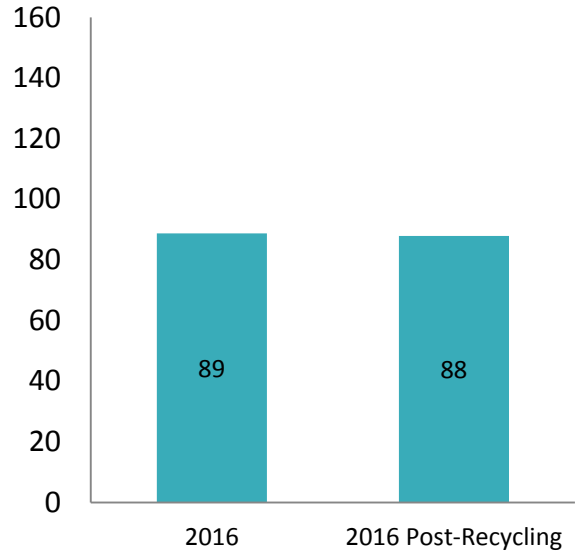
Typical Residential Bill
750/kWh per month



Typical Commercial Price ($/MWh)
ADD NEW CLASS A TO THIS CHART



Typical Industrial Price ($/MWh)



Residential: The net impact of the ~~8% rebate~~ rate mitigation initiatives is a 6% reduction.

Commercial: The net impact of ~~proceeds recycling~~ the rate mitigation initiatives is a 1% reduction.

Industrial: The net impact of ~~proceeds recycling~~ the rate mitigation initiatives is a 1% reduction.

Note: Residential bills reflect electricity rates as per the Regulated Rate Plan (RRP) which came into effect on May 1, 2016. Commercial and industrial electricity prices reflect YTD June 2016. The impact of cap and trade would not be added to electricity bills until 2017 and the impact of ICI would not be added to bills until 2018 due to the time required to implement the expansion and for billing changes. However, both the impact of cap and trade and ICI have been included above for illustrative purposes.

1) Regulated Price Plan Eligible Consumers and Rural or Remote Rate Protection Update

8% Rebate to Regulated Price Plan Eligible Consumers

- ENERGY is proposing to introduce legislation/regulation by X [placeholder for date] to provide a rebate of 8% to consumers eligible for the Regulated Price Plan. The below table indicates which consumers would or would not receive the benefit.
  - This would be equivalent to the provincial portion of the HST*.

Eligible for the 8% rebate (< 50 kW or < 250,000 kWh/year)	**Not eligible for the 8% rebate** (> 50 kW or > 250,000 kWh/year)

• Residential Regulated Price Plan consumers
• Residential retail consumers
• Multi-unit residential buildings and other facilities used as residential rental units
• Long-term care homes and school residences
• Regulated Price Plan eligible farms
• Small businesses
  − Coffee / snack retailer
  − Convenience store
  − Apparel store
  − Hair salon
  − Small insurance office
	• Class A consumers
	  − Manufacturer
	  − Large grocery store
	  − Mines
	  − Auto assembly plants
	• Class B consumers (except farms that have opted out of the Regulated Price Plan)
	  − Commercial offices (low rise)
	  − Hotel
	  − General warehousing

- Those ineligible to receive the 8% rebate will benefit from one or more of the other initiatives under this proposal (e.g., ICI expansion, proceeds recycling, etc).

***Note:** An HST exemption would require federal approval. Engaging in discussions with the federal government would take time and would likely result in not meeting the targeted implementation date.

Illustrative Bill Impacts

	Current Bill (after tax)	Current Rate mitigation initiatives*	Cost of new initiatives (RRRP and ICI)	New Rate Mitigation initiatives	Net impact	New Bill (after tax)
Average Residential (Toronto – 750 kWh/month)	$157 /month	N/A	$1.31/month	8% pre-tax rebate: - $11	-$10 (-6%)	$147 /month
Rural Residential (Hydro One R2 – 1000 kWh/month)	$259 /month	RRRP – $32	$1.74/month	8% pre-tax rebate: - $16 Updated RRRP: - $28	-$46 (-18%)	$212 /month
Low-income Residential ** (Toronto – 750 kWh/month)	$119 /month	OESP - $38	$1.31/month	8% pre-tax rebate: - $10	-$8 (-6%)	$126 /month
Small Business (Toronto - $/MWh)	$ / MWh	N/A	$1.74/MWh	8% pre-tax rebate: x/MWh		
Farm (xxxx - $/MWh)	$ / MWh	N/A	$1.74/MWh	8% pre-tax rebate: x/MWh		

Placeholder - Pending Update

*Note: some residential consumers can also receive tax credits based on income, age and geography (Northern Ontario Energy Credit and Ontario Energy and Property Tax Credit). These credits are delivered through the Trillium Tax Credit and can be as high as xx per year.

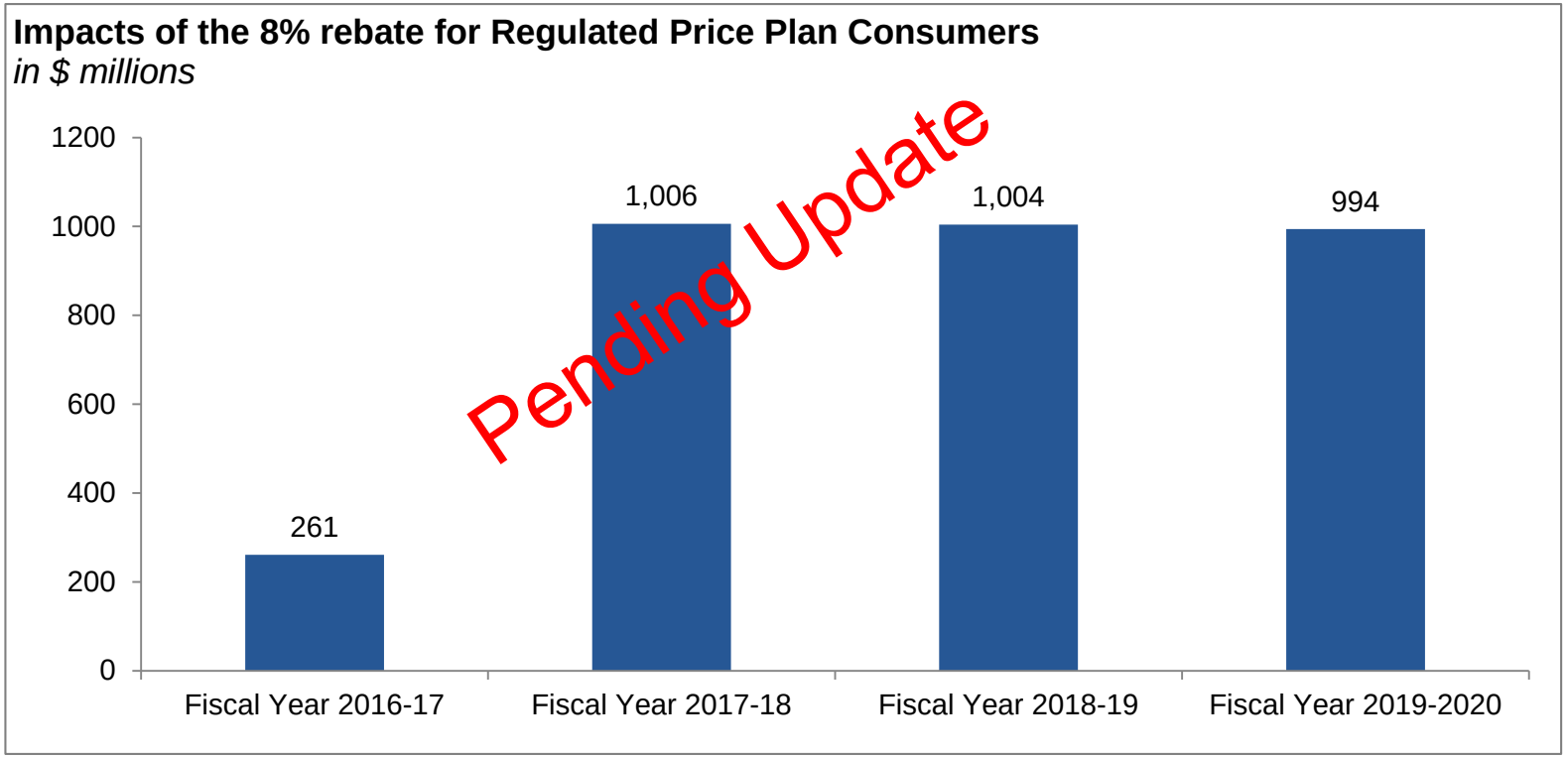
** income of less than $28,000, family of 4.

Totals may not add due to rounding. The impact of cap and trade would not be added to electricity bills until 2017 and the impact of ICI would not be added to bills until 2018 due to the time required to implement the expansion and for billing changes. However, both the impact of cap and trade and ICI have been included above for illustrative purposes.

Note: Kept slide in as CO/PO requested this slide.

8% Rebate to Regulated Price Plan Eligible Consumers – Projected Impact

- ENERGY estimates that the average annual cost of an 8% rebate to consumers eligible for Regulated Price Plan consumers would be approximately $1.0 billion between 2017 and 2020.



Placeholder – Electricity Bill Mock-Up

Moved up from Appendix

Rural or Remote Rate Protection (RRRP) Update

- ENERGY is proposing to amend O.Reg 442/01 to provide an additional $110 million in rate protection to eligible rural or remote electricity consumers, and consider options to periodically adjust the amount of rate protection available to these consumers going forward.

- RRRP is a rate-based funded subsidy program that helps offset the higher costs to distribute electricity to Ontario residents who live in rural or remote locations all across the Province.
  - Today, RRRP is a $175-million program. For an average residential customer, the cost of supporting RRRP is roughly $1 per month. For other customers, the cost can range from $65 for a greenhouse to $8,000 for a medium industrial.
  - The majority of the program funding ($125.5 million) provides a subsidy to Hydro One's lowest-density customers – classified as R2 customers. There are approximately 329,000 R2 customers. The current program provides a monthly subsidy for R2 customers of $31.50.
  - RRRP funding supporting R2 customers has been capped at the current level since 2004. As a result, the impact of its assistance has diluted over time as electricity costs have risen.

- An additional $110 million in program funding would see an increased subsidy of ~$28 /month. This would bring R2 bills in line with Hydro One R1 (medium density) bills at 1000kWh.
  - This would increase the R2 portion of the RRRP to $235 million with a monthly impact on an average residential consumer of ~$0.60.
  - The RRRP could be indexed at inflation or "trued up" on a regular basis to ensure the subsidy remains constant.

Note: Recommend moving this slide to the appendix.

Rural or Remote Rate Protection (RRRP) Update

Bill Comparisons @ 1000kWh/month (Pre-HST)		
	Total Current Delivery** Charge**	**Total Current Bill**
Hydro One R2 (Current RRRP Subsidy Levels)	~$111	~$229
Hydro One R2 (With Proposed RRRP Expansion)	~$83	~$201
Hydro One R1	~$82.50	~$201
Algoma Power (Receives RRRP)	~$79.50	~$197
Provincial Average*	~$51	~$169
Lowest Cost Total Bill LDC**	~$48	~$149*
Lowest Cost Delivery Charge LDC***	~$36	~$154

**Average Bill of Ontario municipal LDCs and non-municipal Algoma Power, CNPI, and Hydro One Urban. Excludes Hydro One Remote, Hydro One R1 and Cornwall Electric.*

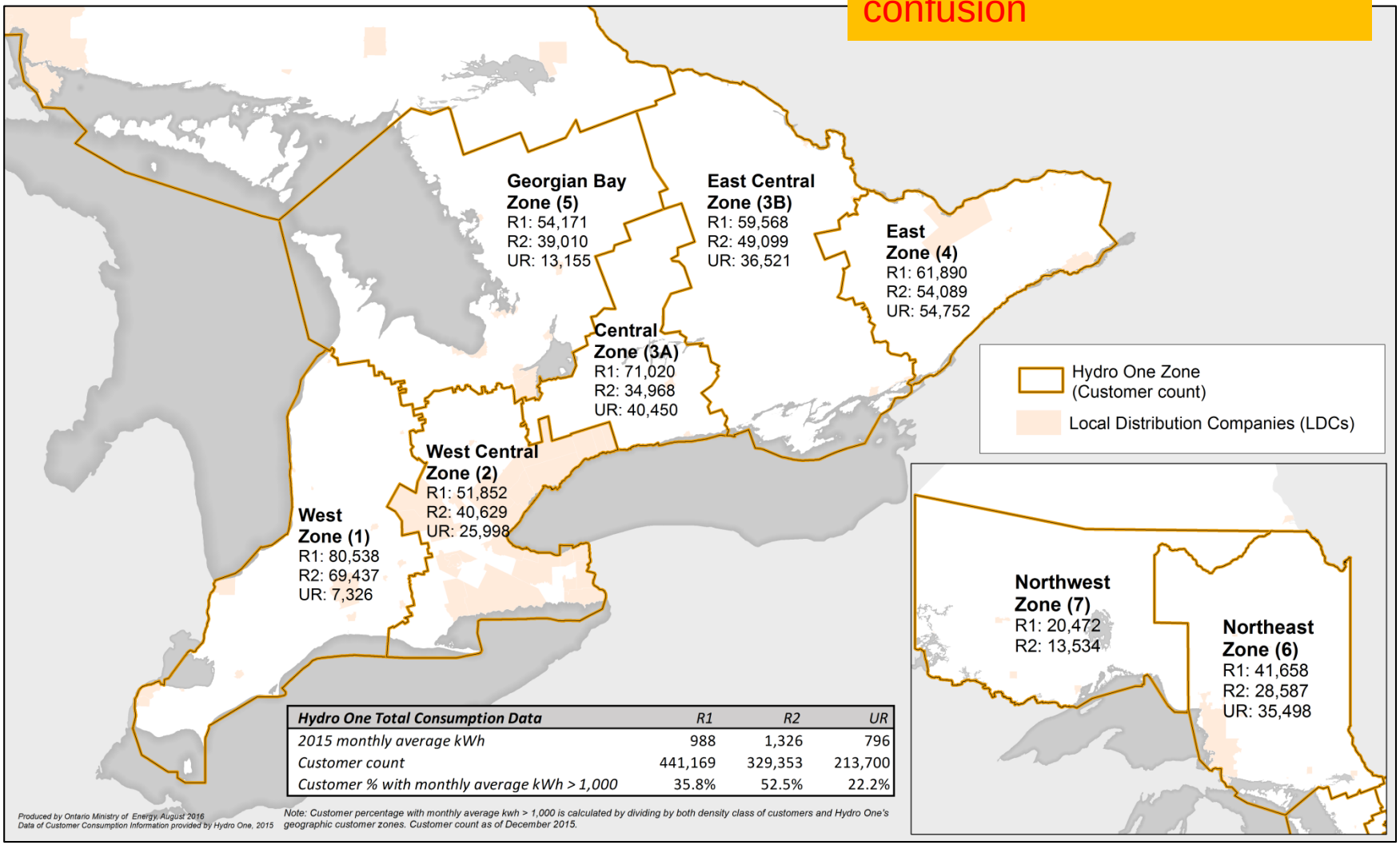
***The LDC with the lowest total bill is Fort Frances Power Corporation (FFPC). However, FFPC does not have the lowest delivery costs in the province. FFPC customers who are not enrolled with a retailer receive a $0.0125/kwh discount on power due to a historic (1905) mill agreement. In order to maintain the discount, FFPC maintains its ROE at 0%.*

****Hydro Hawkesbury has the lowest delivery rates at ~$36 per month*

*****Delivery charges include distribution rates (fixed and variable), transmission, and line loss.*

2) Rural or Remote Rate Protection (RRR Consumers by Customer Class

Slide to be updated to only include numbers related to R2 customers to avoid confusion

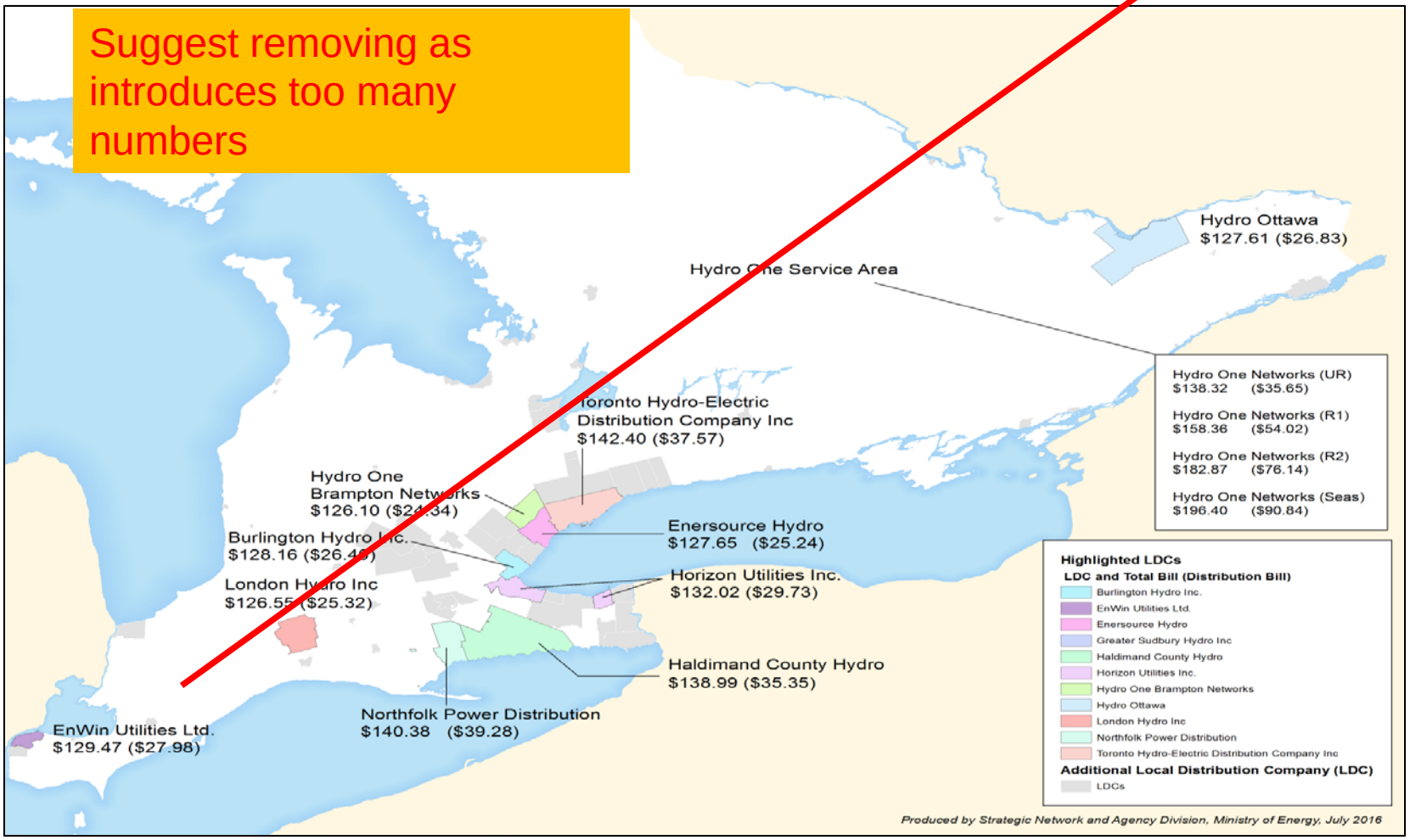


Hydro One Total Consumption Data	R1	R2	UR
2015 monthly average kWh	988	1,326	796
Customer count	441,169	329,353	213,700
Customer % with monthly average kWh > 1,000	35.8%	52.5%	22.2%

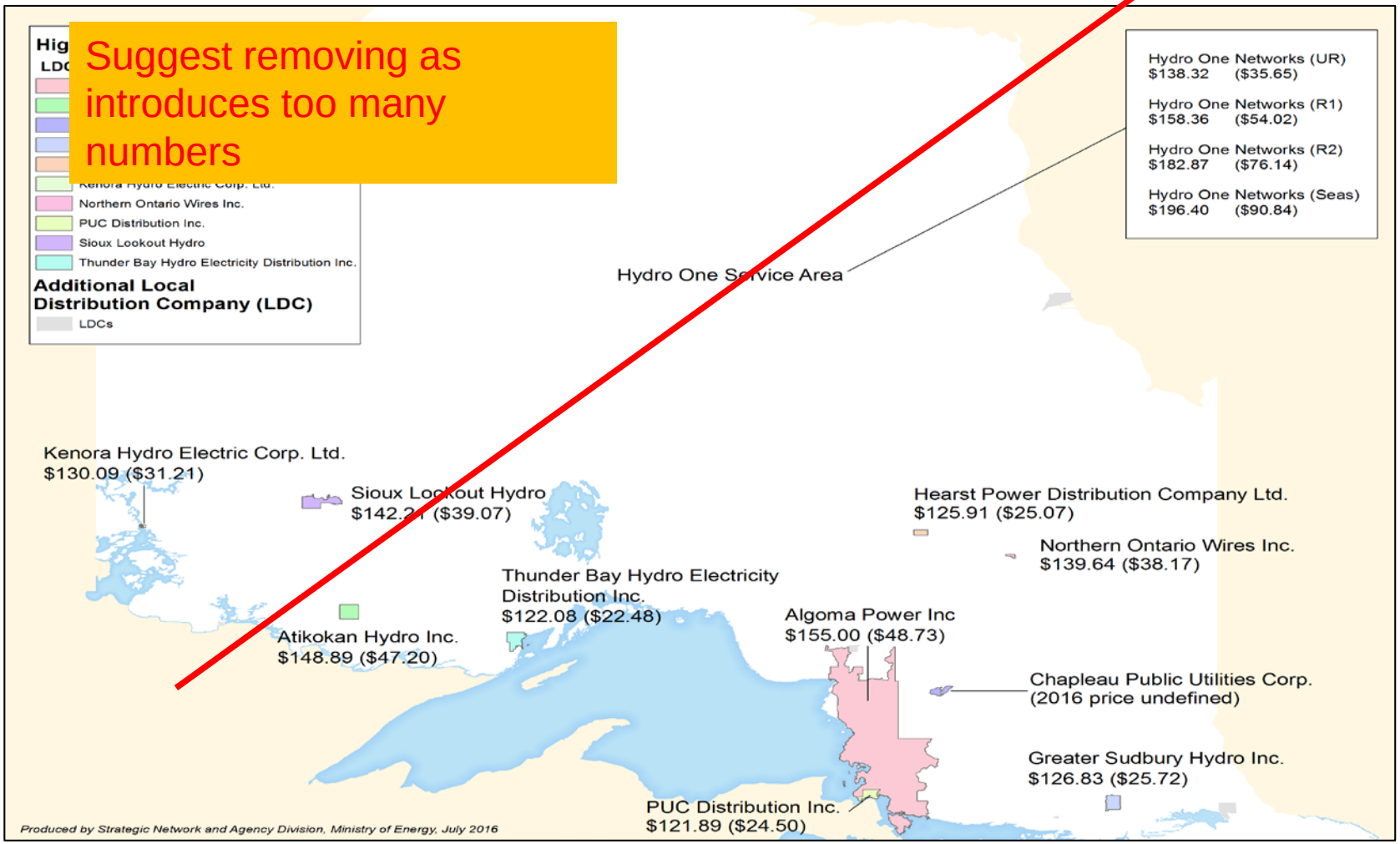
Produced by Ontario Ministry of Energy, August 2016
Data of Customer Consumption Information provided by Hydro One, 2015

Note: Customer percentage with monthly average kwh > 1,000 is calculated by dividing by both density class of customers and Hydro One's geographic customer zones. Customer count as of December 2015.

Rural or Remote Rate Protection (RRRP) Update – Selected Rate Comparison – Total Bill and Distribution Rate



Rural or Remote Rate Protection (RRRP) Update – Selected Rate Comparison – Total Bill and Distribution Rate



2) Expand Industrial Conservation Initiative and Recycle Cap and Trade Proceeds

Industrial Conservation Initiative (ICI) Expansion

- ENERGY is proposing to amend O. Reg. 429/04 to expand ICI eligibility effective [X placeholder date].

- Currently, electricity consumers over 5 MW and consumers from 3-5 MW in certain energy intensive sectors are eligible for ICI (i.e., approximately 300 Class A consumers).
  - Consumers participating in ICI include the following sectors: pulp and paper, auto, manufacturing, chemicals and mines.

- ICI would be expanded so that all consumers over 1 MW are eligible for the program, which would:
  - Reduce electricity peak demand by incenting more consumers to lower their electricity demand during peak periods;
  - Reduce electricity bills for new ICI participants who are able to reduce their electricity demand during peak demand periods; and
  - Increase the electricity bills for non-ICI participants to ensure full cost recovery in the electricity system.

ICI Expansion – Projected Impact

	Benefit to New ICI Participants	System Benefit	Financial Impact	Residential Bill Impact
	Bill Savings	Peak Demand Reduction (MW)	GA shifted to Class B ($M)	
Short-term	Up to 21%	80	47	Increase of $0.42/month
Long-term	Up to 34%	165	82	Increase of $0.74/month

- The different impacts refer to the amount of time it takes for new Class A consumers to respond to the expanded ICI eligibility
  - Short-term refers to the expected impact once ICI billing begins for new Class A consumers (one year after expanded eligibility takes place).
  - Long-term is the expected impact once new Class A consumers have had time to significantly change their behaviour and investment decisions in response to the ICI.

- The bill impacts assume a 25% uptake, which would increase Class A consumption by roughly 3 TWh, leaving an estimated 54 TWh in Class B that are either between 0.05-1 MW or choose not to opt in to ICI. This would represent an estimated 300 additional consumers in ICI, though they would represent a much smaller share of the consumption than the 300 consumers currently participating.

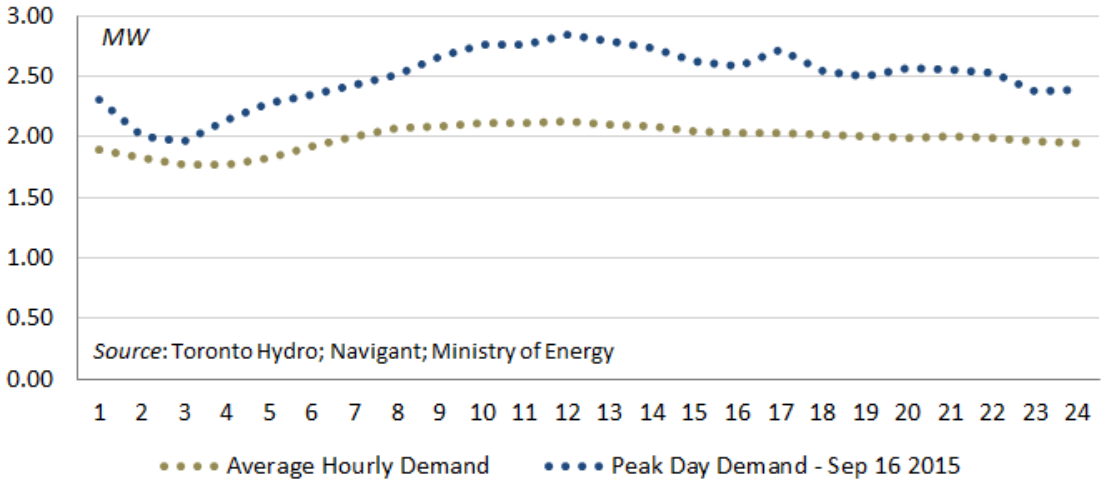
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
  - A few examples of companies that would become eligible under such an expansion would be Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.

ICI Expansion – Illustrative Example of Newly Eligible Consumer

- Plastics manufacturers, such as Poly Five Plastics in Toronto, are among the consumers that would become eligible if the threshold was lowered.
- Such manufacturers fall under NAICS* code 32 and have relatively flat load profiles, reflecting around the clock production. This means they would be beneficiaries of ICI even with no change in consumption behaviour.
- Companies like Poly Five Plastics could expect to see greater savings if they are willing and able to respond to the higher prices during high demand hours.

Typical Demand Profile, 2-3 MW Consumer

Manufacturer, NAICS Code 32 - Nov 2014 to Oct 2015



Illustrative Bill Savings, 2-3 MW Consumer

	Status Quo	*No Price Response*	*Short Term Response*	*Long Term Response*
	Class B	**Class A**	**Class A**	**Class A**
GA	75.26	58.06	43.55	32.03
Total bill	**126.28**	**109.09**	**94.58**	**83.06**
Savings		*-14%*	*-25%*	*-34%*

Source: Navigant; Ministry of Energy

*** Note:** North American Industry Classification System (NAICS) is the standard used by statistical agencies in classifying business establishments.

Illustrative Bill Impacts

	Current Bill	Current Rate mitigation initiatives*	Cost of new initiatives (RRRP and ICI)	New Rate Mitigation initiatives	Net impact	New bill
Large Institutional (Toronto – 10 MW, $/MWh)						
Large Industrial (Timmins – 10 MW, $/MWh)						
Small Industrial – opt-in (Toronto – 2 MW, $/MWh)						
Small Institutional (Toronto – 500 kw, $/MWh)						
Large Commercial – no opt-in (Toronto – 2 MW, $/MWh)						

Placeholder - Pending Update

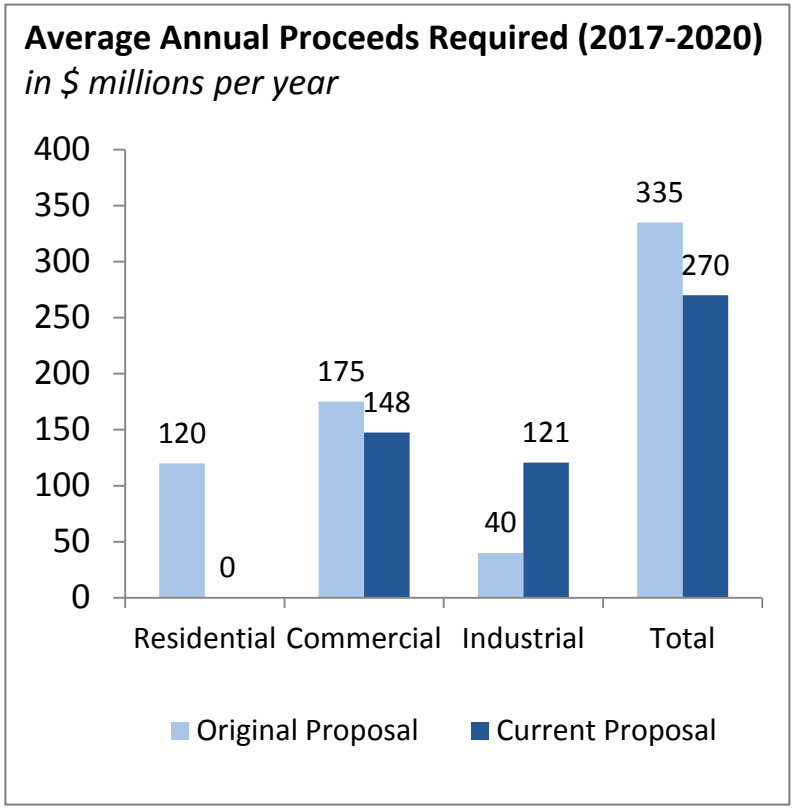
Note: There is the potential for a consumer eligible for the Regulated Price Plan to opt-out of the Regulated Price Plan to opt-in to Class A and receive all three benefits (i.e., Regulated Price Plan, ICI, proceeds recycling).

Redirect Cap and Trade Proceeds Recycling

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial consumers, while also providing a benefit of up to $2 per month for residential consumers.
  - To meet the 2016 Budget commitment, the Climate Change Action Plan (CCAP), committed $1.3 billion from the GGRA over the first compliance period (2017-2020).

- However, providing a 8% rebate to Regulated Price Plan consumers would allow for GGRA proceeds previously committed to residential consumers to be redirected to other consumers classes and/or GHG reduction initiatives in the fiscal plan.

- The current proposal would provide additional recycling to commercial and industrial consumers, while requiring an estimated $60 million less per year (i.e., a reduction of $0.24 billion over the first compliance period).



Note: The original proposal was to offset the impact of cap and trade via GA to the average industrial, and would provide a benefit to commercial and residential consumers. Current proposal would recycle proceeds volumetrically to industrial and commercial consumers.

Redirect Cap and Trade Proceeds Recycling

- Recycling cap and trade auction proceeds to lower the cost of electricity would offset consumers' contributions to non-emitting generation.

- Recycling helps pay for committed investments/initiatives which reduce GHGs (e.g., non-emitting generation and conservation programs).
  - Due to the long-term nature (typically 20 years) of electricity generation contracts and conservation programs, the associated costs are ongoing and are expected to be about $7 billion dollars annually during the first cap and trade compliance period. These costs will continue well beyond the timelines described in the CCAP.

- Recycling cap and trade auction proceeds volumetrically to Class B (commercial) and Class A (industrial) consumers maintains the incentive to shift consumption from on-peak to off-peak hours.

- Using cap and trade auction proceeds to lower the cost of electricity would make it more competitive with traditionally cheaper fossil fuels.

- By using the proceeds to lower the cost of electricity, there is potential to incent fuel-switching away from fossil fuels toward much cleaner grid-connected electricity and support CCAP goals of electrification.

Illustrative Bill Impacts

Placeholder

Considerations

Considerations – Implementation

- New legislation would be required to enable the 8% rebate proposal. Legislation would closely mirror the Ontario Clean Energy Benefit Act, 2010.
  - If passed, the legislation would require a general regulation.
  - Amendments would also be required to various regulations to expand ICI and RRRP.

- On-bill rebate delivery would likely require adjustments to LDC billing systems, which could impact delivery costs and timelines. ENERGY (possibly through Ontario Energy Board) will consult with LDCs to accurately assess these impacts once the program has been announced.
  - In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
  - Timing concerns may be alleviated by allowing LDCs to provide retroactive rebates if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.

- Detailed messaging on bills (for "low-volume" consumer bills) could be implemented by amending O. Reg. 275/04 (made under the Ontario Energy Board Act, 1998). ~~See appendix for bill mock-up.~~
  - The rebate would not be directly linked to HST.
  - With electricity invoices containing multiple line items and LDC bill presentment varying widely, direction on rebate presentment will need to be flexible to allow LDCs to incorporate easily while ensuring government-preferred branding and messaging is conveyed.

- ENERGY will need to continue to consult with the Independent Electricity System Operator (IESO), Ontario Energy Board (OEB) and LDCs regarding implementation of proceeds recycling.

Considerations – Fiscal

- The Climate Change Action Plan (CCAP) committed about $1.3 billion over four years for electricity mitigation for industrial, commercial and residential consumers from GGRA proceeds.
  - The current rate mitigation proposal requires approximately 20% less in proceeds, saving approximately $240 million relative to the CCAP commitment over the first compliance period (2017-2020).
- The 8% rebate is expected to cost about $1 billion per year (i.e., $4 billion from 2017-2020), representing an additional pressure on the fiscal plan.
  - Consideration could be given to allocating the $240 million in reduced proceeds required towards other existing initiatives in the fiscal plan that also reduce greenhouse gas (GHG) emissions, thereby providing an overall fiscal plan offset.
- In the absence of any offset strategies, the full cost of the rate mitigation approach would add to the pressures and risks that need to be managed in order for the government to balance the budget in 2017-18 and stay balanced in 2018-19 and beyond.

Considerations – Legal

- In order to avoid characterization as an unconstitutional tax, a non-tax levy must have a sufficient nexus between those who pay and the regulatory scheme in the sense that those who pay have caused the need for or benefit from the regulatory scheme. Although the case law is not developed on the extent to which some regulated actors can be required to subsidize others, risk is reduced to the extent that any cross-subsidization serves true regulatory goals rather than revenue re-distribution goals.

- HST Rebate (shift costs from rate-base to tax base by providing a rebate equal to the provincial portion of HST):
  - Providing the contemplated rebate under the proposed Bill does not, in and of itself, give rise to legal issues. As policy direction is given on the specifics of supporting regulations, any associated legal risks can be identified.

- ICI Expansion (shift costs within rate-base by expanding eligibility for the ICI program to consumers of >1 MW):
  - Shifting costs to some consumers to lower rates for others without more carries the risk that the charge would be characterized as an unconstitutional tax. To establish that the charge is legitimate, it must be established that the purpose and effect of the charge is to facilitate the maintenance of a financially viable electricity system by way of load management or some other feature under which those who are subsidized provide an overall system benefit enjoyed by those who subsidize them.

- RRRP Update (shift costs within the rate-base by increasing the RRRP benefit paid to rural and remote customers):
  - Increasing the amount of revenue devoted to the RRRP or expanding the scope of consumers eligible for the program does not raise new legal risk. There is a good argument that the RRRP is a regulatory charge, as it socializes some of the costs of distributing electricity to rural consumers. Overall the risk that the RRRP would be characterized as a tax is assessed as moderate (meaning equally good arguments on both sides).

- Cap and Trade Proceeds Recycling (reduce impact on rate base and tax base by directing cap and trade auction proceeds to industrial consumers):
  - To be characterized as regulatory charges under the cap and trade program, auction revenues should be spent on programs that reduce GHGs.

Communications

- Public high-profile communications would coincide with introduction of legislation (September 2016).
  - Stakeholder outreach/technical briefings with LDCs, Ontario Chamber of Commerce, AMPCO, OEB low-income table, AMO, etc.
  - Echo public announcements in southwest and north; proactive provincial/local media.

- **Positioning:**
  - A fiscally prudent plan to benefit all ratepayers in a lasting, meaningful way.
  - Rural customers will receive the largest single rate relief ever.
  - Businesses across Ontario will have even more opportunity to be competitive and manage their energy costs.

- **Issues Considerations:**
  - Significant benefit for rural and remote residential customers; net gain for all residential customers.
  - More complex to communicate, but can be presented as a full plan that includes reforms and improvements to the system.
  - Consistent with cap-and-trade commitment that no business sector will be left worse off, though small businesses outside ICI will benefit the least.

Communications – Key Messages

- [Placeholder]

Proposed Cabinet Minute

CABINET AGREED THAT:

1. THE MINISTRY OF ENERGY (ENERGY), WITH SUPPORT FROM THE MINISTRY OF FINANCE (MOF), SHALL PREPARE LEGISLATION THAT WOULD PROVIDE AN EIGHT PERCENT (8%) REBATE ON THE PRE-TAX COST OF ELECTRICITY FOR THE FOLLOWING CLASSES OF CONSUMERS:
   A. ALL CONSUMERS ELIGIBLE TO BE BILLED UNDER THE ONTARIO ENERGY BOARD'S REGULATED PRICE PLAN; AND
   B. ANY OTHER CONSUMERS WHO WERE ELIGIBLE FOR FINANCIAL ASSISTANCE UNDER THE *ONTARIO CLEAN ENERGY BENEFIT ACT, 2010* (OCEBA) DURING THE PERIOD THAT PROGRAM WAS IN PLACE.

2. THE LEGISLATION SHALL BE GENERALLY MODELLED UPON THE OCEBA, AND WOULD INCLUDE THE FOLLOWING ELEMENTS:
   A. THE REBATE WOULD BE AVAILABLE STARTING JANUARY 1, 2017 AND BEFORE SUCH DATE AS MAY BE PRESCRIBED;
   B. THE REBATE WOULD NOT BE SUBJECT TO A CAP UNLESS A CAP IS PRESCRIBED;
   C. THE LEGISLATION WOULD SPECIFY THE TYPES OF COSTS TO WHICH THE REBATE WOULD OR WOULD NOT BE APPLIED, WITH AUTHORITY TO MAKE CHANGES BY REGULATION;
   D. THE LEGISLATION WOULD ADDRESS INVOICING REQUIREMENTS, INCLUDING AUTHORITY TO PRESCRIBE HOW THE REBATE IS TO APPEAR ON CONSUMER ELECTRICITY BILLS;
   E. THE LEGISLATION WOULD INCLUDE AUTHORITY TO PRESCRIBE THE WAY IN WHICH THE REBATE IS TO BE FLOWED THROUGH TO CONSUMERS, AND THE WAY IN WHICH ELECTRICITY VENDORS PROVIDING THE REBATE ARE TO BE REIMBURSED;
   F. THE LEGISLATION WOULD INCLUDE RECORD-KEEPING REQUIREMENTS FOR ELECTRICITY VENDORS AND ANY OTHER PRESCRIBED PERSONS; AND
   G. THE LEGISLATION WOULD INCLUDE INSPECTION POWERS FOR INSPECTORS APPOINTED BY THE MINISTER OF FINANCE, INCLUDING POWERS RELATED TO RECOVERY OF OVERPAYMENTS.

Pending Update

Proposed Cabinet Minute (cont'd)

3. ENERGY AMEND O. REG. 429/04 (ADJUSTMENTS UNDER SECTION 25.33 OF THE ACT) MADE UNDER THE *ELECTRICITY ACT, 1998* TO EXPAND ELIGIBILITY FOR CLASS A CONSUMERS AND CLASS A MARKET PARTICIPANTS UNDER THE INDUSTRIAL CONSERVATION INITIATIVE (ICI) TO ALL ELECTRICITY CONSUMERS AND MARKET PARTICIPANTS WITH A PEAK DEMAND ABOVE AN AVERAGE OF ONE MEGAWATT (1MW) WITH NO SECTORAL RESTRICTIONS ON PARTICIPATION.

4. ENERGY AMEND O. REG 442/01 (RURAL OR REMOTE ELECTRICITY RATE PROTECTION) MADE UNDER THE *ONTARIO ENERGY BOARD ACT, 1998* TO INCREASE THE TOTAL AMOUNT OF RATE PROTECTION AVAILABLE TO LOW DENSITY HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE RATE PROTECTION PROGRAM BY $110 MILLION, EFFECTIVE JANUARY 1, 2017.

5. ENERGY CONSIDER AND, IF APPROPRIATE, UTILIZE A MECHANISM TO PERIODICALLY ADJUST THE TOTAL ANNUAL AMOUNT OF RATE PROTECTION AVAILABLE TO HYDRO ONE INC. CONSUMERS UNDER THE RURAL OR REMOTE ELECTRICITY RATE PROTECTION REGULATION / PROGRAM, EFFECTIVE JANUARY 1, 2018.

Pending Update

6. ENERGY TO RECYCLE UP TO AN AVERAGE OF $270 MILLION OF CAP AND TRADE AUCTION PROCEEDS FROM THE *GREENHOUSE GAS REDUCTION ACCOUNT* PER YEAR OVER THE FIRST COMPLIANCE PERIOD (2017-2020) TO COMMERCIAL AND INDUSTRIAL ELECTRICITY CONSUMERS.

7. ENERGY AND MOF TO WORK WITH CABINET OFFICE (CO) AND PREMIER'S OFFICE (PO) ON COMMUNICATIONS PLAN.

Appendix

Glossary of Terms

- **Class A:** A category of electricity consumer/market participant established via the Industrial Conservation Initiative (ICI) that pays Global Adjustment (GA) based on their electricity consumption during the five highest peak demand hours during the year. To be eligible for Class A status a consumer/market participant must have an average hourly peak demand of greater than 5MW or greater than 3 MW and less than or equal to 5MW for certain industrial sectors.

- **Class B:** A category of electricity consumer/market participant that pays GA as a flat rate applied to electricity consumption. Class B electricity consumers/market participants have a peak demand over 50 kilowatts and are not eligible for – or choose not to become – Class A status.

- **Cost Shift Impact:** In the context of electricity rate mitigation programs, the impact of electricity rate mitigation programs in terms of assigning fixed costs of the electricity system to the different electricity consumer classes (e.g. Class A, Class B, RPP).

- **Demand Response (DR):** Programs designed to reduce the amount of electricity drawn from the grid during peak demand periods. Customers could be responding to changes in the price of electricity during the day, incentive payments and/or other mechanisms.

- **Distribution:** A distribution system carries electricity from the transmission system and delivers it to consumers. Typically, the network would include medium-voltage power lines, substations and pole-mounted transformers, low-voltage distribution wiring and electricity meters.

- **Feed-in Tariff (FIT):** A guaranteed rate that provides stable prices through long-term contracts for energy generated using renewable resources.

Glossary of Terms (con't)

- **Global Adjustment (GA)**: The GA is the difference between the total payments made to certain contracted or regulated generators and demand management projects, and market revenues. The GA serves a number of functions in Ontario's electricity system; it provides more stable electricity prices for Ontario's consumers and generators; it maintains a reliable energy supply; and, it recovers costs associated with conservation initiatives that benefit all Ontarians.
  - The GA is calculated each month by taking into account the following components: Generation contracts administered by the Ontario Electricity Financial Corporation; OPG's nuclear and baseload hydroelectric generation; and OPA contracts with generators and suppliers of conservation services. Consumers on the regulated price-plan (RPP) pay a fixed price set every six months by the Ontario Energy Board which includes the GA, while customers who have a retail contract pay the contract price for their electricity plus the Global Adjustment.

- **Greenhouse Gas Reduction Account (GGRA)**: An account established in the Public Accounts under Bill 172 ("Climate Change Mitigation and Low-carbon Economy Act, 2016") to record proceeds from the distribution of Ontario emission allowances, amounts payable to the Crown, administrative penalties, all expenditures of public money incurred under cap and trade.

- **Kilowatt (kW)**: A standard unit of power that is equal to 1,000 watts (W). Ten 100-watt light bulbs operated together require one kW of power.

- **Kilowatt-hour (kWh)**: A measure of energy production or consumption over time. Ten 100-watt light bulbs, operated together for one hour, consume one kWh of energy

- **Load Size**: The amount of electricity - in standard units of power (i.e., kW/MW) – that a facility/building is able to consume at any one time from the transmission or distribution system.

Glossary of Terms (con't)

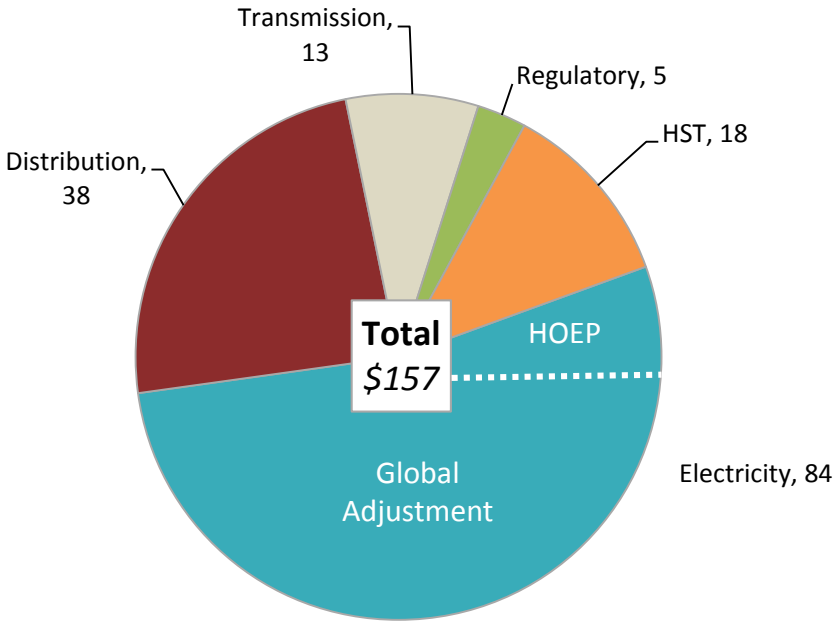
- **Local Distribution Company (LDC)**: A utility that owns and/or operates a distribution system for the local delivery of energy (gas or electricity) to consumers.
- **Megawatt (MW)**: A unit of power equal to 1,000 kilowatts (kW) or 1 million watts (W).
- **Megawatt-hour (MWh)**: A unit of power equal to 1,000 kilowatt-hours (kWh).
- **Peak Demand**: Peak demand, peak load or on peak are terms describing a period in which demand for electricity is highest.
- **Proceeds Recycling (Cap and Trade)**: Applying revenue associated with the functioning of the Ontario cap and trade program to electricity bills in recognition of the significant emissions reduction achieved since 2003.
- **Regulated Price Plan (RPP)**: An Ontario Energy Board developed electricity price plan that provides stable and predictable electricity pricing, encourages conservation and ensures the price consumers pay for electricity better reflects the price paid to generators. The plan has been in place since 2005.
- **Terawatt-hour (TWh)**: A unit of power equal to 1 billion kilowatt-hours.
- **Transmission**: The movement of electricity, usually over long distance, from generation sites to consumers and local distribution systems. Transmission of electricity is done at high voltages. Transmission also applies to the long distance transportation of natural gas and oil.
- **Supply Mix**: The different types of resources that are used to meet electricity demand requirements in a particular jurisdiction. Normally the mix is expressed in terms of the proportion of each type within the overall amount of energy produced.

Residential Electricity Prices

- There are approximately 5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of May 1, 2016 (750 kWh/month)



Source: OEB, Toronto Hydro

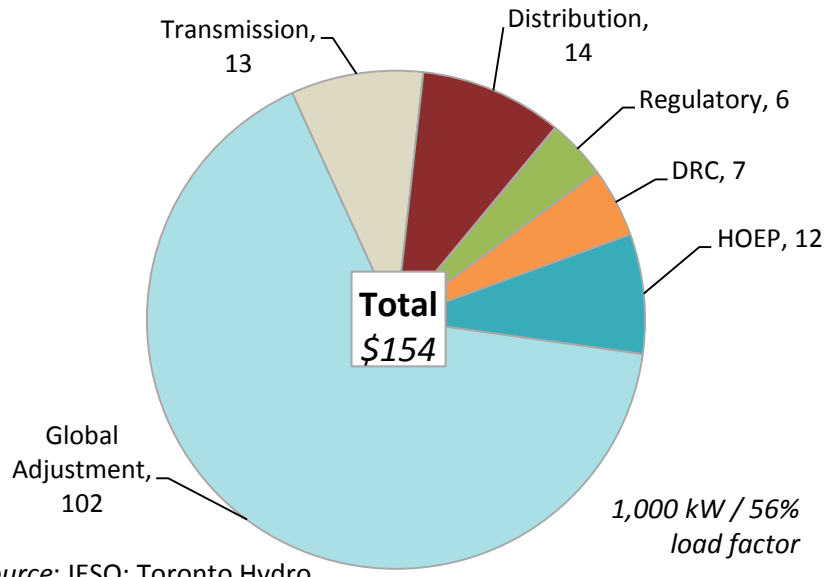
Commercial Electricity Prices

- There are approximately 400,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.

- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



Source: IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.

- Targeted pricing programs are currently not available for Class B consumers.

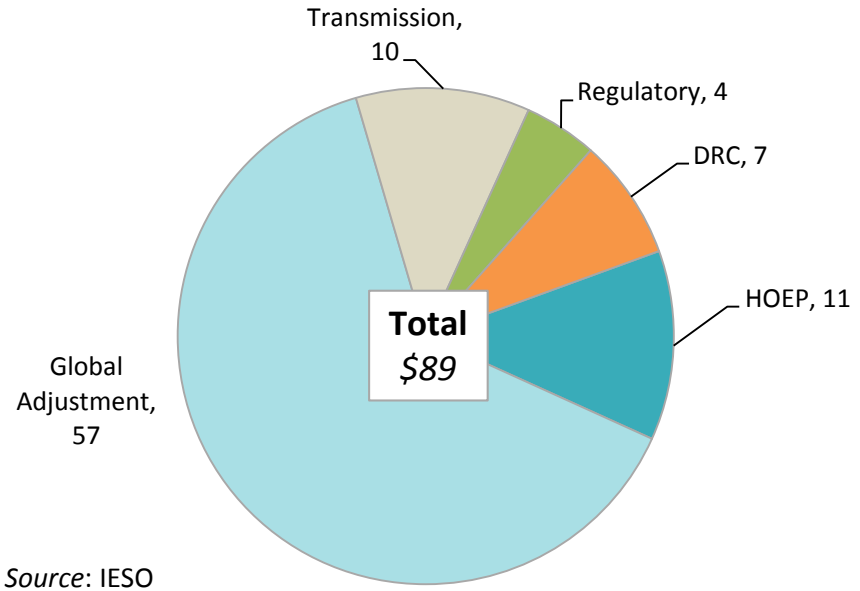
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



Source: IESO

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $64/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Electricity System Cost Reduction Initiatives

- A number of actions have and are being taken to reduce overall electricity system costs:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million.
  - Reducing Feed-in-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Removing an expected $3.3 billion in Large Renewable Procurement (LRP) costs relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast, based on the results of the first phase of the LRP.
- Despite these actions to reduce system costs, electricity rates continue to increase for consumers.

MOVED to APPENDIX

Existing Rate Mitigation

- Ontario currently provides rate mitigation to various electricity consumer classes through a combination of tax-based and rate-based programs.
  - For example, Northern Ontario residential electricity consumers receive tax credits in recognition of higher electricity costs in the north and rural consumers receive a subsidy funded through the rate-base due to the higher cost of delivering power to rural areas.

- As of 2016, the government removed the Debt Retirement Charge (DRC) from residential electricity bills. While this saves a typical residential electricity ratepayer about $60 per year, it is less than the benefit previously provided through the Ontario Clean Energy Benefit (OCEB).
  - OCEB provided a tax-base rebate of 10% rebate on the total cost of electricity charges related to electricity consumption on eligible bills between 2011 and 2015.

- Because electricity costs must be fully recovered from electricity consumers, rate mitigation funded through the rate-base often represents a shifting of costs from one consumer group to another (i.e., industrial to residential and commercial consumers).
  - Rate-based initiatives are generally associated with incenting changes in behaviour that provide electricity system benefits (i.e., shifting electricity consumption from on-peak to off-peak periods).

- The following slides provide an overview of the programs currently available to different electricity consumer classes along with the cost shift associated with several of the programs.

Existing Rate Mitigation (cont'd)

Program	Consumer Type	Rate/Tax -based	Description
Northern Ontario Energy Credit	**Residential**	Tax	Delivered as part of the Ontario Trillium Benefit, provides individuals living in northern Ontario with a credit of up to $146 per year for the 2016 benefit year.
Ontario Energy and Property Tax Credit		Tax	Also delivered as part of the Ontario Trillium Benefit, provides up to $1,008 per year for low-to moderate-income individuals and families.
Ontario Electricity Support Program		Rate	Provides ongoing assistance directly on the bills of eligible low-income electricity consumers.
Rural or Remote Rate Protection		Rate	Provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
saveONenergy Conservation Programs (including Home Assistance Program for low income customers)		Rate	Delivered by LDCs which provide financial incentives for electricity-saving measures like LEDs, ENERGYSTAR certified ceiling fans, baseboard programmable thermostats, clotheslines, and advanced powerbars.
saveONenergy Conservation Programs (including Retrofit Program for Buildings and other programs)	**Commercial**	Rate	saveONenergy suite of electricity conservation programs for commercial customers offered by local distribution companies (LDCs) help businesses save energy to better manage their electricity consumption and reduce their annual electricity costs. See Appendix for more information.
Industrial Conservation Initiative	**Industrial**	Rate	Encourages Ontario's largest consumers to reduce consumption during peak periods to save on average 25% on their electricity bills.
Industrial Accelerator Program		Rate	Provides financial incentives of up to $10 million to transmission-connected electricity consumers, to invest in energy-efficiency or self-generation which would reduce the amount of electricity withdrawn from the provincial grid.
Industrial Electricity Incentive		Rate	Provides reduced electricity rates for companies starting or expanding operations in Ontario.
Northern Industrial Electricity Rate Program		Tax	Provides $20 megawatt per hour (MWh) rebate for qualifying large northern industrial consumers.
Demand Response		Rate	Provides payments to businesses and industry to shift consumption at times when the electricity system is stressed. DR currently provides ~500 MW of capacity to the system.

Note: MO requested that this slide be removed; staff recommend keeping it in the appendix.

saveONenergy Conservation

Program	Consumer Type	Description
Heating and Cooling Initiative	**Residential**	Provides rebates to help offset the cost of purchasing and installing new heating and cooling equipment in the home.
Coupons		Available in-store for one month in the spring and fall and can be downloaded year-round to use at participating retailers to help Ontarians save on a wide range of energy-efficient products including LED bulbs, power bars with integrated timers and more.
Audit Funding	**Business**	Up to 50% of the cost of an energy audit to identify opportunities for energy efficiency upgrades and eligible incentives.
Retrofit Program		Provides various incentives for as much as 50 per cent of project costs, and advanced funding for assisted and social housing buildings, for updating old or inefficient equipment, including lighting, motors, unitary AC or packaged rooftop units.
Small Business Lighting		Provides incentives for new energy efficient lighting.
New Home Construction		Designed to encourage home builders and renovators to construct energy-efficient homes, and includes incentives for installation of energy-efficient measures.
Training and Support		Helps provide access to the most up-to-date training, such as in building commissioning, certified measurement and verification, and how to be an energy manager.
Process and Systems		Provides up to $50,000 for engineering studies and up to 70% of capital costs for energy efficiency upgrades.
Industrial Accelerator Program		Assists eligible transmission-connected companies to fast track capital investment in major energy conservation projects.

Note: MO requested that this slide be removed; staff recommend keeping it in the appendix.

HST – Overview

- The HST is a value-added tax. Unlike a sales tax, under a value-added tax most businesses effectively do not pay tax on their inputs because they are able to claim input tax credits (ITCs).
  - Through ITCs, the HST removes embedded sales taxes paid by businesses.
  - Only HST registrants that have taxable sales can claim ITCs. Businesses selling HST-exempt goods or services (such as financial services) are not eligible to claim input tax credits.

- Unlike businesses engaged in commercial activities, Public Service Bodies (PSBs) are generally not eligible to claim input tax credits. Instead, they can recover a portion of the HST paid by applying for PSB rebates from the Canada Revenue Agency.
  - PSBs consist of municipalities, universities, public colleges, school authorities, hospital authorities and charities and qualifying non-profit organizations.
  - See ~~Appendix for additional information~~ Additional Information – Public Service Bodies.

- To help low- to moderate-income individuals and families with the sales tax they pay on home energy costs (including electricity), Ontario provides tax relief through the energy component of the Ontario Energy and Property Tax Credit (OEPTC).
  - For the 2016 benefit year, eligible families and single people could get up to $224 to help with these costs, totalling about $445 million in tax relief.

- Ontario also provides tax relief through the Ontario Sales Tax Credit (OSTC), which was enhanced in 2010 to help low- to moderate- income individuals and families with the overall sales taxes they pay.
  - For the 2016 benefit year, eligible individuals can get up to $291 plus additional amounts of up to $291 for their spouse and each of their dependant children under age 19.
  - The 2016 OSTC is estimated to provide about $1.3 billion in tax relief.

Sales Tax Treatment in Other Jurisdictions

Jurisdiction	Tax	Tax Paid by Business Customers?	Tax Paid by Residential Customers?	Comment
British Columbia	PST	Yes – 7%	No	• PST does not apply to residential energy, including electricity, acquired solely for residential use in a residential dwelling • BC's carbon tax does not apply to electricity bills.
Alberta	None	N/A	N/A	• Alberta does not have a provincial sales tax.
Saskatchewan	PST	Yes – 5% Except for electricity purchased to heat a building.	No	• PST does not apply to electricity purchased for use in a residential dwelling. • PST does not apply to electricity purchased for use in heating a building that is heated solely by the electricity.
Manitoba	PST	Yes – 8% Reduced rate of 1.6% applies to electricity used by a qualifying business to operate machinery	Yes – 8% Electricity purchased for mixed use, 80% of which is home heating, has a reduced rate of 1.4%. Electricity solely to heat the purchaser's home is exempt.	• Winnipeg also applies a tax of 2.5% on residential and 5% on commercial.
Ontario	HST	Yes (less ITC (input tax credits))	Yes – 8%	
Quebec	QST	Yes (less ITCs)	Yes – 9.975%	
Nova Scotia	HST	Yes (less ITCs)	Yes – 10% less provincially administered rebate.	• Rebate is equal to the provincial portion of the HST, and is administered similar to OCEB, but applies to many energy sources.
New Brunswick	HST	Yes (less ITCs)	Yes – 10%	
Prince Edward Island	HST	Yes (less ITCs)	Yes – 9% (10% beginning Oct 1, 2016)	
Newfoundland and Labrador	HST	Yes (less ITCs)	Yes – 10%	• Had a provincially administered Home Heating Rebate program until July 2015.
Federal	GST	Yes (less ITCs)	Yes – 5%	

Note: MO requested that this slide be removed; staff recommend keeping it in the appendix.

HST – Considerations

- An across-the-board 8% rebate could be criticized as providing HST relief to those who effectively do not pay HST (businesses) as well as to those who receive HST relief through Public Service Body rebates or income tax relief.

- Providing a rebate equivalent to the 8% provincial portion of the HST on electricity, could lead to pressure to provide similar relief for other fuels and energy sources.
  - Ontarians who heat their homes with electricity will benefit from the provincial rebate, while Ontarians who heat their homes with natural gas, heating oil, propane, etc. would continue to pay the full 13% HST on those other energy sources.
  - The costs of natural gas, heating oil, propane, etc. are expected to increase as a result of Ontario's forthcoming cap and trade program.

- The provincial rebate would be an amount equal to the 8% provincial portion of the HST on electricity. OCEB, in contrast, was 10% of the bill including HST.

- The Province may also need to change the reporting for the cost of the energy component of the Ontario Energy and Property Tax Credit, which provides relief for HST on home energy. The energy component is reported as an offset of HST revenue.
  - Ministry program expenses could increase by as much as $445 million (TBC).

- The greater degree of complexity in the design of the program, the more difficult it will be to draft, implement and administer.

- To improve the province's ability to track impacts and program outcomes, subsequent legislative amendments to enable exchanges of data with LDCs could be considered.

Additional Information – Public Service Bodies

- Unlike businesses engaged in commercial activities, Public Service Bodies (PSBs) are generally not eligible to claim input tax credits. Instead, they can recover a portion of the HST paid by applying for PSB rebates from the Canada Revenue Agency.

- Ontario's rebate rates are intended to keep these sectors fiscally neutral relative to the Retail Sales Tax they paid on their inputs under the former RST system.

REBATE RATES FOR PSBs		
PSB Type	**Ontario (8%)**	**Federal (5%)**
Municipalities	78%	100%
Universities & Public Colleges	78%	67%
School Authorities	93%	68%
Hospital Authorities	87%	83%
Charities and Qualifying Non-Profit Organizations*	82%	50%

**A qualifying non-profit organization receives at least 40% of its funding from government.*

Industrial Conservation Initiative (ICI) – Overview

- In January 2011, Ontario amended O.Reg. 429/04 to implement the Industrial Conservation Initiative (ICI). This initiative established two classes of consumers:
  - "Class A" consumers are those with monthly peak demand exceeding 5 MW. They are charged global adjustment (GA) on the basis of their contribution to system peak demand during the highest 5 system demand hours of the year.
  - "Class B" consumers are all other consumers. They continue to be charged GA as a flat rate applied to their consumption.
- In May 2014, O.Reg. 429/04 was further amended to admit all consumers with monthly peak demand between 3 and 5 MW within certain energy-intensive industrial sectors into the ICI.
- This change has been successful in:
  - Incenting large consumers to significantly reduce their peak demand during the highest demand hours of the year, and
  - Providing large industrials with the ability to manage their electricity costs and remain competitive with competing jurisdictions.

Expected Numbers of Newly Eligible ICI Consumers

- As part of its ICI survey, Navigant collected data on the number of consumers in the 1-2 MW, 2-3 MW and 3-5 MW categories. Navigant's response rate for the survey was approximately 76%. Approximately 300 consumers are currently participating in ICI.

- The table below sets out the number of consumers in each tranche from the survey along with an "adjusted number" which estimates the actual total number of customers in each tranche in the province (i.e., it accounts for the response rate).

- As expected, there are a greater number of consumers in the 1 -2 MW category than in the 2 – 3 MW category.

	1-2 MW	**2-3 MW**	**3-5 MW***
# of customers – ICI survey	649	197	171
# of customers – Adjusted for response rate	854	259	225

Source: Navigant; Ministry of Energy

* Includes consumers that are already eligible for and participating in ICI. ENERGY estimates that approximately 75 of 225 estimated consumers in the 3-5 MW category are participating in ICI.

Alignment With Climate Change Action Plan

- Ontario's Climate Change Action Plan (CCAP) commits $6.0 – 8.3 billion over 4 years to greenhouse gas (GHG) reduction initiatives, funded by Cap and Trade auction proceeds.

- The CCAP includes up to $1.32 billion over 4 years to help keep electricity rates affordable for residential and industrial consumers. This initiative is estimated to reduce up to 3,000,000 tonnes of greenhouse gas (GHG) emmissions by 2020.

$ Billions	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**Total**
Total Committed in CCAP	**$1.5 – 2.1**	**$1.5 – 2.1**	**$1.5 – 2.1**	**$1.5 – 2.1**	**$6.0 – 8.3**
Electricity Price Mitigation	*Up to 0.3*	*Up to 0.3*	*Up to 0.3*	*Up to 0.3*	*Up to 1.3*

- Ontario's *Climate Change Mitigation and Low-carbon Economy Act, 2016* requires that all proceeds generated from Cap and Trade be used to help reduce greenhouse gas emissions.

- Should a portion of CCAP funding currently allocated to Electricity Price Mitigation be used to offset rate increases for certain industrial consumers, the remaining CCAP funding could provide a fiscal plan offset to the overall initiative by funding other existing initiatives that help reduce greenhouse gas emissions – for example:
  - Regional Express Rail;
  - Hamilton LRT;
  - Hurontario LRT; and
  - Energy efficiency in schools.

Electricity Price Mitigation

Ministry of Energy

WORKING DRAFT

Date: September 14, 2016

Minister

Deputy Minister

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.

- Ontario has taken action to replace coal-fired generation with cleaner sources of energy. Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished clean generation, including nuclear, natural gas and renewables.
  - This investment represents about 40% of our current supply and has helped decrease electricity sector emissions by approximately 80%.

- Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.

- Since 2010, electricity prices have risen considerably, particularly for households and small businesses. Prices are forecast to continue to increase as additional generation comes online.

- The Ministry of Energy and Ministry of Finance were asked to develop a proposal to provide rate relief to Ontario electricity consumers.

Electricity Consumer Classes

- There are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 3 MW	Above 3 MW*
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

**** Note:** Consumers with peak demand between 3-5 MW in the manufacturing, mining, refrigerated warehousing, greenhouses and data-processing industries are currently eligible for Class A. All other 3-5MW consumers are Class B.

Current Rate Base Mitigation Programs

- Ontario has implemented several programs to help electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers;
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods; and
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.

- These programs have shifted costs amongst electricity consumer classes (i.e., residential, commercial and industrial) as shown in the table below:

Cost Shift Impact	2011	2012	2013	2014	2015	2016
Residential Bill ($/month for 750 kWh)	3.55	4.07	3.85	4.46	5.68	6.55
Commercial – Class B ($/MWh)	4.74	5.43	5.14	5.94	7.57	8.73
Industrial – Class A ($/MWh)	-20.97	-25.26	-22.38	-24.68	-32.56	-31.55

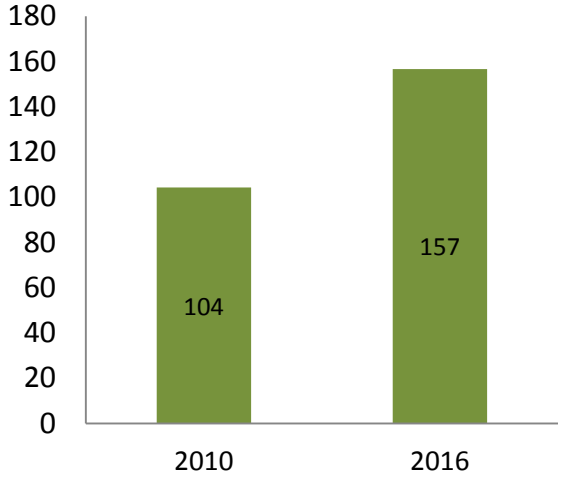
Note: Negative values indicate a benefit; positive values denote an incremental charge.

Prices by Electricity Consumer Class

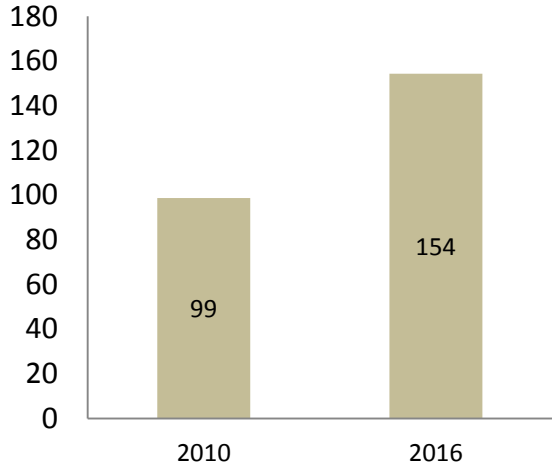
- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50% and rates paid by commercial have increased by 56%.

- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers.

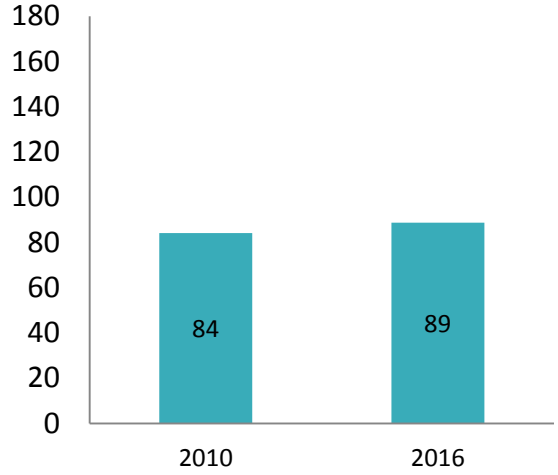
Typical Residential Bill (750/kWh per month)



Typical Class B (Commercial) Price ($/MWh)



Typical Class A (Industrial) Price ($/MWh)



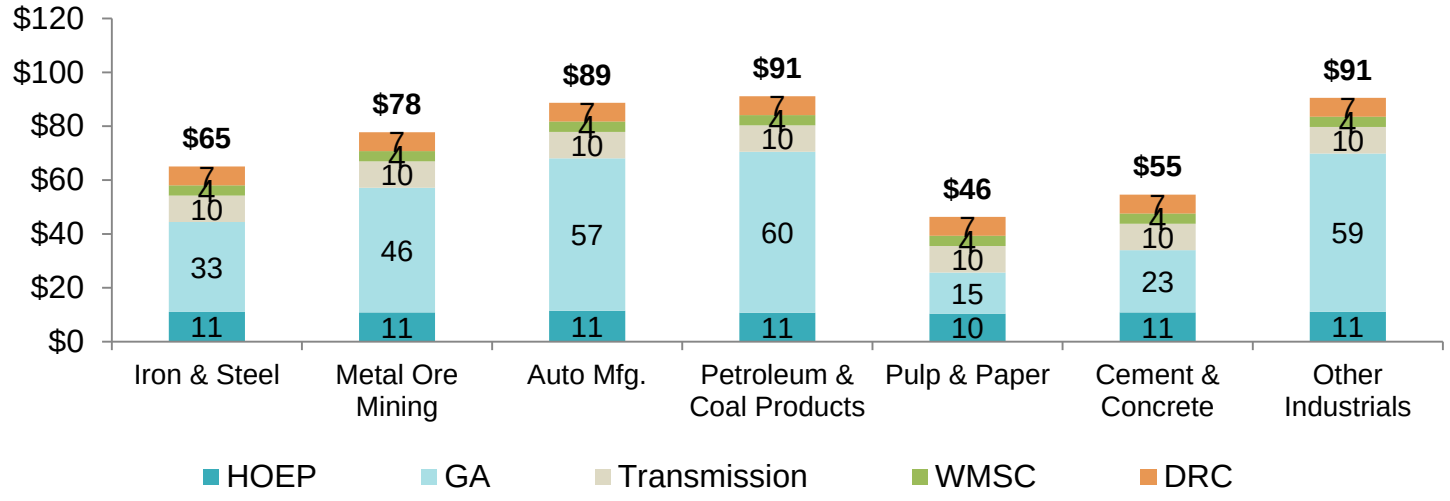
Note: 2016 represents May 2016 for residential and YTD June 2016 for commercial and industrial.

Industrial Electricity Prices Vary by Sector

- While Class A (industrial consumers) benefit from participation in the ICI program, there is a significant amount of variability in the ability to shift away from peak periods across customer classes, impacting the savings achieved.

- The below chart shows the prices paid in 2015 across a number of industrial sectors. Consumers in the north that receive rebates under the Northern Industrial Electricity Rate Program (NIERP) achieve rates that are $20/MWh lower than the below.

Average all-in Class A, Transmission-connected Electricity Prices by Industrial Sector (estimated $/MWh), Year-to-Date June 2016



Note: HOEP = Hourly Ontario Energy Price, GA = Global Adjustment, WMSC = Wholesale Market Service Charges, DRC = Debt Retirement Charge

Recent Actions to Bend the Cost Curve

- Since 2010, a number of actions have been taken to reduce overall electricity system costs:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million.
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Removing an expected $3.3 billion in Large Renewable Procurement (LRP) costs relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast, based on the results of the first phase of the LRP.
- Despite these actions to reduce system costs, electricity rates continue to increase for consumers.

Rate Mitigation

- The 2016 Budget committed to offset the impact of cap and trade in Ontario for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers. The Climate Change Action Plan (CCAP) committed $1.3 billion from the Greenhouse Gas Reduction Account (GGRA) over the first compliance period (2017-2020).

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:

  - **Tax-based Lever:**
    - Provide an on-bill rebate funded from the tax-base to all consumers or specific classes of consumers (i.e., the Ontario Clean Energy Benefit (OCEB) provided a rebate for eligible electricity consumers).

  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.

  - **Cap and Trade Proceeds Lever:**
    - Redirect cap and trade proceeds to offset the cost of existing initiatives that help reduce greenhouse gas (GHG) emissions (i.e., the CCAP committed to offset the impact of cap and trade and to keep electricity rates affordable).

Rate Mitigation Proposal

- The Ministry of Energy is proposing to implement the following electricity price mitigation initiatives. The approach identified below would provide relief across all electricity consumer classes:

  1) Provide an 8% rebate equal to the provincial portion of HST to consumers eligible for the Regulated Price Plan* (i.e., residential, small business and farms) and update the Rural and Remote Rate Protection (RRRP) program, to provide relief to rural customers

  2) Expand ICI eligibility by lowering the threshold to 1 MW, to provide support to Class B electricity consumers (i.e., commercial, institutional and small industrial) and redirect cap and trade proceeds to commercial and industrial electricity consumers to provide a modest reduction in rates.

- The following slides provide additional information on the above initiatives.

***Notes:** Eligibility for the 8% rebate would be similar to OCEB and include some customers not on the Regulated Price Plan (RPP), such as Independent Power Authority consumers and consumers that have opted-out of RPP. See Appendix for discussion on HST considerations.

Rate Mitigation Proposal – Illustrative Impacts

	Average Annual Fiscal Impact	Average Annual Greenhouse Gas Reduction Account (GGRA) Proceeds Impact	Regulated Price Plan (Residential) Impact		Class B (Commercial) Impact*	Class A (Industrial) Impact*	
			*Average (750 kWh/ month)***	*Rural*** (1000 kWh/ month)*		*Existing*	*New*
• 8% rebate to Regulated Price Plan eligible consumers • ICI Expansion • RRRP Update • Proceeds Recycling	$1.0 billion annually	$0.27 billion annually (Reduction of $0.06 billion annually or $0.24 billion total from the CCAP commitment)	-$11/ month (-8%)	-$45/ month (-20%)	-$1/MWh (-1%)	-$1/ MWh (-1%)	Up to -$52/MWh (-34%)

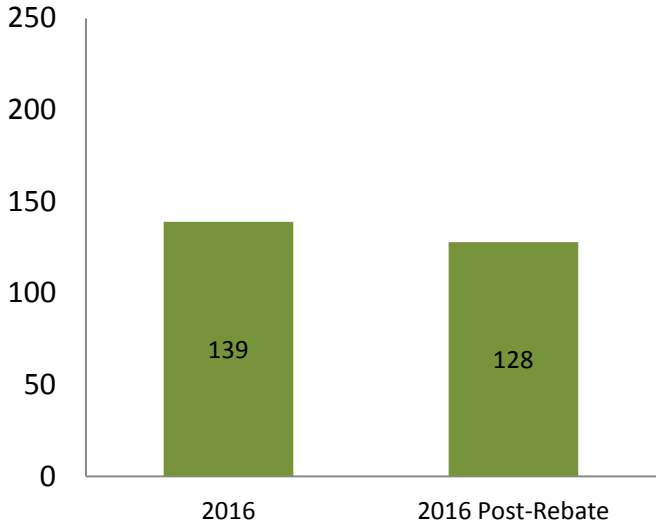
***Note:** The impact of cap and trade would not be added to electricity bills until 2017 and the impact of ICI would not be added to bills until 2018 due to the time required to implement the expansion and for billing changes.

**** Note:** Average Regulated Price Plan Impact represents a pre-tax value of the 8% rebate and does not include the impact of ICI expansion and RRRP update (total impact of $1.31/month based on 750 kWh/month).

*****Note**: Rural customers refers to customers of Hydro One eligible to receive RRRP (R2 rate class customers). Impact shown is pre-tax and does not include the impact of ICI expansion and RRRP update (total impact of $1.74/month based on 1000 kWh/month).

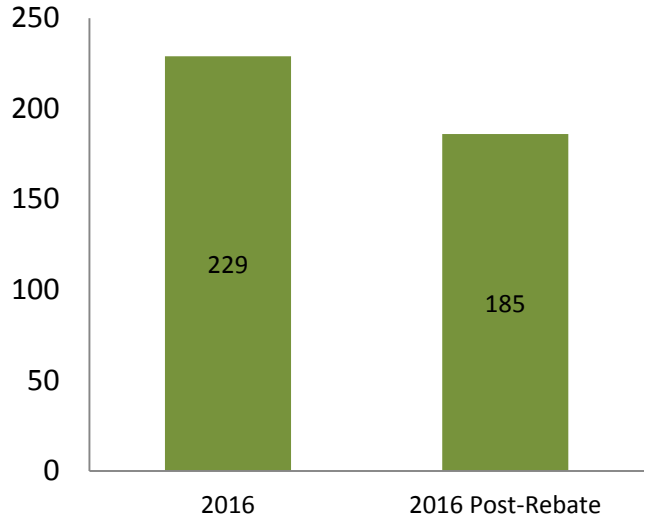
Rate Mitigation Proposal – Illustrative Bill Impacts by Electricity Consumer Class

Typical Residential Bill
750/kWh per month, 8% only



The pre-tax impact of a 8% reduction.

Rural (R2) Residential Bill
1,000/kWh per month, 8% and RRRP update

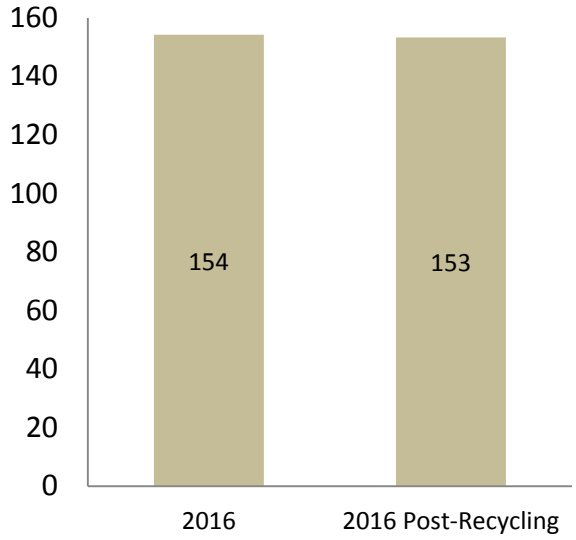


The pre-tax impact of the rate mitigation initiatives is a 19% reduction.

Note: Residential bills reflect electricity rates as per the Regulated Rate Plan (RRP) which came into effect on May 1, 2016. Commercial and industrial electricity prices reflect YTD June 2016.

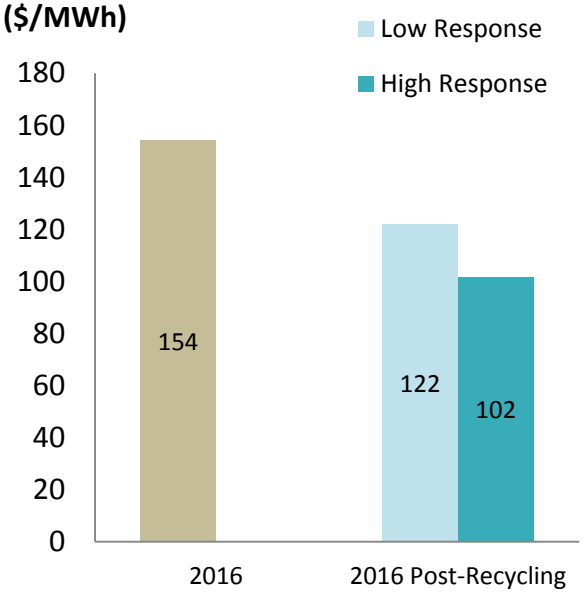
Rate Mitigation Proposal – Illustrative Bill Impacts by Electricity Consumer Class (cont'd)

Typical Class B (Commercial) Price ($/MWh)



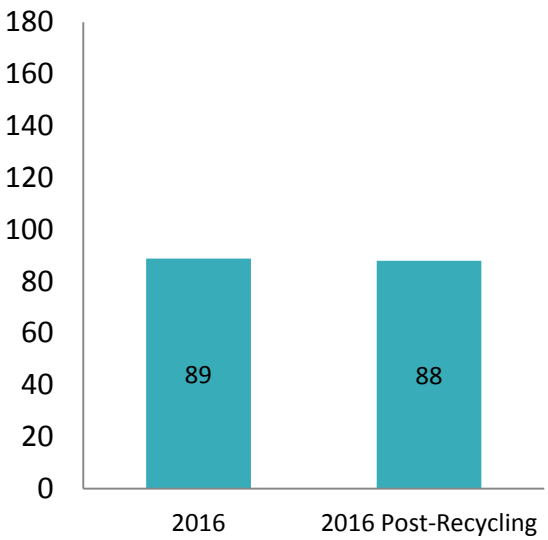
Class B: The net impact of the rate mitigation initiatives is a 1% reduction.

Typical New Class A Price ($/MWh)



New Class A: The net impact of the rate mitigation initiatives is a reduction of up to 21% and 34% for low and high response respectively.

Typical Class A (Industrial) Price ($/MWh)



Existing Class A: The net impact of the rate mitigation initiatives is a 1% reduction.

Note: The impact of cap and trade would not be added to electricity bills until 2017 and the impact of ICI would not be added to bills until 2018 due to the time required to implement the expansion and for billing changes. However, both the impact of cap and trade and ICI have been included above for illustrative purposes.

1) Regulated Price Plan Eligible Consumers and Rural or Remote Rate Protection Update

8% Rebate to Regulated Price Plan Eligible Consumers

- Legislation/regulation will be introduced to provide a rebate of 8% to consumers eligible for the Regulated Price Plan. The below table indicates which consumers would or would not receive the benefit.
  - This would be equivalent to the provincial portion of the HST*.

Eligible for the 8% rebate (< 50 kW or < 250,000 kWh/year)	**Not eligible for the 8% rebate** (> 50 kW or > 250,000 kWh/year)

• Residential Regulated Price Plan consumers
• Residential retail consumers
• Multi-unit residential buildings and other facilities used as residential rental units
• Long-term care homes and school residences
• Regulated Price Plan eligible farms
• Small businesses
  − Coffee / snack retailer
  − Convenience store
  − Apparel store
  − Hair salon
  − Small insurance office
	• Class A consumers
	  − Manufacturer
	  − Large grocery store
	  − Mines
	  − Auto assembly plants
	• Class B consumers (except farms that have opted out of the Regulated Price Plan)
	  − Commercial offices (low rise)
	  − Hotel
	  − General warehousing

- Those ineligible to receive the 8% rebate will benefit from one or more of the other initiatives under this proposal (e.g., ICI expansion, proceeds recycling, etc).

***Note:** An HST exemption would require federal approval. Engaging in discussions with the federal government would take time and would likely result in not meeting the targeted implementation date.

Placeholder – Electricity Bill Mock-Up

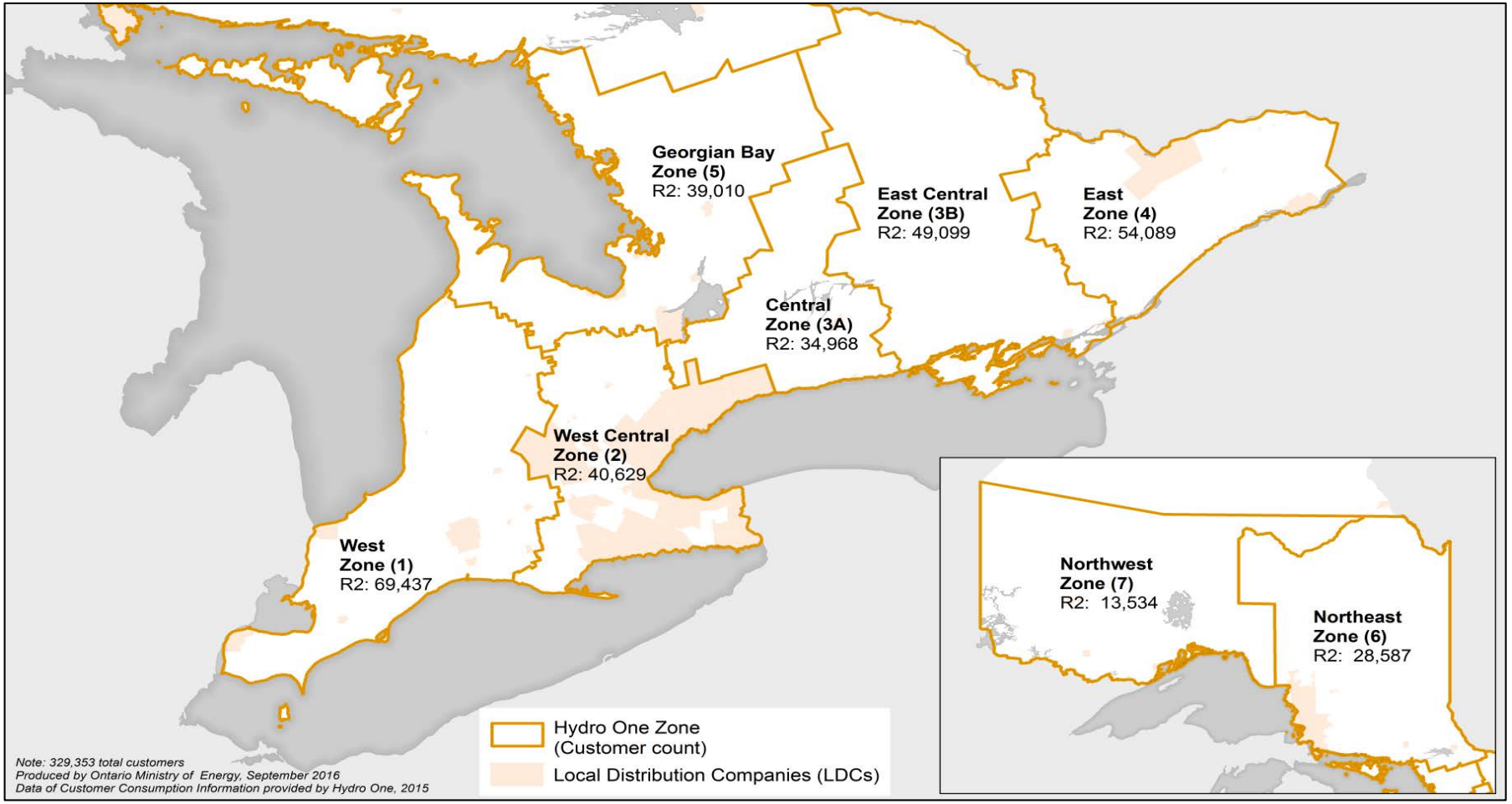
Rural or Remote Rate Protection (RRRP) Update

- ENERGY is proposing to amend O.Reg 442/01 to provide an additional $110 million in rate protection to eligible rural or remote electricity consumers, and consider options to periodically adjust the amount of rate protection available to these consumers going forward.

- RRRP is a rate-based funded subsidy program that helps offset the higher costs to distribute electricity to Ontario residents who live in rural or remote locations all across the Province.
  - Today, RRRP is a $175-million program. For an average residential customer, the cost of supporting RRRP is roughly $1 per month. For other customers, the cost can range from $65 for a greenhouse to $8,000 for a medium industrial.
  - The majority of the program funding ($125.5 million) provides a subsidy to Hydro One's lowest-density customers – classified as R2 customers. There are approximately 329,000 R2 customers. The current program provides a monthly subsidy for R2 customers of $31.50.
  - RRRP funding supporting R2 customers has been capped at the current level since 2004. As a result, the impact of its assistance has diluted over time as electricity costs have risen.

- An additional $110 million in program funding would see an increased subsidy of ~$28 /month. This would bring R2 bills in line with Hydro One R1 (medium density) bills at 1000kWh.
  - This would increase the R2 portion of the RRRP to $235 million with a monthly impact on an average residential consumer of ~$0.60.
  - The RRRP could be indexed at inflation or "trued up" on a regular basis to ensure the subsidy remains constant.

Rural or Remote Rate Protection (RRRP) Update – R2 Customers by Region



2) Expand Industrial Conservation Initiative and Redirect Cap and Trade Proceeds

Industrial Conservation Initiative (ICI) Expansion

- ENERGY is proposing to amend O. Reg. 429/04 to expand ICI eligibility effective [X placeholder date].

- Currently, electricity consumers over 5 MW and consumers from 3-5 MW in certain energy intensive sectors are eligible for ICI (i.e., approximately 300 Class A consumers).
  - Consumers participating in ICI include the following sectors: pulp and paper, auto, manufacturing, chemicals and mines.

- ICI would be expanded so that all consumers over 1 MW are eligible for the program, which would:
  - Reduce electricity peak demand by incenting more consumers to lower their electricity demand during peak periods;
  - Reduce electricity bills for new ICI participants who are able to reduce their electricity demand during peak demand periods; and
  - Increase the electricity bills for non-ICI participants to ensure full cost recovery in the electricity system.

ICI Expansion – Projected Impact

	Benefit to New ICI Participants	System Benefit	Financial Impact	Residential Bill Impact
	Bill Savings	Peak Demand Reduction (MW)	GA shifted to Class B ($M)	
Short-term	Up to 21%	80	47	Increase of $0.42/month
Long-term	Up to 34%	165	82	Increase of $0.74/month

- The different impacts refer to the amount of time it takes for new Class A consumers to respond to the expanded ICI eligibility
  - Short-term refers to the expected impact once ICI billing begins for new Class A consumers (one year after expanded eligibility takes place).
  - Long-term is the expected impact once new Class A consumers have had time to significantly change their behaviour and investment decisions in response to the ICI.

- The bill impacts assume a 25% uptake, which would increase Class A consumption by roughly 3 TWh, leaving an estimated 54 TWh in Class B that are either between 0.05-1 MW or choose not to opt in to ICI. This would represent an estimated 300 additional consumers in ICI, though they would represent a much smaller share of the consumption than the 300 consumers currently participating.

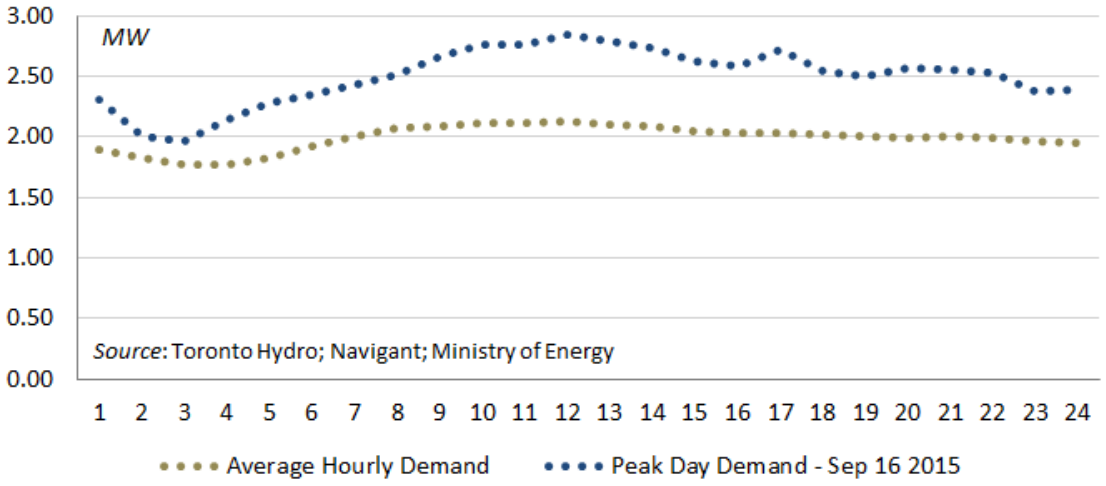
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
  - A few examples of companies that would become eligible under such an expansion would be Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.

ICI Expansion – Illustrative Example of Newly Eligible Consumer

- Plastics manufacturers, such as Poly Five Plastics in Toronto, are among the consumers that would become eligible if the threshold was lowered.
- Such manufacturers fall under NAICS* code 32 and have relatively flat load profiles, reflecting around the clock production. This means they would be beneficiaries of ICI even with no change in consumption behaviour.
- Companies like Poly Five Plastics could expect to see greater savings if they are willing and able to respond to the higher prices during high demand hours.

Typical Demand Profile, 2-3 MW Consumer

Manufacturer, NAICS Code 32 - Nov 2014 to Oct 2015



Illustrative Bill Savings, 2-3 MW Consumer

	Status Quo	*No Price Response*	*Short Term Response*	*Long Term Response*
	Class B	**Class A**	**Class A**	**Class A**
GA	75.26	58.06	43.55	32.03
Total bill	**126.28**	**109.09**	**94.58**	**83.06**
Savings		*-14%*	*-25%*	*-34%*

Source: Navigant; Ministry of Energy

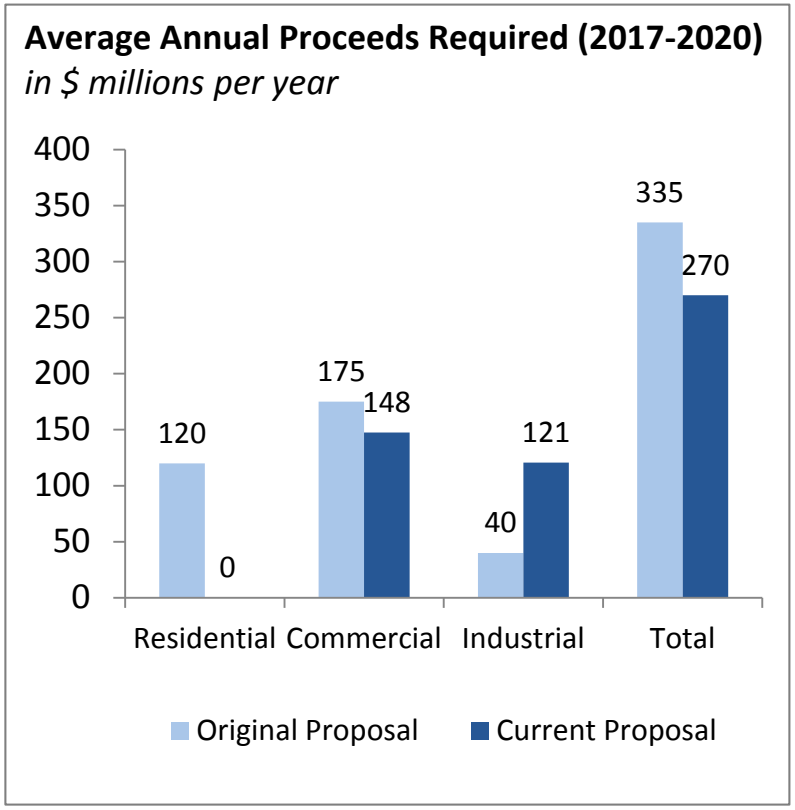
*** Note:** North American Industry Classification System (NAICS) is the standard used by statistical agencies in classifying business establishments.

Redirect Cap and Trade Proceeds Recycling

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial consumers, while also providing a benefit of up to $2 per month for residential consumers.
  - To meet the 2016 Budget commitment, the Climate Change Action Plan (CCAP), committed $1.3 billion from the GGRA over the first compliance period (2017-2020).

- However, providing a 8% rebate to Regulated Price Plan consumers would allow for GGRA proceeds previously committed to residential consumers to be redirected to other consumers classes and/or GHG reduction initiatives in the fiscal plan.

- The current proposal would provide additional recycling to commercial and industrial consumers, while requiring an estimated $60 million less per year (i.e., a reduction of $0.24 billion over the first compliance period).



Note: The original proposal was to offset the impact of cap and trade via GA to the average industrial, and would provide a benefit to commercial and residential consumers. Current proposal would recycle proceeds volumetrically to industrial and commercial consumers.

Redirect Cap and Trade Proceeds Recycling

- Redirecting cap and trade auction proceeds to lower the cost of electricity would offset consumers' contributions to non-emitting generation.

- Redirecting helps pay for committed investments/initiatives which reduce GHGs (e.g., non-emitting generation and conservation programs).
  - Due to the long-term nature (typically 20 years) of electricity generation contracts and conservation programs, the associated costs are ongoing and are expected to be about $7 billion dollars annually during the first cap and trade compliance period. These costs will continue well beyond the timelines described in the CCAP.

- Redirecting cap and trade auction proceeds volumetrically to Class B (commercial) and Class A (industrial) consumers maintains the incentive to shift consumption from on-peak to off-peak hours.

- Using cap and trade auction proceeds to lower the cost of electricity would make it more competitive with traditionally cheaper fossil fuels.

- By using the proceeds to lower the cost of electricity, there is potential to incent fuel-switching away from fossil fuels toward much cleaner grid-connected electricity and support CCAP goals of electrification.

Considerations

Implementation

- New legislation would be required to enable the 8% rebate proposal. Legislation would closely mirror the Ontario Clean Energy Benefit Act, 2010.
  - If passed, the legislation would require a general regulation.
  - Amendments would also be required to various regulations to expand ICI and RRRP.
- On-bill rebate delivery would likely require adjustments to LDC billing systems, which could impact delivery costs and timelines. ENERGY (possibly through Ontario Energy Board) will consult with LDCs to accurately assess these impacts once the program has been announced.
  - In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
  - Timing concerns may be alleviated by allowing LDCs to provide retroactive rebates if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.
- Detailed messaging on bills (for "low-volume" consumer bills) could be implemented by amending O. Reg. 275/04 (made under the Ontario Energy Board Act, 1998).
  - The rebate would not be directly linked to HST.
  - With electricity invoices containing multiple line items and LDC bill presentment varying widely, direction on rebate presentment will need to be flexible to allow LDCs to incorporate easily while ensuring government-preferred branding and messaging is conveyed.
- While the impact of cap and trade would be added to electricity bills as of January 2017, the offsetting effect of proceeds recycling may not occur immediately depending on implementation and potential alignment with the first auction expected in March 2017.
- ENERGY will need to continue to consult with the Independent Electricity System Operator (IESO), Ontario Energy Board (OEB) and LDCs regarding implementation of proceeds recycling.

Fiscal

- The Climate Change Action Plan (CCAP) committed about $1.3 billion over four years for electricity mitigation for industrial, commercial and residential consumers from GGRA proceeds.
  - The current rate mitigation proposal requires approximately 20% less in proceeds, saving approximately $240 million relative to the CCAP commitment over the first compliance period (2017-2020).

- The 8% rebate is expected to cost about $1 billion per year (i.e., $4 billion from 2017-2020), representing an additional pressure on the fiscal plan.
  - Consideration could be given to allocating the $240 million in reduced proceeds required towards other existing initiatives in the fiscal plan that also reduce greenhouse gas (GHG) emissions, thereby providing an overall fiscal plan offset.

- In the absence of any offset strategies, the full cost of the rate mitigation approach would add to the pressures and risks that need to be managed in order for the government to balance the budget in 2017-18 and stay balanced in 2018-19 and beyond.

Legal

- In order to avoid characterization as an unconstitutional tax, a non-tax levy must have a sufficient nexus between those who pay and the regulatory scheme in the sense that those who pay have caused the need for or benefit from the regulatory scheme. Although the case law is not developed on the extent to which some regulated actors can be required to subsidize others, risk is reduced to the extent that any cross-subsidization serves true regulatory goals rather than revenue re-distribution goals.

- HST Rebate (shift costs from rate-base to tax base by providing a rebate equal to the provincial portion of HST):
  - Providing the contemplated rebate under the proposed Bill does not, in and of itself, give rise to legal issues. As policy direction is given on the specifics of supporting regulations, any associated legal risks can be identified.

- ICI Expansion (shift costs within rate-base by expanding eligibility for the ICI program to consumers of >1 MW):
  - Shifting costs to some consumers to lower rates for others without more carries the risk that the charge would be characterized as an unconstitutional tax. To establish that the charge is legitimate, it must be established that the purpose and effect of the charge is to facilitate the maintenance of a financially viable electricity system by way of load management or some other feature under which those who are subsidized provide an overall system benefit enjoyed by those who subsidize them.

- RRRP Update (shift costs within the rate-base by increasing the RRRP benefit paid to rural and remote customers):
  - Increasing the amount of revenue devoted to the RRRP or expanding the scope of consumers eligible for the program does not raise new legal risk. There is a good argument that the RRRP is a regulatory charge, as it socializes some of the costs of distributing electricity to rural consumers. Overall the risk that the RRRP would be characterized as a tax is assessed as moderate (meaning equally good arguments on both sides).

- Cap and Trade Proceeds Recycling (reduce impact on rate base and tax base by directing cap and trade auction proceeds to industrial consumers):
  - To be characterized as regulatory charges under the cap and trade program, auction revenues should be spent on programs that reduce GHGs.

Communications

- Public high-profile communications would coincide with introduction of legislation (September 2016).
  - Stakeholder outreach/technical briefings with LDCs, Ontario Chamber of Commerce, AMPCO, OEB low-income table, AMO, etc.
  - Echo public announcements in southwest and north; proactive provincial/local media.

- **Positioning:**
  - A fiscally prudent plan to benefit all ratepayers in a lasting, meaningful way.
  - Rural customers will receive the largest single rate relief ever.
  - Businesses across Ontario will have even more opportunity to be competitive and manage their energy costs.

- **Issues Considerations:**
  - Significant benefit for rural and remote residential customers; net gain for all residential customers.
  - More complex to communicate, but can be presented as a full plan that includes reforms and improvements to the system.
  - Consistent with cap-and-trade commitment that no business sector will be left worse off, though small businesses outside ICI will benefit the least.

Key Messages

- We are taking unprecedented action to help people in their everyday lives.
- Residential ratepayers and other RPP eligible ratepayers will receive an eight per cent rebate on their electricity bill, equivalent to the provincial portion of the HST.
- Modernizing the RRRP will benefit 330,000 families in rural Ontario with significant reductions to their electricity bills – $28 a month, in addition to the eight per cent rebate.
- Over a thousand more Ontario businesses will be eligible to benefit from the ICI program, helping them stay competitive and grow.
- These actions will assist over five million families, farms and small businesses across Ontario.
- These actions today join our many existing initiatives too help keep electricity in Ontario clean, reliable and affordable.

Proposed Cabinet Minute

PLACEHOLDER

29

Appendix

Illustrative Bill Impacts

	Current Bill (after tax) (before tax)	Current Rate mitigation initiatives*	New Rate Mitigation initiatives	New Bill (after tax) (before tax)
Average Residential (Toronto – 750 kWh/month)	$139 /month	N/A	8% pre-tax rebate: - $11	$128 /month
Rural Residential (Hydro One R2 – 1000 kWh/month)	$229 /month	RRRP: –$32	8% pre-tax rebate: - $16 Updated RRRP: - $28	$185 /month
Low-income Residential ** (Toronto – 750 kWh/month)	$101 /month	OESP: -$38	8% pre-tax rebate: - $8	$93 /month
Small Business (Toronto – 403,200 kWh/month)	$148 /MWh	N/A	8% pre-tax rebate: - $12/MWh	$136 /MWh
Small Farm (Hydro One R1 – 4,000 kWh/month)	$202 /MWh	N/A	8% pre-tax rebate: - $16/MWh	$186 /MWh

***Note:** Some residential consumers can also receive tax credits based on income, age and geography (Northern Ontario Energy Credit and Ontario Energy and Property Tax Credit). These credits are delivered through the Trillium Tax Credit and can be as high as $1,332 per year for a family.
** income of less than $28,000, family of 4.

Totals may not add due to rounding.

Illustrative Bill Impacts (cont'd)

	Current Rate	Current Rate mitigation initiatives*	Cost of new initiatives (RRRP and ICI)	New Rate Mitigation initiatives	Net Impact	New Rate
Large Institutional (Toronto – distribution-connected, 10 MW)	$108 /MWh	ICI: -$49/MWh	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh (2017-2020 average)	-$0.90 /MWh (-1%)	$107 /MWh
Large Industrial (Timmins – transmission-connected, 10 MW)	$69 /MWh	ICI: -$49/MWh NIERP: -$20/MWh	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh	-$0.90 /MWh (-1%)	$68 /MWh
Small Industrial – opt-in to ICI (Toronto – 2 MW)	$152 /MWh	N/A	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh ICI: -$51.30/MWh	-$52 /MWh (-34%)	$100 /MWh
Large Commercial – does not opt-in to ICI (Toronto – 2 MW)	$152 /MWh	N/A	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh	-$0.90 /MWh (-1%)	$151 /MWh
Small Institutional (Toronto – 500 kw)	$154 /MWh	N/A	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh	-$0.90 /MWh	$153 /MWh

Notes:

1) There is the potential for a consumer eligible for the Regulated Price Plan to opt-out of the Regulated Price Plan to opt-in to Class A and receive all three benefits (i.e., Regulated Price Plan, ICI, proceeds recycling).

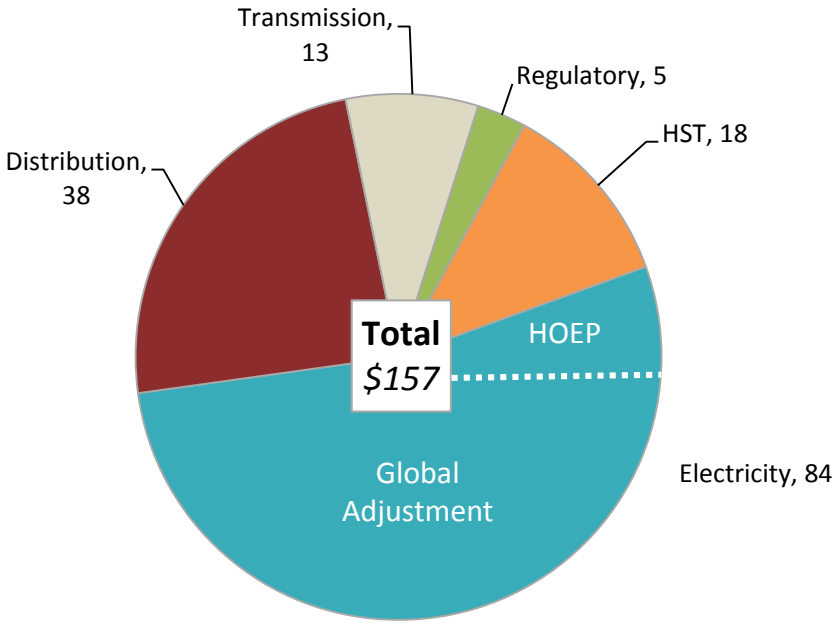
2) The impact of cap and trade would not be added to electricity bills until 2017 and varies per year over the course of the first compliance period. For illustrative purposes, the estimated average benefit of proceeds recycling is shown above.

Residential Electricity Prices

- There are approximately 5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of May 1, 2016 (750 kWh/month)



Source: OEB, Toronto Hydro

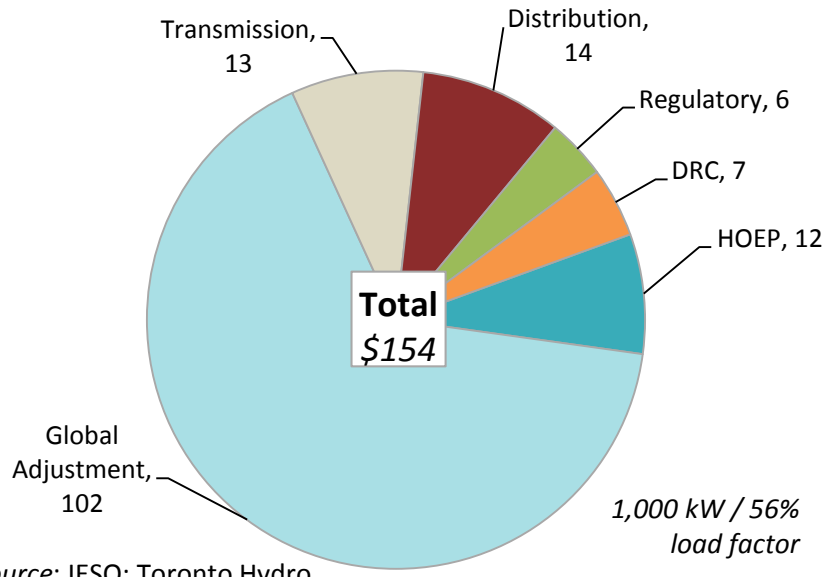
Commercial Electricity Prices

- There are approximately 400,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.

- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



Source: IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.

- Targeted pricing programs are currently not available for Class B consumers.

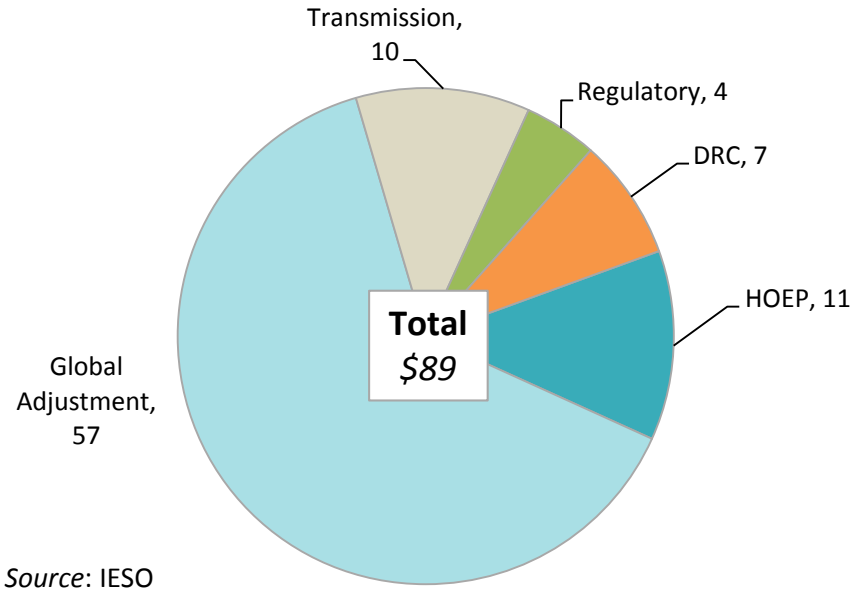
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



Source: IESO

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $64/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Sales Tax Treatment in Other Jurisdictions

Jurisdiction	Tax	Tax Paid by Business Consumers	Tax Paid by Residential Consumers	Comment
British Columbia	PST	Yes – 7%	No	• PST does not apply to residential energy, including electricity, acquired solely for residential use in a residential dwelling • BC's carbon tax does not apply to electricity bills.
Alberta	None	N/A	N/A	• Alberta does not have a provincial sales tax.
Saskatchewan	PST	Yes – 5% Except for electricity purchased to heat a building.	No	• PST does not apply to electricity purchased for use in a residential dwelling. • PST does not apply to electricity purchased for use in heating a building that is heated solely by the electricity.
Manitoba	PST	Yes – 8% Reduced rate of 1.6% applies to electricity used by a qualifying business to operate machinery	Yes – 8% Electricity purchased for mixed use, 80% of which is home heating, has a reduced rate of 1.4%. Electricity solely to heat the purchaser's home is exempt.	• Winnipeg also applies a tax of 2.5% on residential and 5% on commercial.
Ontario	HST	Yes (less ITC (input tax credits))	Yes – 8%	
Quebec	QST	Yes (less ITCs)	Yes – 9.975%	
Nova Scotia	HST	Yes (less ITCs)	Yes – 10% less provincially administered rebate.	• Rebate is equal to the provincial portion of the HST, and is administered similar to OCEB, but applies to many energy sources.
New Brunswick	HST	Yes (less ITCs)	Yes – 10%	
Prince Edward Island	HST	Yes (less ITCs)	Yes – 9% (10% beginning Oct 1, 2016)	
Newfoundland and Labrador	HST	Yes (less ITCs)	Yes – 10%	• Had a provincially administered Home Heating Rebate program until July 2015.
Federal	GST	Yes (less ITCs)	Yes – 5%	

Electricity Price Mitigation

Ministry of Energy

WORKING DRAFT

Date: September 14, 2016

Minister

Deputy Minister

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.

- Ontario has taken action to replace coal-fired generation with cleaner sources of energy. Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished clean generation, including nuclear, natural gas and renewables.
  - This investment represents about 40% of our current supply and has helped decrease electricity sector emissions by approximately 80%.

- Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.

- Since 2010, electricity prices have risen considerably, particularly for households and small businesses. Prices are forecast to continue to increase as additional generation comes online.

- The Ministry of Energy and Ministry of Finance were asked to develop a proposal to provide rate relief to Ontario electricity consumers.

Electricity Consumer Classes

- There are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 3 MW	Above 3 MW*
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

**** Note:** Consumers with peak demand between 3-5 MW in the manufacturing, mining, refrigerated warehousing, greenhouses and data-processing industries are currently eligible for Class A. All other 3-5MW consumers are Class B.

Current Rate Base Mitigation Programs

- Ontario has implemented several programs to help electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers;
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs; and
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.

- These programs have shifted costs amongst electricity consumer classes (i.e., residential, commercial and industrial) as shown in the table below:

Cost Shift Impact	2011	2012	2013	2014	2015	2016
Residential Bill ($/month for 750 kWh)	3.55	4.07	3.85	4.46	5.68	6.55
Commercial – Class B ($/MWh)	4.74	5.43	5.14	5.94	7.57	8.73
Industrial – Class A ($/MWh)	-20.97	-25.26	-22.38	-24.68	-32.56	-31.55

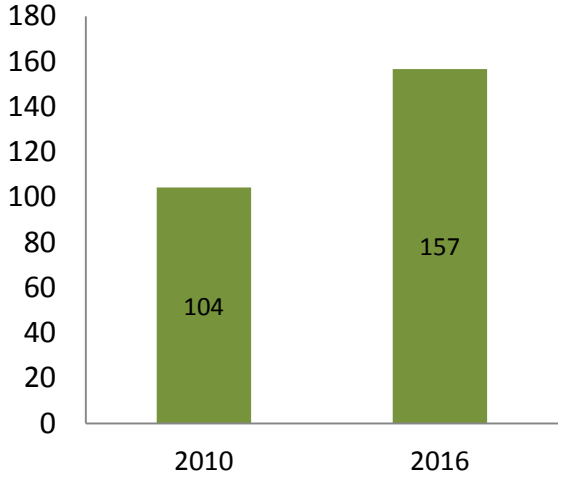
Note: Negative values indicate a benefit; positive values denote an incremental charge.

Prices by Electricity Consumer Class

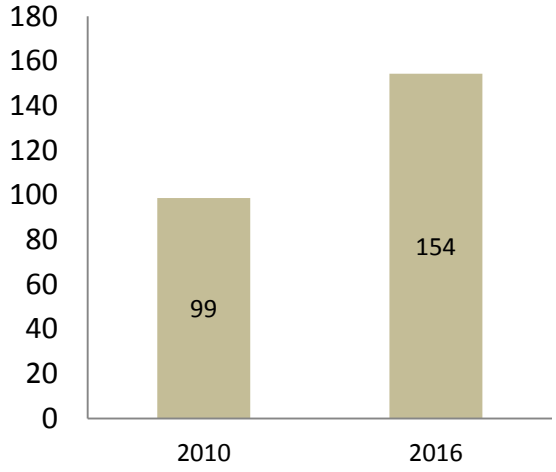
- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50% and rates paid by commercial have increased by 56%.

- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers.

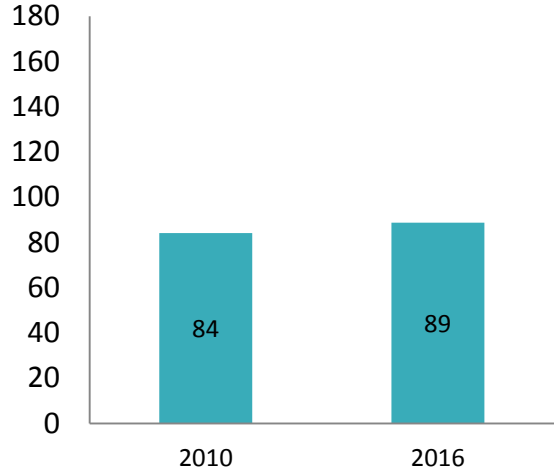
Typical Residential Bill (750/kWh per month)



Typical Class B (Commercial) Price ($/MWh)



Typical Class A (Industrial) Price ($/MWh)



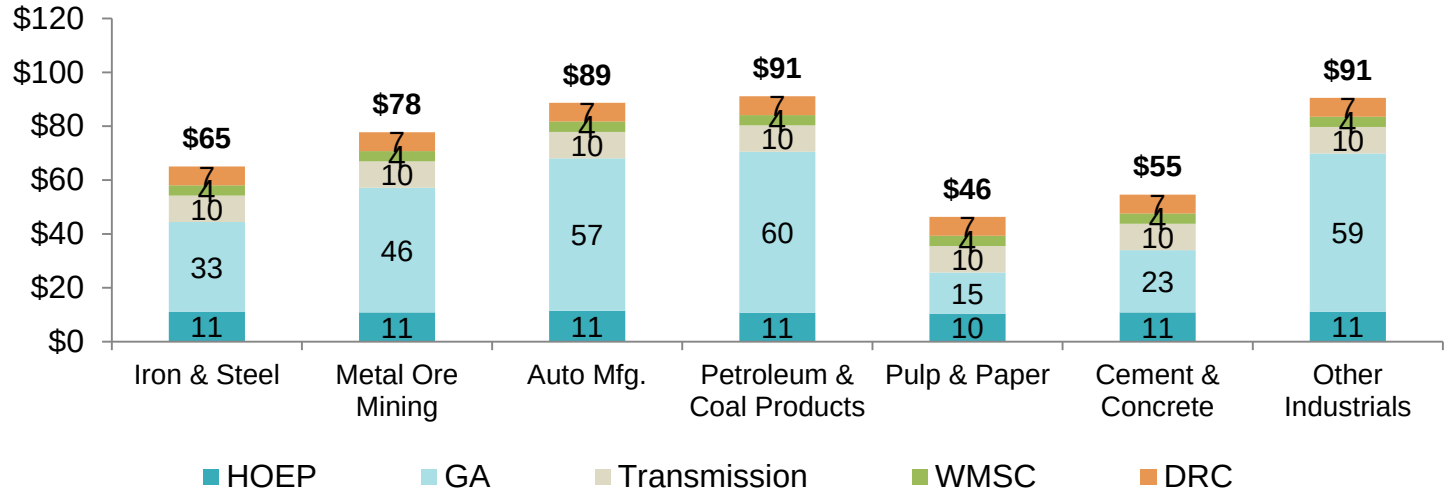
Note: 2016 represents May 2016 for residential and YTD June 2016 for commercial and industrial.

Industrial Electricity Prices Vary by Sector

- While Class A (industrial consumers) benefit from participation in the ICI program, there is a significant amount of variability in the ability to shift away from peak periods across customer classes, impacting the savings achieved.

- The below chart shows the prices paid in 2015 across a number of industrial sectors. Consumers in the north that receive rebates under the Northern Industrial Electricity Rate Program (NIERP) achieve rates that are $20/MWh lower than the below.

Average all-in Class A, Transmission-connected Electricity Prices by Industrial Sector (estimated $/MWh), Year-to-Date June 2016



Note: HOEP = Hourly Ontario Energy Price, GA = Global Adjustment, WMSC = Wholesale Market Service Charges, DRC = Debt Retirement Charge

Recent Actions to Bend the Cost Curve

- Since 2013, a number of actions have been taken to reduce overall electricity system costs:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Removing an expected $3.3 billion in Large Renewable Procurement (LRP) costs relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast, based on the results of the first phase of the LRP.
- Despite these actions to reduce system costs, electricity rates continue to increase for consumers.

Rate Mitigation

- The 2016 Budget committed to offset the impact of cap and trade in Ontario for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers. The Climate Change Action Plan (CCAP) committed $1.3 billion from the Greenhouse Gas Reduction Account (GGRA) over the first compliance period (2017-2020).

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:

  - **Tax-based Lever:**
    - Provide an on-bill rebate funded from the tax-base to all consumers or specific classes of consumers (i.e., the Ontario Clean Energy Benefit (OCEB) provided a rebate for eligible electricity consumers).

  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.

  - **Cap and Trade Proceeds Lever:**
    - Redirect cap and trade proceeds to offset the cost of existing initiatives that help reduce greenhouse gas (GHG) emissions (i.e., the CCAP committed to offset the impact of cap and trade and to keep electricity rates affordable).

Rate Mitigation Proposal

- The Ministry of Energy is proposing to implement the following electricity price mitigation initiatives. The approach identified below would provide relief across all electricity consumer classes:

  1) Provide an 8% rebate equal to the provincial portion of HST to consumers eligible for the Regulated Price Plan* (i.e., residential, small business and farms) and update the Rural and Remote Rate Protection (RRRP) program, to provide relief to rural customers; and

  2) Expand ICI eligibility by lowering the threshold to 1 MW, to provide support to Class B electricity consumers (i.e., commercial, institutional and small industrial) and redirect cap and trade proceeds to commercial and industrial electricity consumers to provide a modest reduction in rates.

- The following slides provide additional information on the above initiatives.

***Note:** Eligibility for the 8% rebate would be similar to OCEB and include some customers not on the Regulated Price Plan (RPP), such as Independent Power Authority consumers and consumers that have opted-out of RPP. ~~See Appendix for discussion on HST considerations.~~

Rate Mitigation Proposal – Illustrative Benefits*

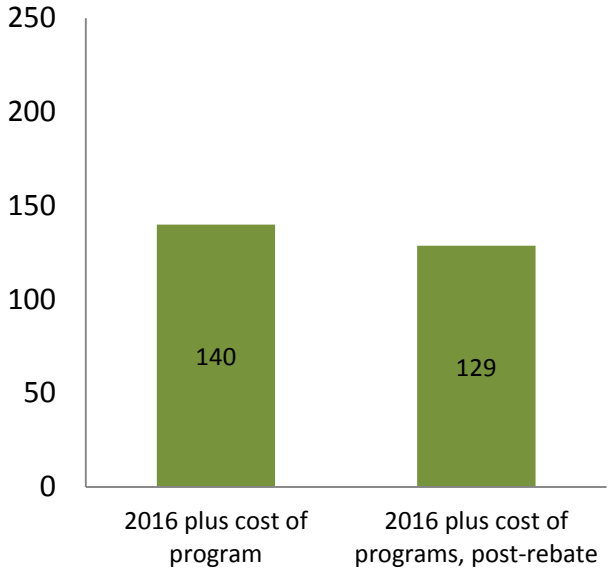
	Average Annual Fiscal Impact	Average Annual Greenhouse Gas Reduction Account (GGRA) Proceeds Impact	Regulated Price Plan (Residential) Benefit		Class B (Commercial) Benefit	Class A (Industrial) Benefit	
			Average (750 kWh/ month)	*Rural*** (1000 kWh/ month)*		*Existing*	*New*
• 8% rebate to Regulated Price Plan eligible consumers • ICI Expansion • RRRP Update • Proceeds Recycling	$1.0 billion annually	$0.27 billion annually (Reduction of $0.06 billion annually or $0.24 billion total from the CCAP commitment)	-$11/ month (-8%)	-$45/ month (-20%)	-$3/MWh (-2%)	-$3/ MWh (-3%)	Up to -$52/MWh (-34%)

- **Notes:** The above benefits do not include the cost of ICI expansion, and the RRRP update (total impact of $1.74/MWh).

The impact of cap and trade would not be added to electricity bills until 2017 and the impact of ICI would not be added to bills until 2018 due to the time required to implement the expansion and for billing changes. Proceeds recycling is an estimated average over the first compliance period (2017-2020).

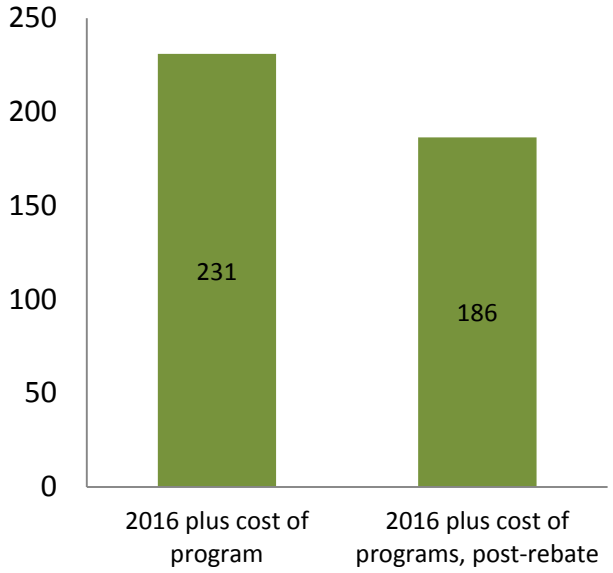
Rate Mitigation Proposal – Illustrative Bill Impacts by Electricity Consumer Class

Typical Residential Bill
750 kWh per month, 8% only



The pre-tax impact is a 8% reduction.

Rural (R2) Residential Bill
1,000 kWh per month, 8% and RRRP Update

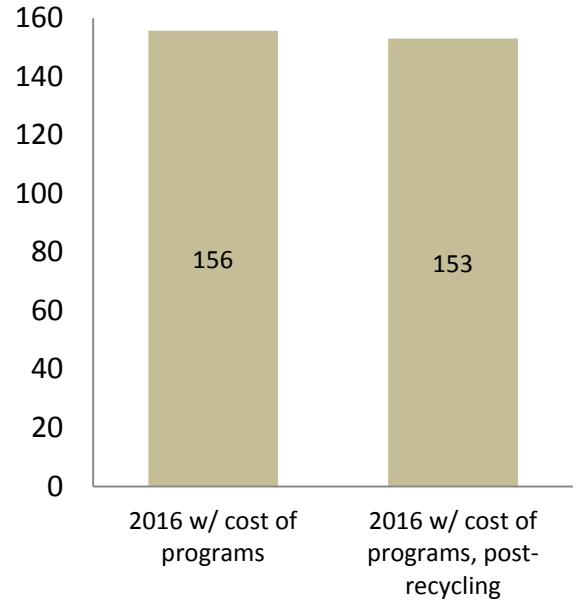


The pre-tax impact of the rate mitigation initiatives is a 20% reduction.

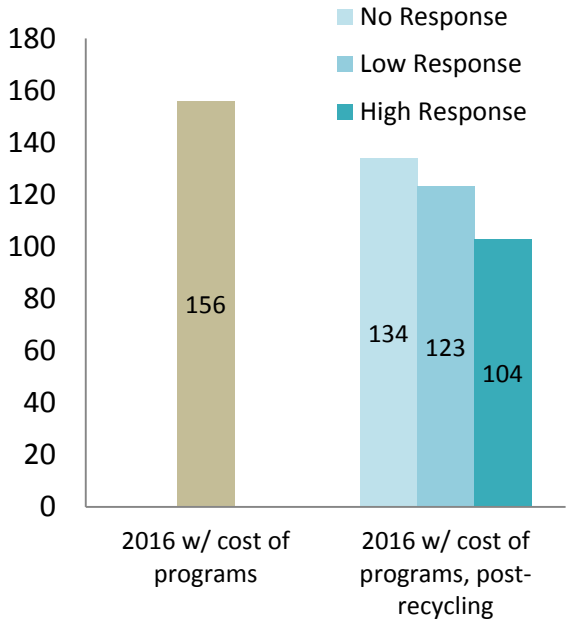
Note: Residential bills reflect electricity rates as per the Regulated Rate Plan (RRP) which came into effect on May 1, 2016.

Rate Mitigation Proposal – Illustrative Bill Impacts by Electricity Consumer Class (cont'd)

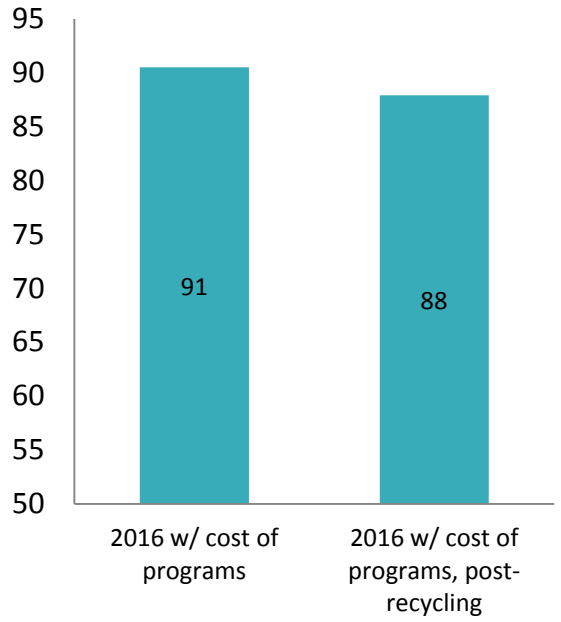
Typical Class B (Commercial) Price ($/MWh)



Typical New Class A Price ($/MWh)



Typical Class A (Industrial) Price ($/MWh)



Class B: The benefit is a 2% reduction.

New Class A: The ~~net impact~~ benefit is a reduction of 14% to 34%.

Existing Class A: The ~~net impact~~ benefit ~~of~~ the rate mitigation initiatives is a 3% reduction.

Note: The impact of cap and trade would not be added to electricity bills until 2017 and the impact of ICI would not be added to bills until 2018 due to the time required to implement the expansion and for billing changes. However, both the impact of cap and trade and ICI have been included above for illustrative purposes.

1) Regulated Price Plan Eligible Consumers and Rural or Remote Rate Protection Update

8% Rebate to Regulated Price Plan Eligible Consumers

- Legislation/regulation will be introduced to provide a rebate of 8% to consumers eligible for the Regulated Price Plan. The below table indicates which consumers would or would not receive the benefit.
  - This would be equivalent to the provincial portion of the HST*.

Eligible for the 8% rebate (< 50 kW or < 250,000 kWh/year)	**Not eligible for the 8% rebate** (> 50 kW or > 250,000 kWh/year)

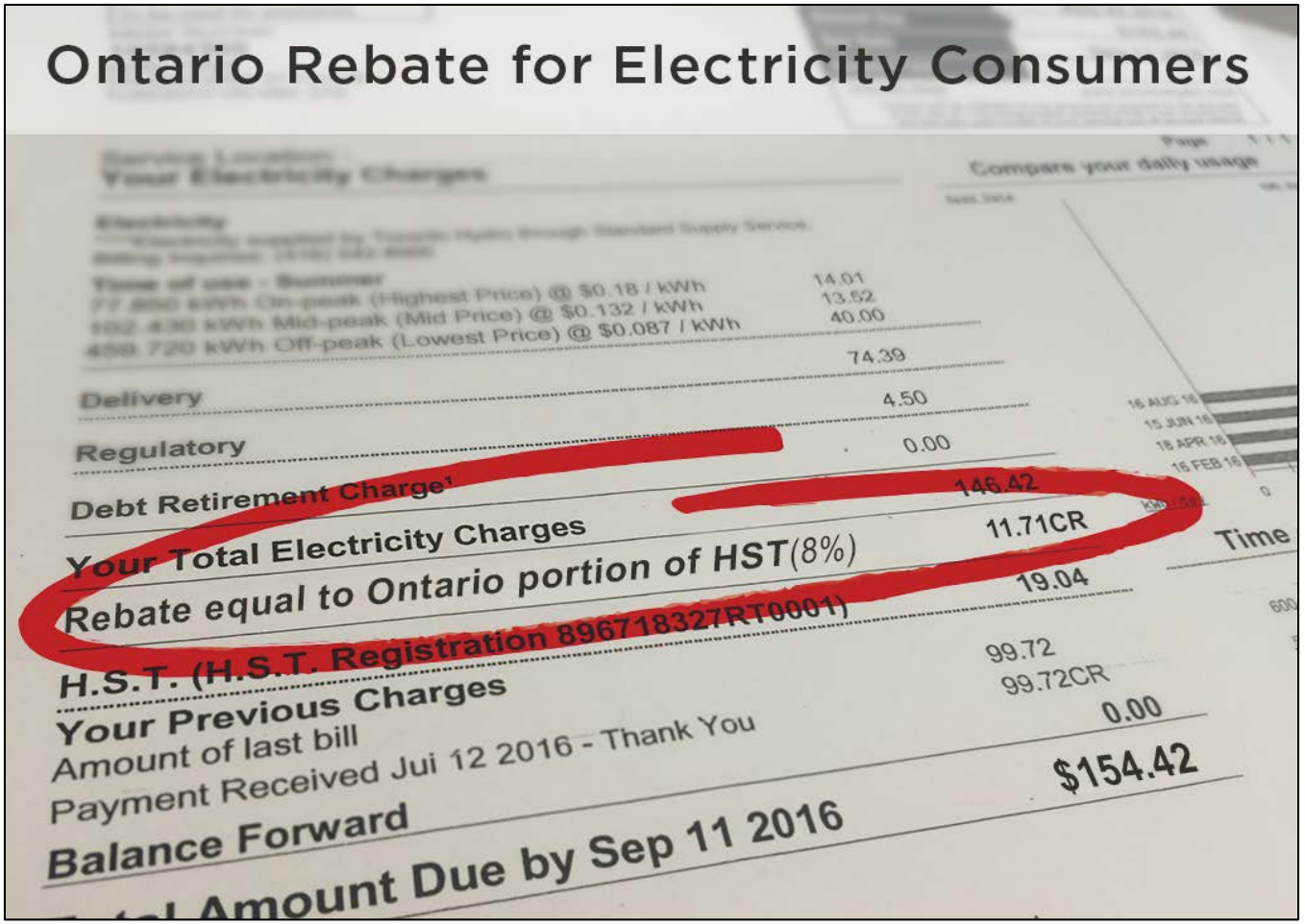
• Residential Regulated Price Plan consumers
• Residential retail consumers
• Multi-unit residential buildings and other facilities used as residential rental units
• Long-term care homes and school residences
• Regulated Price Plan eligible farms
• Small businesses
  − Coffee / snack retailer
  − Convenience store
  − Apparel store
  − Hair salon
  − Small insurance office
	• Class A consumers
	  − Manufacturer
	  − Large grocery store
	  − Mines
	  − Auto assembly plants
	• Class B consumers (except farms that have opted out of the Regulated Price Plan)
	  − Commercial offices (low rise)
	  − Hotel
	  − General warehousing

- Those ineligible to receive the 8% rebate will benefit from one or more of the other initiatives under this proposal (e.g., ICI expansion, proceeds recycling, etc).

***Note:** An HST exemption would require federal approval. Engaging in discussions with the federal government would take time and would likely result in not meeting the targeted implementation date.

To be updated by Comms

Illustrative Electricity Bill Mock-Up



Note: Final bill presentment pending submission to LRC.

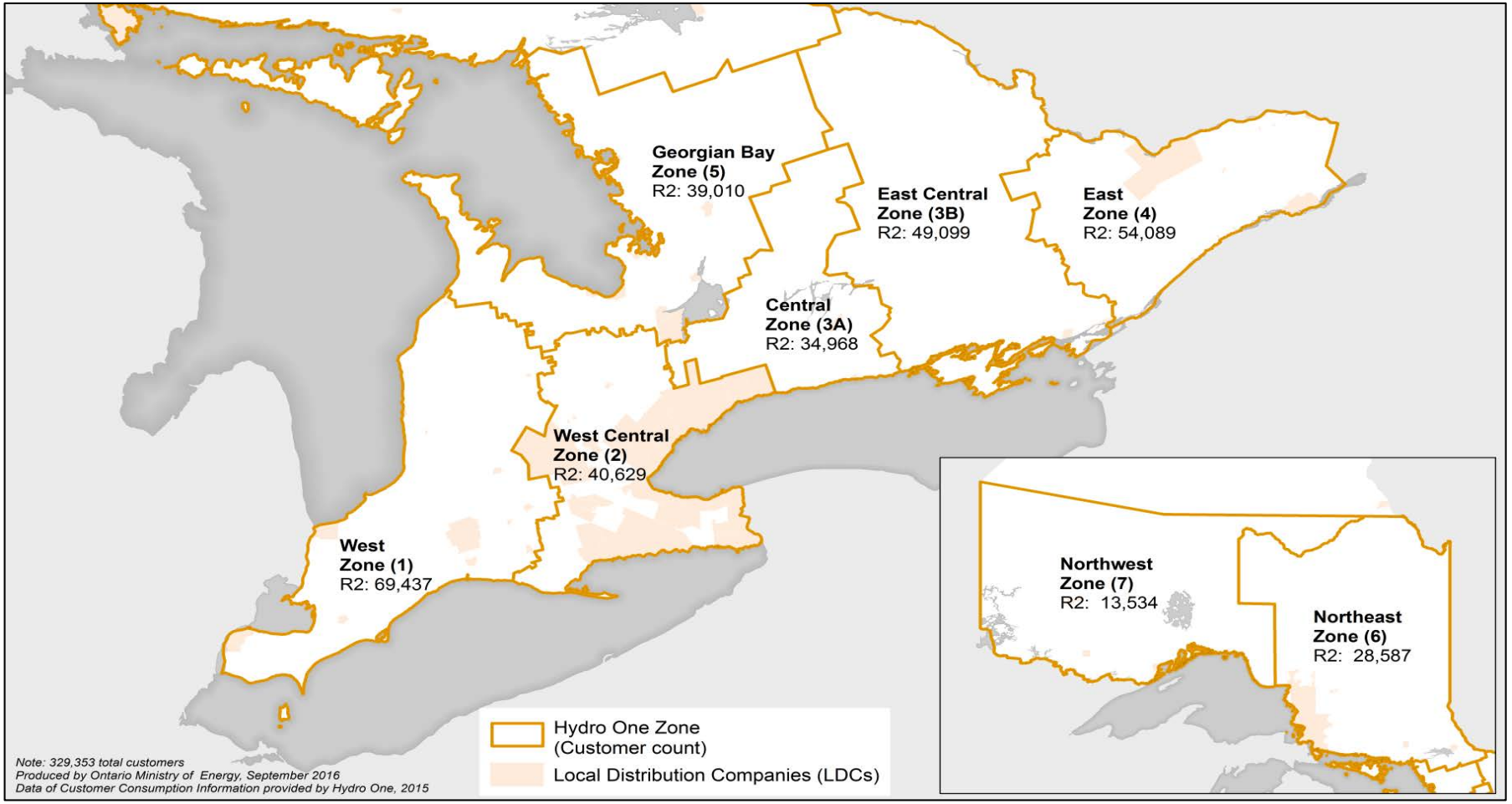
Rural or Remote Rate Protection (RRRP) Update

- ENERGY is proposing to amend O.Reg 442/01 to provide an additional $110 million in rate protection to eligible rural or remote electricity consumers, and consider options to periodically adjust the amount of rate protection available to these consumers going forward.

- RRRP is a rate-based funded ~~subsidy~~ program that helps offset the higher costs to distribute electricity to Ontario residents who live in rural or remote locations all across the Province.
  - Today, RRRP is a $175-million program. For an average residential customer, the cost of supporting RRRP is roughly $1 per month. For other customers, the cost can range from $65 for a greenhouse to $8,000 for a medium industrial.
  - The majority of the program funding ($125.5 million) is provided ~~subsidy~~ to Hydro One's lowest-density customers – classified as R2 customers. There are approximately 329,000 R2 customers. The current program provides a rebate of $31.50. The proposed update to the program would increase the benefit to $60/month.
  - RRRP funding supporting R2 customers has been capped at the current level since 2004. As a result, the impact of its assistance has diluted over time as electricity costs have risen.

- An additional $110 million in program funding would see an increased benefit ~~subsidy~~ of ~$28 /month. This would bring R2 bills in line with Hydro One R1 (medium density) bills at 1000kWh.
  - This would increase the R2 portion of the RRRP to $235 million with a monthly impact on an average residential consumer of ~$0.60.
  - The RRRP could be indexed at inflation or "trued up" on a regular basis to ensure the benefit ~~subsidy~~ remains constant.

Rural or Remote Rate Protection (RRRP) Update – R2 Customers by Region



2) Expand Industrial Conservation Initiative and Redirect Cap and Trade Proceeds

Industrial Conservation Initiative (ICI) Expansion

- ENERGY is proposing to amend O. Reg. 429/04 to expand ICI eligibility. The base setting period for the expanded program would begin in 2017, with the benefit seen by consumers starting in 2018.

- Currently, electricity consumers over 5 MW and consumers from 3-5 MW in certain energy intensive sectors are eligible for ICI (i.e., approximately 300 Class A consumers).
  - Consumers participating in ICI include the following sectors: pulp and paper, auto, manufacturing, chemicals and mines.

- ICI would be expanded so that all consumers over 1 MW are eligible for the program, which would:
  - Reduce electricity peak demand and electricity system costs by incenting more consumers to lower their electricity demand during peak periods;
  - Reduce electricity bills for new ICI participants who are able to reduce their electricity demand during peak demand periods; and
  - Increase the electricity bills for non-ICI participants to ensure full cost recovery in the electricity system.

ICI Expansion – Projected Impact

	Benefit to New ICI Participants	System Benefit	Financial Impact	Residential Bill Impact
	Bill Savings	Peak Demand Reduction (MW)	GA shifted to Class B ($M)	
Short-term	Up to 21%	80	47	Increase of $0.42/month
Long-term	Up to 34%	165	82	Increase of $0.74/month

- The different impacts refer to the amount of time it takes for new Class A consumers to respond to the expanded ICI eligibility
  - Short-term refers to the expected impact once ICI billing begins for new Class A consumers (one year after expanded eligibility takes place).
  - Long-term is the expected impact once new Class A consumers have had time to significantly change their behaviour and investment decisions in response to the ICI.

- The bill impacts assume a 25% uptake, which would increase Class A consumption by roughly 3 TWh, leaving an estimated 54 TWh in Class B that are either between 0.05-1 MW or choose not to opt in to ICI. This would represent an estimated 300 additional consumers in ICI, though they would represent a much smaller share of the consumption than the 300 consumers currently participating.

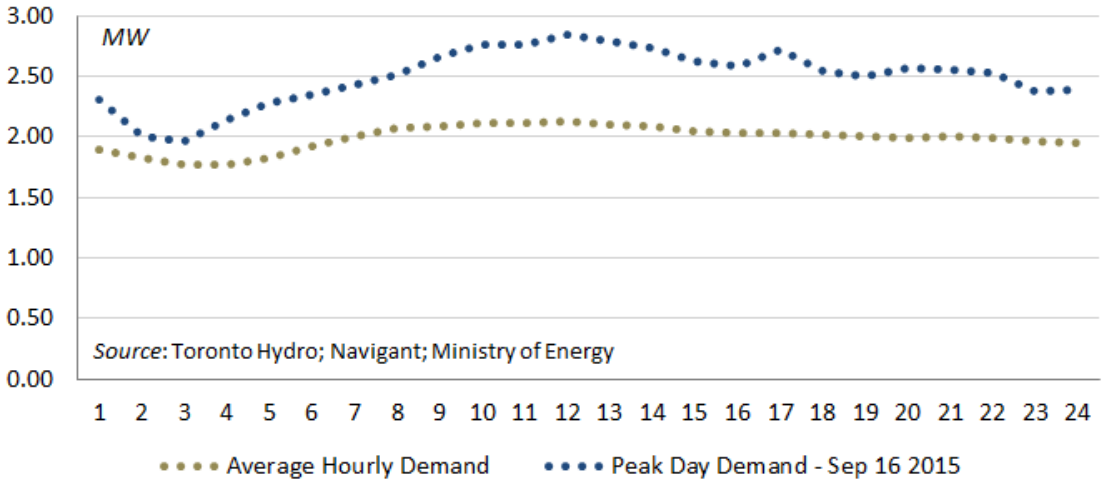
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
  - A few examples of companies that would become eligible under such an expansion would be Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.

ICI Expansion – Illustrative Example of Newly Eligible Consumer

- Plastics manufacturers, such as Poly Five Plastics in Toronto, are among the consumers that would become eligible if the threshold was lowered.
- Such manufacturers fall under NAICS* code 32 and have relatively flat load profiles, reflecting around the clock production. This means they would be beneficiaries of ICI even with no change in consumption behaviour.
- Companies like Poly Five Plastics could expect to see greater savings if they are willing and able to respond to the higher prices during high demand hours.

Typical Demand Profile, 2-3 MW Consumer

Manufacturer, NAICS Code 32 - Nov 2014 to Oct 2015



Illustrative Bill Savings, 2-3 MW Consumer

	Status Quo	*No Price Response*	*Short Term Response*	*Long Term Response*
	Class B	**Class A**	**Class A**	**Class A**
GA	75.26	58.06	43.55	32.03
Total bill	**126.28**	**109.09**	**94.58**	**83.06**
Savings		*-14%*	*-25%*	*-34%*

Source: Navigant; Ministry of Energy

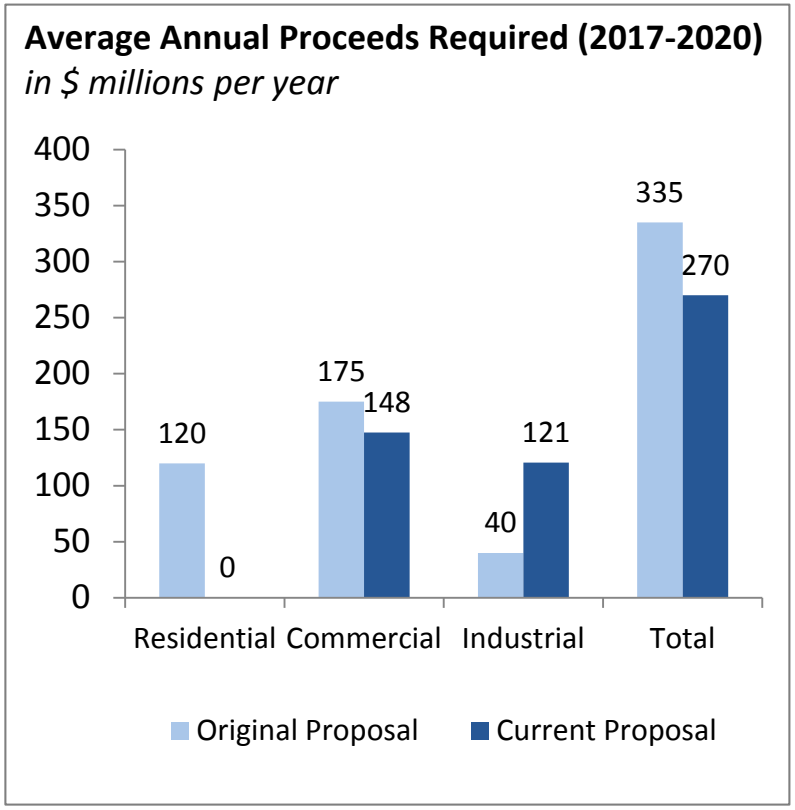
*** Note:** North American Industry Classification System (NAICS) is the standard used by statistical agencies in classifying business establishments.

Redirect Cap and Trade Proceeds Recycling

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial consumers, while also providing a benefit of up to $2 per month for residential consumers.
  - To meet the 2016 Budget commitment, the Climate Change Action Plan (CCAP), committed $1.3 billion from the GGRA over the first compliance period (2017-2020).

- However, providing a 8% rebate to Regulated Price Plan consumers would allow for GGRA proceeds previously committed to residential consumers to be redirected to other consumers classes and/or GHG reduction initiatives in the fiscal plan.

- The current proposal would provide additional recycling to commercial and industrial consumers, while requiring an estimated $60 million less per year (i.e., a reduction of $0.24 billion over the first compliance period).



Note: The original proposal was to offset the impact of cap and trade via GA to the average industrial, and would provide a benefit to commercial and residential consumers. Current proposal would recycle proceeds volumetrically to industrial and commercial consumers.

Redirect Cap and Trade Proceeds Recycling

- Redirecting cap and trade auction proceeds to lower the cost of electricity would offset consumers' contributions to non-emitting generation.

- Redirecting helps pay for committed investments/initiatives which reduce GHGs (e.g., non-emitting generation and conservation programs).
  - Due to the long-term nature (typically 20 years) of electricity generation contracts and conservation programs, the associated costs are ongoing and are expected to be about $7 billion dollars annually during the first cap and trade compliance period. These costs will continue well beyond the timelines described in the CCAP.

- Redirecting cap and trade auction proceeds volumetrically to Class B (commercial) and Class A (industrial) consumers maintains the incentive to shift consumption from on-peak to off-peak hours.

- Using cap and trade auction proceeds to lower the cost of electricity would make it more competitive with traditionally cheaper fossil fuels.

- By using the proceeds to lower the cost of electricity, there is potential to incent fuel-switching away from fossil fuels toward much cleaner grid-connected electricity and support CCAP goals of electrification.

Considerations

Implementation

- ~~New legislation would be required to enable the 8% rebate proposal. Legislation would closely mirror the Ontario Clean Energy Benefit Act, 2010.~~ On September 15, 2016, ENERGY is proposing to introduce the *Ontario Rebate for Electricity Consumers Act, 2016*.
  - If passed, the legislation would require a general regulation.
  - Amendments would also be required to various regulations to expand ICI and RRRP.

- On-bill rebate delivery would likely require adjustments to LDC billing systems, which could impact delivery costs and timelines. ENERGY (possibly through Ontario Energy Board) will consult with LDCs to accurately assess these impacts once the program has been announced.
  - In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
  - Timing concerns may be alleviated by allowing LDCs to provide retroactive rebates if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.

- Detailed messaging on bills (for "low-volume" consumer bills) could be implemented by amending O. Reg. 275/04 (made under the Ontario Energy Board Act, 1998).
  - The rebate would not be directly linked to HST.
  - With electricity invoices containing multiple line items and LDC bill presentment varying widely, direction on rebate presentment will need to be flexible to allow LDCs to incorporate easily while ensuring government-preferred branding and messaging is conveyed.

- While the impact of cap and trade would be added to electricity bills as of January 2017, the offsetting effect of proceeds recycling may not occur immediately depending on implementation and potential alignment with the first auction expected in March 2017.
  - Should there be low demand for carbon allowances, auction proceeds would be less than the amount projected in the CCAP. This could mean a short-fall for proceeds recycling as proposed. However, natural gas utilities are expected to purchase allowances quarterly equal to their emissions.

- ENERGY will need to continue to consult with the Independent Electricity System Operator (IESO), Ontario Energy Board (OEB) and LDCs regarding implementation of proceeds recycling.

Fiscal

- The Climate Change Action Plan (CCAP) committed about $1.3 billion over four years for electricity mitigation for industrial, commercial and residential consumers from GGRA proceeds.
  - The current rate mitigation proposal requires approximately 20% less in proceeds, saving approximately $0.24 billion relative to the CCAP commitment over the first compliance period (2017-2020).

- The 8% rebate is expected to cost about $1 billion per year (i.e., $4 billion from 2017-2020), representing an additional pressure on the fiscal plan.
  - Consideration could be given to allocating the $0.24 billion in reduced proceeds required towards other existing initiatives in the fiscal plan that also reduce greenhouse gas (GHG) emissions, thereby providing an overall fiscal plan offset.
  - If cap and trade auctions are under-subscribed, the $0.24 billion ~~additional funds~~ may not be available for reallocation to the fiscal plan.

- In the absence of any offset strategies, the full cost of the rate mitigation approach would add to the pressures and risks that need to be managed in order for the government to balance the budget in 2017-18 and stay balanced in 2018-19 and beyond.

Legal

- In order to avoid characterization as an unconstitutional tax, a non-tax levy must have a sufficient nexus between those who pay and the regulatory scheme in the sense that those who pay have caused the need for or benefit from the regulatory scheme. Although the case law is not developed on the extent to which some regulated actors can be required to subsidize others, risk is reduced to the extent that any cross-subsidization serves true regulatory goals rather than revenue re-distribution goals.

- HST Rebate (shift costs from rate-base to tax base by providing a rebate equal to the provincial portion of HST):
  - Providing the contemplated rebate under the proposed Bill does not, in and of itself, give rise to legal issues. As policy direction is given on the specifics of supporting regulations, any associated legal risks can be identified.

- ICI Expansion (shift costs within rate-base by expanding eligibility for the ICI program to consumers of >1 MW):
  - Shifting costs to some consumers to lower rates for others without more carries the risk that the charge would be characterized as an unconstitutional tax. To establish that the charge is legitimate, it must be established that the purpose and effect of the charge is to facilitate the maintenance of a financially viable electricity system by way of load management or some other feature under which those who are subsidized provide an overall system benefit enjoyed by those who subsidize them.

- RRRP Update (shift costs within the rate-base by increasing the RRRP benefit paid to rural and remote customers):
  - Increasing the amount of revenue devoted to the RRRP or expanding the scope of consumers eligible for the program does not raise new legal risk. There is a good argument that the RRRP is a regulatory charge, as it socializes some of the costs of distributing electricity to rural consumers. Overall the risk that the RRRP would be characterized as a tax is assessed as moderate (meaning equally good arguments on both sides).

- Cap and Trade Proceeds Recycling (reduce impact on rate base and tax base by directing cap and trade auction proceeds to industrial consumers):
  - To be characterized as regulatory charges under the cap and trade program, auction revenues should be spent on programs that reduce GHGs.

Communications

- Public high-profile communications would coincide with introduction of legislation (September 2016).
  - Stakeholder outreach/technical briefings with LDCs, Ontario Chamber of Commerce, AMPCO, OEB low-income table, AMO, etc.
  - Echo public announcements in southwest and north; proactive provincial/local media.

- **Positioning:**
  - A fiscally prudent plan to benefit all ratepayers in a lasting, meaningful way.
  - Rural customers will receive the largest single rate relief ever.
  - Businesses across Ontario will have even more opportunity to be competitive and manage their energy costs.

- **Issues Considerations:**
  - Significant benefit for rural and remote residential customers; net gain for all residential customers.
  - More complex to communicate, but can be presented as a full plan that includes reforms and improvements to the system.
  - Consistent with cap-and-trade commitment that no business sector will be left worse off, though small businesses outside ICI will benefit the least.

Pending Update

Ontario

Key Messages

- We are taking unprecedented action to help people in their everyday lives.
- Residential ratepayers and other RPP eligible ratepayers will receive an eight per cent rebate on their electricity bill, equivalent to the provincial portion of the HST.
- Modernizing the RRRP will benefit 330,000 families in rural Ontario with significant reductions to their electricity bills – $28 a month, in addition to the eight per cent rebate.
- Over a thousand more Ontario businesses will be eligible to benefit from the ICI program, helping them stay competitive and grow.
- These actions will assist over five million families, farms and small businesses across Ontario.
- These actions today join our many existing initiatives too help keep electricity in Ontario clean, reliable and affordable.

Proposed Cabinet Minute

Cabinet agreed that:

1. ENERGY implement electricity price mitigation for residential, commercial and industrial consumers through the following:

    i. Provide a rebate of 8% on the pre-tax cost of electricity for all electricity consumers eligible to be billed under the Ontario Energy Board's Regulated Price Plan (RPP); and any other consumers who would be eligible for RPP if their electricity account was with a licensed distributor.

    ii. Increase the total amount of rate protection available to R2 low density electricity consumers under the Rural or Remote Rate Protection Program (RRRP) by increasing the subsidy by $110 million from its current level of $127 million which has been capped since 2004.

    iii. Implement a mechanism to periodically adjust the total annual amount of rate protection available to R2 low density electricity consumers under the RRRP, effective on or after January 1, 2018.

    iv. Expand eligibility for participation in the Industrial Conservation Initiative (ICI) to smaller industrial, institutional and commercial customers by lowering the eligibility threshold to 1 MW and removing restrictions on eligible sectors.

Proposed Cabinet Minute (cont'd)

2. ENERGY seek necessary TB/MBC approvals. **[TBD]**

3. ENERGY seek approvals for the proposed *Ontario Rebate for Electricity Consumers Act, 2016* which would, subject to the Legislature's approval of the Act, include the following elements:
   i. The rebate would be available starting January 1, 2017;
   ii. The legislation would specify the types of costs to which the rebate would or would not be applied, with authority to make changes by regulation;
   iii. The legislation would address invoicing requirements, including authority to prescribe how the rebate is to appear on consumers' electricity bills;
   iv. The legislation would include authority to prescribe the way in which the rebate is to be flowed through to consumers, and the way in which electricity vendors providing the rebate are to be reimbursed;
   v. The legislation would include record-keeping requirements for electricity vendors and other prescribed persons;
   vi. The legislation would include inspection powers for inspectors appointed by the minister of Finance, including powers related to the recovery of overpayments; and
   vii. The legislation would include consequential amendments to the *Ontario Energy Board Act, 1998* and the *Ontario Clean Energy Benefit Act, 2010*; and
   viii. The legislation would provide for regulation-making authority to establish a limitation period for ceasing payments and reimbursement based on past entitlement. Similar amendments would be provided for the *Ontario Clean Energy Benefit Act, 2010* but would allow the ceasing of all payments and reimbursements after a prescribed date

Proposed Cabinet Minute (cont'd)

4. ENERGY to report back to LRC and Cabinet for approval of any supporting regulations under the proposed *Ontario Rebate for Electricity Consumers Act, 2016*, and with other complementary regulatory amendments.

5. ENERGY notes the following amendments:

   i. Amendments to Ontario Regulation 429/04 (Adjustments Under Section 25.33 of the Act) made under the *Electricity Act, 1998* to lower the Industrial Conservation Initiative (ICI) threshold to 1 megawatt and require electricity consumers and market participants between 1 MW and 5 MW to opt in.

   ii. Amendments to Ontario Regulation 442/01 (Rural or Remote Electricity Rate Protection) made under the Ontario Energy Board Act, 1998, to increase support through the Rural and Remote Rate Protection Plan to R2 low density electricity customers and provide for a periodic adjustment mechanism.

6. ENERGY work with MOECC to recycle an estimated annual average of $270 million of Cap and Trade auction proceeds from the Greenhouse Gas Reduction Account for non-RPP commercial and industrial electricity consumers over the first compliance period (2017-2020) through a volumetric rebate mechanism.

7. ENERGY and MOF work with Cabinet Office, Premier's office to develop a communications plan

Proposed Cabinet Minute (cont'd)

Cabinet approved version of the proposed *Ontario Rebate for Electricity Consumers Act, 2016* for introduction, subject to the following:

1. The Office of Legislative Counsel is authorized to prepare a French version and to make minor adjustments to the English version, for the purpose of ensuring consistency between the two versions and making other improvements or correcting mistakes discovered in the translation process.

Since we're going to LRC, not sure we need this.

Appendix

Illustrative Bill Impacts

	Current Bill (after cost of new programs, before tax)	Current Rate mitigation initiatives*	New Rate Mitigation initiatives	New Bill (after cost of new programs, before tax)
Average Residential (Toronto – 750 kWh/month)	~~$139~~ $140 /month	N/A	8% pre-tax rebate: - $11	~~$128~~ $129 /month
Rural Residential (Hydro One R2 – 1000 kWh/month)	~~$229~~ $231 /month	RRRP: –$32	8% pre-tax rebate + Updated RRRP: - $45	~~$185~~ $186 /month
Low-income Residential ** (Toronto – 750 kWh/month)	~~$101~~ $102 /month	OESP: -$38	8% pre-tax rebate: - $8	~~$93~~ $94 /month
Small Business (Toronto – 403,200 kWh/month)	~~$148~~ $150 /MWh	N/A	8% pre-tax rebate: - $12/MWh	~~$136~~ $138 /MWh
Small Farm (Hydro One R1 – 4,000 kWh/month)	~~$202~~ $204 /MWh	N/A	8% pre-tax rebate: - $16/MWh	~~$186~~ $188 /MWh

***Note:** Some residential consumers can also receive tax credits based on income, age and geography (Northern Ontario Energy Credit and Ontario Energy and Property Tax Credit). These credits are delivered through the Trillium Tax Credit and can be as high as $1,332 per year for a family.
** income of less than $28,000, family of 4.

Totals may not add due to rounding.

Illustrative Bill Impacts (cont'd)

	Current Rate	Current Rate mitigation initiatives*	Cost of new initiatives (RRRP and ICI)	New Rate Mitigation initiatives	Net Impact,	New Rate,
Large Institutional (Toronto – distribution-connected, 10 MW)	$108 /MWh	ICI: -$49/MWh	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh (2017-2020 average)	-$0.90 /MWh (-1%)	$107 /MWh
Large Industrial (Timmins – transmission-connected, 10 MW)	$69 /MWh	ICI + NIERP: -$69/MWh	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh	-$0.90 /MWh (-1%)	$68 /MWh
Small Industrial – opt-in to ICI (Toronto – 2 MW)	$152 /MWh	N/A	$1.74 /MWh	Proceeds Recycling + ICI: -$53.90/MWh	-$52 /MWh (-34%)	$100 /MWh
Large Commercial – does not opt-in to ICI (Toronto – 2 MW)	$152 /MWh	N/A	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh	-$0.90 /MWh (-1%)	$151 /MWh
Small Institutional (Toronto – 500 kw)	$154 /MWh	N/A	$1.74 /MWh	Proceeds Recycling: -$2.60/MWh	-$0.90 /MWh	$153 /MWh

Notes:

1) There is the potential for a consumer eligible for the Regulated Price Plan to opt-out of the Regulated Price Plan to opt-in to Class A and receive all three benefits (i.e., Regulated Price Plan, ICI and proceeds recycling).

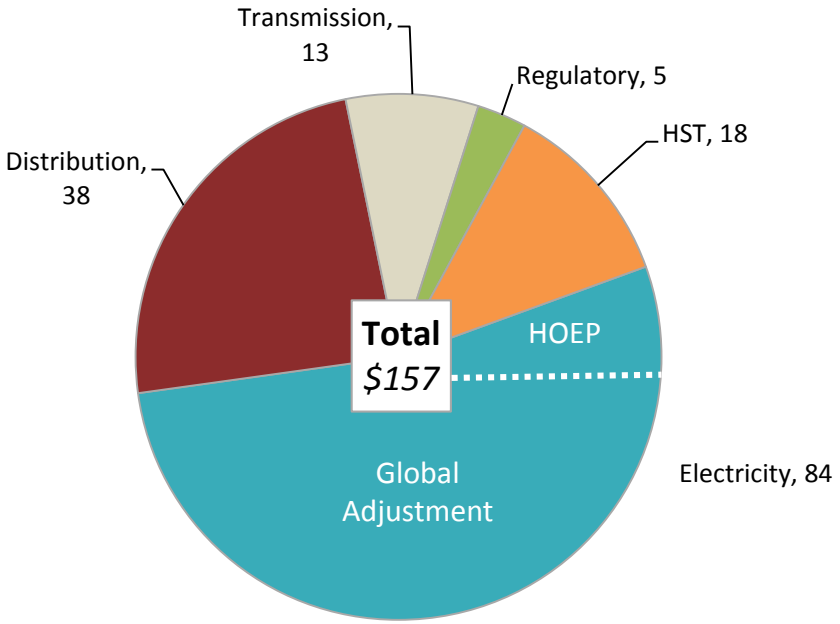
2) The impact of cap and trade would not be added to electricity bills until 2017 and varies per year over the course of the first compliance period. For illustrative purposes, the estimated average benefit of proceeds recycling is shown above.

Residential Electricity Prices

- There are approximately 5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of May 1, 2016 (750 kWh/month)



Source: OEB, Toronto Hydro

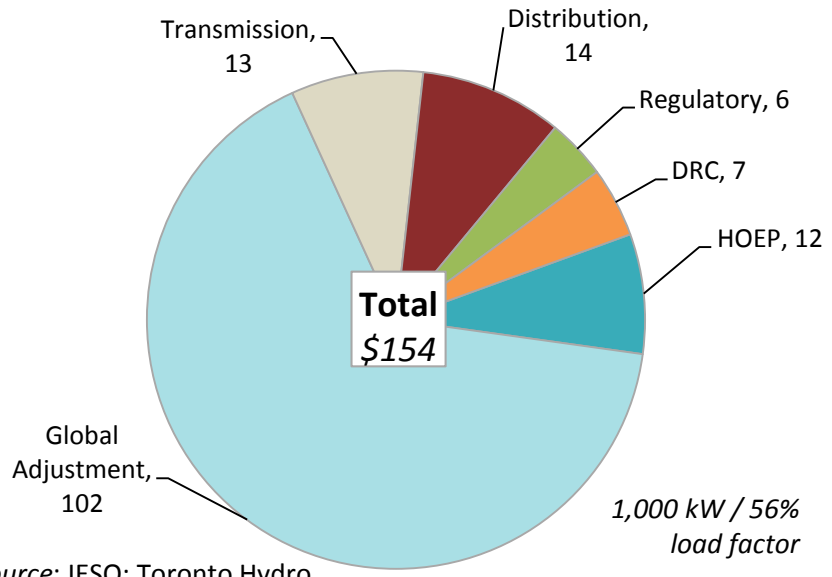
Commercial Electricity Prices

- There are approximately 400,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.

- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



Source: IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.

- Targeted pricing programs are currently not available for Class B consumers.

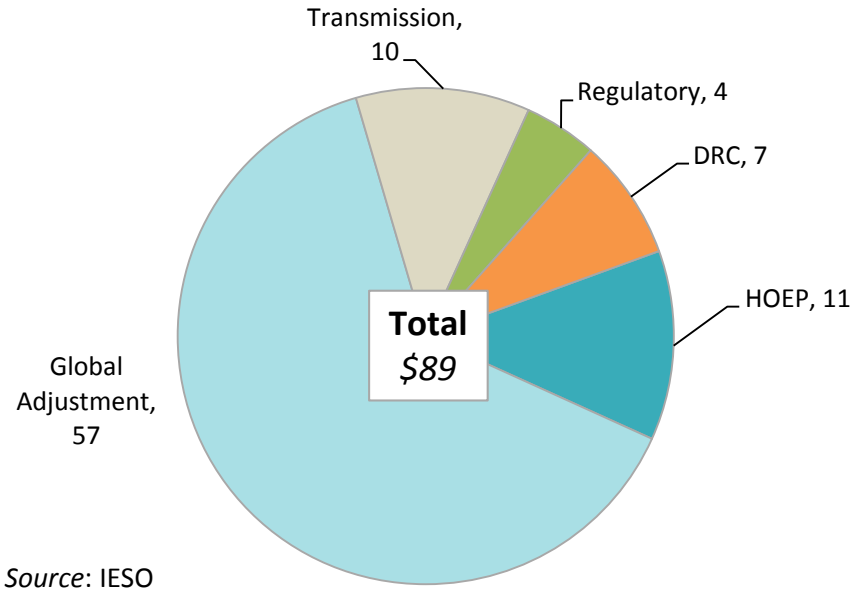
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



Source: IESO

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $64/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Sales Tax Treatment in Other Jurisdictions

Jurisdiction	Tax	Tax Paid by Business Consumers	Tax Paid by Residential Consumers	Comment
British Columbia	PST	Yes – 7%	No	• PST does not apply to residential energy, including electricity, acquired solely for residential use in a residential dwelling • BC's carbon tax does not apply to electricity bills.
Alberta	None	N/A	N/A	• Alberta does not have a provincial sales tax.
Saskatchewan	PST	Yes – 5% Except for electricity purchased to heat a building.	No	• PST does not apply to electricity purchased for use in a residential dwelling. • PST does not apply to electricity purchased for use in heating a building that is heated solely by the electricity.
Manitoba	PST	Yes – 8% Reduced rate of 1.6% applies to electricity used by a qualifying business to operate machinery	Yes – 8% Electricity purchased for mixed use, 80% of which is home heating, has a reduced rate of 1.4%. Electricity solely to heat the purchaser's home is exempt.	• Winnipeg also applies a tax of 2.5% on residential and 5% on commercial.
Ontario	HST	Yes (less ITC (input tax credits))	Yes – 8%	
Quebec	QST	Yes (less ITCs)	Yes – 9.975%	
Nova Scotia	HST	Yes (less ITCs)	Yes – 10% less provincially administered rebate.	• Rebate is equal to the provincial portion of the HST, and is administered similar to OCEB, but applies to many energy sources.
New Brunswick	HST	Yes (less ITCs)	Yes – 10%	
Prince Edward Island	HST	Yes (less ITCs)	Yes – 9% (10% beginning Oct 1, 2016)	
Newfoundland and Labrador	HST	Yes (less ITCs)	Yes – 10%	• Had a provincially administered Home Heating Rebate program until July 2015.
Federal	GST	Yes (less ITCs)	Yes – 5%	

Ontario

Electricity Price Mitigation

Ministry of Energy

Date: September 12, 2016

Minister

Deputy Minister

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.

- Ontario has taken action to replace coal-fired generation with cleaner sources of energy. Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished clean generation, including nuclear, natural gas and renewables.
  - This investment represents about 40% of our current supply and has helped decrease electricity sector emissions by approximately 80%.

- Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.

- Since 2010, electricity prices have risen considerably, particularly for households and small businesses. Prices are forecast to continue to increase as additional generation comes online.

- The Ministry of Energy and Ministry of Finance were asked to develop a proposal to provide rate relief to Ontario electricity consumers.

Electricity Consumer Classes

- There are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 3 MW	Above 3 MW*
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

**** Note:** Consumers with peak demand between 3-5 MW in the manufacturing, mining, refrigerated warehousing, greenhouses and data-processing industries are currently eligible for Class A. All other 3-5MW consumers are Class B.

Current Rate Base Mitigation Programs

- Ontario has implemented several programs to help electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers;
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs; and
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.

- These programs have shifted costs amongst electricity consumer classes (i.e., residential, commercial and industrial) as shown in the table below:

Cost Shift Impact	2011	2012	2013	2014	2015	2016
Residential Bill ($/month for 750 kWh)	3.55	4.07	3.85	4.46	5.68	6.55
Commercial – Class B ($/MWh)	4.74	5.43	5.14	5.94	7.57	8.73
Industrial – Class A ($/MWh)	-20.97	-25.26	-22.38	-24.68	-32.56	-31.55

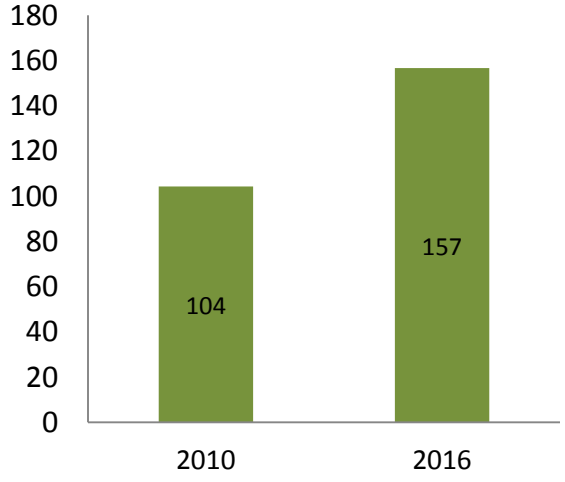
Note: Negative values indicate a benefit; positive values denote an incremental charge.

Prices by Electricity Consumer Class

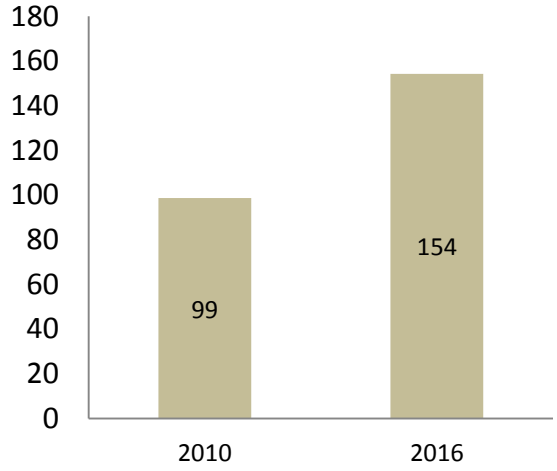
- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50% and rates paid by commercial have increased by 56%.

- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers.

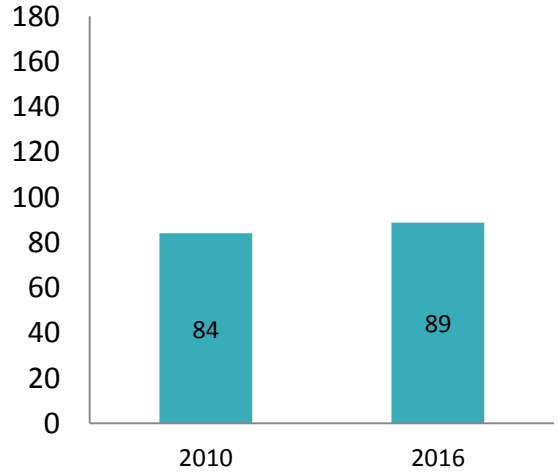
Typical Residential Bill (750/kWh per month)



Typical Class B (Commercial) Price ($/MWh)



Typical Class A (Industrial) Price ($/MWh)



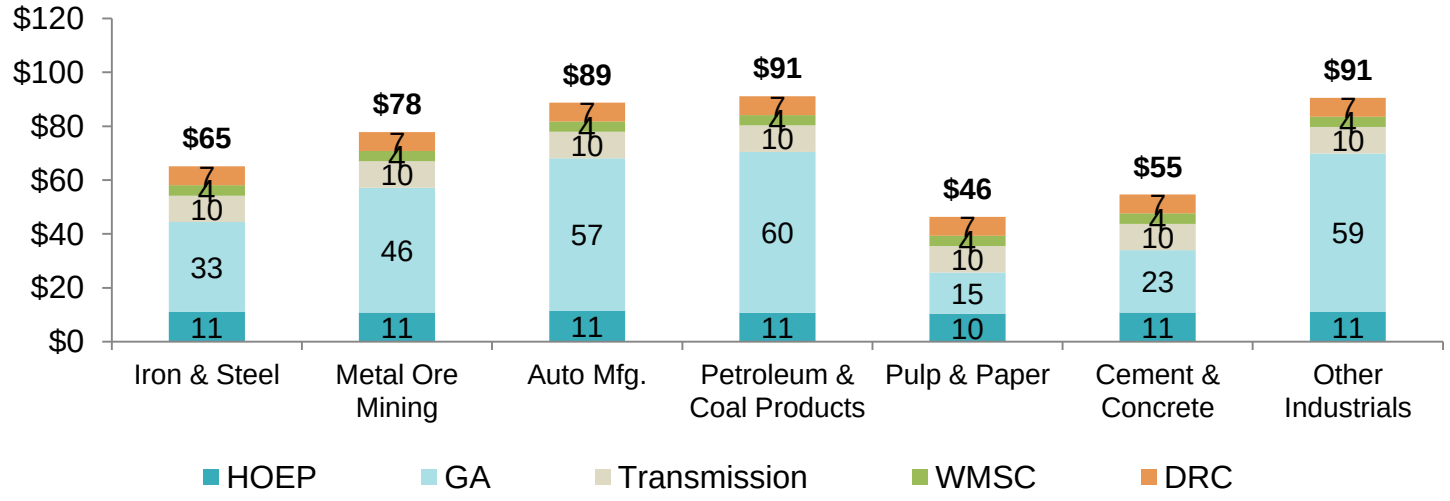
Note: 2016 represents May 2016 for residential after-tax and YTD June 2016 for commercial and industrial.

Industrial Electricity Prices Vary by Sector

- While Class A (industrial consumers) benefit from participation in the ICI program, there is a significant amount of variability in the ability to shift away from peak periods across customer classes, impacting the savings achieved.

- The below chart shows the prices paid in 2015 across a number of industrial sectors. Consumers in the north that receive rebates under the Northern Industrial Electricity Rate Program (NIERP) achieve rates that are $20/MWh lower than the below.

Average all-in Class A, Transmission-connected Electricity Prices by Industrial Sector (estimated $/MWh), Year-to-Date June 2016



Note: HOEP = Hourly Ontario Energy Price, GA = Global Adjustment, WMSC = Wholesale Market Service Charges, DRC = Debt Retirement Charge

Recent Actions to Bend the Cost Curve

- Since 2013, a number of actions have been taken to reduce overall electricity system costs:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Removing an expected $3.3 billion in Large Renewable Procurement (LRP) costs relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast, based on the results of the first phase of the LRP.
- Despite these actions to reduce system costs, electricity rates continue to increase for consumers.

Rate Mitigation

- The 2016 Budget committed to offset the impact of cap and trade in Ontario for commercial and industrial electricity consumers, while also providing a benefit of up to $2 per month for residential electricity consumers. The Climate Change Action Plan (CCAP) committed $1.3 billion from the Greenhouse Gas Reduction Account (GGRA) over the first compliance period (2017-2020).

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:

  - **Tax-based Lever:**
    - Provide an on-bill rebate funded from the tax-base to all consumers or specific classes of consumers (i.e., the Ontario Clean Energy Benefit (OCEB) provided a rebate for eligible electricity consumers).

  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.

  - **Cap and Trade Proceeds Lever:**
    - Redirect cap and trade proceeds to offset the cost of existing initiatives that help reduce greenhouse gas (GHG) emissions (i.e., the CCAP committed to offset the impact of cap and trade and to keep electricity rates affordable).

Rate Mitigation Proposal

- The Ministry of Energy is proposing to implement the following electricity price mitigation initiatives. The approach identified below would provide relief across all electricity consumer classes:

  1) Provide an 8% rebate equal to the provincial portion of HST to consumers eligible for the Regulated Price Plan* (i.e., residential, small business and farms) and update the Rural or Remote Rate Protection (RRRP) program, to provide relief to rural customers; and

  2) Expand ICI eligibility by lowering the threshold to 1 MW, to provide support to Class B electricity consumers (i.e., commercial, institutional and small industrial) and redirect cap and trade proceeds to commercial and industrial electricity consumers to provide a modest reduction in rates.

- The following slides provide additional information on the above initiatives.

***Note:** Eligibility for the 8% rebate would be similar to OCEB and include some customers not on the Regulated Price Plan (RPP), such as Independent Power Authority consumers and consumers that have opted-out of RPP.

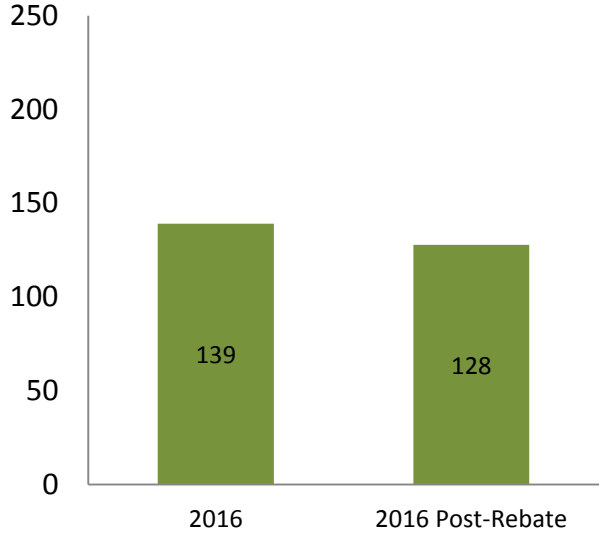
Rate Mitigation Proposal – Illustrative Benefits*

	Average Annual Fiscal Impact	Average Annual Greenhouse Gas Reduction Account (GGRA) Proceeds Impact	Regulated Price Plan (Residential) Benefit		Class B (Commercial) Benefit	Class A (Industrial) Benefit	
			Average (750 kWh/ month)	*Rural (1000 kWh/ month)*		*Existing*	*New*
• 8% rebate to Regulated Price Plan eligible consumers • ICI Expansion • RRRP Update • Proceeds Recycling	$1.0 billion annually	$0.27 billion annually (Reduction of $0.06 billion annually or $0.24 billion total from the CCAP commitment)	-$11/ month (-8%)	-$45/ month (-20%)	-$3/MWh (-2%)	-$3/ MWh (-3%)	Up to -$52/MWh (-34%)

*** Notes:** The above benefits do not include the cost of ICI expansion and the RRRP update (total impact of $1.74/MWh). Proceeds recycling is net of the cost of carbon and represents an estimated average of the proceeds required over the first compliance period (2017-2020).

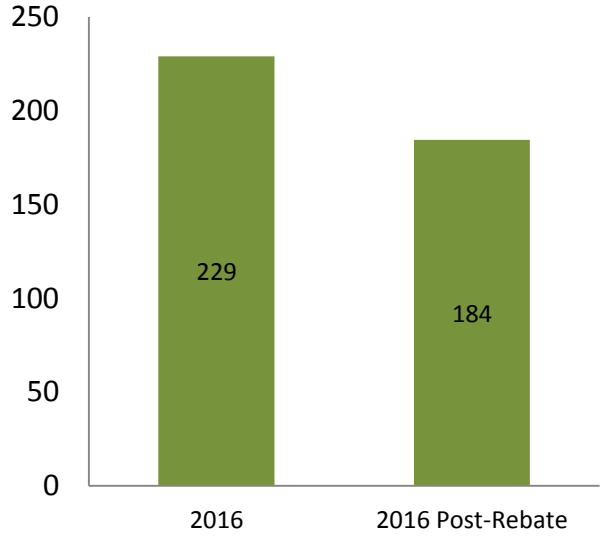
Rate Mitigation Proposal – Illustrative Bill Impacts by Electricity Consumer Class

Typical Residential Bill
750kWh per month, 8% only



The benefit is a 8% reduction.

Rural (R2) Residential Bill
1,000kWh per month, 8% and RRRP Update

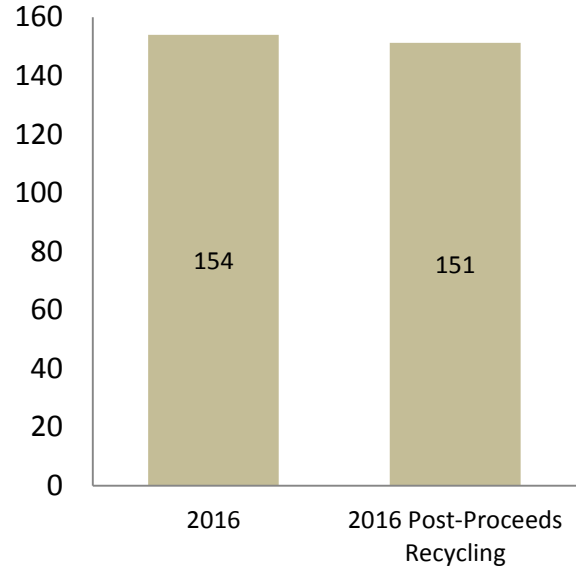


The benefit is a 20% reduction.

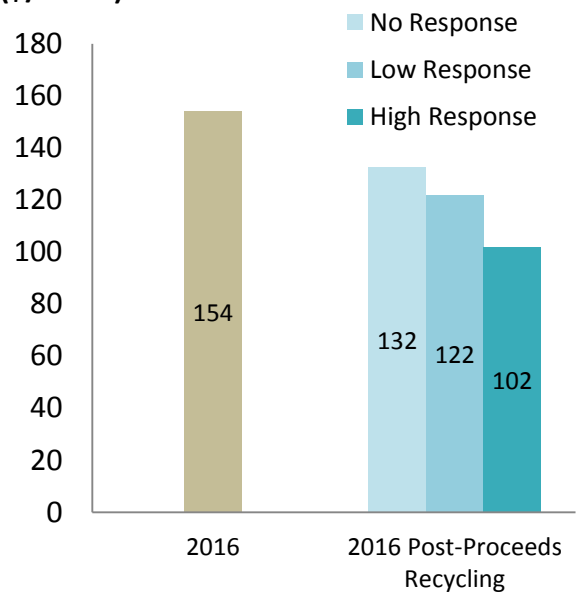
Note: The above benefits do not include the cost of ICI expansion and the RRRP update (total impact of $1.74/MWh).

Rate Mitigation Proposal – Illustrative Bill Impacts by Electricity Consumer Class (cont'd)

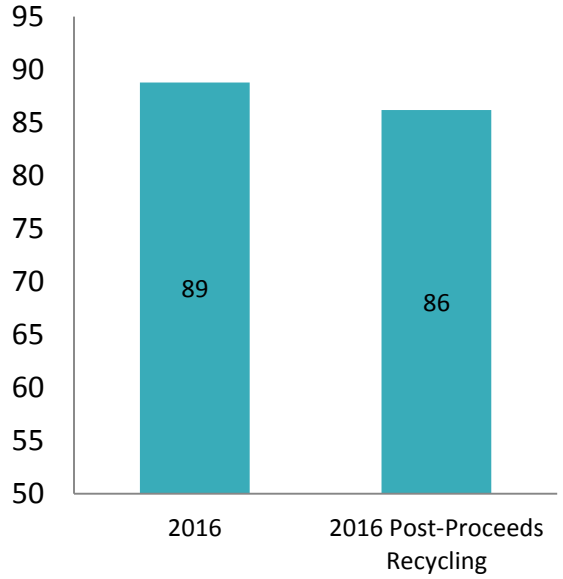
Typical Class B (Commercial) Price ($/MWh)



Typical New Class A Price ($/MWh)



Typical Class A (Industrial) Price ($/MWh)



Class B: The benefit is a 2% reduction.

New Class A: The benefit is a reduction of 14% to 34%.

Existing Class A: The benefit is a 3% reduction.

Notes: The above benefits do not include the cost of ICI expansion and the RRRP update (total impact of $1.74/MWh). Proceeds recycling is net of the cost of carbon and represents an estimated average of the proceeds required over the first compliance period (2017-2020).

1) Regulated Price Plan Eligible Consumers and Rural or Remote Rate Protection Update

8% Rebate to Regulated Price Plan Eligible Consumers

- Legislation/regulation will be introduced to provide a rebate of 8% to consumers eligible for the Regulated Price Plan. The below table indicates which consumers would or would not receive the benefit.
  - This would be equivalent to the provincial portion of the HST*.

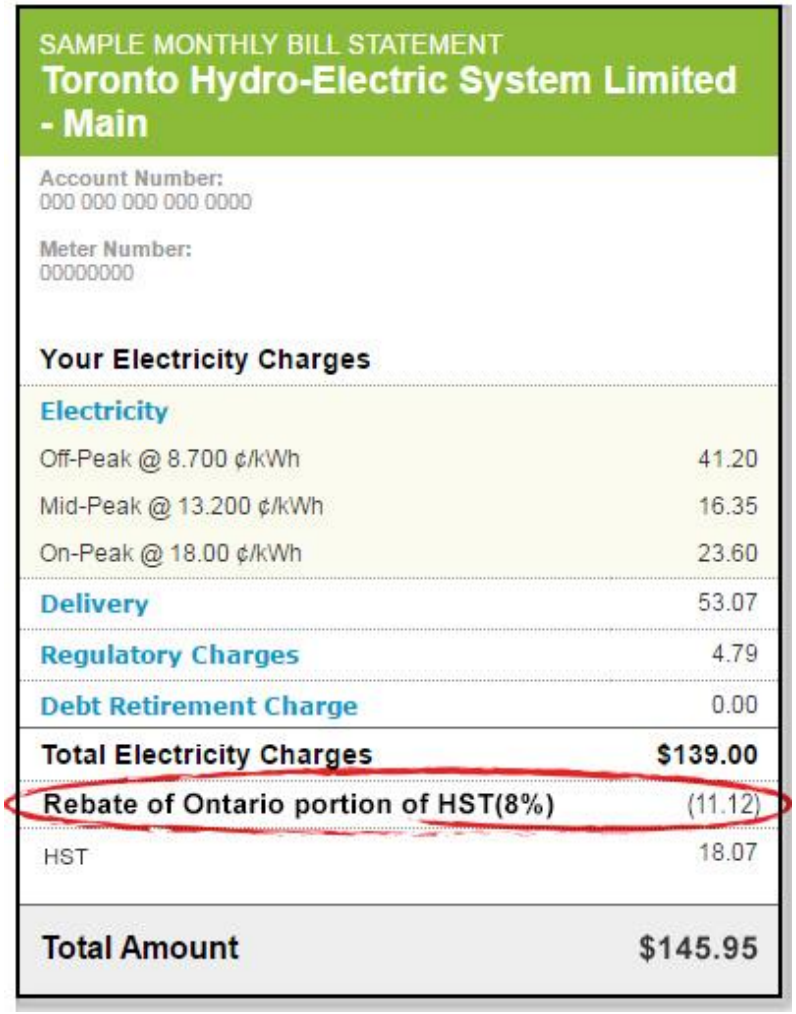
Eligible for the 8% rebate (< 50 kW or < 250,000 kWh/year)	**Not eligible for the 8% rebate** (> 50 kW or > 250,000 kWh/year)

• Residential Regulated Price Plan consumers
• Residential retail consumers
• Multi-unit residential buildings and other facilities used as residential rental units
• Long-term care homes and school residences
• Regulated Price Plan eligible farms
• Small businesses
  – Coffee / snack retailer
  – Convenience store
  – Apparel store
  – Hair salon
  – Small insurance office
	• Class A consumers
	  – Manufacturer
	  – Large grocery store
	  – Mines
	  – Auto assembly plants
	• Class B consumers (except farms that have opted out of the Regulated Price Plan)
	  – Commercial offices (low rise)
	  – Hotel
	  – General warehousing

- Those ineligible to receive the 8% rebate will benefit from one or more of the other initiatives under this proposal (e.g., ICI expansion, proceeds recycling, etc).

***Note:** An HST exemption would require federal approval. Engaging in discussions with the federal government would take time and would likely result in not meeting the targeted implementation date.

Illustrative Electricity Bill Mock-Up



SAMPLE MONTHLY BILL STATEMENT

Toronto Hydro-Electric System Limited - Main

Account Number:
000 000 000 000 0000

Meter Number:
00000000

Your Electricity Charges

Electricity	
Off-Peak @ 8.700 ¢/kWh	41.20
Mid-Peak @ 13.200 ¢/kWh	16.35
On-Peak @ 18.00 ¢/kWh	23.60
Delivery	53.07
Regulatory Charges	4.79
Debt Retirement Charge	0.00
Total Electricity Charges	**$139.00**
Rebate of Ontario portion of HST(8%)	(11.12)
HST	18.07
Total Amount	**$145.95**

Note: Final bill presentment pending submission to LRC.

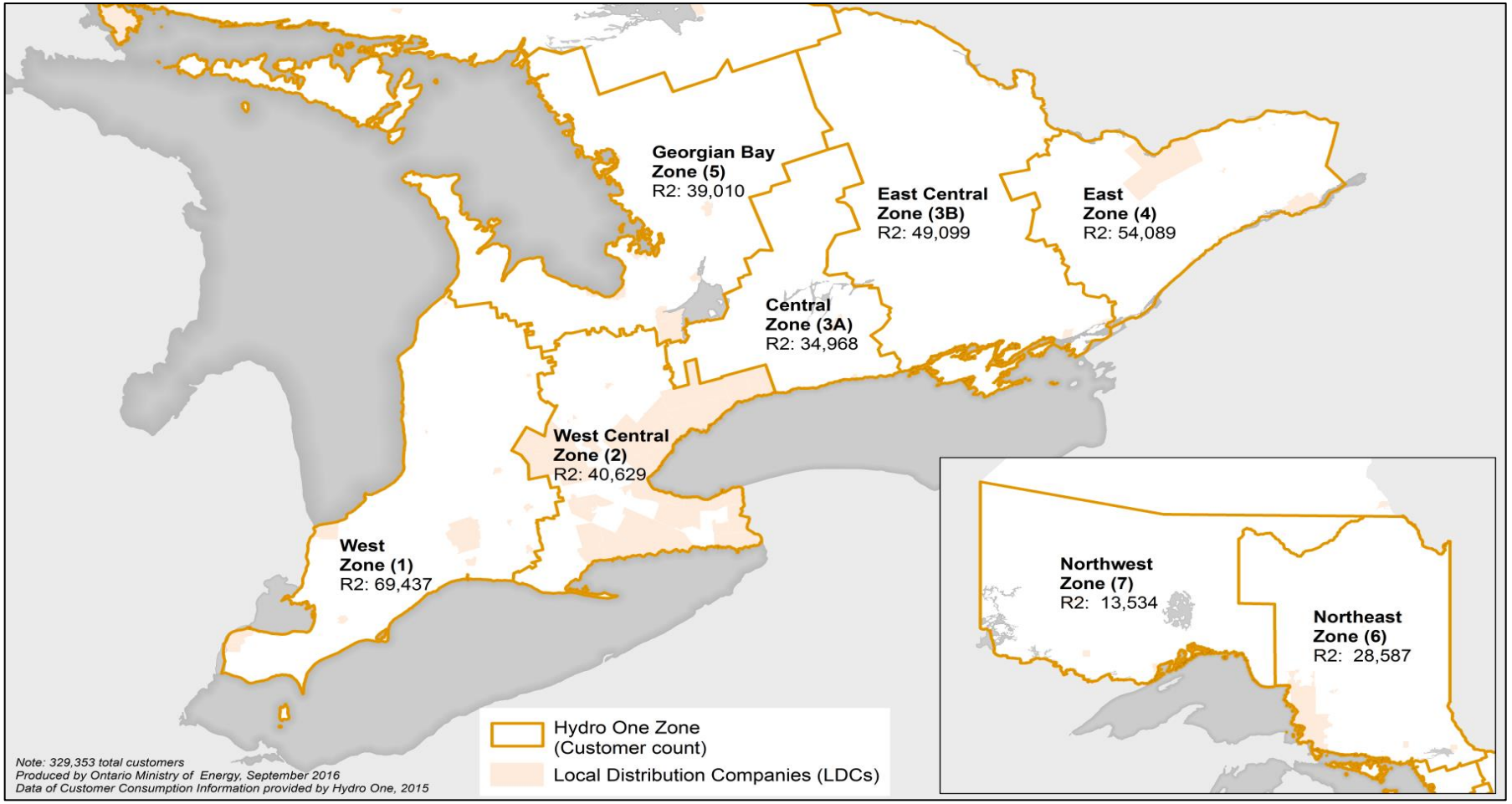
Rural or Remote Rate Protection (RRRP) Update

- ENERGY is proposing to amend O.Reg 442/01 to provide an additional $110 million in rate protection to eligible rural or remote electricity consumers, and consider options to periodically adjust the amount of rate protection available to these consumers going forward.

- RRRP is a rate-based funded program that helps offset the higher costs to distribute electricity to Ontario residents who live in rural or remote locations all across the Province.
  - Today, RRRP is a $175-million program. For an average residential customer, the cost of supporting RRRP is roughly $1 per month. For other customers, the cost can range from $65 for a greenhouse to $8,000 for a medium industrial.
  - The majority of the program funding ($125.5 million) is provided to Hydro One's lowest-density customers – classified as R2 customers. There are approximately 329,000 R2 customers. The current program provides a rebate of $31.50. The proposed update to the program would increase the benefit to $60/month.
  - RRRP funding supporting R2 customers has been capped at the current level since 2004. As a result, the impact of its assistance has diluted over time as electricity costs have risen.

- An additional $110 million in program funding would see an increased benefit for eligible rural customers, including the 8% rebate, of $45/month. This would help bring R2 bills in line with Hydro One R1 (medium density) bills at 1000kWh.
  - This would increase the R2 portion of the RRRP to $235 million with a monthly impact on an average residential consumer of ~$0.60.
  - The RRRP could be indexed at inflation or "trued up" on a regular basis to ensure the benefit remains constant.

Rural or Remote Rate Protection (RRRP) Update – R2 Customers by Region



2) Expand Industrial Conservation Initiative and Redirect Cap and Trade Proceeds

Industrial Conservation Initiative (ICI) Expansion

- ENERGY is proposing to amend O. Reg. 429/04 to expand ICI eligibility. The base setting period for the expanded program would begin in 2017, with the benefit seen by consumers starting in 2018.

- Currently, electricity consumers over 5 MW and consumers from 3-5 MW in certain energy intensive sectors are eligible for ICI (i.e., approximately 300 Class A consumers).
  - Consumers participating in ICI include the following sectors: pulp and paper, auto, manufacturing, chemicals and mines.

- ICI would be expanded so that all consumers over 1 MW are eligible for the program, which would:
  - Reduce electricity peak demand and electricity system costs by incenting more consumers to lower their electricity demand during peak periods;
  - Reduce electricity bills for new ICI participants who are able to reduce their electricity demand during peak demand periods; and
  - Increase the electricity bills for non-ICI participants to ensure full cost recovery in the electricity system.

ICI Expansion – Projected Impact

	Benefit to New ICI Participants	System Benefit	Financial Impact	Residential Bill Impact
	Bill Savings	Peak Demand Reduction (MW)	GA shifted to Class B ($M)	
Short-term	Up to 21%	80	47	Increase of $0.42/month
Long-term	Up to 34%	165	82	Increase of $0.74/month

- The different impacts refer to the amount of time it takes for new Class A consumers to respond to the expanded ICI eligibility
  - Short-term refers to the expected impact once ICI billing begins for new Class A consumers (one year after expanded eligibility takes place).
  - Long-term is the expected impact once new Class A consumers have had time to significantly change their behaviour and investment decisions in response to the ICI.

- The bill impacts assume a 25% uptake, which would increase Class A consumption by roughly 3 TWh, leaving an estimated 54 TWh in Class B that are either between 0.05-1 MW or choose not to opt in to ICI. This would represent an estimated 300 additional consumers in ICI, though they would represent a much smaller share of the consumption than the 300 consumers currently participating.

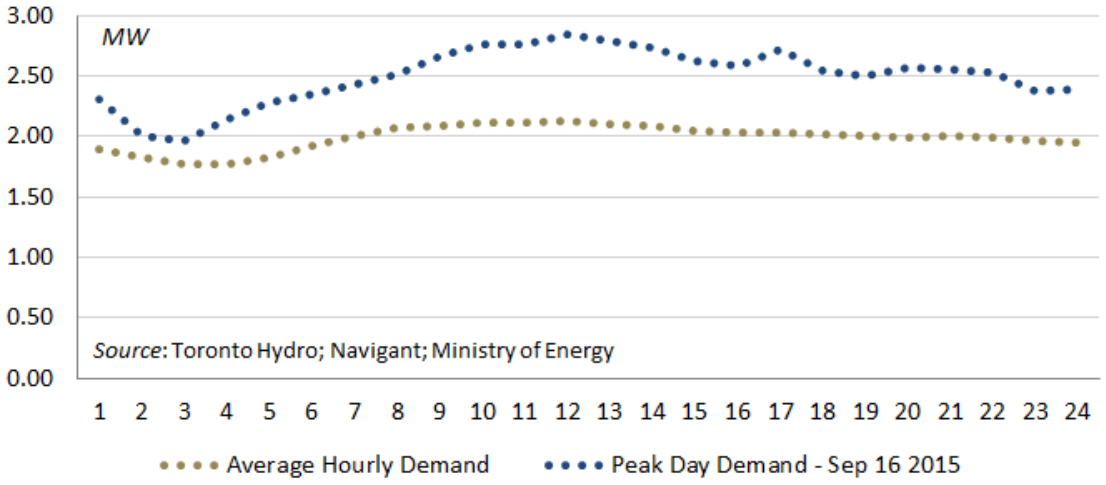
- Newly eligible consumers in the program would mostly fall into the small industrial, institutional and commercial category, including: automotive supply chain companies, office tower, large shopping mall, greenhouses and others.
  - A few examples of companies that would become eligible under such an expansion would be Kellogg, Canlan Ice Sports, Cambridge Towel, SLACAN and Casino Rama.

ICI Expansion – Illustrative Example of Newly Eligible Consumer

- Plastics manufacturers, such as Poly Five Plastics in Toronto, are among the consumers that would become eligible if the threshold was lowered.
- Such manufacturers fall under NAICS* code 32 and have relatively flat load profiles, reflecting around the clock production. This means they would be beneficiaries of ICI even with no change in consumption behaviour.
- Companies like Poly Five Plastics could expect to see greater savings if they are willing and able to respond to the higher prices during high demand hours.

Typical Demand Profile, 2-3 MW Consumer

Manufacturer, NAICS Code 32 - Nov 2014 to Oct 2015



Illustrative Bill Savings, 2-3 MW Consumer

	Status Quo	*No Price Response*	*Short Term Response*	*Long Term Response*
	Class B	**Class A**	**Class A**	**Class A**
GA	75.26	58.06	43.55	32.03
Total bill	**126.28**	**109.09**	**94.58**	**83.06**
Savings		*-14%*	*-25%*	*-34%*

Source: Navigant; Ministry of Energy

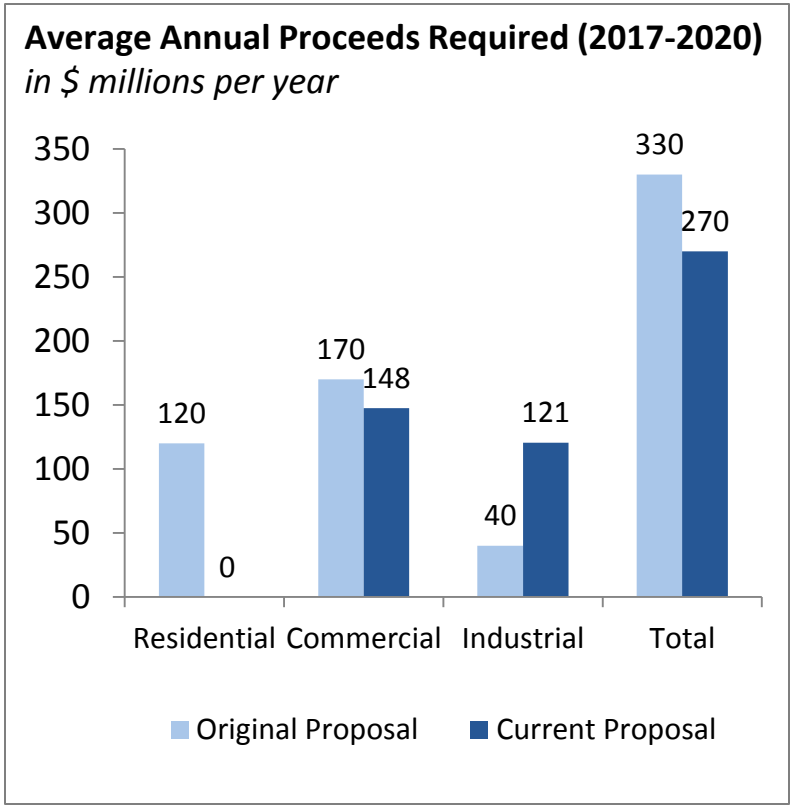
*** Note:** North American Industry Classification System (NAICS) is the standard used by statistical agencies in classifying business establishments.

Redirect Cap and Trade Proceeds Recycling

- The 2016 Budget committed to offset the impact of cap and trade for commercial and industrial consumers, while also providing a benefit of up to $2 per month for residential consumers.
  - To meet the 2016 Budget commitment, the Climate Change Action Plan (CCAP), committed $1.3 billion from the GGRA over the first compliance period (2017-2020).

- However, providing a 8% rebate to Regulated Price Plan consumers would allow for GGRA proceeds previously committed to residential consumers to be redirected to other consumers classes and/or GHG reduction initiatives in the fiscal plan.

- The current proposal would provide additional recycling to commercial and industrial consumers, while requiring an estimated $60 million less per year (i.e., a reduction of $0.24 billion over the first compliance period).



Note: The original proposal was to offset the impact of cap and trade via GA to the average industrial, and would provide a benefit to commercial and residential consumers. Current proposal would recycle proceeds volumetrically to industrial and commercial consumers.

Redirect Cap and Trade Proceeds Recycling

- Redirecting cap and trade auction proceeds to lower the cost of electricity would offset consumers' contributions to non-emitting generation.

- Redirecting helps pay for committed investments/initiatives which reduce GHGs (e.g., non-emitting generation and conservation programs).
  - Due to the long-term nature (typically 20 years) of electricity generation contracts and conservation programs, the associated costs are ongoing and are expected to be about $7 billion dollars annually during the first cap and trade compliance period. These costs will continue well beyond the timelines described in the CCAP.

- Redirecting cap and trade auction proceeds volumetrically to Class B (commercial) and Class A (industrial) consumers maintains the incentive to shift consumption from on-peak to off-peak hours.

- Using cap and trade auction proceeds to lower the cost of electricity would make it more competitive with traditionally cheaper fossil fuels.

- By using the proceeds to lower the cost of electricity, there is potential to incent fuel-switching away from fossil fuels toward much cleaner grid-connected electricity and support CCAP goals of electrification.

Considerations

Implementation

- On September 15, 2016, ENERGY is proposing to introduce the *Ontario Rebate for Electricity Consumers Act, 2016*.
  - If passed, the legislation would require a general regulation.
  - Amendments would also be required to various regulations to expand ICI and RRRP.

- On-bill rebate delivery would likely require adjustments to LDC billing systems, which could impact delivery costs and timelines. ENERGY (possibly through Ontario Energy Board) will consult with LDCs to accurately assess these impacts once the program has been announced.
  - In the past, LDCs have asked for at least six months' notice when implementing billing system changes.
  - Timing concerns may be alleviated by allowing LDCs to provide retroactive rebates if their systems cannot be updated in time for January 1, 2017. This was done with the OCEB.

- Detailed messaging on bills (for "low-volume" consumer bills) could be implemented by amending O. Reg. 275/04 (made under the Ontario Energy Board Act, 1998).
  - The rebate would not be directly linked to HST.
  - With electricity invoices containing multiple line items and LDC bill presentment varying widely, direction on rebate presentment will need to be flexible to allow LDCs to incorporate easily while ensuring government-preferred branding and messaging is conveyed.

- While the impact of cap and trade would be added to electricity bills as of January 2017, the offsetting effect of proceeds recycling may not occur immediately depending on implementation and potential alignment with the first auction expected in March 2017.
  - Should there be low demand for carbon allowances, auction proceeds would be less than the amount projected in the CCAP. This could mean a short-fall for proceeds recycling as proposed. However, natural gas utilities are expected to purchase allowances quarterly equal to their emissions.

- ENERGY will need to continue to consult with the Independent Electricity System Operator (IESO), Ontario Energy Board (OEB) and LDCs regarding implementation of proceeds recycling.

Fiscal

- The Climate Change Action Plan (CCAP) committed about $1.3 billion over four years for electricity mitigation for industrial, commercial and residential consumers from GGRA proceeds.
  - The current rate mitigation proposal requires approximately 20% less in proceeds, saving approximately $0.24 billion relative to the CCAP commitment over the first compliance period (2017-2020).

- The 8% rebate is expected to cost about $1 billion per year (i.e., $4 billion from 2017-2020), representing an additional pressure on the fiscal plan.
  - Consideration could be given to allocating the $0.24 billion in reduced proceeds required towards other existing initiatives in the fiscal plan that also reduce greenhouse gas (GHG) emissions, thereby providing an overall fiscal plan offset.
  - If cap and trade auctions are under-subscribed, the $0.24 billion may not be available for reallocation to the fiscal plan.

- In the absence of any offset strategies, the full cost of the rate mitigation approach would add to the pressures and risks that need to be managed in order for the government to balance the budget in 2017-18 and stay balanced in 2018-19 and beyond.

Legal

- In order to avoid characterization as an unconstitutional tax, a non-tax levy must have a sufficient nexus between those who pay and the regulatory scheme in the sense that those who pay have caused the need for or benefit from the regulatory scheme. Although the case law is not developed on the extent to which some regulated actors can be required to subsidize others, risk is reduced to the extent that any cross-subsidization serves true regulatory goals rather than revenue re-distribution goals.

- 8% Rebate (shift costs from rate-base to tax base by providing a rebate equal to the provincial portion of HST):
  - Providing the contemplated rebate under the proposed Bill does not, in and of itself, give rise to legal issues. As policy direction is given on the specifics of supporting regulations, any associated legal risks can be identified.

- ICI Expansion (shift costs within rate-base by expanding eligibility for the ICI program to consumers of >1 MW):
  - Shifting costs to some consumers to lower rates for others without more carries the risk that the charge would be characterized as an unconstitutional tax. To establish that the charge is legitimate, it must be established that the purpose and effect of the charge is to facilitate the maintenance of a financially viable electricity system by way of load management or some other feature under which those who are subsidized provide an overall system benefit enjoyed by those who subsidize them.

- RRRP Update (shift costs within the rate-base by increasing the RRRP benefit paid to rural and remote customers):
  - Increasing the amount of revenue devoted to the RRRP or expanding the scope of consumers eligible for the program does not raise new legal risk. There is a good argument that the RRRP is a regulatory charge, as it socializes some of the costs of distributing electricity to rural consumers. Overall the risk that the RRRP would be characterized as a tax is assessed as moderate (meaning equally good arguments on both sides).

- Cap and Trade Proceeds Recycling (reduce impact on rate base and tax base by directing cap and trade auction proceeds to industrial consumers):
  - To be characterized as regulatory charges under the cap and trade program, auction revenues should be spent on programs that reduce GHGs.

Communications

- A series of high-profile announcements around introduction of legislation (September 2016).
  - Keynote speech and two public events pre-introduction
  - News release at introduction
  - Full media availability province-wide
  - Regional echo events post-introduction
  - Early engagement of EDA, CEOs of LDCs
  - Stakeholder outreach/technical briefings with Ontario Chamber of Commerce, AMPCO, OEB low-income table, AMO, etc.
- **Positioning:**
  - An unprecedented plan to benefit all ratepayers in a lasting, meaningful way.
  - Rural customers will receive the largest single rate relief ever.
  - Businesses across Ontario will have even more opportunity to be competitive and manage their energy costs.
- **Issues Considerations:**
  - Significant benefit for rural and remote residential customers; net gain for all residential customers.
  - Consistent with cap-and-trade commitment that no business sector will be left worse off.

Key Messages

- We are taking unprecedented action to help people in their everyday lives.
- Residential ratepayers and other RPP eligible ratepayers will receive an eight per cent rebate on their electricity bill, equivalent to the provincial portion of the HST.
- Modernizing the RRRP will benefit 330,000 families in rural Ontario with significant reductions to their electricity bills ($45 a month).
- Over a thousand more Ontario businesses will be eligible to benefit from the ICI program, helping them stay competitive and grow.
- These actions will assist over five million families, farms and small businesses across Ontario.
- These actions today join our many existing initiatives too help keep electricity in Ontario clean, reliable and affordable.

Proposed Cabinet Minute

Cabinet agreed that:

1. ENERGY implement electricity price mitigation for residential, commercial and industrial consumers through the following:

    i. Provide a rebate of 8% on the pre-tax cost of electricity for all electricity consumers eligible to be billed under the Ontario Energy Board's Regulated Price Plan (RPP); and any other consumers who would be eligible for RPP if their electricity account was with a licensed distributor.

    ii. Increase the total amount of rate protection available to R2 low density electricity consumers under the Rural or Remote Rate Protection Program (RRRP) by increasing the subsidy by $110 million from its current level of $127 million which has been capped since 2003.

    iii. Implement a mechanism to periodically adjust the total annual amount of rate protection available to R2 low density electricity consumers under the RRRP, effective on or after January 1, 2018.

    iv. Expand eligibility for participation in the Industrial Conservation Initiative (ICI) to smaller industrial, institutional and commercial customers by lowering the eligibility threshold to 1 MW and removing restrictions on eligible sectors.

Proposed Cabinet Minute (cont'd)

2. ENERGY seek necessary TB/MBC approvals.

3. ENERGY seek approvals for the proposed *Ontario Rebate for Electricity Consumers Act, 2016* which would, subject to the Legislature's approval of the Act, include the following elements:
   i. The rebate would be available starting January 1, 2017;
   ii. The legislation would specify the types of costs to which the rebate would or would not be applied, with authority to make changes by regulation;
   iii. The legislation would address invoicing requirements, including authority to prescribe how the rebate is to appear on consumers' electricity bills;
   iv. The legislation would include authority to prescribe the way in which the rebate is to be flowed through to consumers, and the way in which electricity vendors providing the rebate are to be reimbursed;
   v. The legislation would include record-keeping requirements for electricity vendors and other prescribed persons;
   vi. The legislation would include inspection powers for inspectors appointed by the minister of Finance, including powers related to the recovery of overpayments; and
   vii. The legislation would include consequential amendments to the *Ontario Energy Board Act, 1998* and the *Ontario Clean Energy Benefit Act, 2010*; and
   viii. The legislation would provide for regulation-making authority to establish a limitation period for ceasing payments and reimbursement based on past entitlement. Similar amendments would be provided for the *Ontario Clean Energy Benefit Act, 2010* but would allow the ceasing of all payments and reimbursements after a prescribed date

Proposed Cabinet Minute (cont'd)

4. ENERGY to report back to LRC and Cabinet for approval of any supporting regulations under the proposed *Ontario Rebate for Electricity Consumers Act, 2016*, and with other complementary regulatory amendments.

5. ENERGY notes the following amendments:

   i. Amendments to Ontario Regulation 429/04 (Adjustments Under Section 25.33 of the Act) made under the Electricity Act, 1998 to lower the Industrial Conservation Initiative (ICI) threshold to 1 megawatt and require electricity consumers and market participants between 1 MW and 5 MW to opt in.

   ii. Amendments to Ontario Regulation 442/01 (Rural or Remote Electricity Rate Protection) made under the Ontario Energy Board Act, 1998, to increase support through the Rural and Remote Rate Protection Plan to R2 low density electricity customers and provide for a periodic adjustment mechanism.

6. ENERGY work with MOECC to recycle an estimated annual average of $270 million of Cap and Trade auction proceeds from the Greenhouse Gas Reduction Account for non-RPP commercial and industrial electricity consumers over the first compliance period (2017-2020) through a volumetric rebate mechanism.

7. ENERGY and MOF work with Cabinet Office, Premier's office to develop a communications plan

Proposed Cabinet Minute (cont'd)

Cabinet approved version of the proposed *Ontario Rebate for Electricity Consumers Act, 2016* for introduction, subject to the following:

1. The Office of Legislative Counsel is authorized to prepare a French version and to make minor adjustments to the English version, for the purpose of ensuring consistency between the two versions and making other improvements or correcting mistakes discovered in the translation process.

Appendix

Illustrative Benefits

	Current Bill (before tax)	Current Rate mitigation initiatives*	New Rate Mitigation initiatives	New Bill (before tax)
Average Residential (Toronto – 750 kWh/month)	$139 /month	N/A	8% pre-tax rebate: - $11	$128 /month
Rural Residential (Hydro One R2 – 1000 kWh/month)	$229 /month	RRRP: –$32	8% pre-tax rebate + Updated RRRP: - $45	$184 /month
Low-income Residential ** (Toronto – 750 kWh/month)	$101 /month	OESP: -$38	8% pre-tax rebate: - $8	$93 /month
Small Business (Toronto – 403,200 kWh/month)	$149 /MWh	N/A	8% pre-tax rebate: - $12/MWh	$137 /MWh
Small Farm (Hydro One R1 – 4,000 kWh/month)	$203 /MWh	N/A	8% pre-tax rebate: - $16/MWh	$187 /MWh

Notes:

***** Some residential consumers can also receive tax credits based on income, age and geography (Northern Ontario Energy Credit and Ontario Energy and Property Tax Credit). These credits are delivered through the Trillium Tax Credit and can be as high as $1,332 per year for a family.

** income of less than $28,000, family of 4.

The above benefits do not include the cost of ICI expansion and the RRRP update (total impact of $1.74/MWh). Totals may not add due to rounding.

Illustrative Benefits (cont'd)

	Current Rate	Current Rate mitigation initiatives*	New Rate Mitigation initiatives	New Rate
Large Institutional (Toronto – distribution-connected, 10 MW)	$108 /MWh	ICI: -$49/MWh	Proceeds Recycling: -$2.60/MWh (2017-2020 average)	$105 /MWh
Large Industrial (Timmins – transmission-connected, 10 MW)	$69 /MWh	ICI + NIERP: -$69/MWh	Proceeds Recycling: -$2.60/MWh	$66 /MWh
Small Industrial – opt-in to ICI (Toronto – 2 MW)	$152 /MWh	N/A	Proceeds Recycling + ICI: Up to -$52/MWh	$100 /MWh
Large Commercial – does not opt-in to ICI (Toronto – 2 MW)	$152 /MWh	N/A	Proceeds Recycling: -$2.60/MWh	$149 /MWh
Small Institutional (Toronto – 500 kw)	$154 /MWh	N/A	Proceeds Recycling: -$2.60/MWh	$151 /MWh

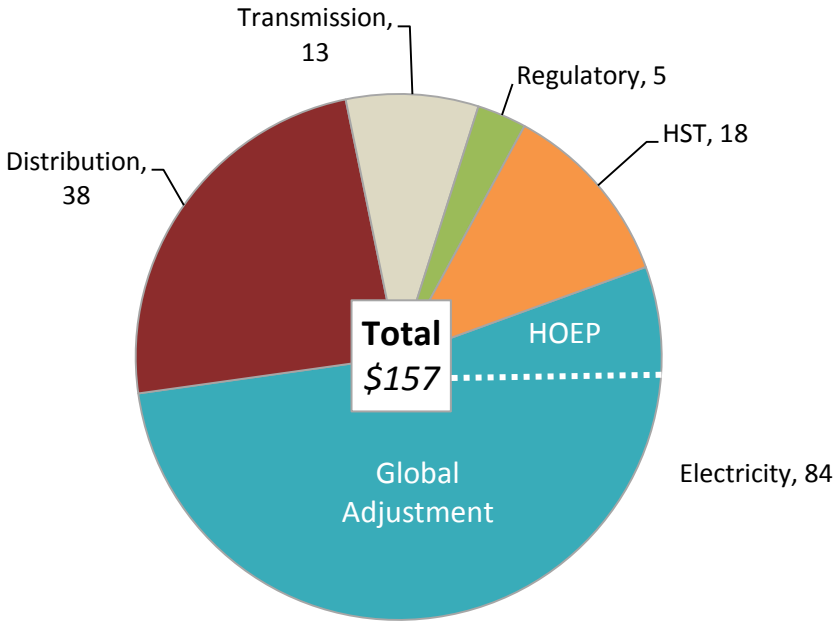
Notes:
The above benefits do not include the cost of ICI expansion and the RRRP update (total impact of $1.74/MWh). Proceeds recycling is net of the cost of carbon and represents an estimated average of the proceeds required over the first compliance period (2017-2020).

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of May 1, 2016 (750 kWh/month)



Source: OEB, Toronto Hydro

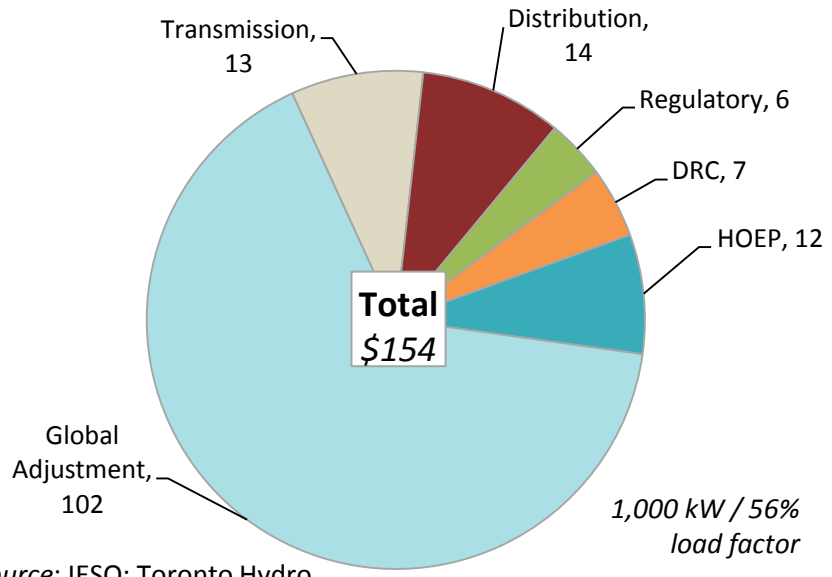
Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.

- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



Source: IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.

- Targeted pricing programs are currently not available for Class B consumers.

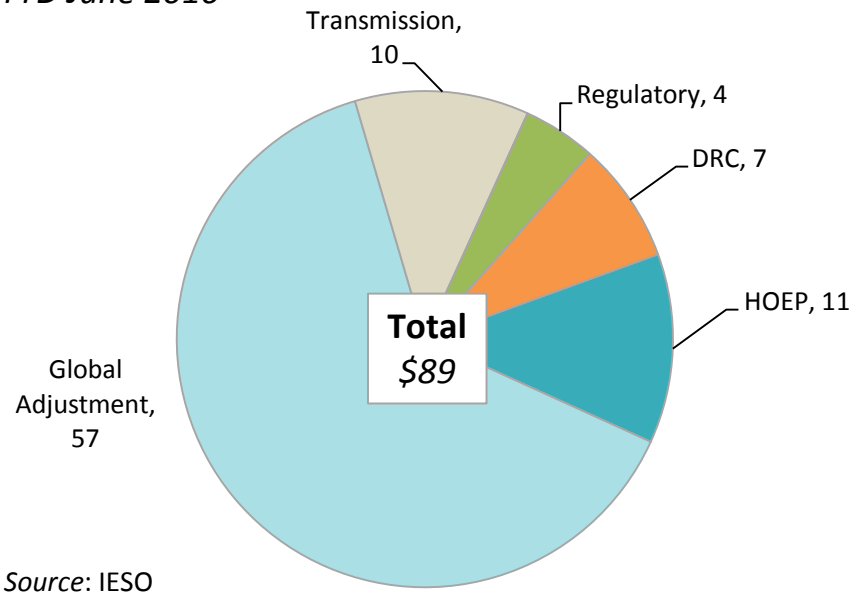
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



Source: IESO

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Sales Tax Treatment in Other Jurisdictions

Jurisdiction	Tax	Tax Paid by Business Consumers	Tax Paid by Residential Consumers	Comment
British Columbia	PST	Yes – 7%	No	• PST does not apply to residential energy, including electricity, acquired solely for residential use in a residential dwelling • BC's carbon tax does not apply to electricity bills.
Alberta	None	N/A	N/A	• Alberta does not have a provincial sales tax.
Saskatchewan	PST	Yes – 5% Except for electricity purchased to heat a building.	No	• PST does not apply to electricity purchased for use in a residential dwelling. • PST does not apply to electricity purchased for use in heating a building that is heated solely by the electricity.
Manitoba	PST	Yes – 8% Reduced rate of 1.6% applies to electricity used by a qualifying business to operate machinery	Yes – 8% Electricity purchased for mixed use, 80% of which is home heating, has a reduced rate of 1.4%. Electricity solely to heat the purchaser's home is exempt.	• Winnipeg also applies a tax of 2.5% on residential and 5% on commercial.
Ontario	HST	Yes (less ITC (input tax credits))	Yes – 8%	
Quebec	QST	Yes (less ITCs)	Yes – 9.975%	
Nova Scotia	HST	Yes (less ITCs)	Yes – 10% less provincially administered rebate.	• Rebate is equal to the provincial portion of the HST, and is administered similar to OCEB, but applies to many energy sources.
New Brunswick	HST	Yes (less ITCs)	Yes – 10%	
Prince Edward Island	HST	Yes (less ITCs)	Yes – 9% (10% beginning Oct 1, 2016)	
Newfoundland and Labrador	HST	Yes (less ITCs)	Yes – 10%	• Had a provincially administered Home Heating Rebate program until July 2015.
Federal	GST	Yes (less ITCs)	Yes – 5%	

Tab x

CABINET BRIEFING NOTE

Committee:	Cabinet
Meeting Date:	September 14, 2016 [or Sept 13?]
Ministry:	Finance/TBS
Last reviewed by:	**Tracking to:**

SUBMISSION TITLE:	Electricity Price Mitigation

I. REQUEST/DECISION REQUIRED:

- Since 2010, electricity prices have risen considerably, particularly for households.
- The government has a variety of levers to provide rate relief to Ontario electricity consumers:
    - Tax-based Levers, shifts costs from the rate-base to the tax base
    - Cap and Trade Proceeds Levers, redirect proceeds from Cap and Trade towards other consumers classes
    - Rate-based Levers, shifts costs within the rate-base, from one customer group to another
-

II. KEY POINTS:

- Think storyline!
    - What do the Deputy and Minister need to know?
    - Why is this coming forward now?
    - What result will occur due to this decision?
    - What is the critical context needed for effective decision-making?
    - What issues is Cabinet Office flagging as part of their briefings to senior management?
    - What was the discussion at previous committees on the issue?
    - What do other jurisdictions do re: this issue?
    - What are the risks surrounding this decision – if approved/not approved?
    - Is this contentious?
    - How does this contribute to competitive government?

III. KEY CONSIDERATIONS

Summarize TBS/MOF comments and suggestions in up to 2-3 short bullets.

- Are there impacts or risks to the fiscal plan?
- Does the initiative have economic impacts?
- Does the initiative set a precedent?

- Please note the Briefing Note should be a maximum of one page double-sided
  1 attachment appendix (e.g., map, key table, agreement) – if necessary

IV. CABINET COMMITTEE DISCUSSION SUMMARY

-

V. Financial Summary

$ Millions	2016-17	2017-18	2018-19
Initiative cost requested	0.0	0.0	0.0
Requested program base	0.0	0.0	0.0
Total fiscal impact (draw from c-funds)	0.0	0.0	0.0

VI. Performance Measures

-

Name of analyst:	
Date:	
Branch / Division:	

APPENDIX A: PROPOSED CABINET MINUTE

APPENDIX B: SCHEDULES

- Map, Key table including (Before/After examples), agreement – if necessary

Examples of information to have as back-pocket:

- What have we done historically on this issue?
- What regions will be impacted/excluded?
- Who has been consulted? (or will be?)
- Who are the key people involved? (e.g. names of lead negotiator, CEO)
- Does this set a precedent or have linkages to other programs? (e.g. pools - community centres - hockey rinks)
- What are the key milestones, timelines for implementation?
- What is the accounting treatment? When does it hit our books?
- Who owns the risk? (e.g. agency, provincial government, feds, municipalities)
- What are the administration costs, and FTE implications?

	2016-17	2017-18	2018-19
Proceeds (Inflow)	478	1800	1800

Price Mitigation (Outflow from GGRA)

Energy Operating Expense Lines

Cap and Trade Proceeds Recycling		$249	$263
8% rebate to RRP	-300	-1100	-1100

Update to RRRP
ICI Expansion

2019-20	2020-21		
1800	1800	7678	FES

FES

$276	$319	1107	PRRT
-1200	-1200	-4900	PRRT

Impact of Select Electricity Relief Programs and Tax Credits on Residential Monthly Electricity Bills

Ministry of Finance / Ministry of Energy

October 12, 2016

Overview

- The Financial Accountability Office (FAO) released a commentary on September 27, 2016, that showed average household home energy costs (multiple fuels, including electricity) by region and by income. It found:
  - average spending on home energy varies significantly by region - northern families spend more on average; and
  - average home energy spending also varies with household income - higher income families spend more on home energy, though it is a lower percentage of their income.
- MOF, using Statistics Canada publicly-available information, produced similar results on home energy spending by income.
- The FAO did not calculate the cost of home energy net of government support programs, although the report did highlight the key ones available.
- The Ministry of Finance and Ministry of Energy worked together to create case examples that demonstrate the residential monthly electricity costs after taking into account select electricity relief programs and tax credits attributable to electricity usage.
- The cases show that:
  - low-income families are well-supported;
  - northern and farm families are paying higher electricity costs that reflect higher usage; and,
  - modest income families receive little support.

Enhancing the FAO Analysis

- Attempting to enhance the FAO analysis by including the average benefit from the support programs to show net home energy costs would be unreliable and underestimate their benefit.
  - Trying to determine reasonable average credit and benefit amounts for the income groups used in the FAO report would be, at best, an educated guess. This was a crucial caveat raised by the FAO in their report.
  - MOF has, in the past, linked tax family data to aggregate consumption costs based on some earlier Statistics Canada surveys; however, attempts to categorize these costs into specific spending areas did not yield reliable results. The FAO required Statistics Canada to compile results from a multi-year average of the survey as sample sizes were small, and regional variances were significant.
  - Electricity consumption data from smart meters is not available to the government, thus making it challenging to replicate FAO results using observed consumption. Other energy use is also not available at the household level.
- Case examples of representative families are a good alternative to demonstrate the scenarios where government mitigation efforts have a significant impact.

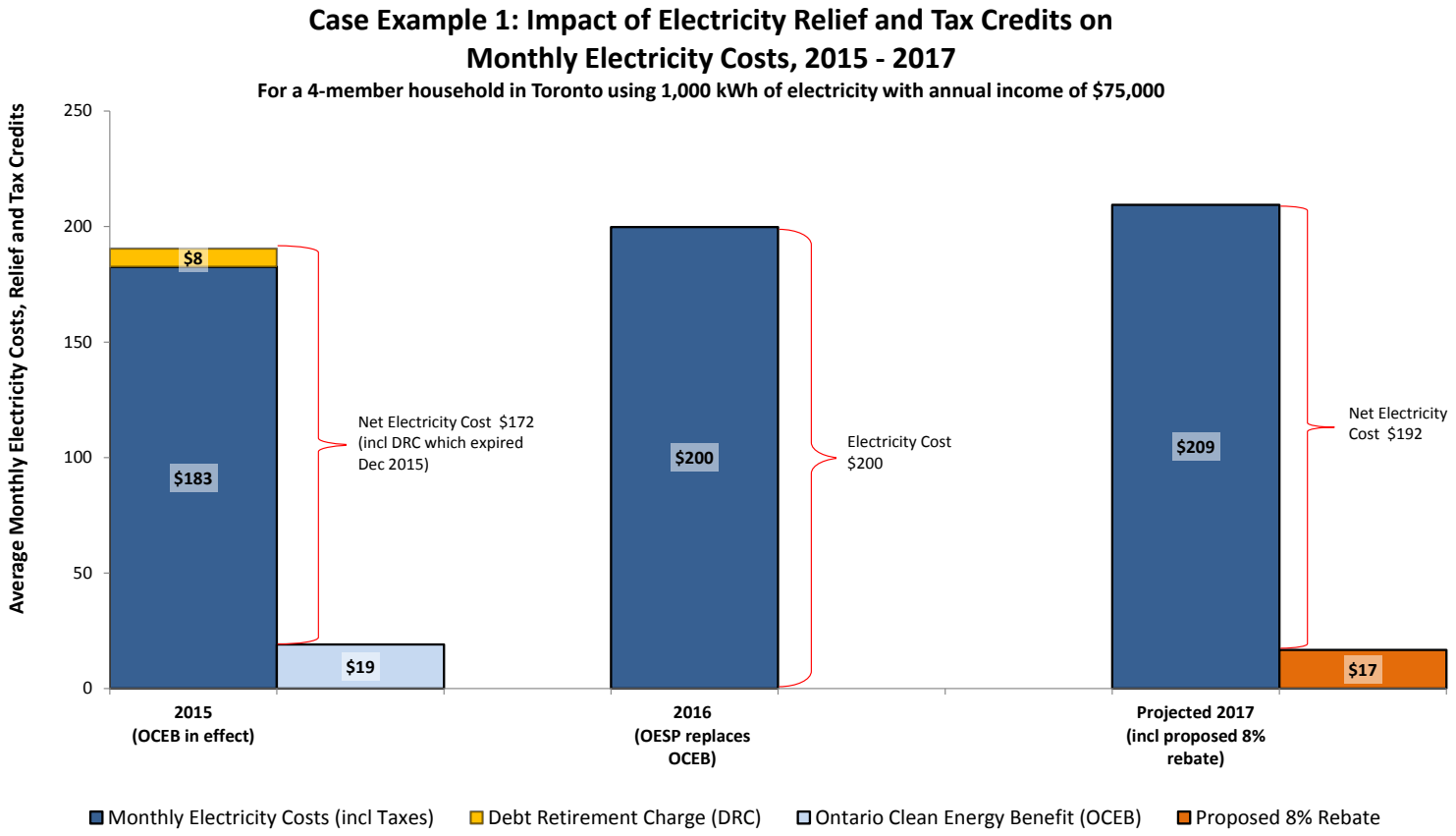
Approach Used to Build the Cases

- Representative case examples have been prepared to show monthly residential electricity costs faced by select Ontario families, less select government supports to help them with those costs.
- Costs have been estimated assuming a time-of-usage pattern, total electricity usage for the particular case and using published electricity rates. For 2017, commodity costs and rates were projected by Ministry of Energy staff.
- Electricity relief programs and tax credits that have been considered include:
  - the Ontario Electricity Support Program (2016);
  - a proposed 8% electricity bill rebate reflecting an amount equal to the provincial portion of the Harmonized Sales Tax (HST) (2017);
  - an enhanced Rural or Remote Rate Protection (2017);
  - a portion of the Ontario Sales Tax Credit (OSTC) and the federal Goods and Services Tax (GST) credit attributable to electricity usage; and
  - the energy (not just electricity) component of the Ontario Energy and Property Tax Credit (OEPTC).
- Some of the cost offsets mentioned above such as the OSTC, OEPTC, and federal GST credit do not directly affect the electricity bill, but provide notional cost offsets.
- These case examples represent an after-tax scenario.
- The various conservation programs that are available to families in Ontario to lower their electricity costs have not been included in the analysis.

Methodology, Caveats, and Assumptions

- Each case has been assigned an appropriate electricity service provider, e.g., if the case represents a low-density (R2) area, it is a Hydro One – R2 customer.
- The Ontario Sales Tax Credit and federal Goods and Services Tax credit amounts have been pro-rated based on the total Harmonized Sales Tax revenues attributable to electricity usage.
- The energy component of the Ontario Energy and Property Tax Credit has been allocated to each case; the estimate is based on occupancy cost information of similar families living in similar areas with similar incomes and household sizes.
- To focus the examples on on-bill support, incomes, property taxes and rents are held constant. Tax credits are paid out over a benefit year of July to June based on prior year's income.
- The Debt Retirement Charge is 0.7 cents per kWh of electricity consumed (prior to 2016, for residential).
- The proposed 8% electricity bill rebate, Ontario Electricity Support Program and Rural or Remote Rate Protection (RRRP) rates have been estimated by Ministry of Energy officials and have been applied pre-tax. The proposed $29 RRRP-enhancement has been reflected in the 2017 scenarios.
- Most of the cases would have received the maximum support from the Ontario Clean Energy Benefit in 2015 as their monthly usage was below 3,000 kWh, except for the dairy farm example.
- For 2016 and 2017, the families with an annual income of more than $52,000 do not get Ontario Electricity Support Program (OESP) payments. Some cases are assumed to be high-intensity users, making them entitled to more generous OESP payments.
- Sensitivity analysis on 'time-of-use' patterns and electricity usage shows minimal differences in monthly costs. And, net electricity cost is calculated as the monthly electricity bill less the benefits received from select electricity relief programs and tax credits.

Moderate and Higher-Income Families Get Some Support

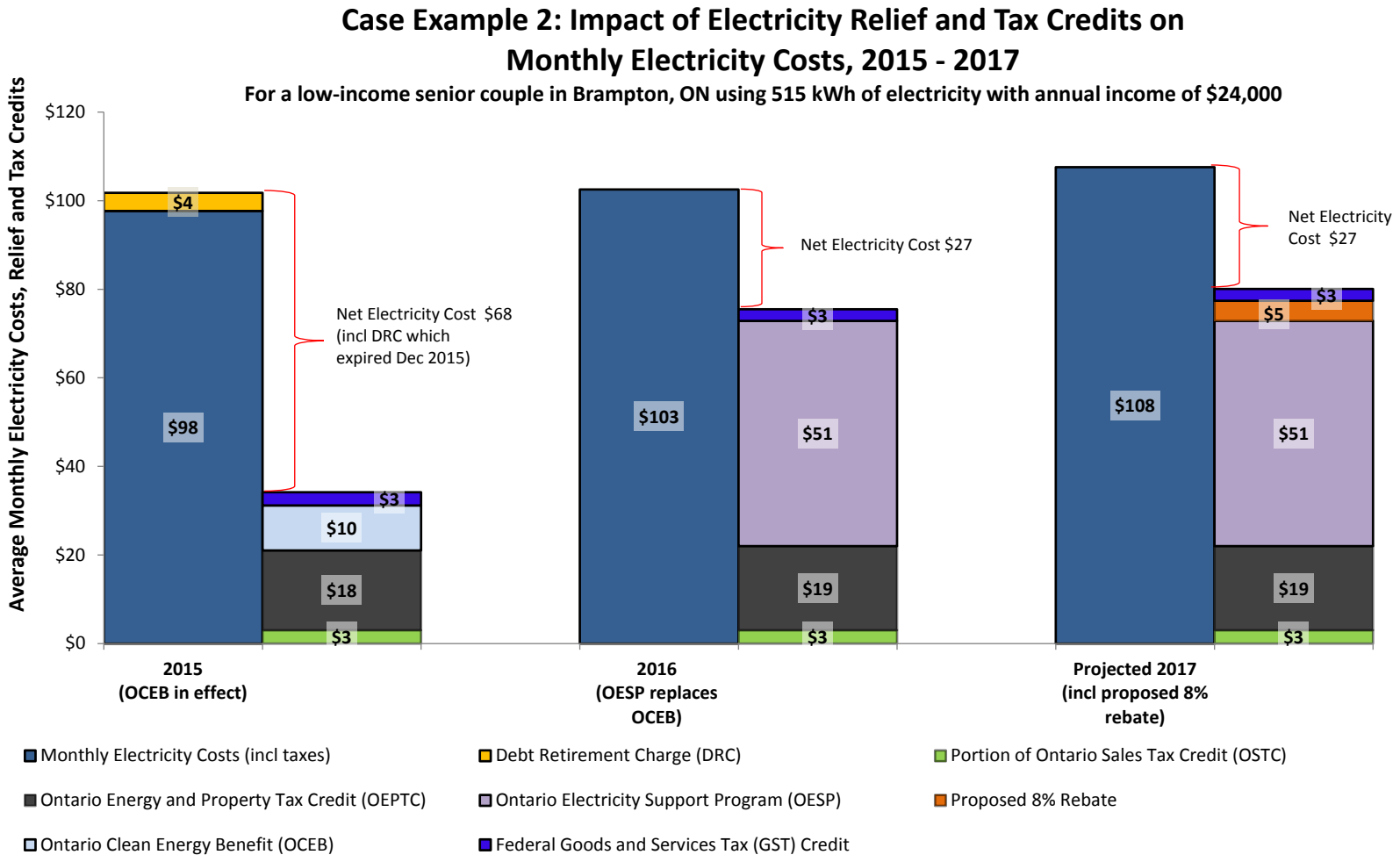


Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family owns a house in Toronto and pays property taxes of about $3,500.
2. The family has an electricity meter with Toronto Hydro.
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 62%, mid-peak 23% and on- peak 15%) and total electricity usage of 1,000 kWh a month.
4. For 2016 and 2017, this family is not entitled to any Ontario Electricity Support Program payments. (The OESP cut-off for a 4-member household is $39,000).
5. The family, at its current income level, is not entitled to the Ontario Sales Tax Credit, Ontario Energy and Property Tax Credit and federal Goods and Services Tax credit.

Vulnerable Low-Income Seniors are Well Supported



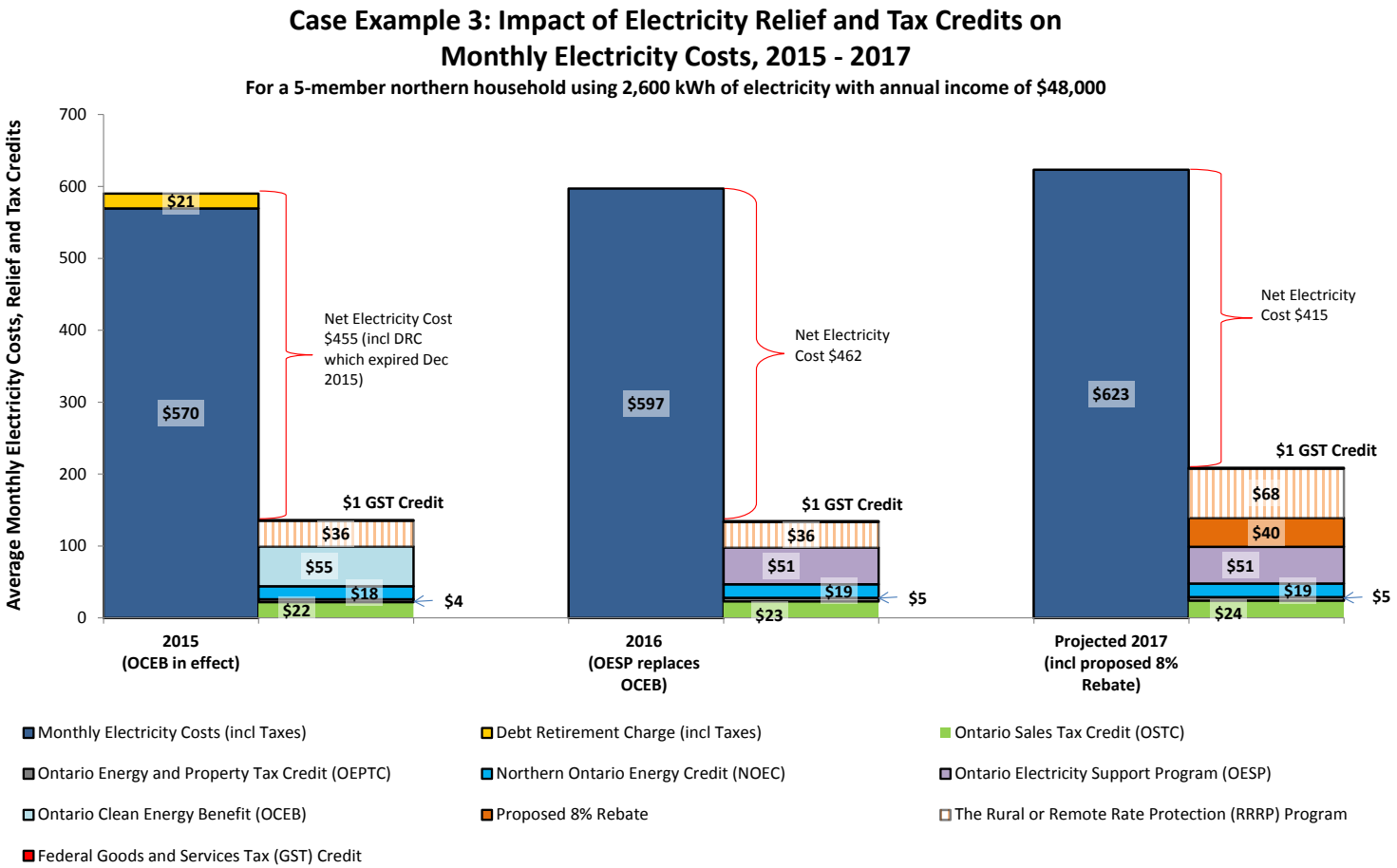
Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family rents an apartment in Brampton, ON ($700 a month) with a separate meter with Hydro One Brampton Network Inc.
2. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 60%, mid-peak 20% and on-peak 20%) and total electricity usage of 515 kWh a month.

3 For 2016 and 2017, the family is assumed to have high-intensity electricity usage (e.g., by using certain medical equipment), making them eligible for more generous OESP payments.

Families in the North Face Higher Costs Reflecting Higher Usage

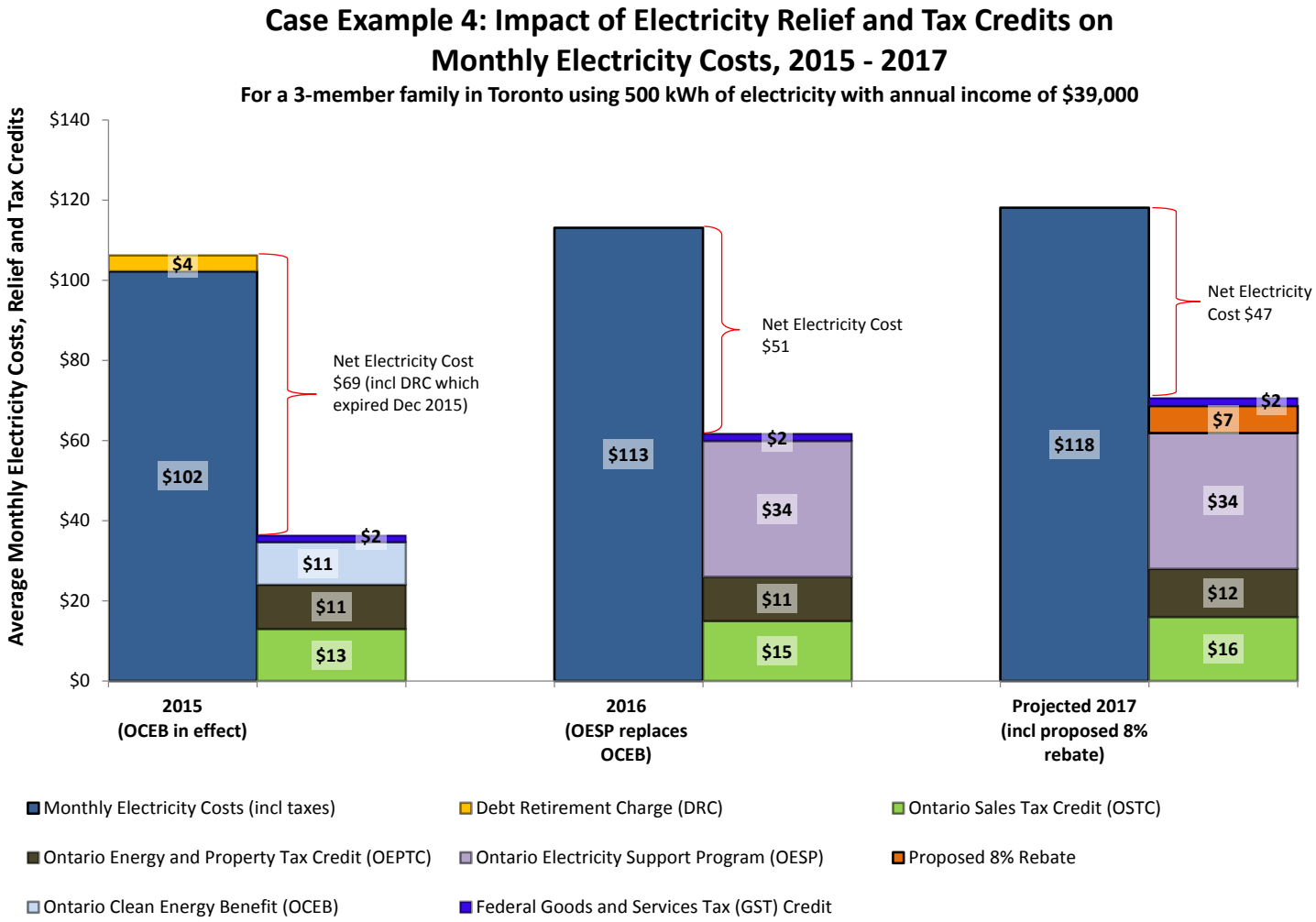


Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family lives in northern Ontario, owns a house that is heated with electricity. In low-density, rural areas, reliance on electricity for home heating is more common. The family pays property taxes of $2,500.
2. The family is a client of the Hydro One Networks Inc. – Low Density (R2).
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 65%, mid-peak 18% and on-peak 17%) and total electricity usage of 2,600 kWh a month. The time-of-usage pattern used here is close to the average pattern, given that the heating load is relatively flat and information is not available on specific heating profile for this type of home.
4. For 2016 and 2017, the family is entitled to high-intensity OESP payments, due to having electric heating.

Low-Income Families Receive Increased Support for Electricity

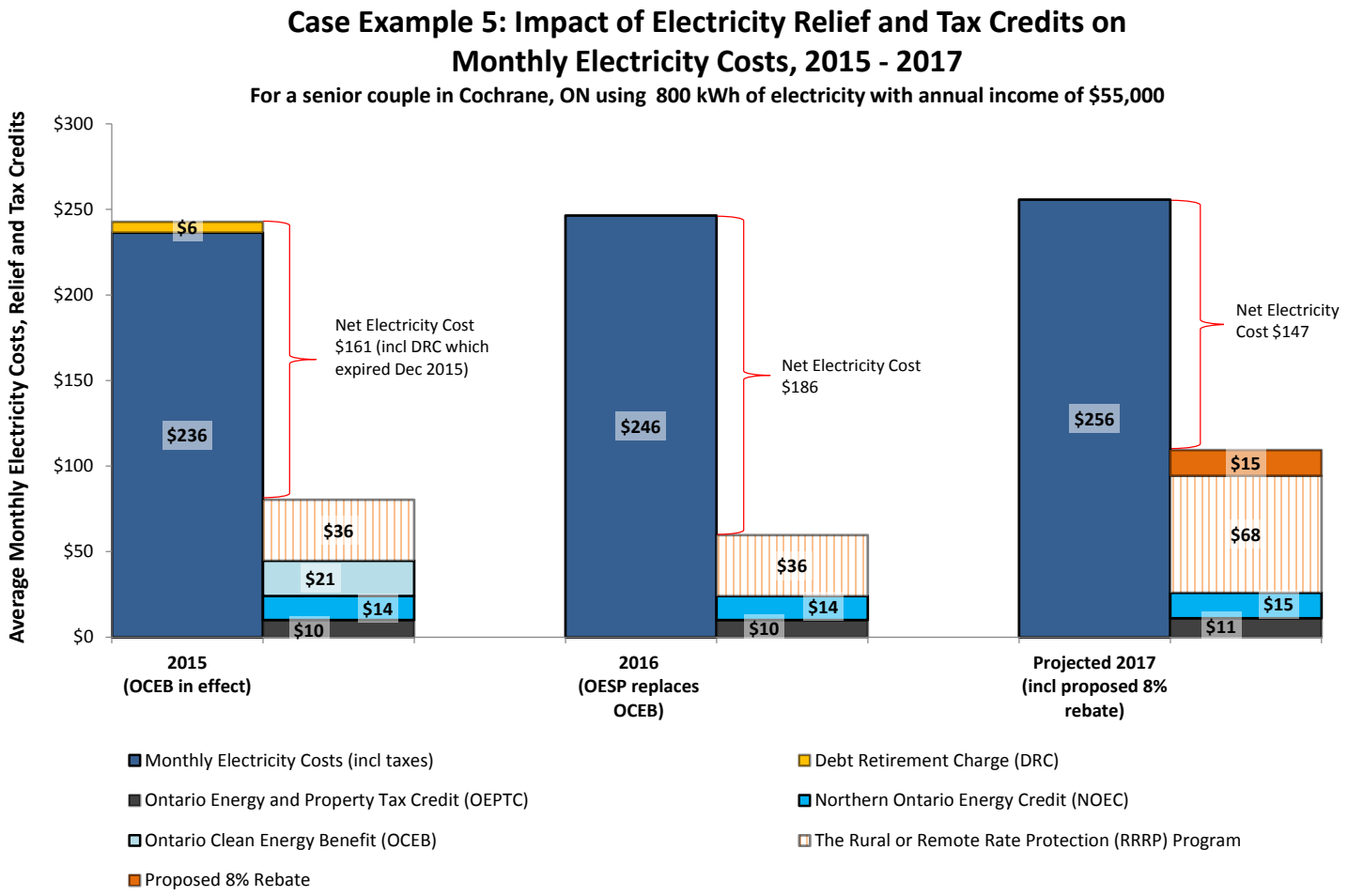


Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family lives in Toronto, owns a house and pays about $2,800 in property taxes.
2. This family is a client of the Toronto Hydro.
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 65%, mid-peak 18% and on-peak 17%) and total electricity usage of 500 kWh a month.

Rural and Remote Senior Families will Receive Enhanced Support

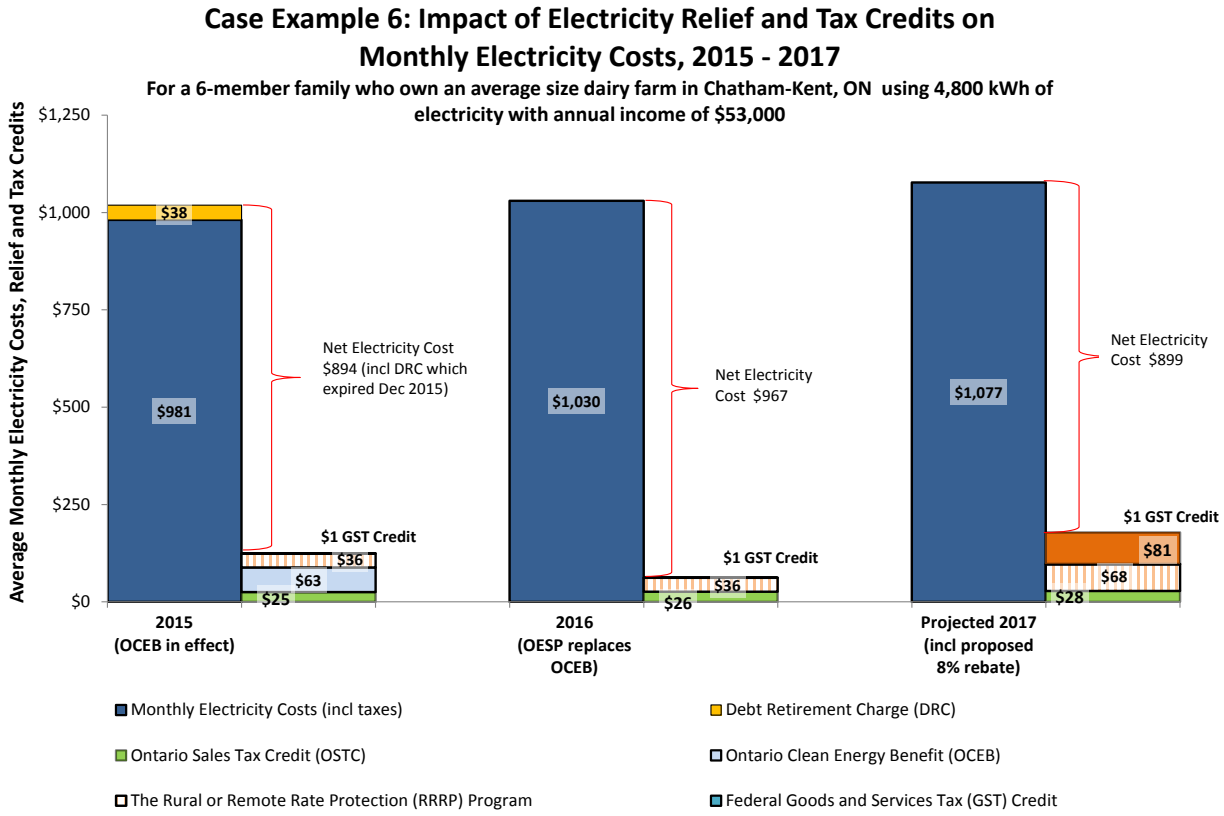


Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family lives in a propane-heated home in the District of Cochrane, North-eastern Ontario; and pays about $2,250 in property taxes.
2. The family is a client of the Hydro One Networks Inc. – Low Density (R2), making them eligible for Rural or Remote Rate Protection (RRRP).
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 60%, mid-peak 20% and on-peak 20%) and total electricity usage of 800 kWh a month.
4. The family, at its current income level, is not entitled to the Ontario Sales Tax Credit and federal Goods and Services Tax credit.

Farm Families Receive Modest Support for Electricity Costs



Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family owns an average-sized dairy farm, which is not incorporated and files farm income under personal income taxes, in Chatham-Kent, South-western Ontario; and pays about $2,000 in property taxes for their residential home.
2. The family is a client of the Hydro One Networks Inc. – Low Density (R2), making them eligible for Rural or Remote Rate Protection (RRRP).
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 65%, mid-peak 18% and on-peak 17%) and total electricity usage of 4,800 kWh a month. This is an estimated average monthly consumption for an average-sized dairy farm (source: an OMAFRA study).
4. As the family lives on the farm, they pay residential electricity rates for their farm operations, as well.
5. The family received the Ontario Clean Energy Benefit (OCEB) in 2015 only for up to 3,000 kWh per month of electricity usage. The OCEB provided 10% rebate only on up to $3,000 kWh of electricity usage.

Appendix: Background

On-Bill Relief:

- Both the Ontario Clean Energy Benefit (OCEB) and the Debt Retirement Charge (DRC) have ended December 2015.
    - The OCEB provided typical residential consumers[1] relief of about $16 a month and typical residential consumers paid DRC of about $5.25 a month (pre-tax).
- Effective January 2016, the government has introduced the Ontario Electricity Support Program (OESP).
    - The OESP provides ongoing, on-bill relief (up to $75 a month) for low-income electricity ratepayers who apply for the program.
- The government has recently announced its proposal to provide further support, including:
    - A proposed 8% electricity bill rebate reflecting the provincial portion of the Harmonized Sales Tax (HST), effective January 1, 2017, if passed by the legislature; and
    - A proposed enhancement of about $29 a month to the existing Rural or Remote Rate Protection (RRRP) program, also effective January 1, 2017, to be enacted by Regulation.

[1] Utilizing 750 kWh of electricity a month

Appendix: Background (Cont'd)

Ontario Tax Relief:

- The Ontario Sales Tax Credit (OSTC) provides relief to low- to moderate-income Ontarians to help with their sales taxes.
- The Ontario Energy and Property Tax Credit (OEPTC) provides relief to low- to moderate-income Ontarians, including seniors, to help them with their sales tax on energy and property taxes.
    - The energy component of the OEPTC is a flat, notional amount that, with certain exceptions, is not tied to actual home energy costs paid.
- The Northern Ontario Energy Credit (NOEC) provides relief to low- to moderate-income residents of northern Ontario to help them with their higher energy costs.
- The OSTC, OEPTC and NOEC are delivered to eligible recipients by the Canada Revenue Agency on behalf of the Province through the Ontario Trillium Benefit.

Federal Tax Relief:

- The federal Goods and Services Tax (GST) credit provides relief to low- to moderate-income Canadians for the federal portion of sales taxes they pay.

Impact of Select Electricity Relief Programs and Tax Credits on Residential Monthly Electricity Bills

Ministry of Finance / Ministry of Energy

October 12, 2016

Overview

- The Financial Accountability Office (FAO) released a commentary on September 27, 2016, that showed average household home energy costs (multiple fuels, including electricity) by region and by income. It found:
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- The Ministry of Finance and Ministry of Energy worked together to create case examples that demonstrate the residential monthly electricity costs after taking into account select electricity relief programs and tax credits attributable to electricity usage.
- The cases chosen show that:
  - low-income families are well-supported;
  - northern and farm families in low-density areas are paying higher electricity costs that reflect higher usage, assuming electric heating for the case example chosen, and a higher cost of distribution; and,
  - modest income families receive little support.

Commented [RK1]: Suggest this be better described --- what income level, income quintile, how representative?

Enhancing the FAO Analysis

- Attempting to enhance the FAO analysis by including the average benefit from the support programs to show net home energy costs would be unreliable and underestimate their benefit.
  - Trying to determine reasonable average credit and benefit amounts for the income groups used in the FAO report would be, at best, an educated guess. This was a crucial caveat raised by the FAO in their report.
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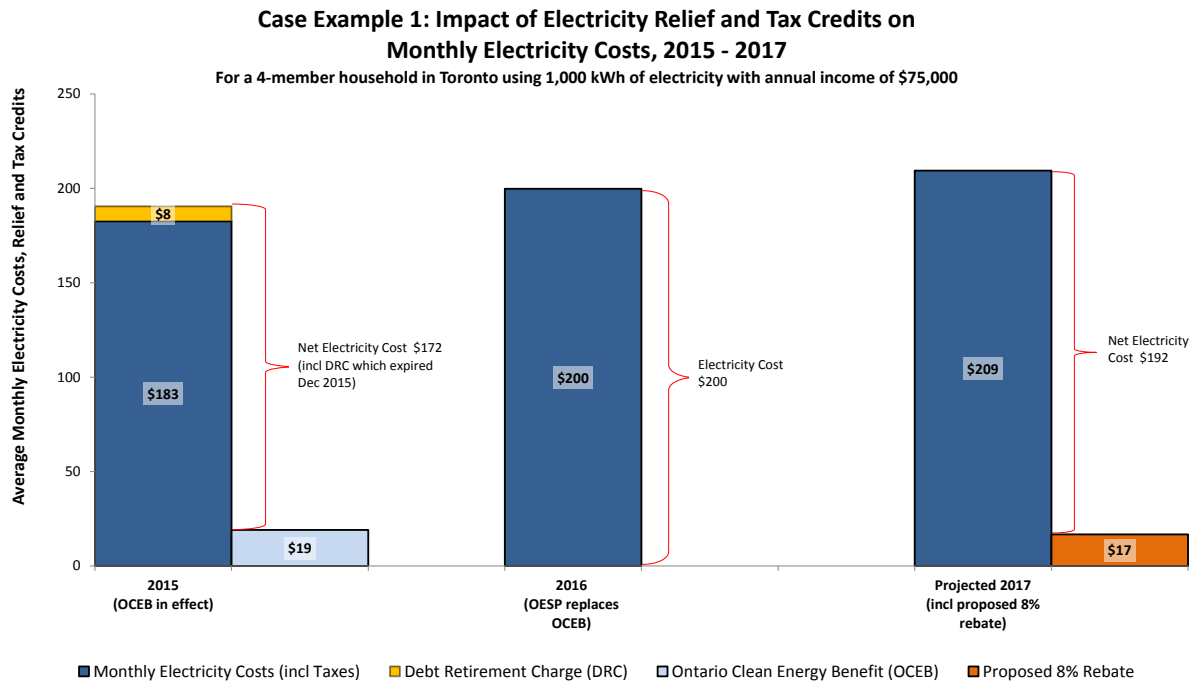
Approach Used to Build the Cases

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- Costs have been estimated assuming a time-of-usage pattern, total electricity usage for the particular case and using published electricity rates. For 2017, commodity costs and rates were projected by Ministry of Energy staff.
- Electricity relief programs and tax credits that have been considered include:
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Moderate and Higher-Income Families Get Some Support

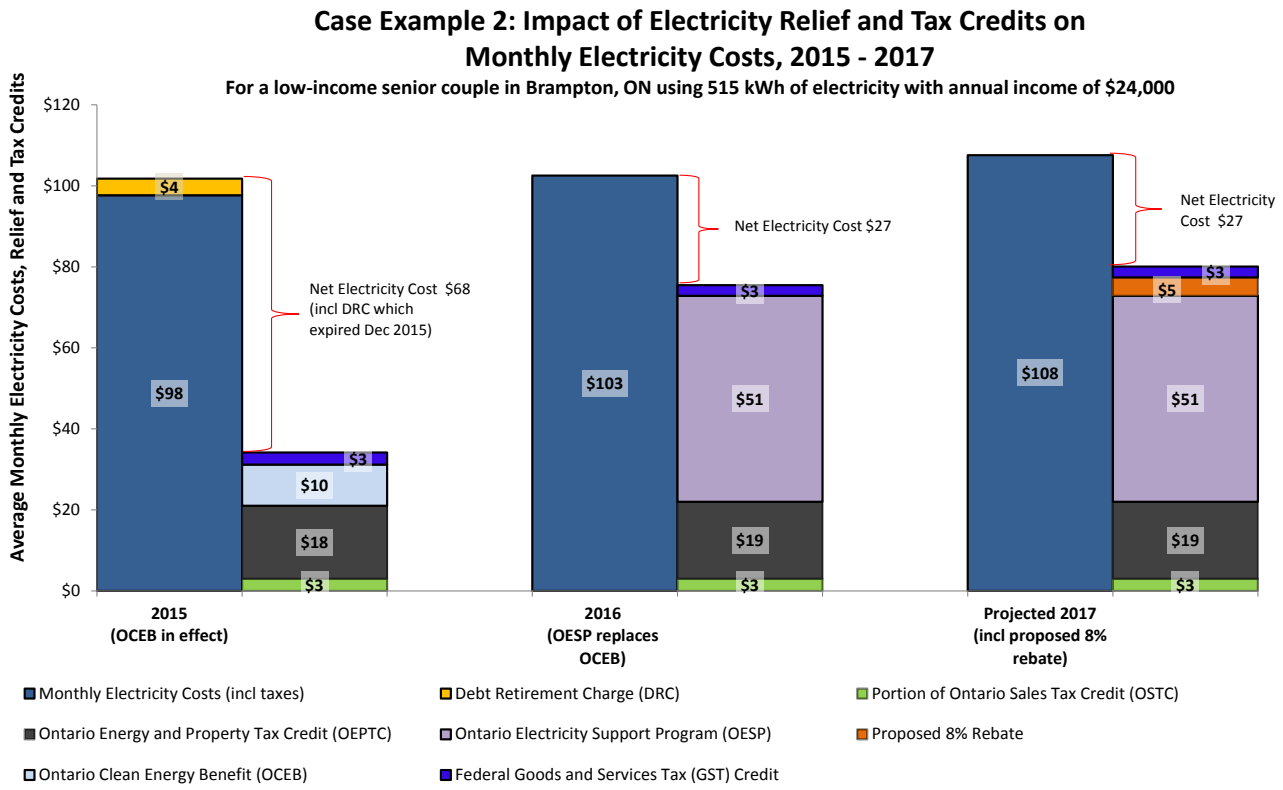


Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family owns a house in Toronto and pays property taxes of about $3,500.
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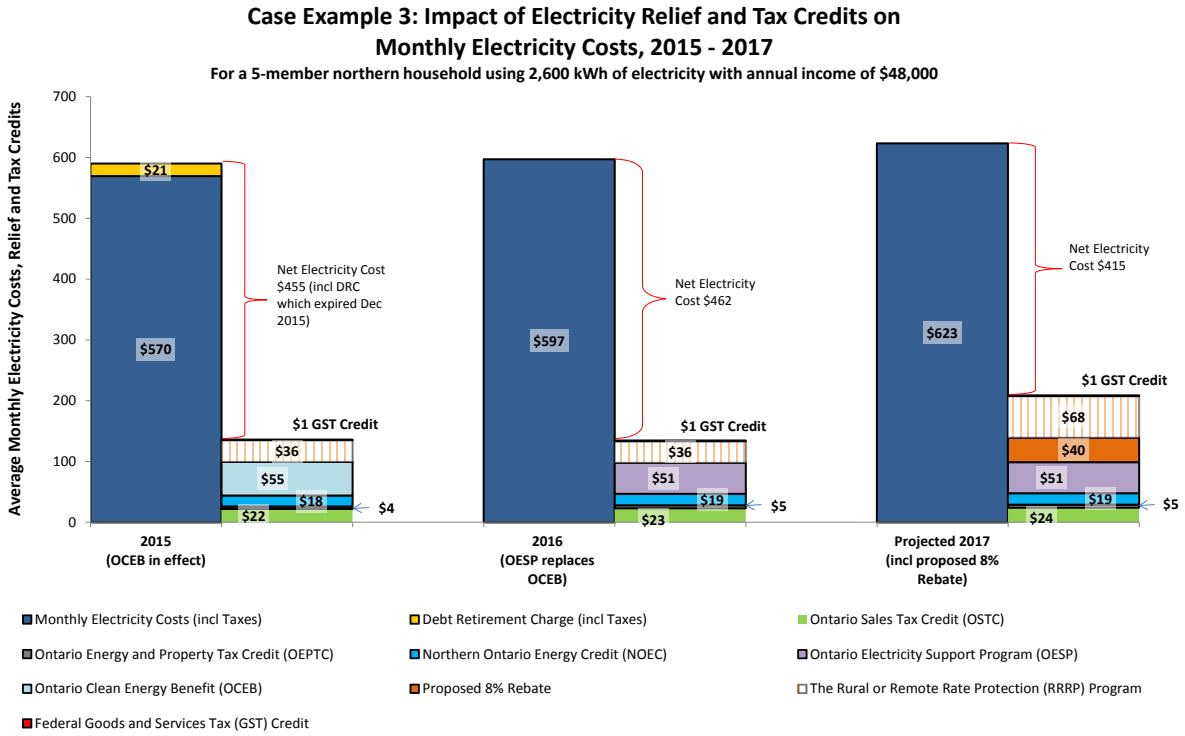


Source: Ministry of Finance / Ministry of Energy

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Families in the North Face Higher Costs Reflecting Higher Usage



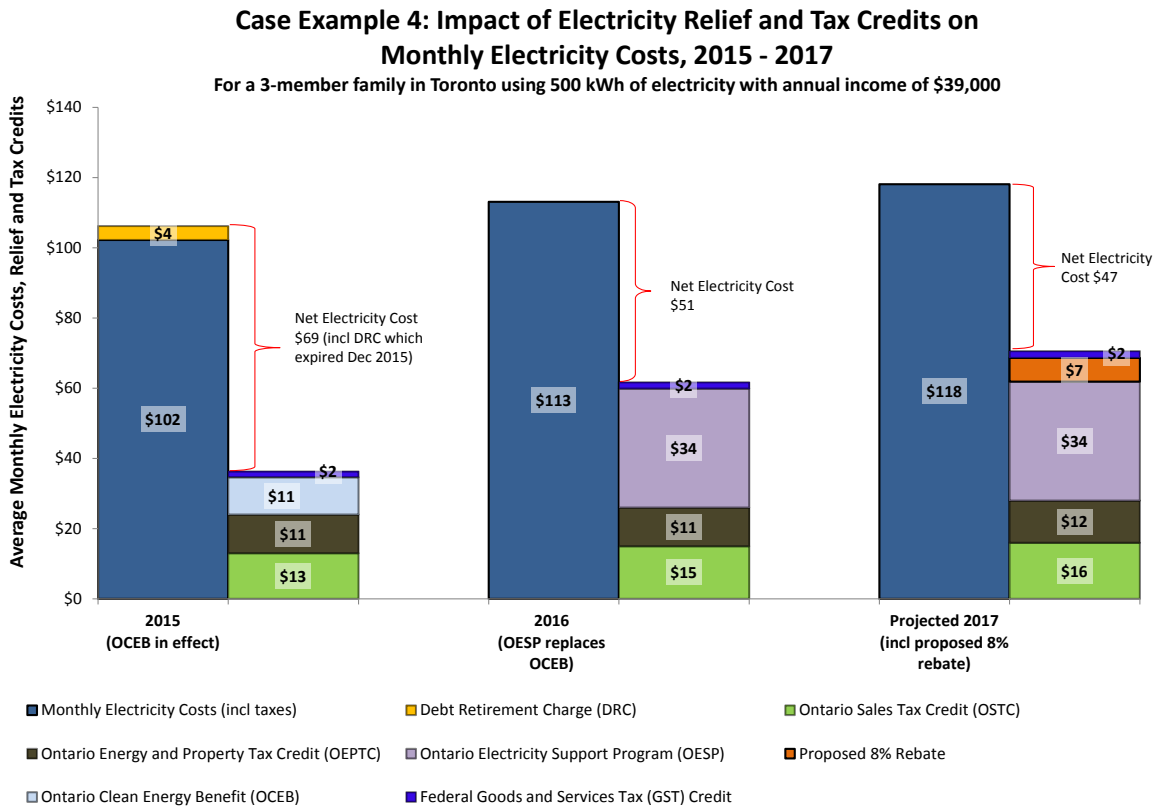
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1. This example assumes the family lives in northern Ontario, owns a house that is heated with electricity. In low-density, rural areas, reliance on electricity for home heating is more common. The family pays property taxes of $2,500.
2. The family is a client of the Hydro One Networks Inc. – Low Density (R2).
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 65%, mid-peak 18% and on-peak 17%) and total electricity usage of 2,600 kWh a month. The time-of-usage pattern used here is close to the average pattern, given that the heating load is relatively flat and information is not available on specific heating profile for this type of home.
4. For 2016 and 2017, the family is entitled to high-intensity OESP payments, due to having electric heating.

Commented [RK2]: Can the percentage of northern homes heated with electricity be added?

Low-Income Families Receive Increased Support for Electricity

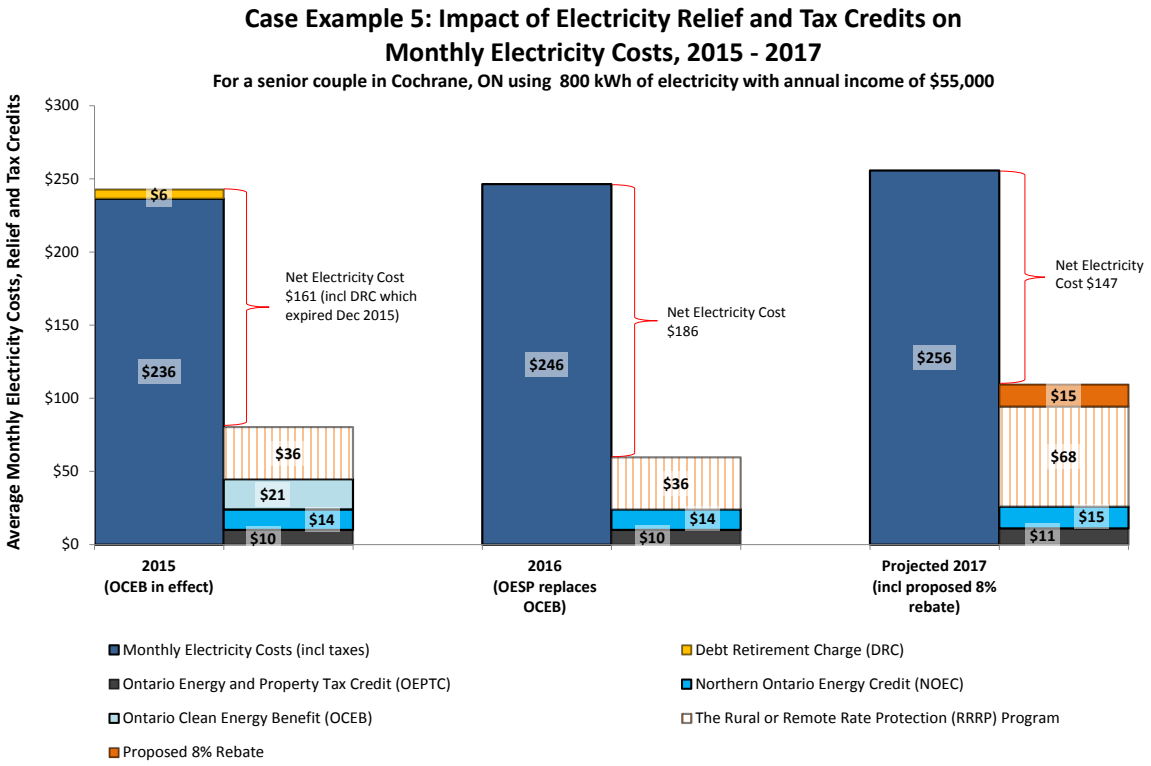


Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family lives in Toronto, owns a house and pays about $2,800 in property taxes.
2. This family is a client of the Toronto Hydro.
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 65%, mid-peak 18% and on-peak 17%) and total electricity usage of 500 kWh a month.

Rural and Remote Senior Families will Receive Enhanced Support

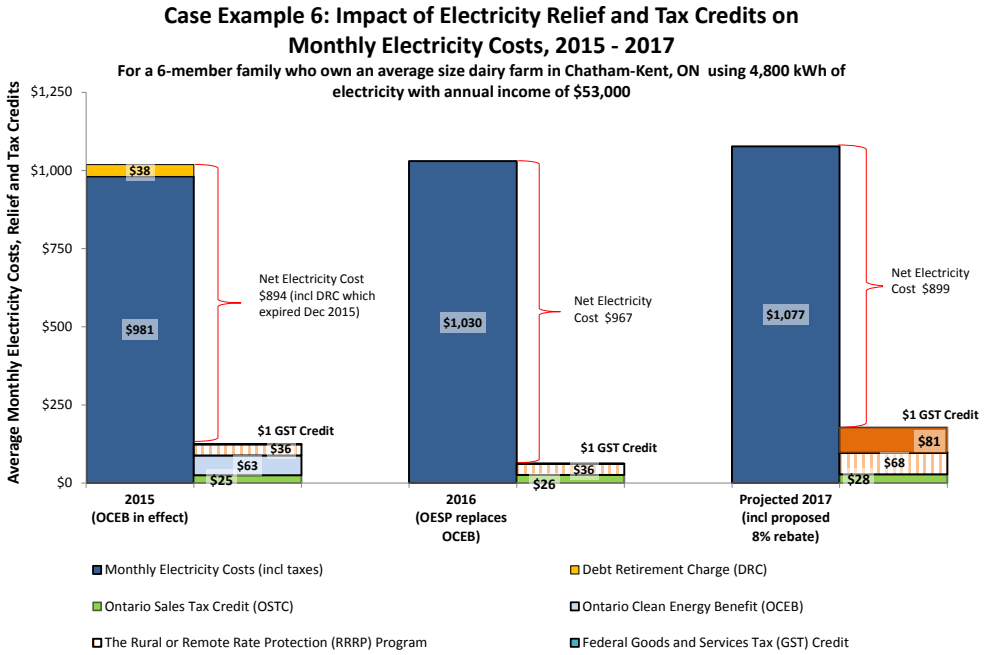


Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family lives in a propane-heated home in the District of Cochrane, North-eastern Ontario; and pays about $2,250 in property taxes.
2. The family is a client of the Hydro One Networks Inc. – Low Density (R2), making them eligible for Rural or Remote Rate Protection (RRRP).
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 60%, mid-peak 20% and on-peak 20%) and total electricity usage of 800 kWh a month.
4. The family, at its current income level, is not entitled to the Ontario Sales Tax Credit and federal Goods and Services Tax credit.

Farm Families Receive Modest Support for Electricity Costs



Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family owns an average-sized dairy farm, which is not incorporated and files farm income under personal income taxes, in Chatham-Kent, South-western Ontario; and pays about $2,000 in property taxes for their residential home.
2. The family is a client of the Hydro One Networks Inc. – Low Density (R2), making them eligible for Rural or Remote Rate Protection (RRRP).
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 65%, mid-peak 18% and on-peak 17%) and total electricity usage of 4,800 kWh a month. This is an estimated average monthly consumption for an average-sized dairy farm (source: an OMAFRA study).
4. As the family lives on the farm, they pay residential electricity rates for their farm operations, as well.
5. The family received the Ontario Clean Energy Benefit (OCEB) in 2015 only for up to 3,000 kWh per month of electricity usage. The OCEB provided 10% rebate only on up to $3,000 kWh of electricity usage.

Appendix: Background

On-Bill Relief:

- Both the Ontario Clean Energy Benefit (OCEB) and the Debt Retirement Charge (DRC) have ended December 2015.
  - The OCEB provided typical residential consumers[1] relief of about $16 a month and typical residential consumers paid DRC of about $5.25 a month (pre-tax).
- Effective January 2016, the government has introduced the Ontario Electricity Support Program (OESP).
  - The OESP provides ongoing, on-bill relief (up to $75 a month) for low-income electricity ratepayers who apply for the program.
- The government has recently announced its proposal to provide further support, including:
  - A proposed 8% electricity bill rebate reflecting the provincial portion of the Harmonized Sales Tax (HST), effective January 1, 2017, if passed by the legislature; and
  - A proposed enhancement of about $29 a month to the existing Rural or Remote Rate Protection (RRRP) program, also effective January 1, 2017, to be enacted by Regulation.

[1] Utilizing 750 kWh of electricity a month

Appendix: Background (Cont'd)

Ontario Tax Relief:

- The Ontario Sales Tax Credit (OSTC) provides relief to low- to moderate-income Ontarians to help with their sales taxes.
- The Ontario Energy and Property Tax Credit (OEPTC) provides relief to low- to moderate-income Ontarians, including seniors, to help them with their sales tax on energy and property taxes.
    - The energy component of the OEPTC is a flat, notional amount that, with certain exceptions, is not tied to actual home energy costs paid.
- The Northern Ontario Energy Credit (NOEC) provides relief to low- to moderate-income residents of northern Ontario to help them with their higher energy costs.
- The OSTC, OEPTC and NOEC are delivered to eligible recipients by the Canada Revenue Agency on behalf of the Province through the Ontario Trillium Benefit.

Federal Tax Relief:

- The federal Goods and Services Tax (GST) credit provides relief to low- to moderate-income Canadians for the federal portion of sales taxes they pay.

Impact of Select Electricity Relief Programs and Tax Credits on Residential Monthly Household Energy Bills

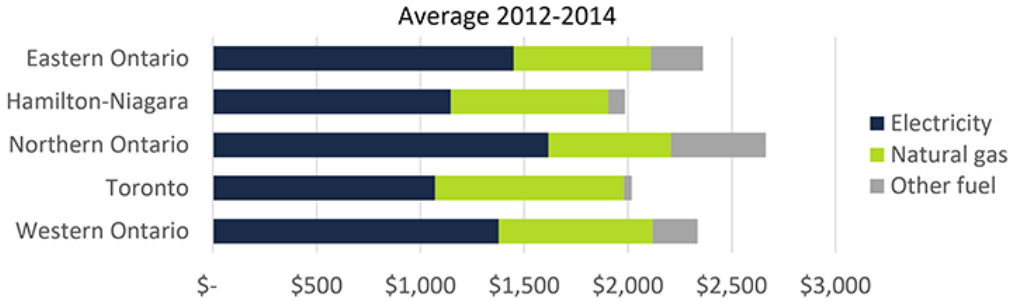
Ministry of Finance / Ministry of Energy

October 13, 2016

Overview

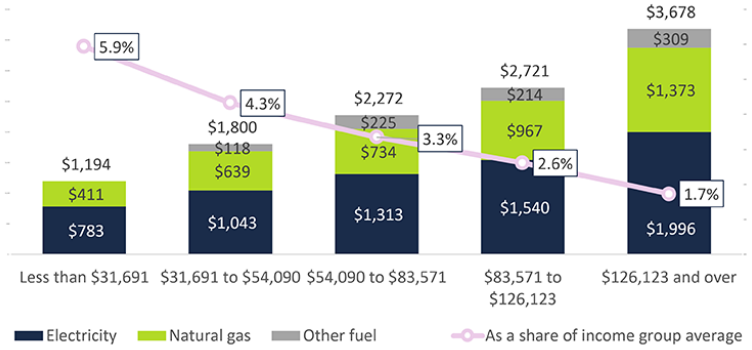
- The Financial Accountability Office (FAO) released a commentary on September 27, 2016, that showed average household home energy costs (multiple fuels, including electricity) by region and by income, using the Statistics Canada Survey of Household Spending (2012-2014 data). It found:
  - average spending on home energy varies significantly by region - northern families spend more on average; and

Average Household Home Energy Spending in Ontario by Energy Source and Region, Average 2012-2014



  - average home energy spending also varies with household income - higher income families spend more on home energy, though it is a lower percentage of their income.

Average Household Energy Spending in Ontario by Energy Source and Income Level, 2014



Ministries' analysis of FAO study

- MOF, using Statistics Canada publicly-available information, produced similar results on home energy spending by income. The underlying data do not allow separating out supports.

  The FAO's analysis is based on survey data[1] and is based on averages on this limited sample.
- Based on the time frame of the survey data (2012-2014), it would appear that the self-reported energy costs factor in the Ontario Clean Energy Benefit (OCEB), the Debt Retirement Charge (ended as of Jan 1, 2016 for residential users) but not non-bill relief, such as tax credits.

- As such, the FAO analysis does not calculate the cost of home energy net of government support programs, although the report did highlight the key ones available.
  - Given the introduction of the 8 per cent rebate starting in 2017, removal of the DRC for residential customers and income-based enhancement such as the Ontario Electricity Support Program, lower income homes are on average expected to be benefit even further than the FAO analysis based on survey data.
  - The proposed enhancement to the existing Rural or Remote Rate Protection (RRRP) program will further benefit residential customers in low-density areas (Hydro One R2).

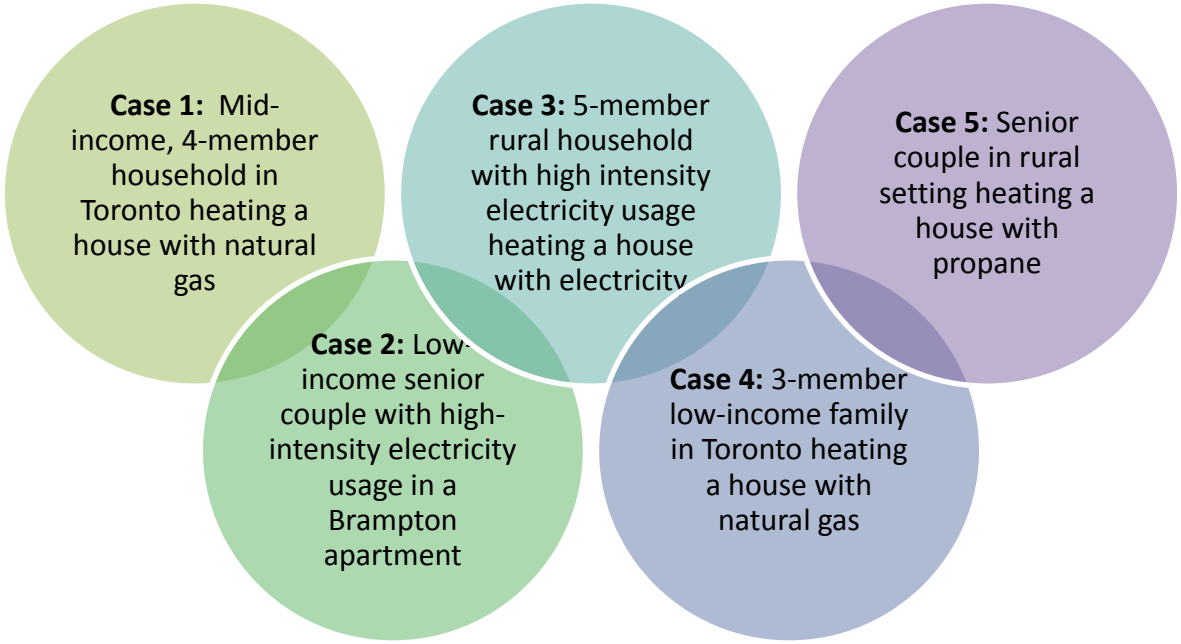
[1] The 2014 Survey of Household Spending included 5,682 interview respondents (735 from Ontario), of which 3,758 submitted usable spending diaries (454 from Ontario).

Ministries' Case Study Approach

- Attempting to enhance the FAO analysis by including the average benefit from the support programs to show net home energy costs would be unreliable and underestimate their benefit, due to the following reasons:
  - Trying to determine reasonable average credit and benefit amounts for the income groups used in the FAO report would be, at best, an educated guess. This was a crucial caveat raised by the FAO in their report.
  - MOF has, in the past, linked tax family data to aggregate consumption costs based on some earlier Statistics Canada surveys; however, attempts to categorize these costs into specific spending areas did not yield reliable results. The FAO required Statistics Canada to compile results from a multi-year average of the survey as sample sizes were small, and regional variances were significant.
  - Electricity consumption data that is warehoused in Ontario's Meter Data Management and Repository (MDMR) in anonymized and currently does not enable analytics at a regional scale. Changes imposed by the Ontario Energy Board through a licence change for the Smart Metering Entity (SME) – which runs the MDMR – will enable this type of analytics. These changes will take effect on January 1, 2017. Government access to that data is currently restricted but work is underway to enable third party access. However the SME may be able to undertake province-wide analytics upon request.
- Alternately, the Ministry of Finance and Ministry of Energy have worked together to create case examples that demonstrate the residential monthly energy costs after taking into account select electricity relief programs and tax credits attributable to energy, and in particular electricity usage.

Overview of Cases

- Electricity costs are highly affected by the fuel used to heat a home. Homes heated by conventional electrical resistance heating systems tend to have higher electricity and higher total home energy bills than those heated with natural gas.
- The cases illustrate a number of Ontario household configurations, based on certain assumptions. The cases were chosen to demonstrate the impact of different electricity support programs available. *As such they should not be regarded as representative.* Tentative lessons include:
  - low-income families receive significant support;
  - electric heating (as prevalent in rural Ontario) results in higher electricity costs;
  - modest income families receive relatively little support.



Approach Used to Build the Cases

- Representative case examples have been prepared to show monthly residential energy costs faced by select Ontario families, less select government supports to help them with those costs.
- Costs have been estimated assuming a time-of-usage pattern, total electricity usage for the particular case and using published electricity rates. For 2017, commodity costs and rates were projected by Ministry of Energy staff.
- Electricity relief programs and tax credits that have been considered include:
  - the Ontario Electricity Support Program (2016);
  - a proposed 8% electricity bill rebate reflecting an amount equal to the provincial portion of the Harmonized Sales Tax (HST) (2017);
  - an enhanced Rural or Remote Rate Protection (2017);
  - a portion of the Ontario Sales Tax Credit (OSTC) and the federal Goods and Services Tax (GST) credit attributable to electricity usage; and
  - the energy (not just electricity) component of the Ontario Energy and Property Tax Credit (OEPTC).
- Some of the cost offsets mentioned above such as the OSTC, OEPTC, and federal GST credit do not directly affect the electricity bill, but provide notional cost offsets.
- These case examples represent an after-tax scenario.
- The various conservation programs that are available to families in Ontario to lower their electricity costs have not been included in the analysis. Instead each case is annotated with a list of conservation supports typically available to these customers.
- Households can generally achieve between 10% and 30% in energy savings by participating in these programs offered by the independent Electricity System Operator (IESO) and natural gas utilities. The level of energy savings achieved depends on a range of factors which include the types of measures being undertaken and the age of the home.

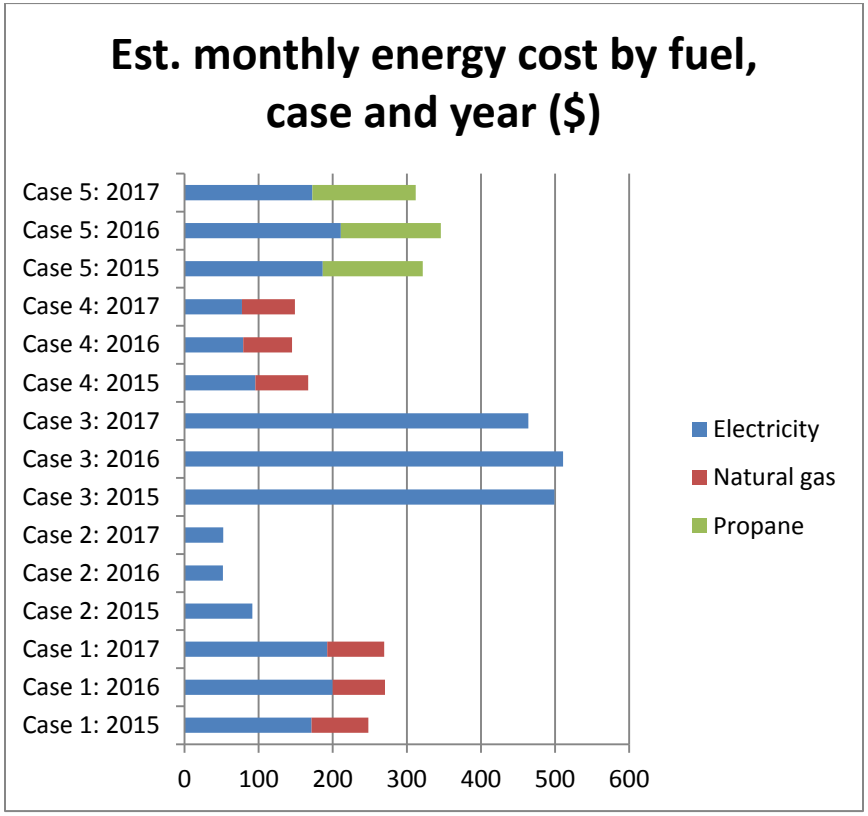
Methodology, Caveats, and Assumptions

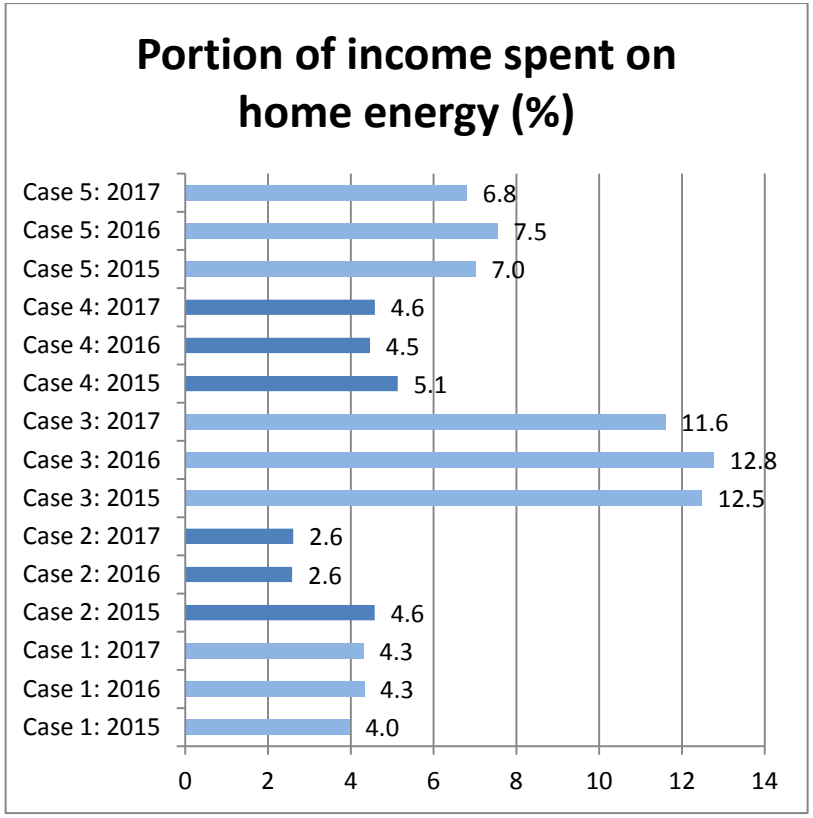
- Each case has been assigned an appropriate electricity service provider, e.g., if the case represents a low-density (R2) area, it is a Hydro One – R2 customer.
- The Ontario Sales Tax Credit and federal Goods and Services Tax credit amounts have been pro-rated based on the total Harmonized Sales Tax revenues attributable to electricity usage.
- The energy component of the Ontario Energy and Property Tax Credit has been allocated to each case; the estimate is based on occupancy cost information of similar families living in similar areas with similar incomes and household sizes.
- 2017 electricity delivery rates have not yet been determined. For 2017, this analysis assumes a 1.7% increase from 2016 rates for each service provider. This represents an assumed 2% increase allowance for inflation, reduced by 0.3% to represent a modest productivity factor used by the Ontario Energy Board to incent efficiency gains. Actual rates will vary.
- To focus the examples on on-bill support, incomes, property taxes and rents are held constant. Tax credits are paid out over a benefit year of July to June based on prior year's income.
- The Debt Retirement Charge is 0.7 cents per kWh of electricity consumed (prior to 2016, for residential).
- The proposed 8% electricity bill rebate, Ontario Electricity Support Program and Rural or Remote Rate Protection (RRRP) rates have been estimated by Ministry of Energy staff and have been applied pre-tax. The proposed $29 RRRP-enhancement has been reflected in the 2017 scenarios.
- The cases would have received the maximum support from the Ontario Clean Energy Benefit in 2015 as their monthly usage was below 3,000 kWh.
- For 2016 and 2017, the families with an annual income of more than $52,000 do not get Ontario Electricity Support Program (OESP) payments. Some cases are assumed to be high-intensity users, making them entitled to more generous OESP payments.

- Sensitivity analysis on 'time-of-use' patterns and electricity usage shows minimal differences in monthly costs. And, net electricity cost is calculated as the monthly electricity bill less the benefits received from select electricity relief programs and tax credits.
- Natural gas and propane costs, are based on typical homes and calculated as rough estimates to provide context on total home energy costs. 2017 forecasts assume constant commodity prices from 2016 but include carbon costs under cap-and-trade.

Total Estimated Household Energy Costs

The following graphs show estimated household energy costs 2015-2017 for each case as absolute costs ($/ month) and as a percentage of income. The cases illustrate a number of Ontario household configurations, based on certain assumptions, and *should not be regarded as representative.* [Underlying costs have to be updated to reflect tax credit components for natural gas and propane energy costs]

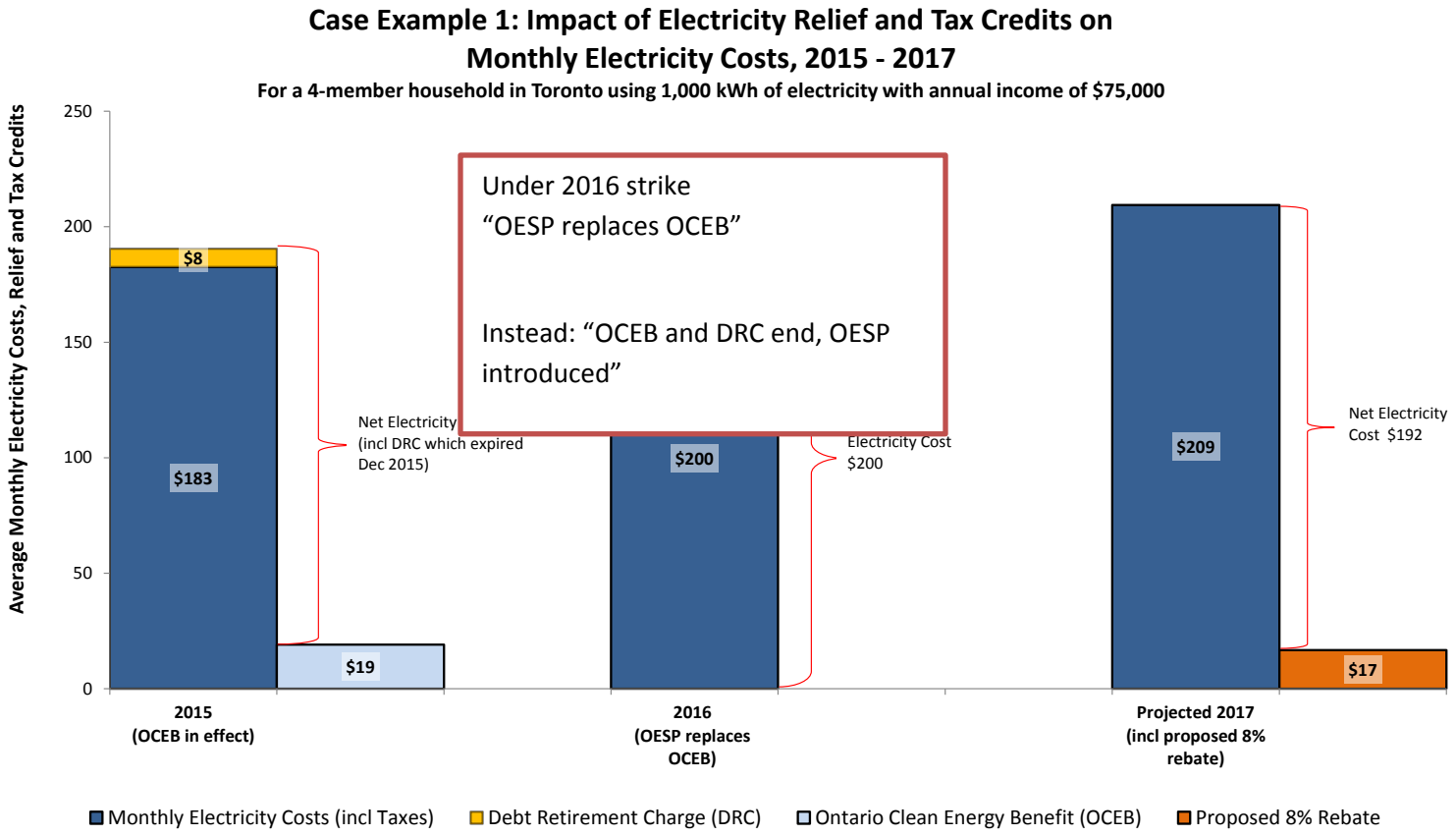




Source: Ministry of Finance / Ministry of Energy

The next slides break down the *electricity* component of energy costs for each case along with the supports available.

Case 1: Moderate and Higher-Income Family

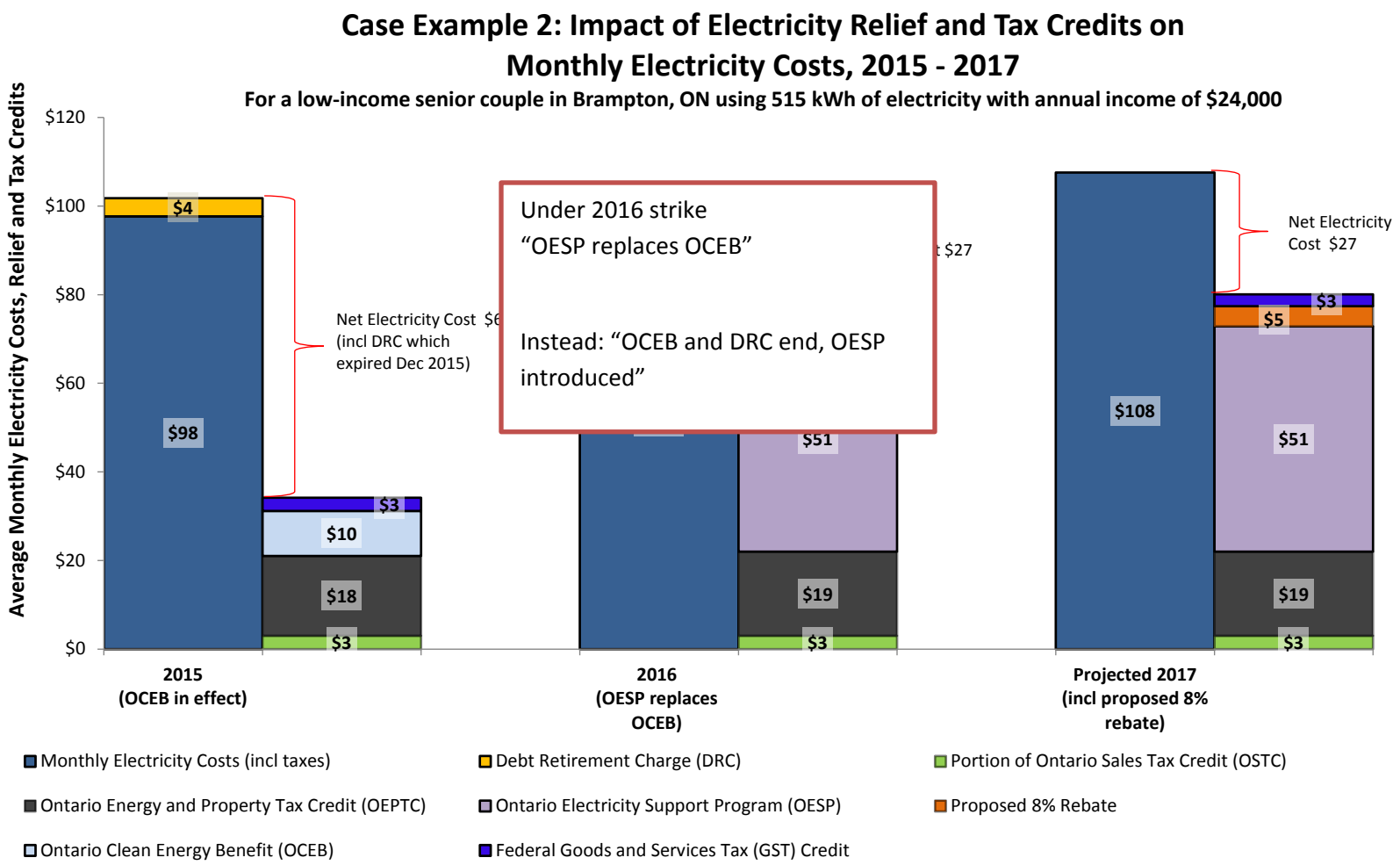


Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family owns a house in Toronto and pays property taxes of about $3,500.
2. The family has an electricity meter with Toronto Hydro.
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 62%, mid-peak 23% and on- peak 15%) and total electricity usage of 1,000 kWh a month.
4. For 2016 and 2017, this family is not entitled to any Ontario Electricity Support Program payments. (The OESP cut-off for a 4-member household is $39,000).
5. The family, at its current income level, is not entitled to the Ontario Sales Tax Credit, Ontario Energy and Property Tax Credit and federal Goods and Services Tax credit.

Case 2: Vulnerable Low-Income Senior Couple

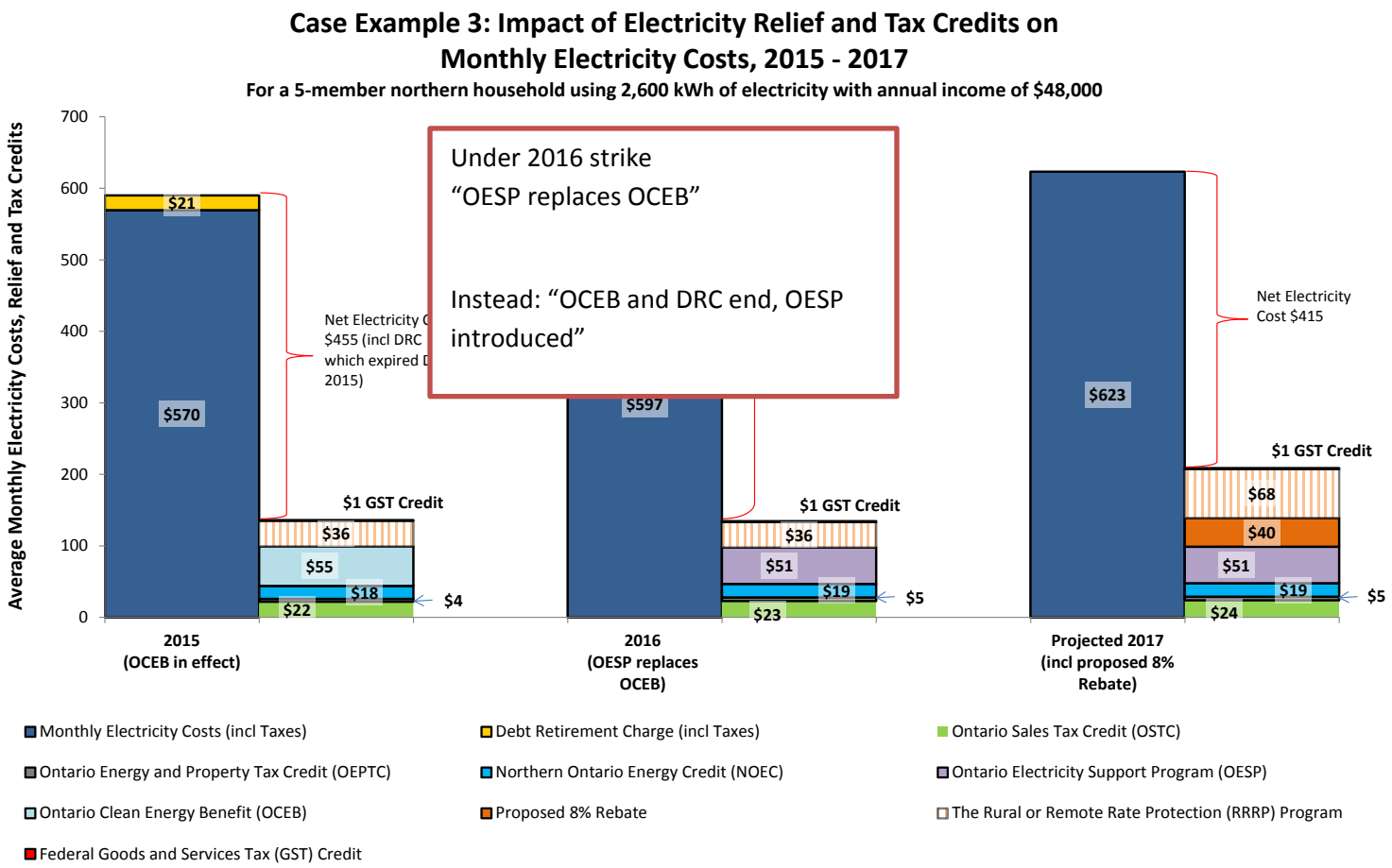


Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family rents an apartment in Brampton, ON ($700 a month) with a separate meter with Hydro One Brampton Network Inc.
2. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 60%, mid-peak 20% and on-peak 20%) and total electricity usage of 515 kWh a month.
3 For 2016 and 2017, the family is assumed to have high-intensity electricity usage (e.g., by using certain medical equipment), making them eligible for more generous OESP payments.

Case 3: Rural family With Electric Heating

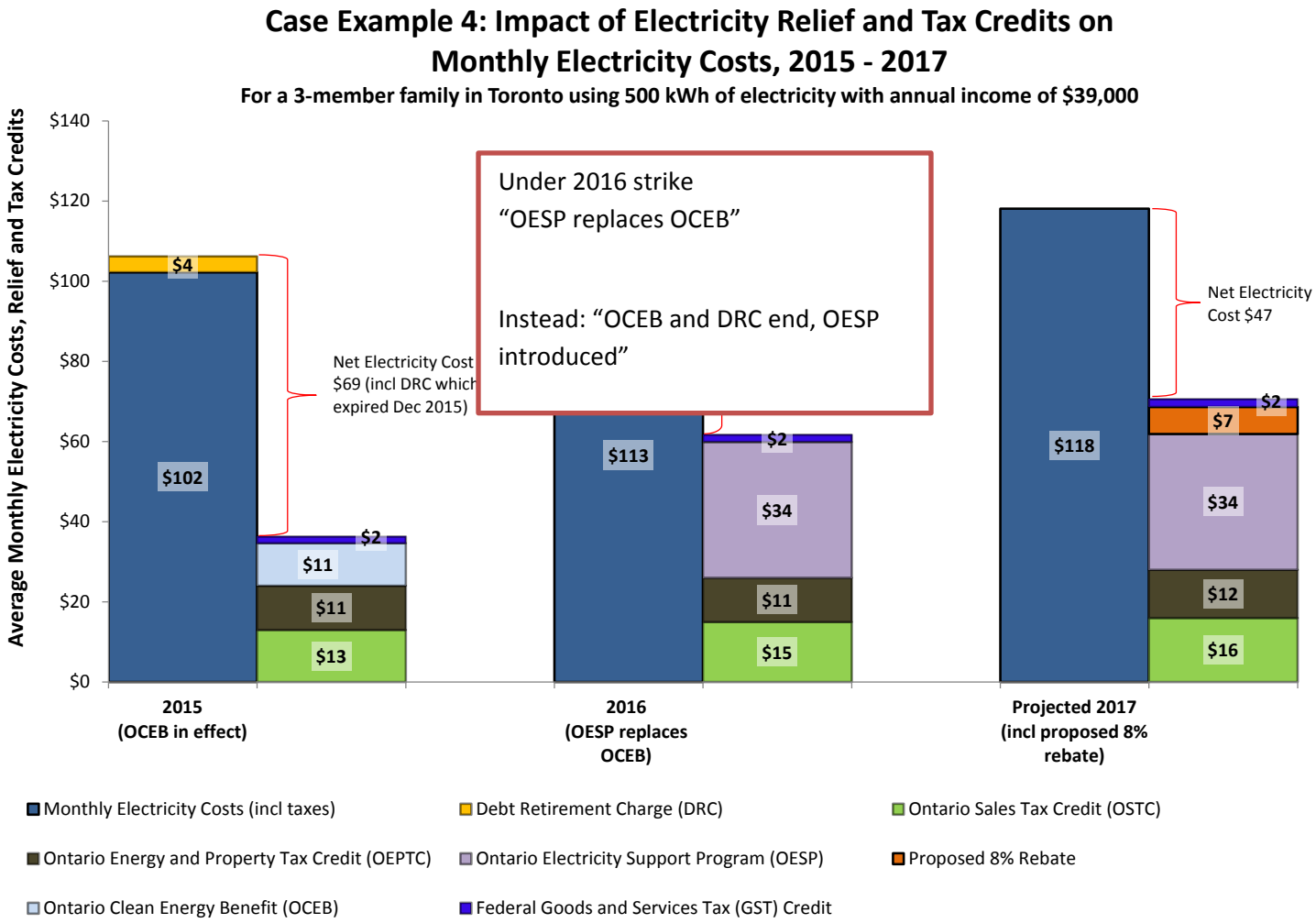


Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family lives in northern Ontario, owns a house that is heated with electricity. In low-density, rural areas, reliance on electricity for home heating is more common. The family pays property taxes of $2,500.
2. The family is a client of the Hydro One Networks Inc. – Low Density (R2).
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 65%, mid-peak 18% and on-peak 17%) and total electricity usage of 2,600 kWh a month. The time-of-usage pattern used here is close to the average pattern, given that the heating load is relatively flat and information is not available on specific heating profile for this type of home.
4. For 2016 and 2017, the family is entitled to high-intensity OESP payments, due to having electric heating.

Case 4: Urban, Low-Income Family

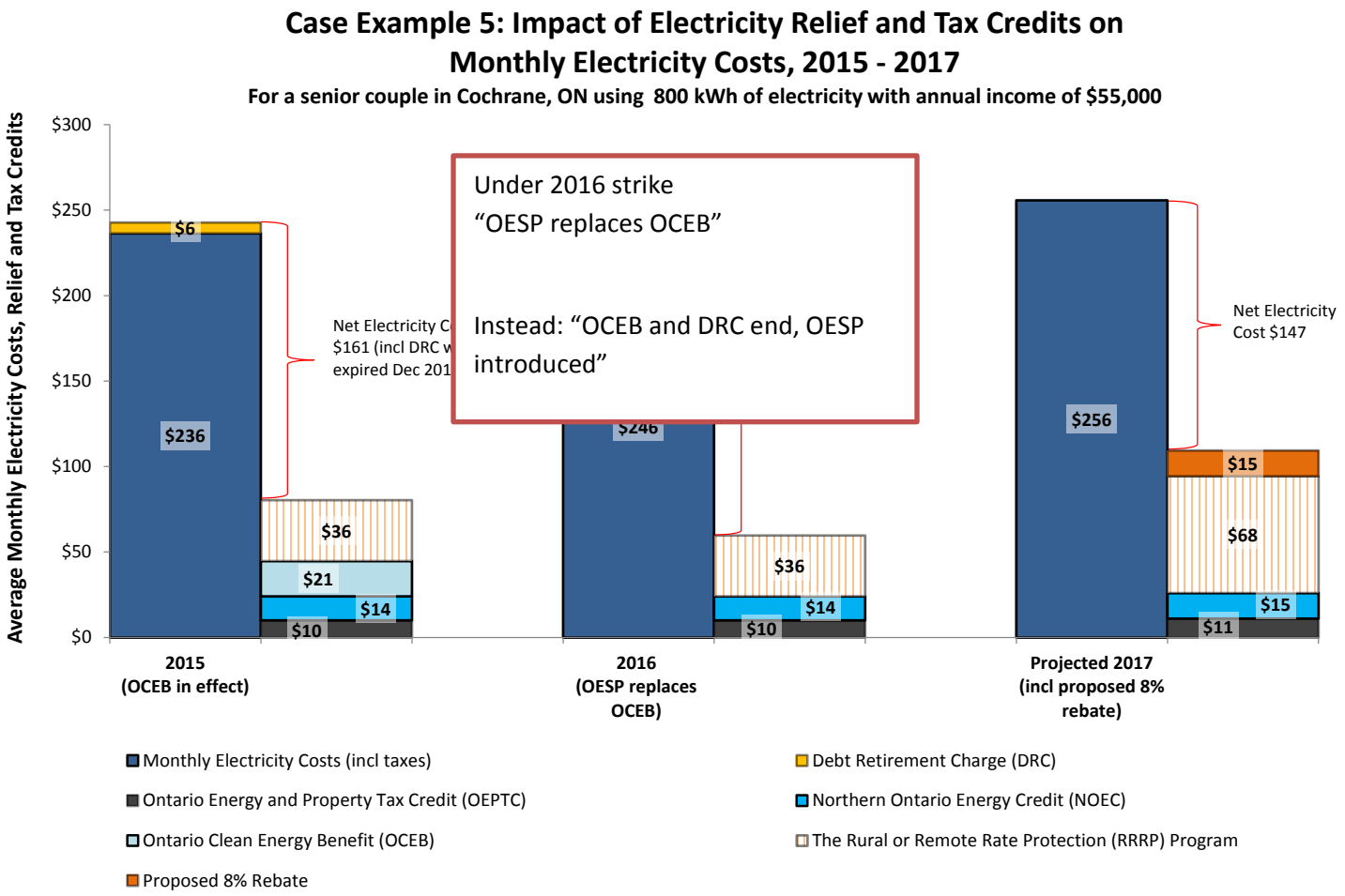


Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family lives in Toronto, owns a house and pays about $2,800 in property taxes.
2. This family is a client of the Toronto Hydro.
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 65%, mid-peak 18% and on-peak 17%) and total electricity usage of 500 kWh a month.

Case 5: Rural Senior Family



Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family lives in a propane-heated home in the District of Cochrane, North-eastern Ontario; and pays about $2,250 in property taxes.
2. The family is a client of the Hydro One Networks Inc. – Low Density (R2), making them eligible for Rural or Remote Rate Protection (RRRP).
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 60%, mid-peak 20% and on-peak 20%) and total electricity usage of 800 kWh a month.
4. The family, at its current income level, is not entitled to the Ontario Sales Tax Credit and federal Goods and Services Tax credit.

Appendix 1: Background

On-Bill Relief:

- Both the Ontario Clean Energy Benefit (OCEB) and the Debt Retirement Charge (DRC) have ended December 2015.
    - The OCEB provided typical residential consumers[2] relief of about $16 a month and typical residential consumers paid DRC of about $5.25 a month (pre-tax).
- Effective January 2016, the government has introduced the Ontario Electricity Support Program (OESP).
    - The OESP provides ongoing, on-bill relief (up to $75 a month) for low-income electricity ratepayers who apply for the program.
- The government has recently announced its proposal to provide further support, including:
    - A proposed 8% electricity bill rebate reflecting the provincial portion of the Harmonized Sales Tax (HST), effective January 1, 2017, if passed by the legislature; and
    - A proposed enhancement of about $29 a month to the existing Rural or Remote Rate Protection (RRRP) program, also effective January 1, 2017, to be enacted by Regulation.

[2] Utilizing 750 kWh of electricity a month

Appendix 1: Background (Cont'd)

Ontario Tax Relief:

- The Ontario Sales Tax Credit (OSTC) provides relief to low- to moderate-income Ontarians to help with their sales taxes.
- The Ontario Energy and Property Tax Credit (OEPTC) provides relief to low- to moderate-income Ontarians, including seniors, to help them with their sales tax on energy and property taxes.
    - The energy component of the OEPTC is a flat, notional amount that, with certain exceptions, is not tied to actual home energy costs paid.
- The Northern Ontario Energy Credit (NOEC) provides relief to low- to moderate-income residents of northern Ontario to help them with their higher energy costs.
- The OSTC, OEPTC and NOEC are delivered to eligible recipients by the Canada Revenue Agency on behalf of the Province through the Ontario Trillium Benefit.

Federal Tax Relief:

- The federal Goods and Services Tax (GST) credit provides relief to low- to moderate-income Canadians for the federal portion of sales taxes they pay.

Appendix 2: Conservation and Energy Efficiency Programs

- Ontario's electricity and natural gas conservation programs offer financial incentives to help households with the costs of installing energy-efficient equipment and improving the energy efficiency of their home. Electricity conservation programs are delivered by the Independent Electricity System Operator (IESO) in collaboration with local electricity utilities. Natural gas conservation programs are delivered by Ontario's two main natural as utilities; Enbridge Gas Distribution and Union Gas
- Households can generally achieve between 10% and 30% in energy savings by participating in these programs. The level of energy savings achieved depends on a range of factors which include the types of measures being undertaken and the age of the home.

Case 1: Toronto based semi-detached home (mid-income family- natural gas fuel source for space and water heating)

The specific household in this scenario could undertake energy efficiency upgrades through the following programs to help further manage energy costs.

Electricity Conservation Programs (offered by the IESO in collaboration with the local electricity utility)

- The **saveONenergy Heating and Cooling Incentive** provides up to $650 in rebates to help offset the cost of purchasing and installing new heating and cooling equipment in the home, such as a high efficiency furnace with an electronically commutated motor (ECM), or an ENERGY STAR certified central air conditioner.

- **saveONenergy Coupons** can help households save on a wide range of energy-efficient products including LED bulbs, power bars with integrated timers or auto-shutoff and more.

Natural Gas Conservation Programs (offered by Enbridge Gas Distribution)

- The **Home Energy Conservation Program** provides financial incentives up to $2,100 for homeowners to undertake natural gas reducing retrofits like upgrades to furnace, windows and insulation.

- The **Smart Thermostat Program** provides a $100 rebate to customers that install an adaptive thermostat.

Case 2: Brampton based apartment (senior couple- natural gas fuel source for space and water heating, paid through rent)

Participation in energy efficiency programs for apartments is generally managed by the apartment building owner, given that most heating and cooling systems are central building wide systems. The specific apartment building in this scenario could undertake energy efficiency upgrades through the following programs to help tenants further manage energy costs.

Electricity Conservation Programs (offered by the IESO in collaboration with the local electricity utility)

- The **saveONenergy Retrofit Program** provides apartment buildings energy efficiency incentives up to 50% of the total project cost. Eligible measures include lighting retrofits, HVAC redesign, insulation upgrades, variable frequency drives and chiller replacement.

- The **saveONenergy Audit Incentive** helps apartment buildings covers up to 50% of the cost of an energy audit to identify opportunities for energy efficiency upgrades and eligible incentives.

- **saveONenergy Coupons** can help individual apartments dwellers save on a wide range of energy-efficient products including LED bulbs, power bars with integrated timers or auto-shutoff and more.

Natural Gas Conservation Program (offered by Enbridge Gas Distribution)

- The **Multi-Residential Incentive Program** provides apartment buildings technical assistance and financial incentives up to $100,000 to implement energy efficient technologies. Eligible projects can include boiler replacements, heat recovery projects and building controls.

Case 3: Electricity heated Ontario based detached home (electricity fuel source for space and water heating)

The specific household in this scenario could undertake energy efficiency upgrades through the following programs to help further manage energy costs.

Electricity Conservation Programs (offered by the IESO in collaboration with the local electricity utility)

- The **saveONenergy Heating and Cooling Incentive** provides up to $650 in rebates to help offset the cost of purchasing and installing new heating and cooling equipment in the home, such as a high efficiency furnace with an electronically commutated motor (ECM), or an ENERGY STAR certified central air conditioner.

- **saveONenergy Coupons** can help households save on a wide range of energy-efficient products including LED bulbs, power bars with integrated timers or auto-shutoff and more.

Case 4: Toronto based row house (low-income family- natural gas fuel source for space and water heating)

The specific low-income household in this scenario could undertake energy efficiency upgrades through the following programs to help further manage energy costs. The list includes some programs that are specific to low-income households.

Electricity Conservation Programs (offered by the IESO in collaboration with the local electricity utility)

- The **saveONenergy Home Assistance Program** helps income-eligible households manage their energy use and costs by offering detailed in-home energy assessments and installing energy-saving measures at no cost.

Natural Gas Conservation Programs (offered by Enbridge Gas Distribution)

- The **Home Winterproofing Program** provides low income households with a free home assessment and weatherization services (e.g. insulation and air sealing) at no cost to the participant.

Case 5: Cochrane District based detached home (propane fuel source for space and water heating)

The specific household in this scenario could undertake energy efficiency upgrades through the following programs to help further manage energy costs.

Electricity Conservation Programs (offered by the IESO in collaboration with the local electricity utility)

- The **saveONenergy Heating and Cooling Incentive** provides up to $650 in rebates to help offset the cost of purchasing and installing new heating and cooling equipment in the home, such as a high efficiency furnace with an electronically commutated motor (ECM), or an ENERGY STAR certified central air conditioner.

- **saveONenergy Coupons** can help households save on a wide range of energy-efficient products including LED bulbs, power bars with integrated timers or auto-shutoff and more.

Impact of Select Electricity Relief Programs and Tax Credits on Residential Monthly ~~Electricity~~ Household Energy Bills

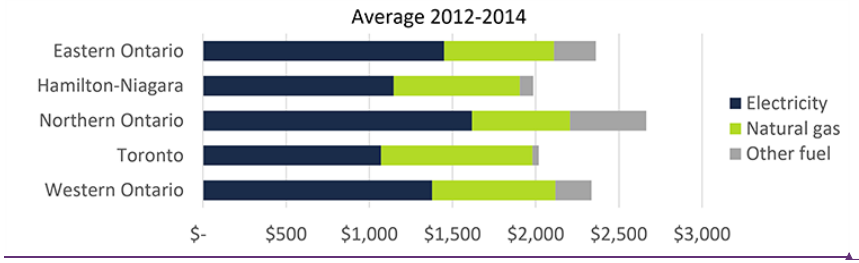
Ministry of Finance / Ministry of Energy

October 13~~2~~, 2016

Overview

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  - average spending on home energy varies significantly by region - northern families spend more on average; and
  - ~~average home energy spending also varies with household income - higher income families spend more on home energy, though it is a lower percentage of their income.~~

Average Household Home Energy Spending in Ontario by Energy Source and Region, Average 2012-2014



  - average home energy spending also varies with household income - higher income families spend more on home energy, though it is a lower percentage of their income.

Average Household Energy Spending in Ontario by Energy Source and Income Level, 2014

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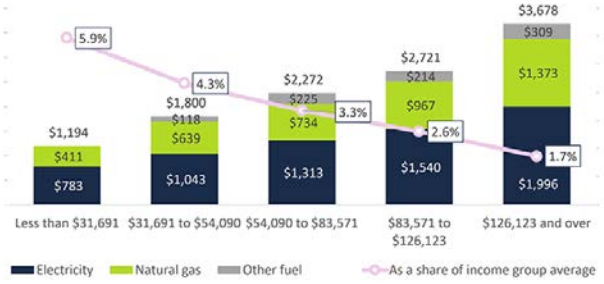
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Ministries' analysis of FAO study

- MOF, using Statistics Canada publicly-available information, produced similar results on home energy spending by income. The underlying data do not allow separating out supports.
- The FAO's analysis is based on survey data[1] and is based on averages on this limited sample. ~~As such, the FAO analysis does not calculate the cost of home energy net of government support programs, although the report did highlight the key ones available.~~
- Based on the time frame of the survey data (2012-2014), it would appear that the self-reported energy costs factor in the Ontario Clean Energy Benefit (OCEB), the Debt Retirement ~~c~~Charge (ended as of Jan 1, 2016 for residential users) but not non-bill relief, such as tax credits.
- ~~As such~~As such, the ~~, the~~ FAO analysis does not calculate the cost of home energy net of government support programs, although the report did highlight the key ones available.

[1] The 2014 Survey of Household Spending included 5,682 interview respondents (735 from Ontario), of which 3,758 submitted usable spending diaries (454 from Ontario).

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- Given the introduction of the 8 per cent rebate starting in 2017, removal of the DRC for residential customers and income-based enhancement such as the Ontario Electricity Support Program, lower income homes are on average expected to be benefit even further than the FAO analysis based on survey data.
- The proposed enhancement to the existing Rural or Remote Rate Protection (RRRP) program will further benefit residential customers in low-density areas (Hydro One R2).

~~Directionally, the OCEB However, it is challenging to quantify the impact of these additional supports at this time due to the lack of data availability. Specificially, xxxxx~~

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Ministries' Case Study Approach

- ~~MOF, using Statistics Canada publicly available information, produced similar results on home energy spending by income.~~
- ~~The FAO did not calculate the cost of home energy net of government support programs, although the report did highlight the key ones available.~~
- ~~The Ministry of Finance and Ministry of Energy have worked together to create case examples that demonstrate the residential monthly electricity energy costs after taking into account select electricity relief programs and tax credits attributable to energy, and in particular electricity usage.~~

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- ~~Electricity costs are highly affected by the fuel used to heat a home. Homes heated by conventional electrical resistance heating systems tend to have higher electricity and higher total home energy bills than those heated with natural gas.~~
- ~~The cases show that:~~
  - ~~low-income families are well-supported~~receive significant support~~;~~
  - ~~northern and farm families are paying higher electricity costs that reflect higher usage; and,~~
  - ~~modest income families receive little support.~~

~~Enhancing the FAO Analysis~~

- Attempting to enhance the FAO analysis by including the average benefit from the support programs to show net home energy costs would be unreliable and underestimate their benefit, due to the following reasons:~~.~~
  - Trying to determine reasonable average credit and benefit amounts for the income groups used in the FAO report would be, at best, an educated guess. This was a crucial caveat raised by the FAO in their report.
  - MOF has, in the past, linked tax family data to aggregate consumption costs based on some earlier Statistics Canada surveys; however, attempts to categorize these costs into specific spending areas did not yield reliable results.~~-~~ The FAO required Statistics Canada to compile results from a multi-year average of the survey as sample sizes were small, and regional variances were significant.
  - Electricity consumption data that is warehoused in Ontario's Meter Data Management and Repository (MDMR) in anonymized and currently does not enable analytics at a regional scale. Changes imposed by the Ontario Energy Board through a licence change for the Smart Metering Entity (SME) – which runs the MDMR – will enable this type of analytics. These changes will take effect on January 1, 2017. Government access to that data is currently restricted but work is underway to enable third party access. However the SME may be able to undertake province-wide analytics upon request.~~from smart meters is not yet available to the government,[2] thus making it challenging to replicate FAO results using observed consumption. Other energy use is also not available at the household level.~~

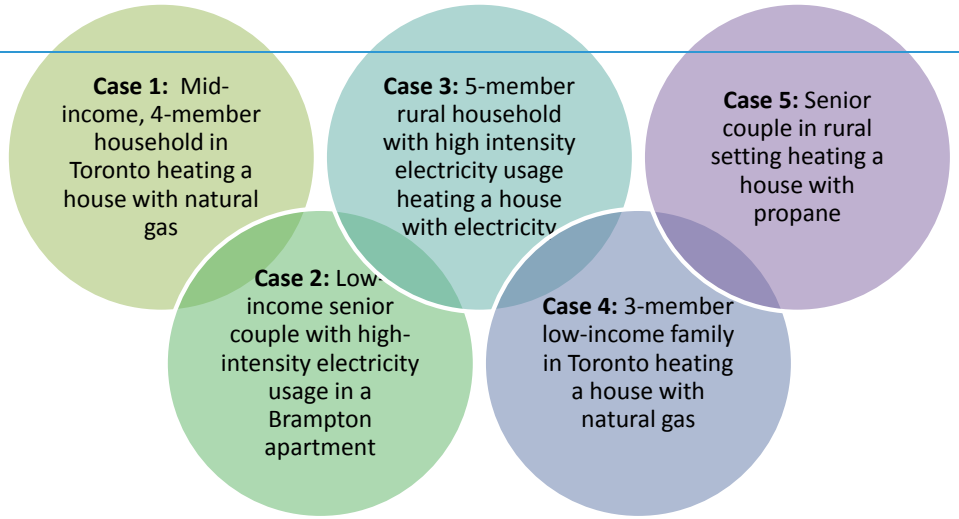
~~[2] Privacy concerns related to smart meter data will have to be resolved with the Information and Privacy Commissioner of Ontario before data can be made available to the government.~~

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- ~~Case examples of representative families are a good alternative to demonstrate the scenarios where government mitigation efforts have a significant impact.~~Alternately, the Ministry of Finance and Ministry of Energy have worked together to create case examples that demonstrate the residential monthly energy costs after taking into account select electricity relief programs and tax credits attributable to energy, and in particular electricity usage.

Overview of Cases

- Electricity costs are highly affected by the fuel used to heat a home. Homes heated by conventional electrical resistance heating systems tend to have higher electricity and higher total home energy bills than those heated with natural gas.
- The cases illustrate ~~on their own and~~a number of Ontario household configurations, based on certain assumptions. The cases were chosen to demonstrate the impact of different electricity support programs available. *As such they should not be regarded as representative.* Tentative lessons include~~,~~:
  - low-income families receive significant support;
  - electric heating (as prevalent in ~~northern~~rural Ontario) ~~and higher usage such as residential properties that may share a meter with a farm, are paying~~results in higher electricity costs ~~that reflect higher usage~~;
  - modest income families receive relatively little support. ~~[caveat]~~
-



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Approach Used to Build the Cases

- Representative case examples have been prepared to show monthly residential ~~electricity~~ energy costs faced by select Ontario families, less select government supports to help them with those costs.
- Costs have been estimated assuming a time-of-usage pattern, total electricity usage for the particular case and using published electricity rates. For 2017, commodity costs and rates were projected by Ministry of Energy staff.
- Electricity relief programs and tax credits that have been considered include:
  - the Ontario Electricity Support Program (2016);
  - a proposed 8% electricity bill rebate reflecting an amount equal to the provincial portion of the Harmonized Sales Tax (HST) (2017);
  - an enhanced Rural or Remote Rate Protection (2017);
  - a portion of the Ontario Sales Tax Credit (OSTC) and the federal Goods and Services Tax (GST) credit attributable to electricity usage; and
  - the energy (not just electricity) component of the Ontario Energy and Property Tax Credit (OEPTC).
- Some of the cost offsets mentioned above such as the OSTC, OEPTC, and federal GST credit do not directly affect the electricity bill, but provide notional cost offsets.
- These case examples represent an after-tax scenario.
- The various conservation programs that are available to families in Ontario to lower their electricity costs have not been included in the analysis. Instead each case is annotated with a list of conservation supports typically available to these customers.
- Households can generally achieve between 10% and 30% in energy savings by participating in these programs offered by the independent Electricity System Operator (IESO) and natural gas utilities. The

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level of energy savings achieved depends on a range of factors which include the types of measures being undertaken and the age of the home.

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Methodology, Caveats, and Assumptions

- Each case has been assigned an appropriate electricity service provider, e.g., if the case represents a low-density (R2) area, it is a Hydro One – R2 customer.
- The Ontario Sales Tax Credit and federal Goods and Services Tax credit amounts have been pro-rated based on the total Harmonized Sales Tax revenues attributable to electricity usage.
- The energy component of the Ontario Energy and Property Tax Credit has been allocated to each case; the estimate is based on occupancy cost information of similar families living in similar areas with similar incomes and household sizes.
- 2017 electricity delivery rates have not yet been determined. For 2017, this analysis assumes a 1.7% increase from 2016 rates for each service provider. This represents an assumed 2% increase allowance for inflation, reduced by 0.3% to represent a modest productivity factor used by the Ontario Energy Board to incent efficiency gains. Actual rates will vary.
- To focus the examples on on-bill support, incomes, property taxes and rents are held constant. Tax credits are paid out over a benefit year of July to June based on prior year's income.
- The Debt Retirement Charge is 0.7 cents per kWh of electricity consumed (prior to 2016, for residential).
- The proposed 8% electricity bill rebate, Ontario Electricity Support Program and Rural or Remote Rate Protection (RRRP) rates have been estimated by Ministry of Energy ~~officials~~ staff and have been applied pre-tax. The proposed $29 RRRP-enhancement has been reflected in the 2017 scenarios.
- ~~Most of t~~The cases would have received the maximum support from the Ontario Clean Energy Benefit in 2015 as their monthly usage was below 3,000 kWh~~, except for the dairy farm example~~.
- For 2016 and 2017, the families with an annual income of more than $52,000 do not get Ontario Electricity Support Program (OESP) payments. Some cases are assumed to be high-intensity users, making them entitled to more generous OESP payments.

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- Sensitivity analysis on 'time-of-use' patterns and electricity usage shows minimal differences in monthly costs. And, net electricity cost is calculated as the monthly electricity bill less the benefits received from select electricity relief programs and tax credits.
- Natural gas and propane costs, are based on typical homes and calculated as rough estimates to provide context on total home energy costs. 2017 forecasts assume constant commodity prices from 2016 but include carbon costs under cap-and-trade.

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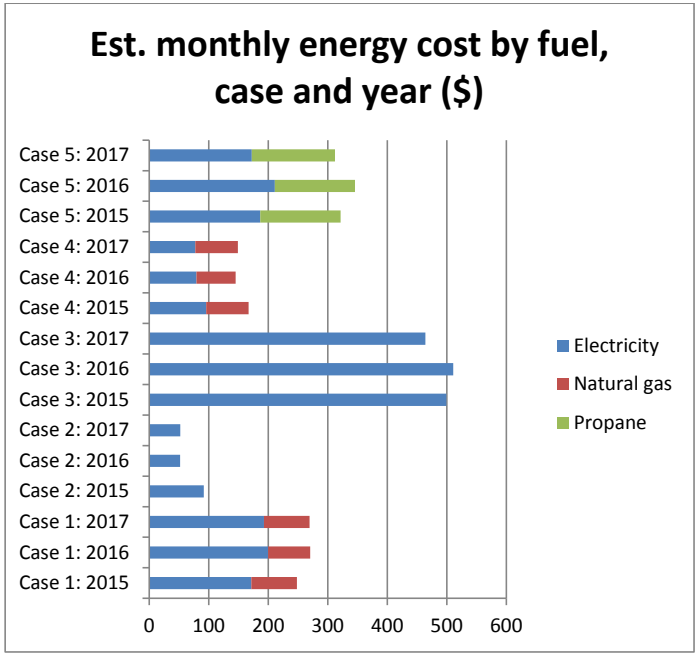
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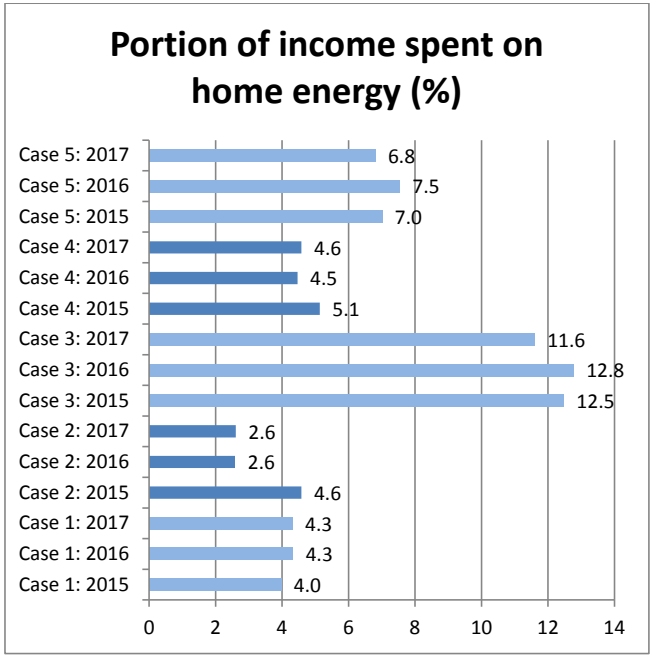
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Total Estimated Household Energy Costs

The following graphs show estimated household energy costs 2015-2017 for each case as absolute costs (4$/ month) and as a percentage of income. The cases illustrate a number of Ontario household configurations, based on certain assumptions, and *should not be regarded as representative.*

~~aveat~~[Underlying costs have to be updated to reflect tax credit components for natural gas and propane energy costs]





Source: Ministry of Finance / Ministry of Energy

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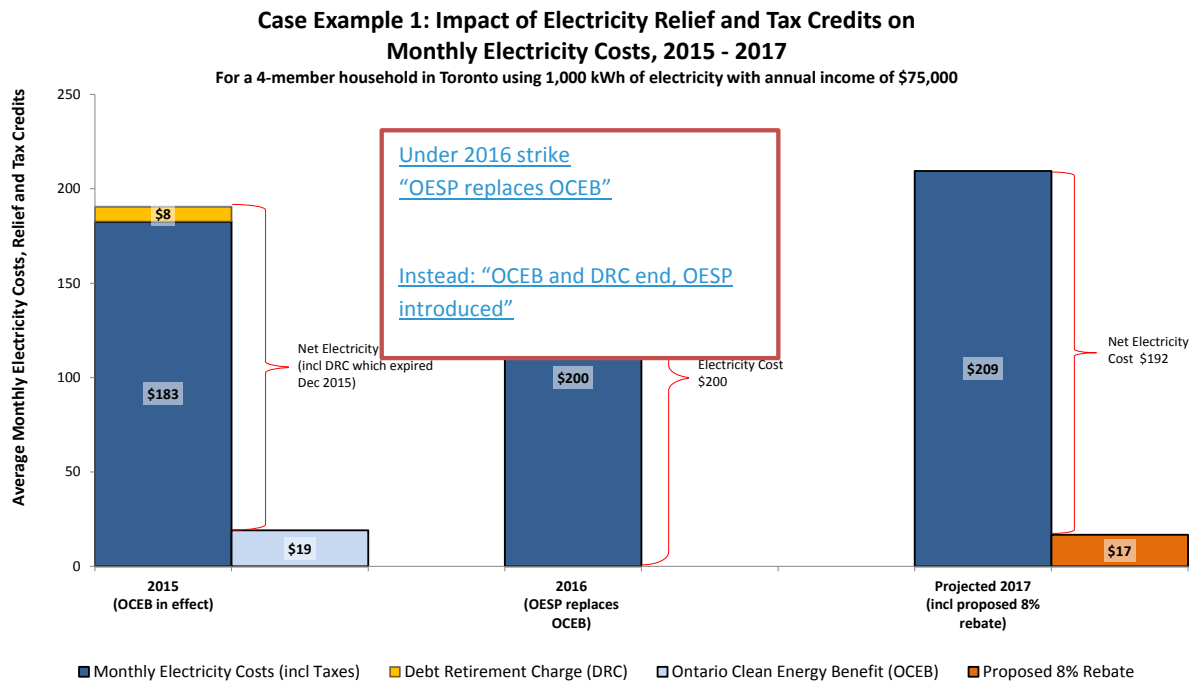
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The next slides breaks down the *electricity* component of energy costs for each case along with the supports available.

Case 1: Moderate and Higher-Income Family



Under 2016 strike
"OESP replaces OCEB"

Instead: "OCEB and DRC end, OESP introduced"

Source: Ministry of Finance / Ministry of Energy

NOTES:

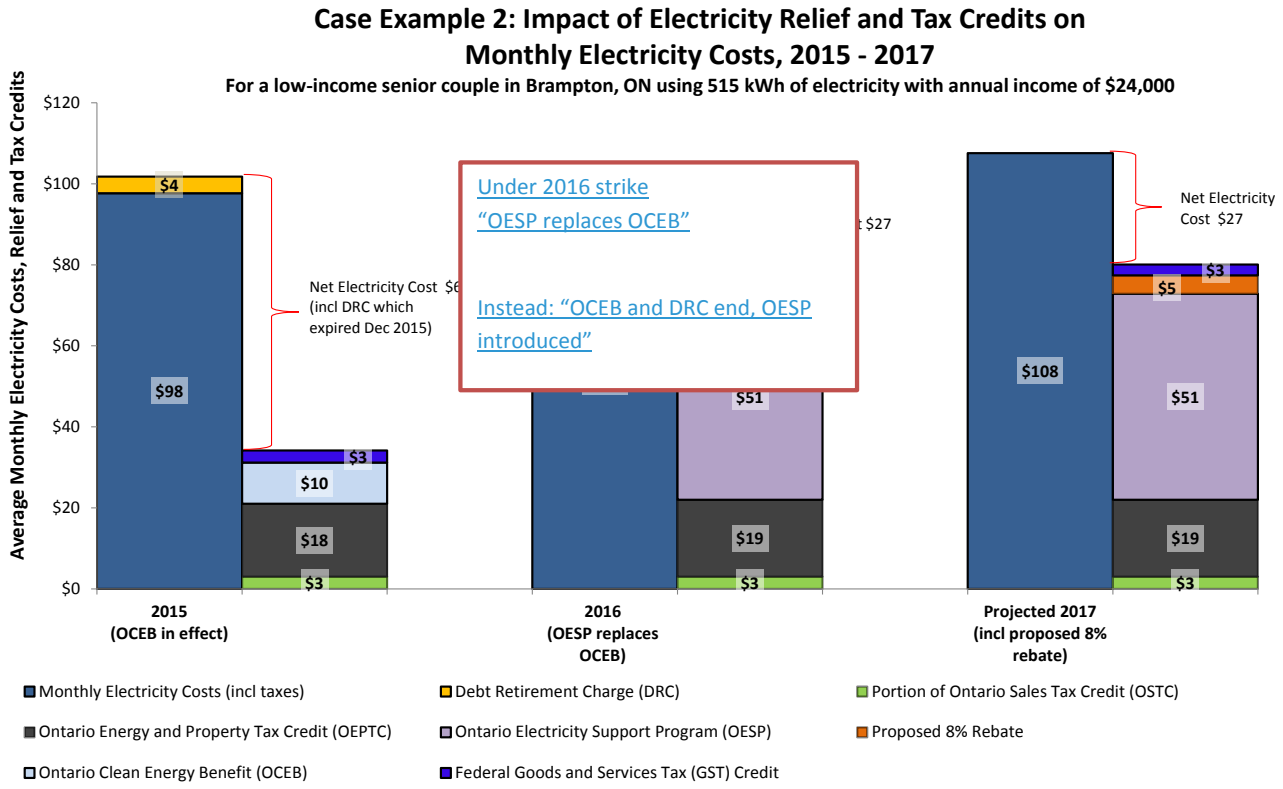
1. This example assumes the family owns a house in Toronto and pays property taxes of about $3,500.
2. The family has an electricity meter with Toronto Hydro.
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 62%, mid-peak 23% and on- peak 15%) and total electricity usage of 1,000 kWh a month.
4. For 2016 and 2017, this family is not entitled to any Ontario Electricity Support Program payments. (The OESP cut-off for a 4-member household is $39,000).
5. The family, at its current income level, is not entitled to the Ontario Sales Tax Credit, Ontario Energy and Property Tax Credit and federal Goods and Services Tax credit.

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Case 2: Vulnerable Low-Income Senior Couple



Under 2016 strike "OESP replaces OCEB"

Instead: "OCEB and DRC end, OESP introduced"

Source: Ministry of Finance / Ministry of Energy

NOTES:

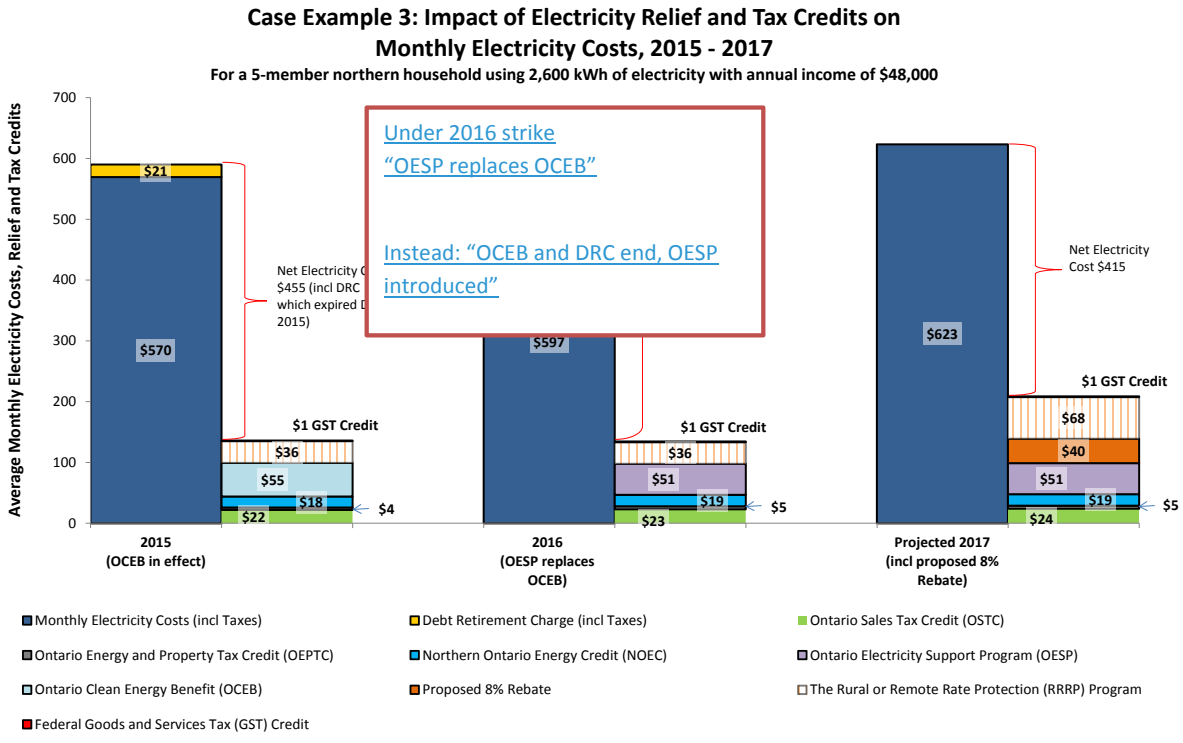
1. This example assumes the family rents an apartment in Brampton, ON ($700 a month) with a separate meter with Hydro One Brampton Network Inc.
2. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 60%, mid-peak 20% and on-peak 20%) and total electricity usage of 515 kWh a month.
3 For 2016 and 2017, the family is assumed to have high-intensity electricity usage (e.g., by using certain medical equipment), making them eligible for more generous OESP payments.

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~~Families in the North Face~~Case 3: Rural family W~~w~~ith ~~e~~Electric ~~h~~Heating



Under 2016 strike "OESP replaces OCEB"

Instead: "OCEB and DRC end, OESP introduced"

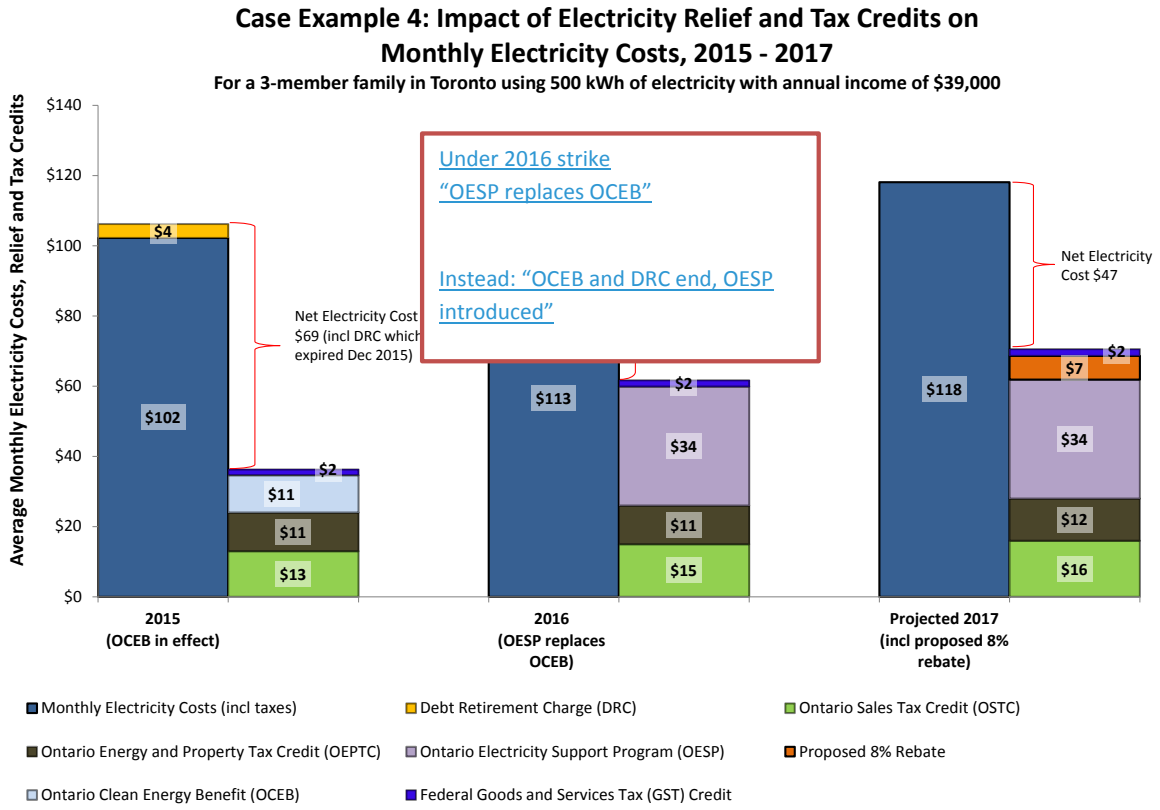
Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family lives in northern Ontario, owns a house that is heated with electricity. In low-density, rural areas, reliance on electricity for home heating is more common. The family pays property taxes of $2,500.
2. The family is a client of the Hydro One Networks Inc. – Low Density (R2).
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 65%, mid-peak 18% and on-peak 17%) and total electricity usage of 2,600 kWh a month. The time-of-usage pattern used here is close to the average pattern, given that the heating load is relatively flat and information is not available on specific heating profile for this type of home.
4. For 2016 and 2017, the family is entitled to high-intensity OESP payments, due to having electric heating.

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Case 4: Urban, Low-Income ~~Families~~ Family



Under 2016 strike "OESP replaces OCEB"

Instead: "OCEB and DRC end, OESP introduced"

Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family lives in Toronto, owns a house and pays about $2,800 in property taxes.
2. This family is a client of the Toronto Hydro.
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 65%, mid-peak 18% and on-peak 17%) and total electricity usage of 500 kWh a month.

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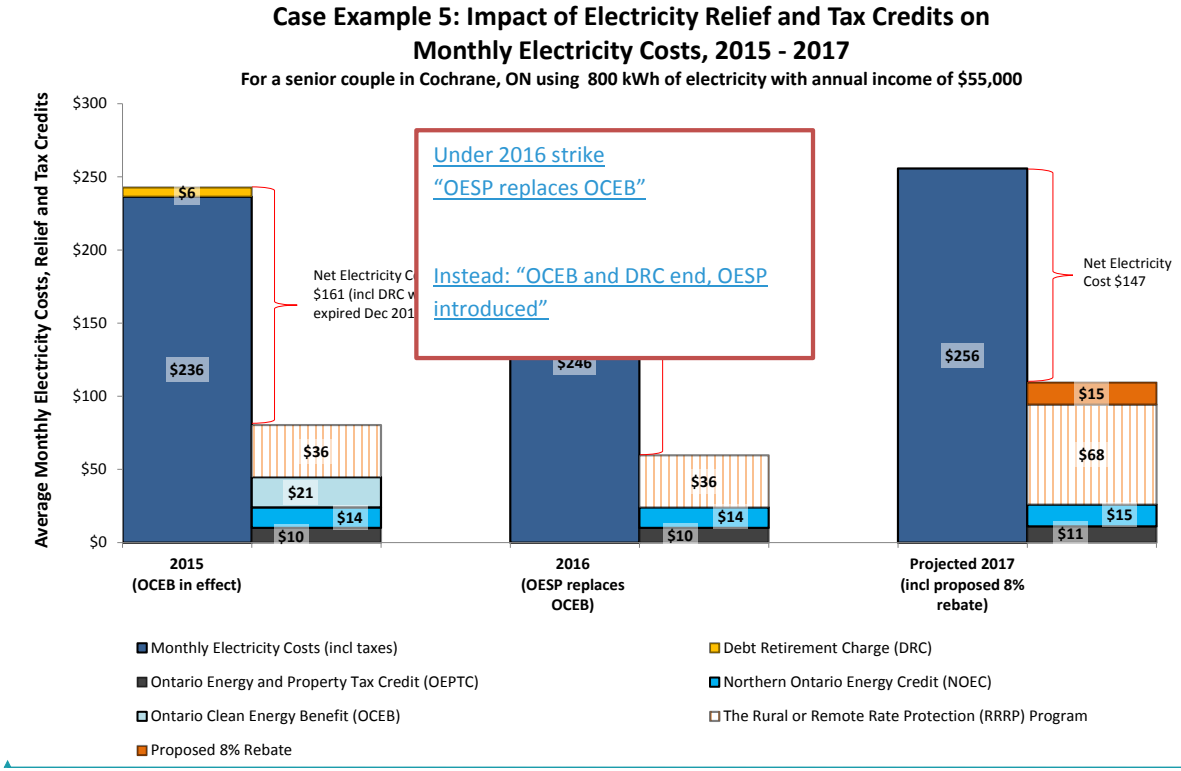
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Case 5: Rural ~~and Remote~~ Senior ~~Families~~ Family



Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family lives in a propane-heated home in the District of Cochrane, North-eastern Ontario; and pays about $2,250 in property taxes.
2. The family is a client of the Hydro One Networks Inc. – Low Density (R2), making them eligible for Rural or Remote Rate Protection (RRRP).
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 60%, mid-peak 20% and on-peak 20%) and total electricity usage of 800 kWh a month.
4. The family, at its current income level, is not entitled to the Ontario Sales Tax Credit and federal Goods and Services Tax credit.

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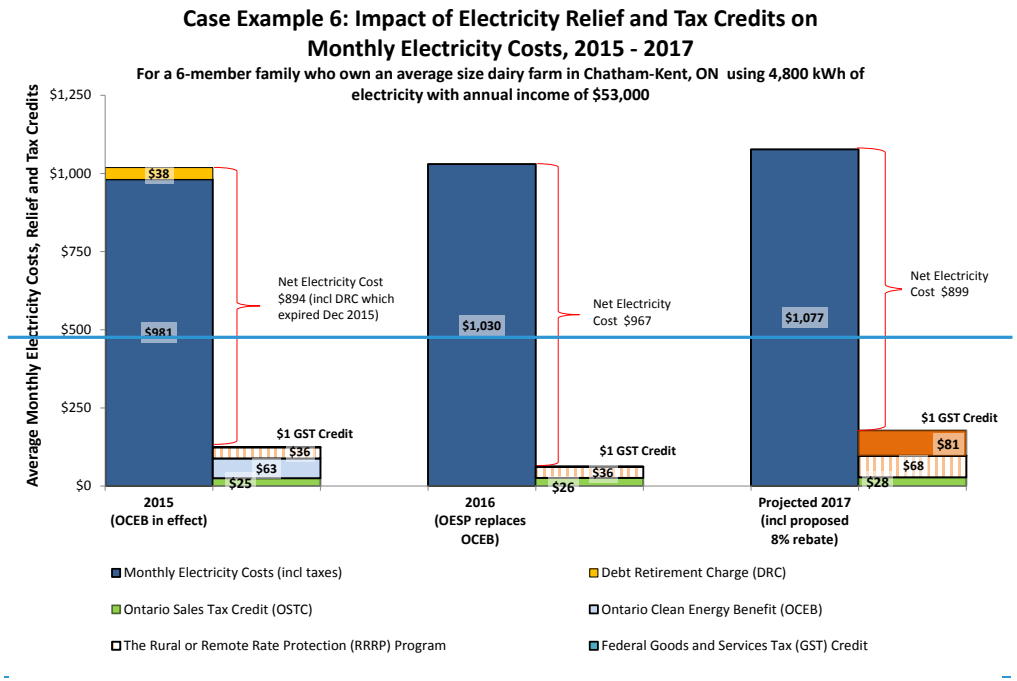
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~~Case 6: Rural, Farm Attached to Residential Meter~~

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Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family owns an average-sized dairy farm, which is not incorporated and files farm income under personal income taxes, in Chatham-Kent, South-western Ontario; and pays about $2,000 in property taxes for their residential home.
2. The family is a client of the Hydro One Networks Inc. – Low Density (R2), making them eligible for Rural or Remote Rate Protection (RRRP).
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 65%, mid-peak 18% and on-peak 17%) and total electricity usage of 4,800 kWh a month. This is an estimated average monthly consumption for an average-sized dairy farm (source: an OMAFRA study [dated?]), however is not intended to be representative of farms or farms connected to residential meters.
4. As the family lives on the farm, they pay residential electricity rates for their farm operations, as well.
5. The family received the Ontario Clean Energy Benefit (OCEB) in 2015 only for up to 3,000 kWh per month of electricity usage. The OCEB provided 10% rebate only on up to ~~$~~3,000 kWh of monthly electricity usage.

Appendix 1: Background

On-Bill Relief:

- Both the Ontario Clean Energy Benefit (OCEB) and the Debt Retirement Charge (DRC) have ended December 2015.
    - The OCEB provided typical residential consumers[3] relief of about $16 a month and typical residential consumers paid DRC of about $5.25 a month (pre-tax).
- Effective January 2016, the government has introduced the Ontario Electricity Support Program (OESP).
    - The OESP provides ongoing, on-bill relief (up to $75 a month) for low-income electricity ratepayers who apply for the program.
- The government has recently announced its proposal to provide further support, including:
    - A proposed 8% electricity bill rebate reflecting the provincial portion of the Harmonized Sales Tax (HST), effective January 1, 2017, if passed by the legislature; and
    - A proposed enhancement of about $29 a month to the existing Rural or Remote Rate Protection (RRRP) program, also effective January 1, 2017, to be enacted by Regulation.

[3] Utilizing 750 kWh of electricity a month

Appendix 1: Background (Cont'd)

Ontario Tax Relief:

- The Ontario Sales Tax Credit (OSTC) provides relief to low- to moderate-income Ontarians to help with their sales taxes.
- The Ontario Energy and Property Tax Credit (OEPTC) provides relief to low- to moderate-income Ontarians, including seniors, to help them with their sales tax on energy and property taxes.
    - The energy component of the OEPTC is a flat, notional amount that, with certain exceptions, is not tied to actual home energy costs paid.
- The Northern Ontario Energy Credit (NOEC) provides relief to low- to moderate-income residents of northern Ontario to help them with their higher energy costs.
- The OSTC, OEPTC and NOEC are delivered to eligible recipients by the Canada Revenue Agency on behalf of the Province through the Ontario Trillium Benefit.

Federal Tax Relief:

- The federal Goods and Services Tax (GST) credit provides relief to low- to moderate-income Canadians for the federal portion of sales taxes they pay.

Appendix 2: Conservation and Energy Efficiency Programs

- Ontario's electricity and natural gas conservation programs offer financial incentives to help households with the costs of installing energy-efficient equipment and improving the energy efficiency of their home. Electricity conservation programs are delivered by the Independent Electricity System Operator (IESO) in collaboration with local electricity utilities. Natural gas conservation programs are delivered by Ontario's two main natural as utilities; Enbridge Gas Distribution and Union Gas
- Households can generally achieve between 10% and 30% in energy savings by participating in these programs. The level of energy savings achieved depends on a range of factors which include the types of measures being undertaken and the age of the home.

Case 1: Toronto based semi-detached home (mid-income family- natural gas fuel source for space and water heating)

The specific household in this scenario could undertake energy efficiency upgrades through the following programs to help further manage energy costs.

Electricity Conservation Programs (offered by the IESO in collaboration with the local electricity utility)

- The **saveONenergy Heating and Cooling Incentive** provides up to $650 in rebates to help offset the cost of purchasing and installing new heating and cooling equipment in the home, such as a high efficiency furnace with an electronically commutated motor (ECM), or an ENERGY STAR certified central air conditioner.

- **saveONenergy Coupons** can help households save on a wide range of energy-efficient products including LED bulbs, power bars with integrated timers or auto-shutoff and more.

Natural Gas Conservation Programs (offered by Enbridge Gas Distribution)

- The **Home Energy Conservation Program** provides financial incentives up to $2,100 for homeowners to undertake natural gas reducing retrofits like upgrades to furnace, windows and insulation.

- The **Smart Thermostat Program** provides a $100 rebate to customers that install an adaptive thermostat.

Case 2: Brampton based apartment (senior couple- natural gas fuel source for space and water heating, paid through rent)

Participation in energy efficiency programs for apartments is generally managed by the apartment building owner, given that most heating and cooling systems are central building wide systems. The specific apartment building in this scenario could undertake energy efficiency upgrades through the following programs to help tenants further manage energy costs.

Electricity Conservation Programs (offered by the IESO in collaboration with the local electricity utility)

- The **saveONenergy Retrofit Program** provides apartment buildings energy efficiency incentives up to 50% of the total project cost. Eligible measures include lighting retrofits, HVAC redesign, insulation upgrades, variable frequency drives and chiller replacement.

- The **saveONenergy Audit Incentive** helps apartment buildings covers up to 50% of the cost of an energy audit to identify opportunities for energy efficiency upgrades and eligible incentives.

- **saveONenergy Coupons** can help individual apartments dwellers save on a wide range of energy-efficient products including LED bulbs, power bars with integrated timers or auto-shutoff and more.

Natural Gas Conservation Program (offered by Enbridge Gas Distribution)

- The **Multi-Residential Incentive Program** provides apartment buildings technical assistance and financial incentives up to $100,000 to implement energy efficient technologies. Eligible projects can include boiler replacements, heat recovery projects and building controls.

Case 3: ~~Northern~~Electricity heated Ontario based detached home (electricity fuel source for space and water heating)

The specific household in this scenario could undertake energy efficiency upgrades through the following programs to help further manage energy costs.

Electricity Conservation Programs (offered by the IESO in collaboration with the local electricity utility)

- The **saveONenergy Heating and Cooling Incentive** provides up to $650 in rebates to help offset the cost of purchasing and installing new heating and cooling equipment in the home, such as a high efficiency furnace with an electronically commutated motor (ECM), or an ENERGY STAR certified central air conditioner.
- **saveONenergy Coupons** can help households save on a wide range of energy-efficient products including LED bulbs, power bars with integrated timers or auto-shutoff and more.

Case 4: Toronto based row house (low-income family- natural gas fuel source for space and water heating)

The specific low-income household in this scenario could undertake energy efficiency upgrades through the following programs to help further manage energy costs. The list includes some programs that are specific to low-income households.

Electricity Conservation Programs (offered by the IESO in collaboration with the local electricity utility)

- The **saveONenergy Home Assistance Program** helps income-eligible households manage their energy use and costs by offering detailed in-home energy assessments and installing energy-saving measures at no cost.

Natural Gas Conservation Programs (offered by Enbridge Gas Distribution)

- The **Home Winterproofing Program** provides low income households with a free home assessment and weatherization services (e.g. insulation and air sealing) at no cost to the participant.

Case 5: Cochrane District based detached home (propane fuel source for space and water heating)

The specific household in this scenario could undertake energy efficiency upgrades through the following programs to help further manage energy costs.

Electricity Conservation Programs (offered by the IESO in collaboration with the local electricity utility)

- The **saveONenergy Heating and Cooling Incentive** provides up to $650 in rebates to help offset the cost of purchasing and installing new heating and cooling equipment in the home, such as a high efficiency furnace with an electronically commutated motor (ECM), or an ENERGY STAR certified central air conditioner.

- **saveONenergy Coupons** can help households save on a wide range of energy-efficient products including LED bulbs, power bars with integrated timers or auto-shutoff and more.

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COMMERCIALLY SENSITIVE AND CONFIDENTIAL

Comments on Proposed Initiatives to Transform Ontario's Electricity Sector

The Ministry of Energy is providing an update on progress related to transforming the province's electricity sector by elaborating on the potential initiatives, as outlined in its deck.

CONTEXT

- As outlined in Energy's update, electricity costs have been increasing following investments to transform towards cleaner generation (i.e. meeting goals towards decarbonize) and modernize the electricity infrastructure (i.e. more than $35 billion in cleaner generation and $15.5 billion investment by Hydro One in Hydro One transmission and distribution systems.

- The government has taken action to lower electricity cost pressures to all consumers by taking actions, including deferring investments in generation (e.g., new build nuclear), improving market efficiency and decreasing costs related to renewable procurement (e.g. GEIA renegotiation, decreasing FIT prices, etc).

- The government introduced the Ontario Rebate for Electricity Consumers which will provide a rebate equal to the 8% provincial portion of the Harmonized Sales Tax, saving $11 per month starting January 1, 2018 for eligible small businesses, farms and residential consumer and has taken steps to expand the Rural or Remote Electricity Rate Protection program, expected to save eligible RRRP customers about $45 per month.

COMMENTS

Energy's proposals generally involve shifting some costs from the rate base to the tax base. A general comment on the proposals would be that while the proposals may have a fairly limited impact, e.g. a little over $8/month for residentia (about little over 5% of the average monthly bill), the proposals would not come at a non-material incremental fiscal cost ($1.3 billion to $1.9 billion).

Over the past five years, the fiscally funded electricity price mitigation efforts have averaged about $1.5 billion and is already expected to increase to about $2 billion with the introduction of OREC. The existing program costs are summarized in the table below:

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,100*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,005**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from Energy PRRT submission

OCEB – Ontario Clean Energy Benefit
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DRC – Debt etirement Charge
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NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

OESP & RRRP (Total of about $0.4 Billion/year):

This includes shifting the cost of the Ontario Electricity Support Program (OESP) and the Rural or Remote Electricity Rate Program (RRRP) to the tax base. Note that the fiscal exposure is larger if the OESP take up rate is larger, faster than assumed.

- The fiscal impact from shifting OESP and RRRP to the tax base may also be larger if future changes are made to the programs. Energy noted in previous drafts of its price mitigation deck that
  - OESP credits could be increased to address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits).
  - The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

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Industrial Conservation Initiative (ICI -- About $900+ Million/year):

Energy also shows, as a potential residential price mitigation measure, the cancellation of the ICI.

- Energy is not initially proposing it be continued instead as taxpayer funded, but notes that about 30% price increase (from $85/MWh to $110), if ICI is cancelled, for the large Class A customers benefiting from ICI currently.
- As this cost estimate is for 2016, prior to the planned expansion of the ICI, this could further increase the fiscal exposure by about $100 million).

Departure Tax:

As a result of the IPO, Hydro One paid a "departure tax" payment in lieu of tax (PIL) of $2.6 billion, as a final true-up of its PILs tax obligation.

- This was paid to the Ontario Electricity Financial Corporation and helped reduce stranded debt.
- Using some or all of it for price mitigation would change the net stranded debt paydown by OEFC resulting from the IPO. This would also be a one-time measure (potentially over a few years), and fiscal impact, as the departure tax amount was one-time.

Other fiscal cost risks (Total of about $0.8+ Bn):

- Amortisation of conservation costs also poses a fiscal risk (about $0.4 bn/yr),
- Ending the DRC early for Class B customers (commercial, small industrial) (about $0.4 bn/yr to 2017-18)
- Lowering of the debt interest paid by OPG (about $30 – 70 million/yr between 2017 and 2021),

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
OCEB	-	-	-	-	-
OREC	300	1,100*	1,100*	1,200*	1,200*
Ending DRC[2]	330	330	--	--	--
NIERP	120	120	120	120	120

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NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
CURRENT TOTAL	**1,195**	**2,005**	**1,715**	**1,826**	**1,826**
1. OESP		106	119	127	132
2. RRRP		292	300	306	315
3. First Nations Delivery Rate		18	18	18	18
4. Fund ICI through Tax Base		900+	900+	900+	900+
5. Departure Tax		TBD	TBD	TBD	TBD
6. Conservation Amortisation		TBD	TBD	TBD	TBD
7. DRC Ended for Class B	110	450			
8. Other		30	45	60	70
TOTAL	**1,305**	**3,901**	**3,197**	**3,237**	**3,261**

Electricity Finance Branch, Corporate and Electricity Finance Division
Ontario Financing Authority
December 12, 2016

COMMERCIALLY SENSITIVE AND CONFIDENTIAL

Comments on Proposed Initiatives to Transform Ontario's Electricity Sector

The Ministry of Energy is providing an update on progress related to transforming the province's electricity sector by elaborating on the potential initiatives, as outlined in its deck.

CONTEXT

- As outlined in Energy's update, electricity costs have been increasing following investments to transform towards cleaner generation (i.e. meeting goals towards decarbonize) and modernize the electricity infrastructure (i.e. more than $35 billion in cleaner generation and $15.5 billion investment by Hydro One ~~in Hydro One~~ alone in transmission and distribution systems).

- The government has taken action to lower electricity cost pressures to all consumers by taking actions, including deferring investments in generation (e.g., new build nuclear), improving market efficiency and decreasing costs related to renewable procurement (e.g. GEIA renegotiation, decreasing FIT prices, etc).

- The government introduced the Ontario Rebate for Electricity Consumers which will provide a rebate equal to the 8% provincial portion of the Harmonized Sales Tax, saving $11 per month starting ~~January~~ January 1, 2018 for eligible small businesses, farms and residential consumers and has taken steps to expand the Rural or Remote Electricity Rate Protection program, expected to save eligible RRRP customers about $45 per month.

- The proposals Energy is putting forth would add on to those above.

COMMENTS

Energy's proposals generally involve shifting some costs from the rate base to the tax base. ~~A general comment on the proposals would be that w~~While these proposals may have a fairly limited residential rate payer impact (~~,~~ e.g. about $5-6/month for residential, ~~(~~less than 5% of the average monthly bill), the proposals would come at a material incremental fiscal cost ($1 billion to $1.3 billion)~~,~~. Note these impacts are lower than ~~somewhat down from the impacts from an~~ those prestend in an earlier deck ($1.3 billion to $1.9 billion).

Over the past five years, the fiscally funded electricity price mitigation efforts have averaged about $1.5 billion and is already expected to increase to about $2 billion with the introduction of OREC. The existing program costs are summarized in the table below:

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
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Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,005**

1. 2016-17, 2017-18 based on forecasted numbers
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NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

Proposals

Energy has outlined the following rate mitigation proposals with significant bearing on the fiscal plan:

OESP & RRRP (Total of about $0.4 to 0.45 Billion/year):

This ~~includes~~ would shift~~ing~~ the cost of the current and proposed expanded Ontario Electricity Support Program (OESP), ~~as well as an additional 50% increase,~~ and the Rural or Remote Electricity Rate Program (RRRP), to the tax base.

Note: that the fiscal exposure ~~is larger~~ would increase if the OESP take up rate is larger, and faster than assumed.

Fund Conservation Programs through the Tax-Base:

This would be for the remaining term of the existing Conservation and Demand Management framework. Over time the costs would transition ~~and to transition costs~~ to the new "green bank ~~enecity~~entity" ~~over time~~.

- Energy's rationale for t~~T~~he cost shift would be in recognition of the burden borne by ratepayers in phasing out coal generation.

Departure Tax:

As a result of the IPO, Hydro One paid a "departure tax" payment in lieu of tax (PIL) of $2.6 billion, as a final true-up of its PILs tax obligation. Energy is proposed using some or all of this departure tax for price mitigation.

- This was paid to the Ontario Electricity Financial Corporation (OEFC) and help~~ed~~ reduce stranded debt.
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- Using some or all of it for price mitigation would change the net stranded debt paydown by OEFC resulting from the IPO.
- This would ~~also~~ be a one-time measure, ~~(~~potentially spread out over a few years~~)~~, and fiscal impact, as the departure tax amount was one-time.

Debt Retirement Charge (Total of about $0.45 Billion in annualized rate to 2017-18):

Ending the DRC early for Class B customers (commercial, small industrial) ~~(~~would have an impact of about $0.45 billion~~/year~~ in 2017-18~~ to 2017-18)~~.

- The end of the DRC had previously been linked with the end retirement of the residual stranded debt.
- Removing additional DRC revenue from the OEFC would call into question the proposed end date of the DRC.

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($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
~~OCEBe~~	-	-	-	-	-
1. OESP, RRRP, First Nation rate		398	419	433	447
2. Conservation Programs through Tax Base	110	450	450	450	450
4. Departure Tax		TBD	TBD	TBD	TBD
7. DRC Ended for Class B	110	450			
OREC	300	1,100*	1,100*	1,200*	1,200*
Ending DRC[2]	330	330	--	--	--
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
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CURRENT TOTAL	**1,195**	**2,005**	**1,715**	**1,826**	**1,826**
~~1. OESP, RRRP, First Nation rate~~		~~398~~	~~419~~	~~433~~	~~447~~
~~2. Conservation Programs through Tax Basee~~	~~110~~	~~450~~	~~450~~	~~450~~	~~450~~
~~4. Departure Tax~~		~~TBD~~	~~TBD~~	~~TBD~~	~~TBD~~
~~7. DRC Ended for Class B~~	~~110~~	~~450~~			
TOTAL	**1,415**	**3,303**	**2,584**	**2,709**	**2,723**

1. Based on forecasted numbers
2. OEPTC amounts in all years based on energy component of the rebate.
   * Sourced from Energy PRRT submission

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Electricity Finance Branch, Corporate and Electricity Finance Division
Ontario Financing Authority
December 12, 2016

Comments on Proposed Initiatives to Transform Ontario's Electricity Sector

The Ministry of Energy is providing an update on progress related to transforming the province's electricity sector by elaborating on the potential initiatives, as outlined in its deck.

CONTEXT

- As outlined in Energy's update, electricity costs have been increasing following investments to transform towards cleaner generation (i.e. meeting goals towards decarbonize) and modernize the electricity infrastructure (i.e. more than $35 billion in cleaner generation and $15.5 billion investment by Hydro One alone in ~~Hydro One~~ transmission and distribution systems).

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COMMENTS

Energy's proposals generally involve shifting some costs from the rate base to the tax base. ~~A general comment on the proposals would be that w~~While these proposals may have a fairly limited residential rate payer impact (~~,~~e.g. about $5-6/month for residential, ~~(~~less than 5% of the average monthly bill), the proposals would come at a material incremental fiscal cost ($1 billion to $1.3 billion)~~,~~. Note these impacts are lower than ~~somewhat down from the impacts from an~~ those prestend in an earlier deck ($1.3 billion to $1.9 billion).

Over the past five years, the fiscally funded electricity price mitigation efforts have averaged about $1.5 billion and is already expected to increase to about $2 billion with the introduction of OREC. The existing program costs are summarized in the table below:

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OREC	-	-	-	-	-	300	1,100*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	1,530	1,544	1,564	1,639	1,525	1,225	2,005

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Proposals

Energy has outlined the following rate mitigation proposals with significant bearing on the fiscal plan:

OESP & RRRP (Total of about $0.4 to 0.45 Billion/year):

This ~~includes~~ would shift~~ing~~ the cost of the current and proposed expanded Ontario Electricity Support Program (OESP), ~~as well as an additional 50% increase,~~ and the Rural or Remote Electricity Rate Program (RRRP), to the tax base.

Note: that the fiscal exposure ~~is larger~~ would increase if the OESP take up rate is larger, and faster than assumed.

Fund Conservation Programs through the Tax-Base:

This would be for the remaining term of the existing Conservation and Demand Management framework. Over time the costs would transition ~~and to transition costs~~ to the new "green bank ~~eneity~~entity" ~~over time~~.

- Energy's rationale for t~~T~~he cost shift would be in recognition of the burden borne by ratepayers in phasing out coal generation.

Expanding the scope of the Trillium Trust to invest in energy infrastructure:

The Province is currently targeting $5.7 billion from asset optimization to dedicate to the Trillium Trust for investment in infrastructure under Moving Ontario Forward.

- Expanding access to natural gas is already included under Moving Ontario Forward.
- Using the Trillium Trust for additional energy projects would require additional funding from asset optimization, given that the government is committed to using the targeted $5.7 billion to fund across Moving Ontario Forward projects. Incremental investments would have negative fiscal impacts once the assets are in-service and amortized.
- Investments through the Trillium Trust instead of through other electricity sector entities (Hydro One, OPG, LDCs) could have additional negative fiscal impacts as these entities could see reduced ratebase growth, lowering the revenues that the Province realizes from these entities (e.g., consolidated net income, payments-in-lieu of taxes, etc.) May also negatively impact Hydro One share price if the measure is perceived by the market as reducing Hydro One's potential ratebase growth.
- Unless applied to existing projects, this measure would have little or no near-term rate impact.

Departure Tax:

As a result of the IPO, Hydro One paid a "departure tax" payment in lieu of tax (PIL) of $2.6 billion, as a final true-up of its PILs tax obligation. Energy is proposed using some or all of this departure tax for price mitigation.

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Debt Retirement Charge (Total of about $0.45 Billion in annualized rate to 2017-18):
Ending the DRC early for Class B customers (commercial, small industrial) ~~(~~would have an impact of about $0.45 billion~~/year~~ in 2017-18 ~~to 2017-18)~~.

- The end of the DRC had previously been linked with the end retirement of the residual stranded debt.
- Removing additional DRC revenue from the OEFC would call into question the proposed end date of the DRC.

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
~~OCEBe~~	-	-	-	-	-
OESP, RRRP, First Nation rate		398	419	433	447
Conservation Programs through Tax Base	110	450	450	450	450
[Trillium Trust]	TBD	TBD	TBD	TBD	TBD
Departure Tax		TBD	TBD	TBD	TBD
DRC removal for Class B	110	450			
Proposed Program Total:	**220**	**1,298**	**869**	**883**	**897**
OREC	300	1,100*	1,100*	1,200*	1,200*
Ending DRC[2]	330	330	--	--	--
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~~2. Conservation Programs through Tax Basee~~	~~110~~	~~450~~	~~450~~	~~450~~	~~450~~
~~4. Departure Tax~~		~~TBD~~	~~TBD~~	~~TBD~~	~~TBD~~
~~7. DRC Ended for Class B~~	~~110~~	~~450~~			
TOTAL	**1,445**	**3,303**	**2,584**	**2,709**	**2,723**

1. Based on forecasted numbers
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Electricity Finance Branch, Corporate and Electricity Finance Division
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December 12, 2016

COMMERCIALLY SENSITIVE AND CONFIDENTIAL

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COMMENTS

Energy's proposals generally involve shifting ~~some~~ costs from the rate base to the tax base. ~~A general comment on the proposals would be that w~~While these proposals may have a fairly limited residential rate payer impact (~~,~~ e.g. about $5-6/month for residential, ~~(~~less than 5% of the average monthly bill), the proposals would come at a material incremental fiscal cost ($1 billion to $1.3 billion)~~.~~. Note these impacts are lower than ~~somewhat down from the impacts from an~~ those prestend in an earlier deck ($1.3 billion to $1.9 billion).

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- Expanding access to natural gas is already included under Moving Ontario Forward.
- Using the Trillium Trust for additional energy projects would require additional funding from asset optimization, given that the government is committed to using the targeted $5.7 billion to fund across Moving Ontario Forward projects. Incremental investments would have negative fiscal impacts once the assets are in-service and amortized.
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Departure Tax:

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COMMERCIALLY SENSITIVE AND CONFIDENTIAL

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- This was paid to the Ontario Electricity Financial Corporation (OEFC) ~~and helped reduce stranded debt~~. The departure tax payment was fiscally neutral to the Province as the income to the OEFC was fully offset by a reduction in ESDI resulting from reduced net income of Hydro One.
-
- Using some or all of it for price mitigation would ~~change~~ require restating the net stranded debt paydown by OEFC ~~resulting from~~related to the IPO. [As the departure tax paid was fiscally neutral, OEFC's uplift was primarily related to the deferred tax benefit and the s.50.3 benefit under the *Electricity Act*.]
- This would ~~also~~ be a one-time measure, ~~(~~potentially spread out over a few years~~)~~, and fiscal impact, as the departure tax amount was one-time.

Debt Retirement Charge (Total of about $0.45 Billion in annualized rate to 2017-18):
Ending the DRC early for Class B customers (commercial, small industrial) ~~(~~would have an impact of about $0.45 billion~~/year~~ in 2017-18 ~~to 2017-18)~~.

- The end of the DRC had previously been linked with the end retirement of the residual stranded debt.
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($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
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Existing Program Total:	**1,225**	**2,005**	**1,715**	**1,826**	**1,826**
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~~7. DRC Ended for Class B~~	~~110~~	~~450~~			
TOTAL	**1,445**	**3,303**	**2,584**	**2,709**	**2,723**

1. Based on forecasted numbers
2. OEPTC amounts in all years based on energy component of the rebate.

COMMERCIALLY SENSITIVE AND CONFIDENTIAL

* Sourced from Energy PRRT submission

Electricity Finance Branch, Corporate and Electricity Finance Division
Ontario Financing Authority
December 12, 2016

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CONTEXT

- As outlined in Energy's update, electricity costs have been increasing following investments to transform towards cleaner generation (i.e. meeting goals towards decarbonize) and modernize the electricity infrastructure (i.e. more than $35 billion in cleaner generation and $15.5 billion investment by Hydro One alone in ~~Hydro One~~ transmission and distribution systems).

- The government has taken action to lower electricity cost pressures to all consumers by taking actions, including deferring investments in generation (e.g., new build nuclear), improving market efficiency and decreasing costs related to renewable procurement (e.g. GEIA renegotiation, decreasing FIT prices, etc).

- The government introduced the Ontario Rebate for Electricity Consumers (OREC) which will provide a rebate equal to the 8% provincial portion of the Harmonized Sales Tax, saving $11 per month starting ~~January~~ January 1, ~~2018~~ 2017 for eligible small businesses, farms and residential~~s~~ consumers and has taken steps to expand the Rural or Remote Electricity Rate Protection program, expected to save eligible RRRP customers about $45 per month, when combined with OREC.

COMMENTS

Energy's proposals generally involve shifting ~~some~~ costs from the rate base to the tax base. ~~A general comment on the proposals would be that w~~While these proposals may have a fairly limited residential rate payer impact (~~,~~ e.g. about $5-6/month for residential, ~~(~~less than 5% of the average monthly bill), the proposals would come at a material incremental fiscal cost ($1 billion to $1.3 billion)~~.~~. Note these impacts are lower than ~~somewhat down from the impacts from an~~ those prestend in an earlier deck ($1.3 billion to $1.9 billion).

Over the past five years, the fiscally funded electricity price mitigation efforts have averaged about $1.5 billion and is already expected to increase to about $2 billion with the introduction of OREC. The existing program costs are summarized in the table below:

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,100*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	1,530	1,544	1,564	1,639	1,525	1,225	2,005

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Proposals

Energy has outlined the following rate mitigation proposals with significant bearing on the fiscal plan:

OESP & RRRP (Total of about $0.4 to 0.45 Billion/year):

This ~~includes~~ would shift~~ing~~ the cost of the current and proposed expanded Ontario Electricity Support Program (OESP), ~~as well as an additional 50% increase,~~ and the Rural or Remote Electricity Rate Program (RRRP), to the tax base.

Note: that the fiscal exposure ~~is larger~~ would increase if the OESP take up rate is larger, and faster than assumed.

- The fiscal impact from shifting OESP and RRRP to the tax base may also be larger if future changes are made to the programs. Energy noted in previous drafts of its price mitigation deck that
  - OESP credits could be increased to address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits).
- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

Fund Conservation Programs through the Tax-Base:

This would be for the remaining term of the existing Conservation and Demand Management framework. Over time the costs would transition ~~and to transition costs~~ to the new "green bank ~~enecity~~entity" ~~over time~~.

- Energy's rationale for t~~T~~he cost shift would be in recognition of the burden borne by ratepayers in phasing out coal generation.

Expanding the scope of the Trillium Trust to invest in energy infrastructure:

The Province is currently targeting $5.7 billion from asset optimization to dedicate to the Trillium Trust for investment in infrastructure under Moving Ontario Forward.

- Expanding access to natural gas is already included under Moving Ontario Forward.
- Using the Trillium Trust for additional energy projects would require additional funding from asset optimization, given that the government is committed to using the targeted $5.7 billion to fund across Moving Ontario Forward projects. Incremental investments would have negative fiscal impacts once the assets are in-service and amortized.
- Investments through the Trillium Trust instead of through other electricity sector entities (Hydro One, OPG, LDCs) could have additional negative fiscal impacts as these entities could see reduced ratebase growth, lowering the revenues that the Province realizes from these entities (e.g., consolidated net income, payments-in-lieu of taxes, etc.) May also negatively impact Hydro One share price if the measure is perceived by the market as reducing Hydro One's potential ratebase growth.
- Unless applied to existing projects, this measure would have little or no near-term rate impact.

Departure Tax:

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COMMERCIALLY SENSITIVE AND CONFIDENTIAL

As a result of the IPO, Hydro One paid a "departure tax" payment in lieu of tax (PIL) of $2.6 billion, as a final true-up of its PILs tax obligation. Energy is proposed using some or all of this departure tax for price mitigation.

- This was paid to the Ontario Electricity Financial Corporation (OEFC) ~~and helped reduce stranded debt~~. The departure tax payment was fiscally neutral to the Province as the income to the OEFC was fully offset by a reduction in ESDI resulting from reduced net income of Hydro One.
-
- Using some or all of it for price mitigation would ~~change~~ require restating the net stranded debt paydown by OEFC ~~resulting from~~related to the IPO. [As the departure tax paid was fiscally neutral, OEFC's uplift was primarily related to the deferred tax benefit and the s.50.3 benefit under the *Electricity Act, 1998*.]
- This would ~~also~~ be a one-time measure, ~~(~~potentially spread out over a few years~~)~~, and fiscal impact, as the departure tax amount was one-time.

Debt Retirement Charge (Total of about $0.45 Billion in annualized rate to 2017-18):
Ending the DRC early for Class B customers (commercial, small industrial) ~~(~~would have an impact of about $0.45 billion~~/year~~ in 2017-18 ~~to 2017-18)~~.

- The end of the DRC had previously been linked with the end retirement of the residual stranded debt.
- Removing additional DRC revenue from the OEFC would call into question the proposed end date of the DRC.

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
~~OCEBe~~	-	-	-	-	-
OESP, RRRP, First Nation rate		398	419	433	447
Conservation Programs through Tax Base	110	450	450	450	450
[Trillium Trust]	TBD	TBD	TBD	TBD	TBD
Departure Tax		TBD	TBD	TBD	TBD
DRC removal for Class B	110	450			
Proposed Program Total:	**220**	**1,298**	**869**	**883**	**897**
OREC	300	1,100*	1,100*	1,200*	1,200*
Ending DRC	330	330	--	--	--
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
~~OEPTC~~[2]OEPTC[2]	450	460	470	481	481
Existing Program Total:[3]	**1,225**	**2,005**	**1,715**	**1,826**	**1,826**
~~1. OESP, RRRP, First Nation rate~~		~~398~~	~~419~~	~~433~~	~~447~~
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TOTAL[3]	**1,445**	**3,303**	**2,584**	**2,709**	**2,723**

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3. Total would be significantly larger with the TBDs crystalized.

Electricity Finance Branch, Corporate and Electricity Finance Division
Ontario Financing Authority
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COMMENTS

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Over the past five years, the fiscally funded electricity price mitigation efforts have averaged about $1.5 billion and is already expected to increase to about $2 billion with the introduction of OREC. The existing program costs are summarized in the table below:

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Commented [FC1]: This is not correct. The DT represented revenue to OEFC fully offset by a reduction in ESDI from H1.

Commented [FC2]: What are we trying to say here? OEFC only got an uplift at consolidation of the deferred tax benefit and because of the 50.3 payment. The DT on itself didn't cause a reduction in stranded debt.

Debt Retirement Charge (Total of about $0.45 Billion in annualized rate to 2017-18):

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Ontario Financing Authority
December 12, 2016

COMMITTEE BRIEFING NOTE

Committee:		
Meeting Date:		
Ministry:		
Last reviewed by: Committee (date)		**Tracking to:**

SUBMISSION TITLE:

I. REQUEST/DECISION REQUIRED:

•

II. KEY POINTS:

- Think storyline!
    - What do the Deputy and Minister need to know?
    - Why is this coming forward now?
    - What result will occur due to this decision?
    - What is the critical context needed for effective decision-making?
    - What issues is Cabinet Office flagging as part of their briefings to senior management?
    - What was the discussion at previous committees on the issue?
    - What do other jurisdictions do re: this issue?
    - What are the risks surrounding this decision – if approved/not approved?
    - Is this contentious?
    - How does this contribute to competitive government?

III. KEY CONSIDERATIONS

Summarize TBS/MOF comments and suggestions in up to 2-3 short bullets.

- Are there impacts or risks to the fiscal plan?
- Does the initiative have economic impacts?
- Does the initiative set a precedent?

- Please note the Briefing Note should be a maximum of one page double-sided
  1 attachment appendix (e.g., map, key table, agreement) – if necessary

IV. FINANCIAL SUMMARY

$ Millions	2016-17	2017-18	2018-19
Initiative cost requested	0.0	0.0	0.0
Requested program base	0.0	0.0	0.0
Total fiscal impact (draw from c-funds)	0.0	0.0	0.0

VI. PERFORMANCE MEASURES

-

Name of analyst:	
Date:	
Branch / Division:	

APPENDIX A: SCHEDULES

- Map, Key table including (Before/After examples), agreement – if necessary

Examples of information to have as back-pocket:

- What have we done historically on this issue?
- What regions will be impacted/excluded?
- Who has been consulted? (or will be?)
- Who are the key people involved? (e.g. names of lead negotiator, CEO)
- Does this set a precedent or have linkages to other programs? (e.g. pools - community centres - hockey rinks)
- What are the key milestones, timelines for implementation?
- What is the accounting treatment? When does it hit our books?
- Who owns the risk? (e.g. agency, provincial government, feds, municipalities)
- What are the administration costs, and FTE implications?

Cost Shift Impacts - Residential Bill

750 kWh/month Toronto Hydro Customer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.9	0.82	0.84	0.92	0.93	0.94
OESP						0.84
Conservation	1.85	1.92	2	1.58	2.43	2.45
IEI			0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A Consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.2	1.1	1.12	1.23	1.24	1.25
OESP						1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI			0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Cost of Programs

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP						158
Conservation	329	339	354	280	425	428
IEI			15	16	18	19
Total	**1007**	**1110**	**1264**	**1142**	**1507**	**1674**

Demand Assumption

TWh, %	2011	2012	2013	2014	2015*	2016
Total (TWh)					141	
RPP (%)					41%	
RPP (TWh)					58	
Class B (%)					40%	
Class B (TWh)					57	
Class A (%)					18%	
Class A (TWh)					26	

**Source: Electricity Price Mitigation Cab Sub - Slide 2*

***Source: 2017 Total Demand from IESO 18 Month Outlook, Table 3.1.1*

	2017	
	4.77	*Assume 2017 same as 2016*
	1.56	
	0.86	
	2.45	*Assume 2017 same as 2016*
	0.12	*Assume 2017 same as 2016*
	9.76	

	2017	
	-33.92	*Assume 2017 same as 2016*
	2.08	
	1.15	
	2.02	*Assume 2017 same as 2016*
	0.10	*Assume 2017 same as 2016*
	-28.57	

	2017	
	893	*Assume 2017 same as 2016 since ICI Expansion will take into effect in 2018*
	285	*Source: Electricity Price Mitigation Cab Sub - 'Increasing RRRP by 110M'*
	158	*Assume 2017 same as 2016*
	428	*Assume 2017 same as 2016*
	19	*Assume 2017 same as 2016*
	1783	

	2017**
	137
	41%
	56
	40%
	55
	18%
	25

Table 3.1.1: Monthly Peak and Energy Demand

Forecasted Peak and Energy Demand						
	Peak Demand (MW)			Energy Demand (GWh)		
Month	Current Forecast	Previous Forecast	Weather Corrected Actual	Current Forecast	Previous Forecast	Weather Corrected Actual
Jan-12	22,160	22,311	22,144	13,280	13,426	13,066
Feb-12	21,814	21,970	20,713	12,203	12,342	11,542
Mar-12	20,709	20,813	20,575	12,265	12,376	11,986
Apr-12	18,745	18,839	19,170	10,867	10,965	10,842
May-12	19,038	19,134	19,809	10,944	11,043	11,028
Jun-12	22,569	22,769	22,571	11,398	11,439	11,415
Jul-12	23,298	23,409	23,745	12,319	12,345	12,872
Aug-12	22,957	23,120	22,797	12,419	12,441	12,366
Sep-12	20,506	20,801	20,514	10,811	10,909	10,923
Oct-12	18,346	18,471	18,870	11,200	11,249	11,188
Nov-12	20,572	20,720	20,180	11,630	11,647	11,733
Dec-12	21,693	21,693	20,614	12,612	12,612	12,388
2012	23,298	23,409	23,745	141,947	142,795	141,348
Jan-13	22,014	22,087	22,808	13,314	13,414	13,165
Feb-13	21,774	21,813	21,451	11,820	11,848	11,701
Mar-13	20,635	20,655	20,557	12,283	12,235	11,823
Apr-13	18,492	18,511	18,558	11,018	10,974	10,997
May-13	19,101	19,112	18,498	10,932	10,888	10,658
Jun-13	22,499	22,559	22,324	11,406	11,303	11,176
Jul-13	23,213	23,275	24,256	12,480	12,365	12,554
Aug-13	22,360	22,418	22,892	12,228	12,114	12,090
Sep-13	20,513	20,405	20,604	11,015	10,950	10,800
Oct-13	18,388	18,347	18,888	11,279	11,260	11,217
Nov-13	20,326	20,278	20,086	11,687	11,540	11,740
Dec-13	21,395	21,395	22,047	12,700	12,700	12,532
2013	23,213	23,275	24,256	142,163	141,591	140,452
Jan-14	22,320	22,282	22,119	13,356	13,460	13,302
Feb-14	20,964	21,036	21,541	11,748	11,802	11,727
Mar-14	19,906	19,976	20,654	12,055	12,104	11,983
Apr-14	17,649	17,587	18,476	10,731	10,789	10,922
May-14	18,964	19,049	18,705	10,790	10,851	10,634
Jun-14	22,470	22,435	20,350	11,346	11,346	11,051
Jul-14	22,949	23,025	21,993	12,360	12,360	12,145
Aug-14	21,403	21,483	21,651	11,993	11,993	11,803
Sep-14	19,023	18,933	19,374	10,580	10,662	10,714
Oct-14	18,639	18,589	18,358	11,127	11,340	10,934
Nov-14	20,302	20,336	19,807	11,497	11,730	11,275
Dec-14	21,238	21,118	21,322	12,769	12,722	12,363
2014	22,949	23,025	22,119	140,353	141,159	138,854
Jan-15	22,294	22,149	21,531	12,843	13,069	12,843
Feb-15	20,132	21,017	20,132	11,468	11,529	11,468
Mar-15	20,070	19,841	20,070	11,570	11,857	11,570
Apr-15	18,900	18,121	18,900	10,547	10,542	10,547
May-15	18,033	19,370	18,033	10,401	10,636	10,401
Jun-15	20,472	22,318	20,472	10,782	11,467	10,782
Jul-15	22,559	22,878	22,559	12,083	12,174	12,083
Aug-15	22,055	21,431	22,055	11,788	11,821	11,788
Sep-15	19,206	18,485	19,206	10,866	10,513	10,866
Oct-15	18,256	18,339	18,256	10,779	11,150	10,779
Nov-15	21,188	20,306	21,188	11,334	11,595	11,334
Dec-15	20,155	21,041	20,155	12,083	12,717	12,083
2015	22,559	22,878	22,559	136,543	139,069	136,543
Jan-16	21,158	22,360	21,158	12,620	12,982	12,620
Feb-16	20,195	20,985	20,195	11,593	11,807	11,593
Mar-16	20,153	20,075	20,153	11,532	11,765	11,532
Apr-16	18,292	17,508	18,292	10,440	10,356	10,440
May-16	19,663	19,338	19,663	10,198	10,687	10,198
Jun-16	21,183	22,316	21,183	11,039	11,379	11,039
Jul-16	22,214	22,600	22,214	12,191	11,902	12,191
Aug-16	22,043	21,440	22,043	12,337	11,772	12,337
Sep-16	18,289	18,302		10,402	10,424	
Oct-16	18,079	18,166		10,948	10,932	
Nov-16	20,296	20,406		11,524	11,489	
Dec-16	20,888	20,913		12,431	12,370	
2016	22,214	22,600	22,214	137,255	137,864	91,951
Jan-17	21,981	22,201		12,859	12,879	
Feb-17	21,043	21,078		11,333	11,359	
Mar-17	20,179	20,265		11,859	11,883	
Apr-17	17,905	18,009		10,321	10,388	
May-17	19,128	19,170		10,530	10,563	
Jun-17	22,300	22,269		11,135	11,143	
Jul-17	22,591	22,680		11,983	11,992	
Aug-17	22,358	22,413		12,097	12,102	
Sep-17	19,354	19,418		10,482	10,506	
Oct-17	18,184	18,282		10,953	10,948	
Nov-17	20,451	20,545		11,413	11,390	
Dec-17	20,950	21,036		12,306	12,259	
2017	22,591	22,680		137,271	137,410	

Note: Last Forecast is the most recent or last forecast made for the month. Previous Forecast is the second last forecast for the month.

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Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,200*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,105**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.1 billion.

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Background on Taxpayer-funded Electricity Price Mitigation

Program	Annual Fiscal Impacts ($M)	Date	Details
Ontario Clean Energy Benefit (OCEB)	~1,000	Jan 1 2011 to Dec 31, 2015	OCEB provided over four million residential customers, and over 400,000 farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax. Effective September 1, 2012, electricity consumption eligible for the 10 per cent benefit was capped at the first 3,000 kWh of electricity consumed per month, and provided a full 10 per cent benefit to almost all residential customers and most small retail businesses. OCEB expired December 31, 2015, as planned. OCEB was put in place following the implementation of the Harmonised Sales Tax (HST). Unlike the previous provincial Retail Sales Tax (RST), the HST (and GST) included electricity in the taxable base.
Ending DRC from Residential Bills	~330	Jan 1, 2016 to Mar 31, 2018	The government removed the Debt Retirement Charge (DRC) from residential electricity users' bills as of January 1, 2016. This is saving a typical residential user about $70 each year and meant ending the DRC earlier for these users than otherwise provided for in the *Electricity Act, 1998*.
Ontario Rebate for Electricity Consumers (OREC)	~1,200	Jan 1, 2017 onward	This ongoing program will rebate -- directly on consumers' residential electricity bills -- an amount equal to the provincial portion of the Harmonized Sales Tax (HST).
Northern Industrial Electricity Rate Program	120	March 2010	As announced in 2015 Budget, the government committed to ongoing support for northern industrials with $120 million allocated annually. The Northern Industrial Electricity Rate (NIER) was previously extended in 2012 for an additional three-year term, effective April 1, 2013 and also for a year effective April 1, 2016, with an allocation up to $120 million per year. Qualifying participants receive a rebate of two cents per kilowatt-hour (kWh) up to a maximum of $20 million per year per company. NIER was initially established as a three-year program in Budget 2010, effective April 1, 2010,.
Northern Ontario Energy Credit	~25	Budget 2010	Delivered as part of the Ontario Trillium Benefit, provides individuals living in northern Ontario with a credit of up to $146 per year for the 2016 benefit year, and families up to $224.[1]
Ontario Energy Property Tax Credit	~445	Budget 2010	Delivered as part of the Ontario Trillium Benefit, provides up to $1,008 per year for low-to moderate-income individuals and families, and up to $1,148 for qualifying seniors. [1]

1. Both the energy portion of the Ontario Energy and Property Tax Credit (OEPTC) and NOEC were introduced/enhanced following the introduction of the HST and have a significant annual fiscal cost (totalling about $500 million annually).

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Timeline – Taxpayer-funded Electricity Price Mitigation

Budget 2010: OEPTC, NOEC Proposed as part of the Ontario Trillium Benefit

In the 2011 Budget, the government combined the payments of three existing tax credits — the Ontario Sales Tax Credit, the Ontario Energy and Property Tax Credit, and the Northern Ontario Energy Credit — to create the OTB. The OTB is paid in monthly instalments throughout the year, which helps people meet their expenses as bills arrive.

Ontario Clean Energy Benefit (Jan 1 2011 to Dec 31 2015)

The OCEB was introduced in the 2010 Ontario Economic Outlook and Fiscal Review to help consumers transition to a cleaner electricity system. As set out in legislation, the OCEB ended on December 31, 2015. The Province has introduced rate mitigation measures to be implemented after December 31, 2015.

OCEB provided over four million residential customers, and over 400,000 farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax, for the first 3,000 kilowatt-hours (kWh) of monthly electricity consumption.

Removing DRC from Residential Bills (Jan 1 2016 to Mar 31 2018)

The government removed the DRC from residential electricity users' bills beginning on January 1, 2016. This saves a typical residential user about $70 each year and ends the DRC earlier for these users than otherwise provided for in the Electricity Act, 1998.

Ontario Rebate for Electricity Consumers

As of January 1, 2017, OREC will reduce electricity costs by an amount equal to the provincial portion of the HST for about five million residential consumers, farms and small businesses.

2010 2011 2012 2013 2014 2015 2016 2017

History of Northern Industrial Electricity Price Relief

November 2006

The Ontario government announced the Northern Pulp and Paper Electricity Transition Program (NPPETP), a three-year $140 million, to be effective retroactively to October 1, 2006

Budget 2009

The government announced extension of the NPPETP by one year providing about $58 million with electricity price rebates of 1.8 cents/kWh.

Budget 2010

NIER program announced, with a projected fiscal cost of $150 M per year, to provide electricity price rebates for qualifying large industrial facilities in northern Ontario. An additional $21.8 million allocated for existing NPPETP in 2010-11 to be integrated with NIER.

September 2010

Transition from NPPETP to NIER: pulp and paper mills participating in NPPETP continued to receive the NPPETP rebate of 1.8 cents/kWh until September 30, 2010, with those qualifying for NIER receiving a top-up rebate of 0.2 cents/kWh.

December 2012

The government announced the extension of the NIER for three years, capping the rebates to a maximum of 2011-12 consumptions levels or $20 million, whichever is lower.

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Potential Fiscal Impact to the Electricity Sector

- The electricity sector has a significant impact on the Province's fiscal position; through both the revenue and expense sides of the Province's fiscal position.
  - Electricity Rate mitigation programs funded through the tax base have a direct fiscal impact on the Province's finances.
  - Alternatively, electricity rate mitigation programs funded by the rate base shift costs from one group of ratepayers to another.
- The Province's electricity sector agencies and corporations are each consolidated into the government's financial statements, and directly affect the Province's surplus/deficit position.
  - Ontario Power Generation (OPG) financial results have a dollar-for-dollar impact on the Province.
    - Electricity price mitigation strategies involving OPG would lead to a direct fiscal impact.
  - Hydro One financial results have a direct impact on the Province, based on the Province's proportionate ownership.
    - The Province currently holds about 70 per cent of Hydro One.

Ontario

MINISTRY OF
ENERGY

Cost Shifts in Ontario's Electricity Sector

Working Draft

November 2016

CONFIDENTIAL DRAFT

Context

- Necessary investments in Ontario's electricity system have led to increased prices, prompting government to introduced a number of price mitigation programs for all consumer types.
  - In addition to existing rate mitigation programs, the 2016 Throne Speech announced a package of rate mitigation initiatives to address electricity prices for residential, commercial and industrial consumers.

- Ontario has a number of programs in place to manage residential electricity prices, including:
  - Ontario Electricity Support Program (OESP);
  - Rural or Remote Rate Protect (RRRP);
  - Northern Ontario Energy Credit (NOEC); and
  - Ontario Energy and Property Tax Credit (OEPTC).

- Ontario also has a number of programs in place to manage industrial electricity prices, including:
  - Industrial Conservation Initiative (ICI);
  - Industrial Electricity Incentive (IEI);
  - Industrial Accelerator Program (IAP);
  - saveONenergy for Business Program; and
  - Demand Response.

Context (cont'd)

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in Ontario's Electricity Sector

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in Ontario's Electricity Sector (cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

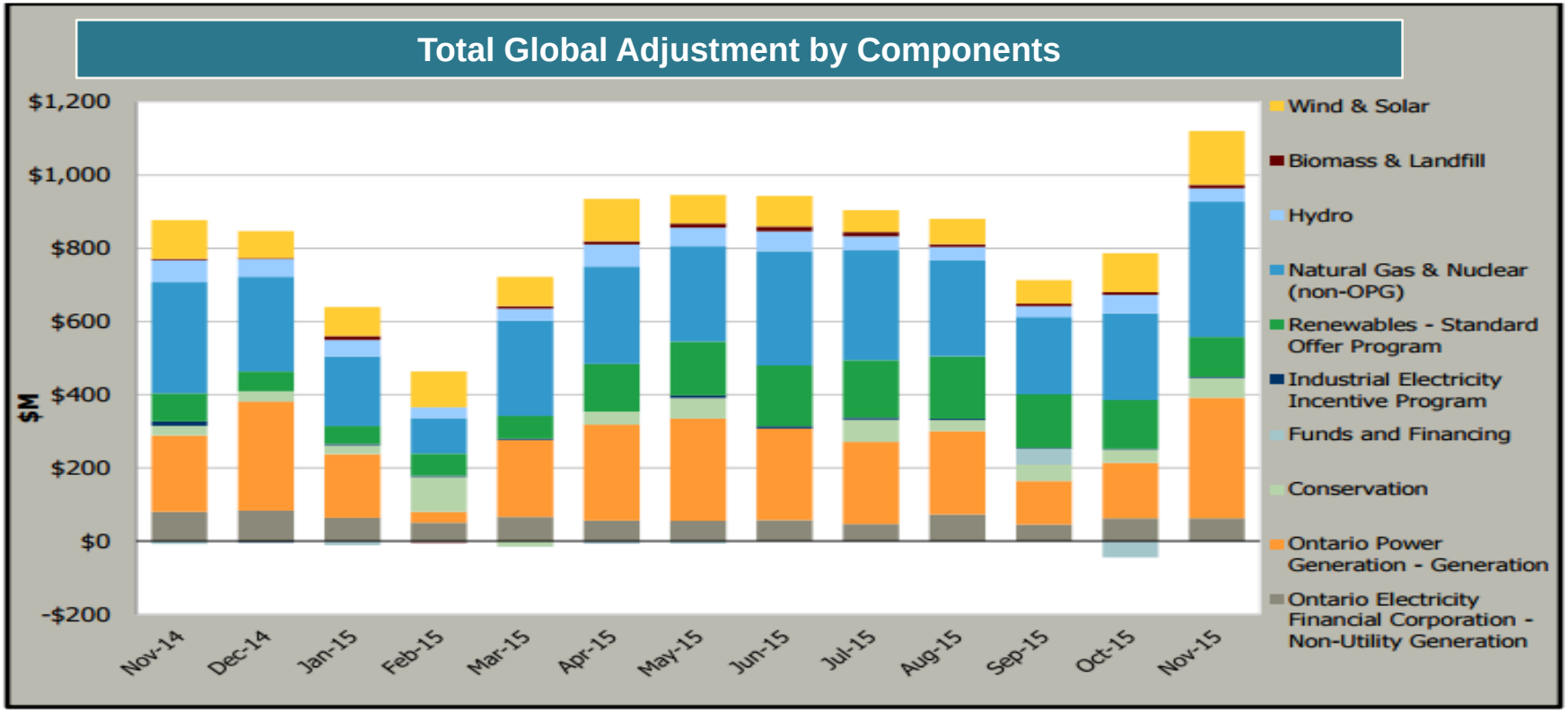
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RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).

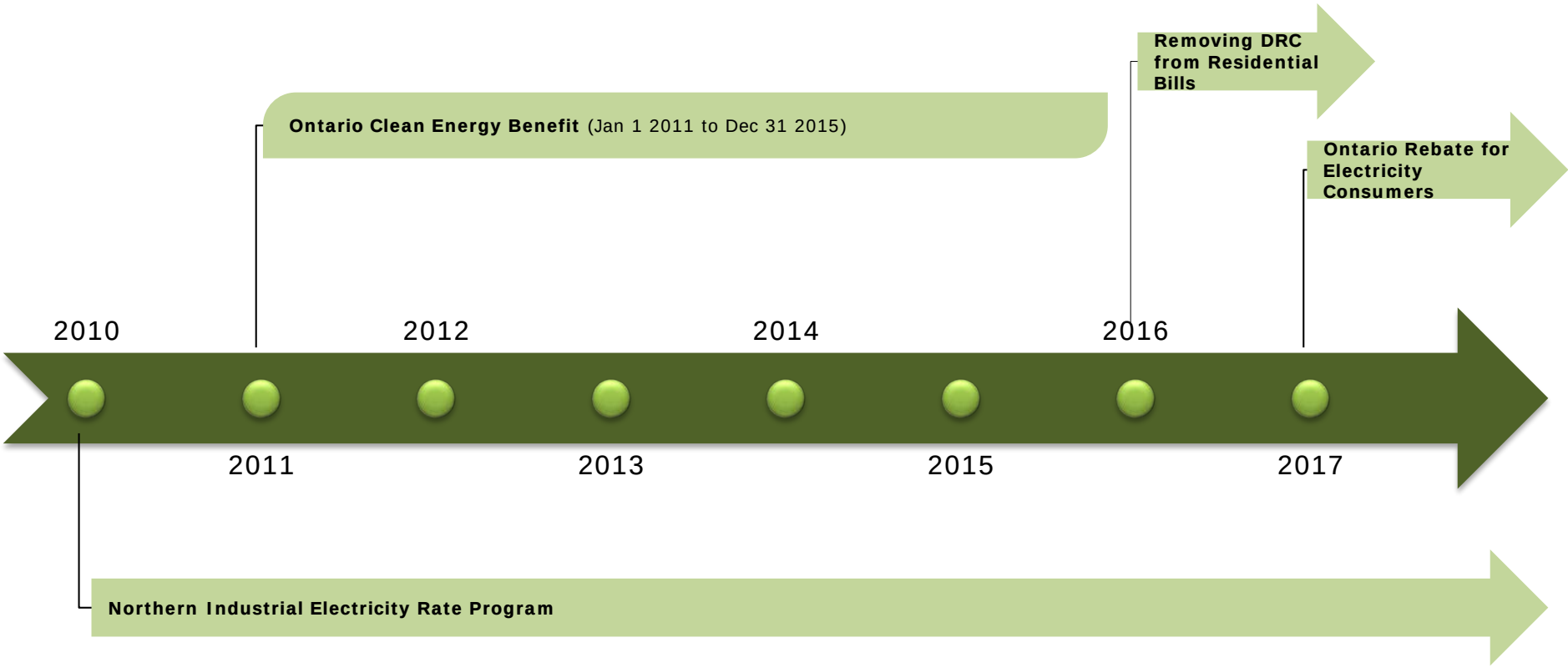


Source: IESO Monthly Market Report (November 2015)

Taxpayer funded Electricity Price Mitigation

Program	Annual Fiscal Impacts ($M)	Date	Details
Ontario Clean Energy Benefit (OCEB)	1,000	Jan 1 2011 to Dec 31, 2015	
Ending DRC from Residential Bills	300	Jan 1, 2016 onward	
Ontario Rebate for Electricity Consumers (OREC)	1,000	Jan 1, 2017 onward	Rebate -- directly on consumers' residential electricity bills -- an amount equal to the provincial portion of the Harmonized Sales Tax (HST), an eight per cent savings.
Northern Industrial Electricity Rate Program	120	2010-2011 fiscal year onwards	Provides a $20 per megawatt hour rebate, up to a maximum of $20 million, for qualifying large northern industrial consumers.
Northern Ontario Energy Credit	25		Delivered as part of the Ontario Trillium Benefit, provides individuals living in northern Ontario with a credit of up to $146 per year for the 2016 benefit year, and families up to $224.
Ontario Energy Property Tax Credit	445		Delivered as part of the Ontario Trillium Benefit, provides up to $1,008 per year for low-to moderate-income individuals and families, and up to $1,148 for qualifying seniors.
Ontario Sales Tax Credit (?)			

Taxpayer funded Electricity Price Mitigation



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Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

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Conservation	1.85	1.92	2.00	1.58	2.43	2.45
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Cost Shift Impacts - Industrial Bill

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$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
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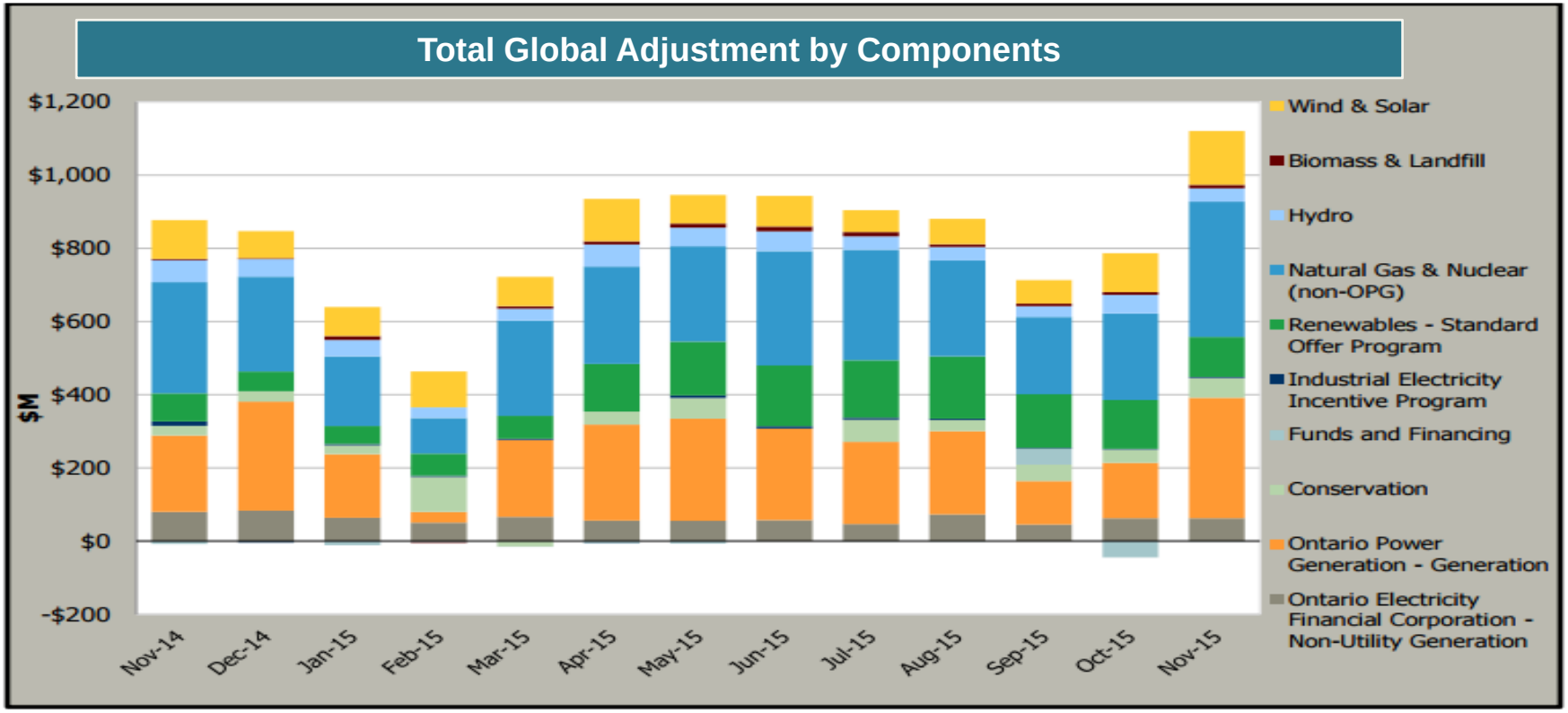
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Source: IESO Monthly Market Report (November 2015)

DRAFT

Taxpayer funded Electricity Price Mitigation

Program	Annual Fiscal Impacts ($M)	Date	Details
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Ontario

MINISTRY OF
ENERGY

Cost Shifts in Ontario's Electricity Sector

Working Draft

November 2016

CONFIDENTIAL DRAFT

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$/month	2011	2012	2013	2014	2015	2016
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Conservation	1.85	1.92	2.00	1.58	2.43	2.45
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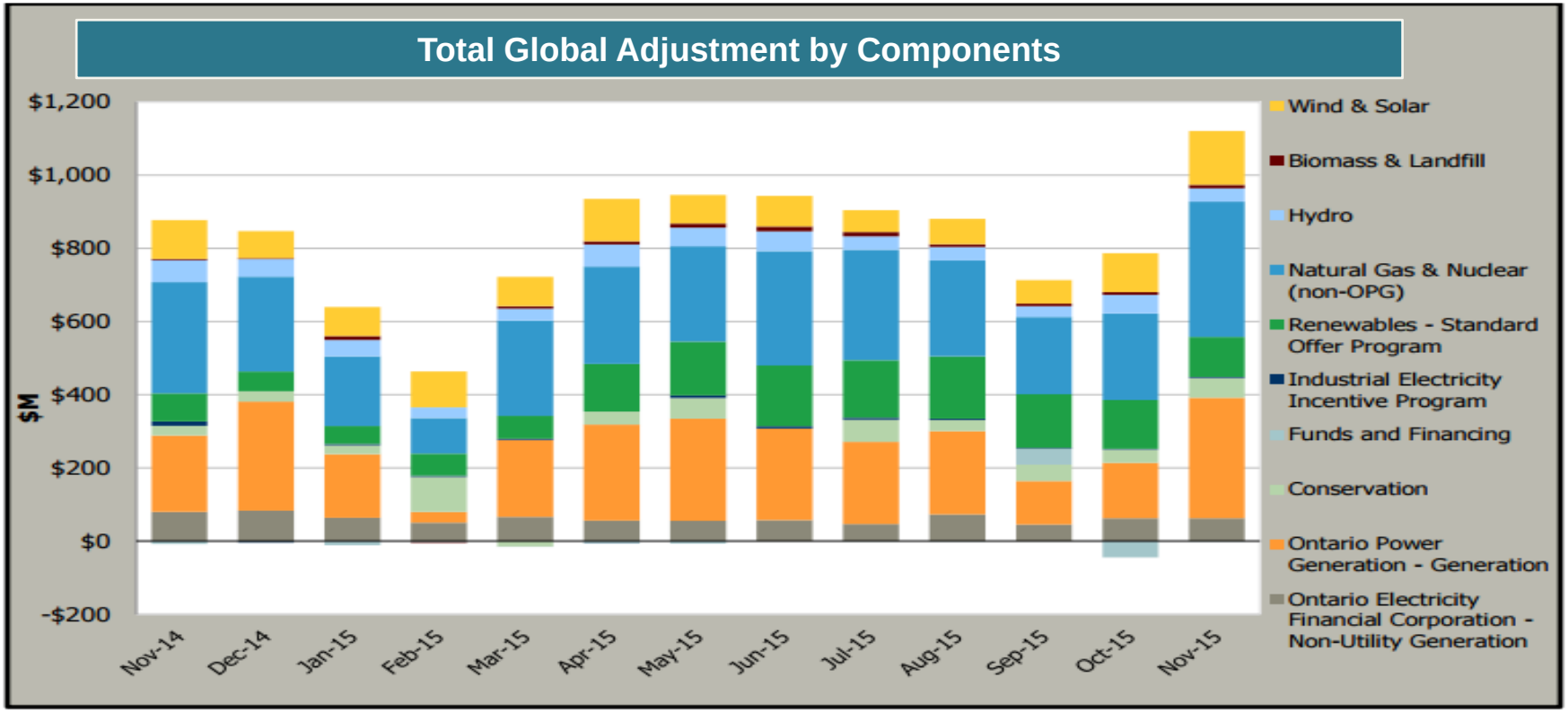
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Taxpayer Funded Electricity Price Mitigation

($M)	2011	2012	2013	2014	2015	2016	2017
OCEB	1,000	1,000	1,000	1,000	1,000	N/A	N/A
OREC	N/A	N/A	N/A	N/A	N/A	N/A	1,000
Ending DRC						300	300
NIERP	120	120	120	120	120	120	120
NOEC	25	25	25	25	25	25	25
OEPTC	445	445	445	445	445	445	445
Total	**1,590**	**1,590**	**1,590**	**1,590**	**1,590**	**890**	**1,890**

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011 – 2017.
- From 2011 – 2015 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016, the fiscal impact due to electricity price mitigation programs is estimated at approximately $900 million.
- In 2017, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $1.9 billion.

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Additional Background on Taxpayer funded Electricity Price Mitigation

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Ontario

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Working Draft

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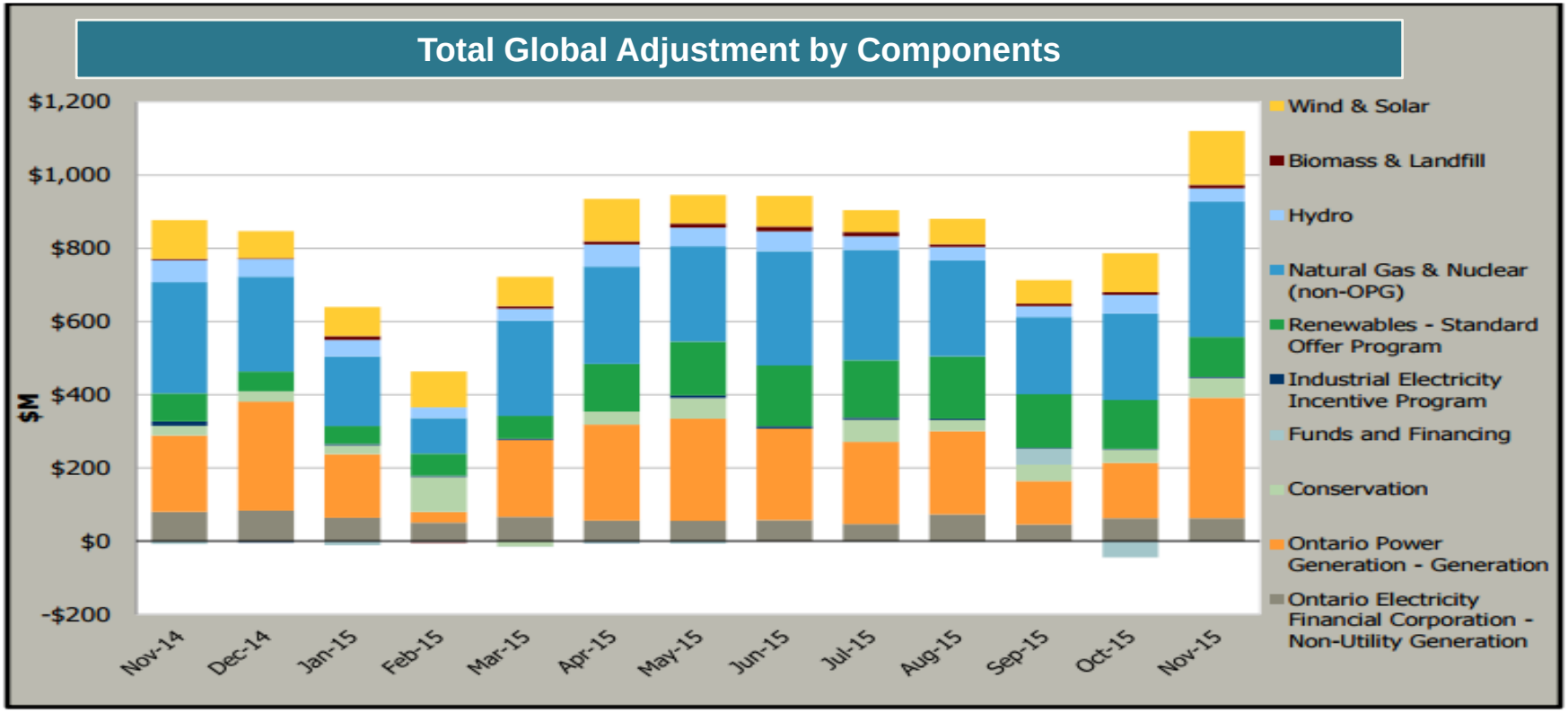
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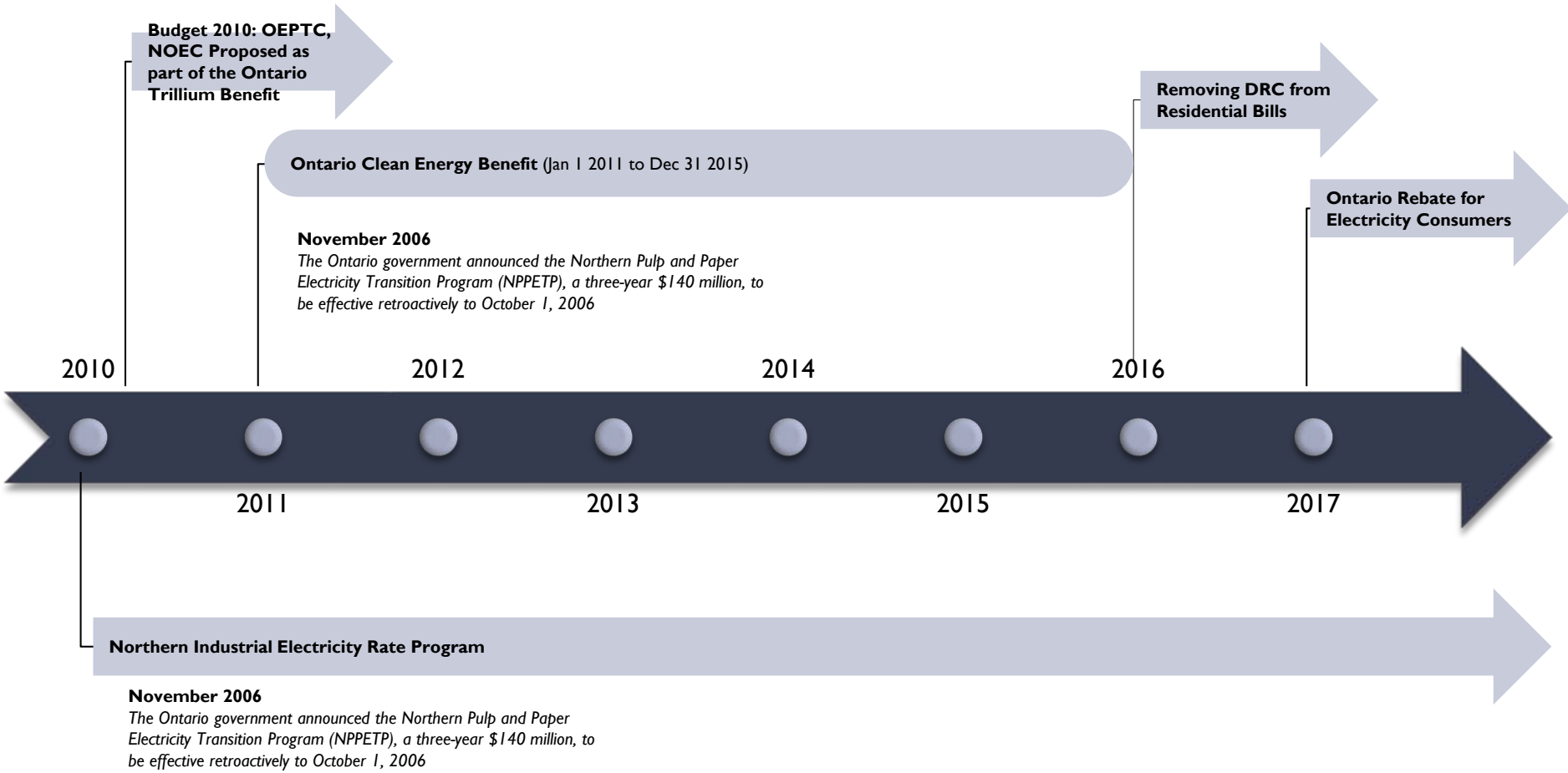
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Timeline of Taxpayer funded Electricity Sector Initiatives

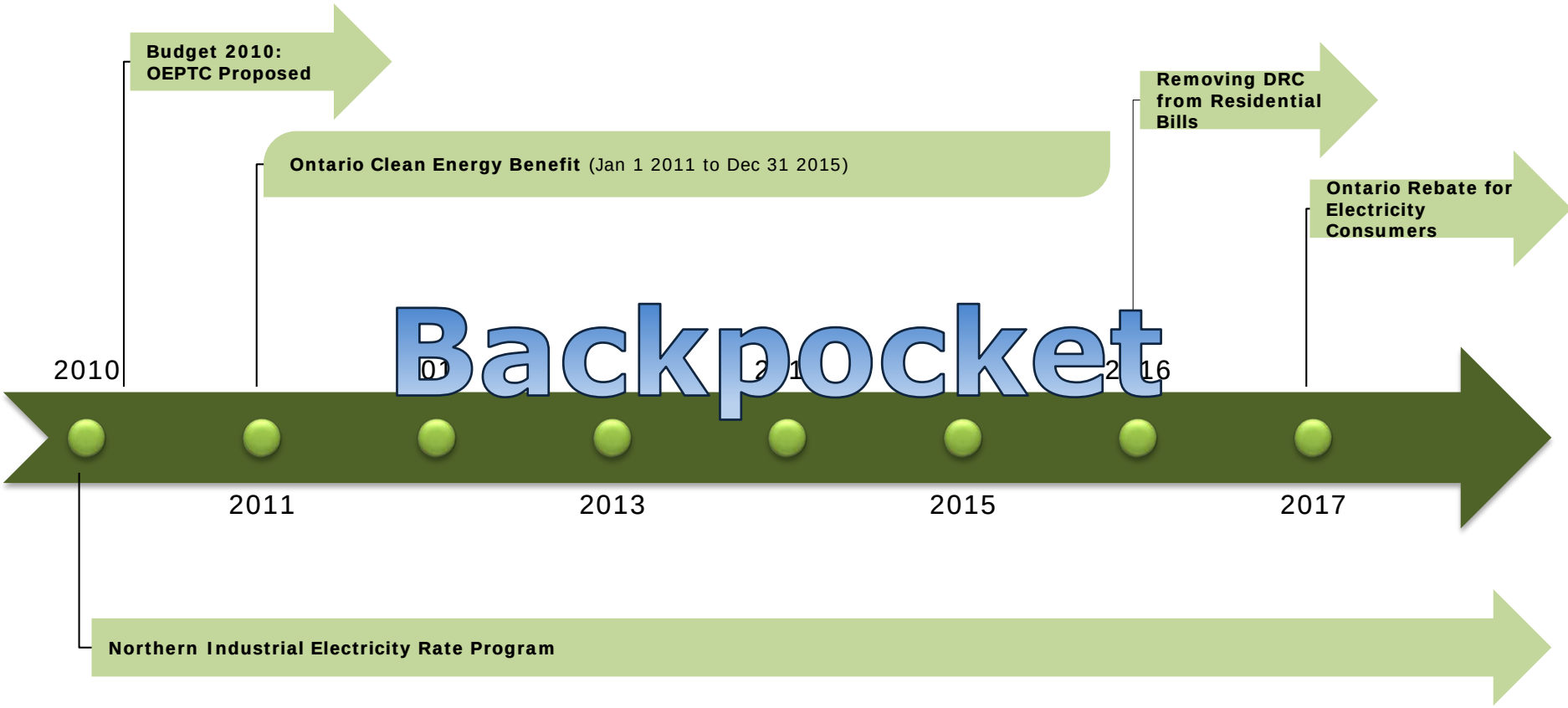


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Ontario Sales Tax Credit (?)			

Backpocket

Taxpayer funded Electricity Price Mitigation



Ontario

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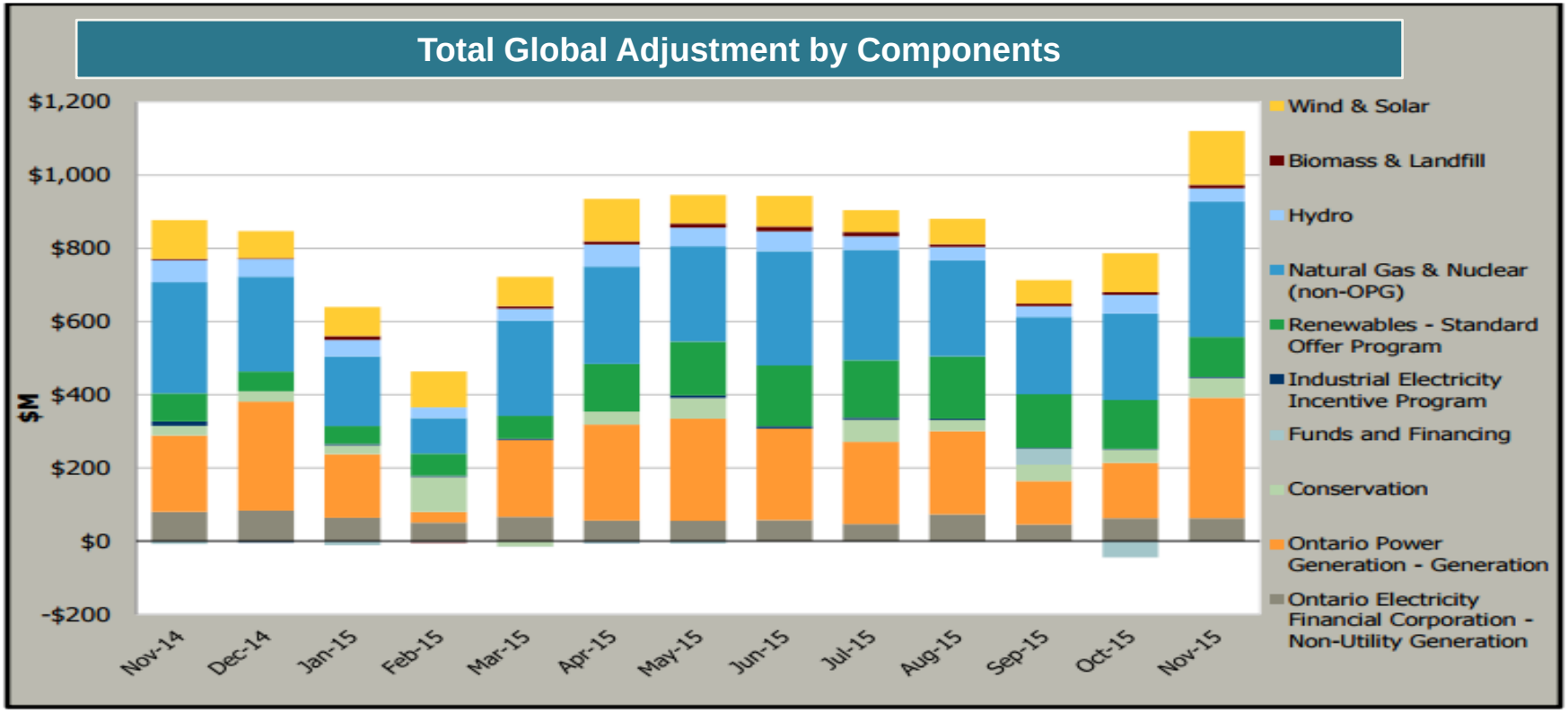
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Conservation	329	339	354	280	425	428
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Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Total Components of Global Adjustment

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Source: IESO Monthly Market Report (November 2015)

DRAFT

Taxpayer funded Electricity Price Mitigation

Program	Annual Fiscal Impacts ($M)	Date	Details
Ontario Clean Energy Benefit (OCEB)	~1,000	Jan 1 2011 to Dec 31, 2015	OCEB provided over four million residential customers, and over 400,000 farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax. Effective September 1, 2012, electricity consumption eligible for the 10 per cent benefit was capped at the first 3,000 kWh of electricity consumed per month, and provided a full 10 per cent benefit to almost all residential customers and most small retail businesses. OCEB was a responsible way of helping Ontario families through the transition to a more reliable and cleaner electricity system, with the monthly cap balancing the fiscal implications of providing electricity relief. Ontario Clean Energy Benefit (OCEB) expired December 31, 2015, as part of the originally planned. OCEB was also put in place following the implementation of the Harmonised Sales Tax (HST). Unlike the previous provincial Retail Sales Tax (RST), the HST (and GST) included electricity in the taxable base.
Ending DRC from Residential Bills	~300	Jan 1, 2016 to Mar 31, 2018	As part of its commitment to reduce electricity cost pressures, the government has removed the Debt Retirement Charge (DRC) from residential electricity users' bills as of January 1, 2016. This is saving a typical residential user about $70 each year and meant ending the DRC earlier for these users than otherwise provided for in the *Electricity Act, 1998*.
Ontario Rebate for Electricity Consumers (OREC)	~1,000	Jan 1, 2017 onward	This ongoing program will rebate -- directly on consumers' residential electricity bills -- an amount equal to the provincial portion of the Harmonized Sales Tax (HST), an eight per cent savings.
Northern Industrial Electricity Rate Program	120	March 2010	The Northern Industrial Electricity Rate (NIER) was extended in 2012 for an additional three-year term, effective April 1, 2013, and expiring March 31, 2016, with an allocation up to $120 million per year. Qualifying participants receive a rebate of two cents per kilowatt-hour (kWh) up to a maximum of $20 million per year per company. NIER was initially established as a three-year program in Budget 2010 and effective as of April 1, 2010, to provide an estimated $150 million per year to eligible large industrial companies in northern Ontario.
Northern Ontario Energy Credit	25	Budget 2010 Announcement	Delivered as part of the Ontario Trillium Benefit, provides individuals living in northern Ontario with a credit of up to $146 per year for the 2016 benefit year, and families up to $224.[1]
Ontario Energy Property Tax Credit	445	Budget 2010 Announcement	Delivered as part of the Ontario Trillium Benefit, provides up to $1,008 per year for low-to moderate-income individuals and families, and up to $1,148 for qualifying seniors. [1]

1. Both the energy portion of the Ontario Energy and Property Tax Credit (OEPTC) and NOEC were introduced/enhanced following the introduction of the HST and have a significant annual fiscal cost (totalling about $500 million annually).

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Timeline - Taxpayer funded Electricity Price Mitigation

Budget 2010: OEPTC, NOEC Proposed as part of the Ontario Trillium Benefit

In the 2011 Budget, the government combined the payments of three existing tax credits — the Ontario Sales Tax Credit, the Ontario Energy and Property Tax Credit, and the Northern Ontario Energy Credit — to create the OTB.
The OTB is paid in monthly instalments throughout the year, which helps people meet their expenses as bills arrive.

Ontario Clean Energy Benefit (Jan 1 2011 to Dec 31 2015)

The OCEB was introduced in the 2010 Ontario Economic Outlook and Fiscal Review to help consumers transition to a cleaner electricity system. As set out in legislation, the OCEB ended on December 31, 2015. The Province has introduced rate mitigation measures to be implemented after December 31, 2015.

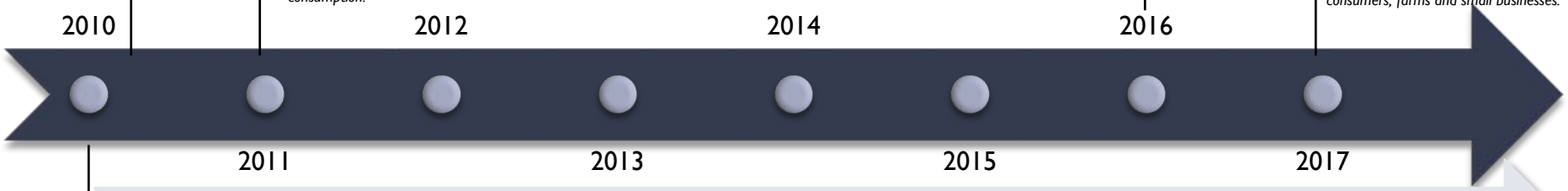
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As of January 1, 2017, OREC will reduce electricity costs by an amount equal to the provincial portion of the HST for about five million residential consumers, farms and small businesses.



Northern Industrial Electricity Rate Program

History of Northern Industrial Relief

November 2006
The Ontario government announced the Northern Pulp and Paper Electricity Transition Program (NPPETP), a three-year $140 million, to be effective retroactively to October 1, 2006

Budget 2009
The government announced extension of the NPPETP by one year providing about $58 million with electricity price rebates of 1.8 cents/kWh.

Budget 2010
The government announced the NIER program, with a projected fiscal cost of $150 million per year, to provide electricity price rebates for qualifying large industrial facilities in Northern Ontario. An additional $21.8 million allocated for existing NPPETP in 2010-11 to be integrated with NIER.

September 2010
Transition from NPPETP to NIER: pulp and paper mills participating in NPPETP continued to receive the NPPETP rebate of 1.8 cents/kWh until September 30, 2010, with those qualifying for NIER receiving a top-up rebate of 0.2 cents/kWh.

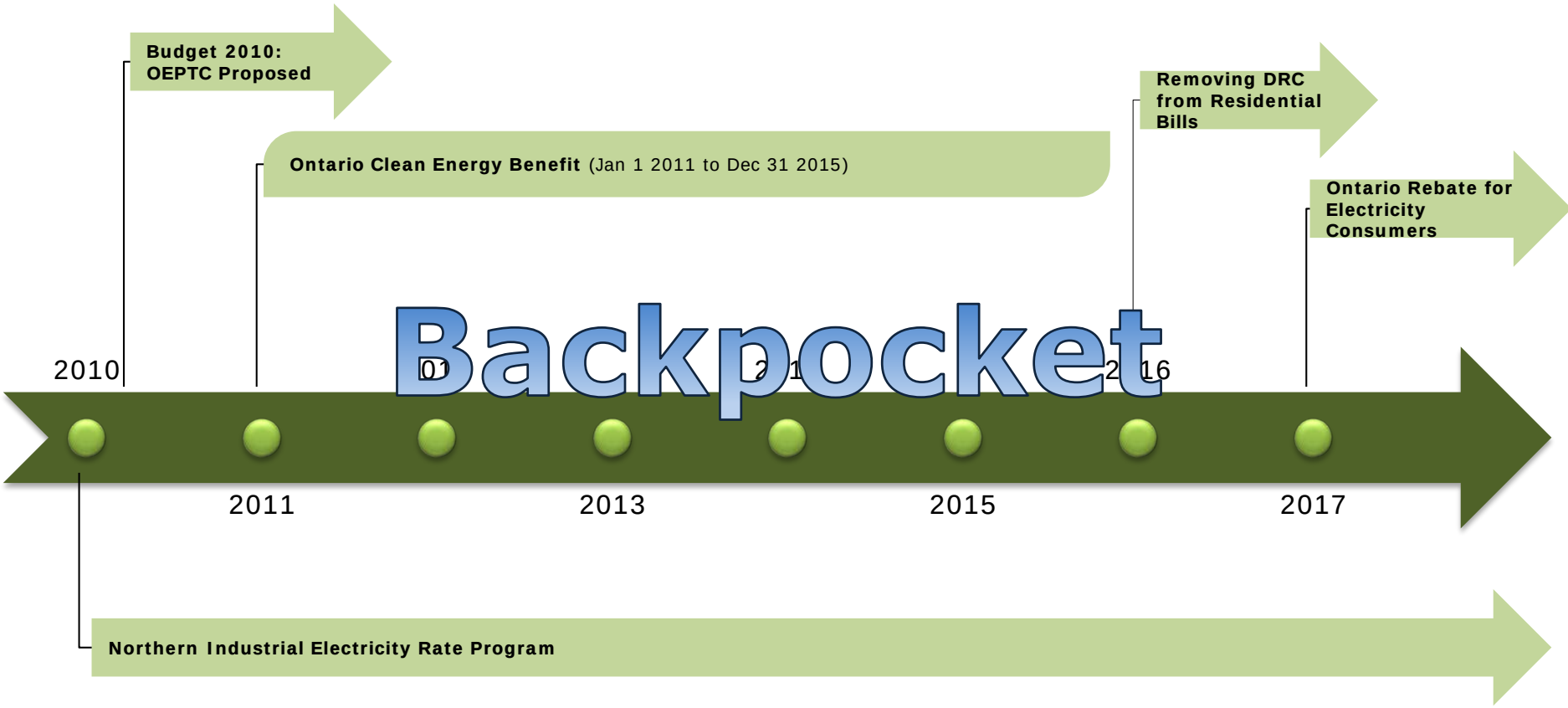
December 2012
The government announced the extension of the NIER for three years, capping the rebates to a maximum of 2011-12 consumptions levels or $20 million, whichever is lower.

Taxpayer funded Electricity Price Mitigation

Program	Annual Fiscal Impacts ($M)	Date	Details
Ontario Clean Energy Benefit (OCEB)	1,000	Jan 1 2011 to Dec 31, 2015	
Ending DRC from Residential Bills	300	Jan 1, 2016 onward	
Ontario Rebate for Electricity Consumers (OREC)	1,000	Jan 1, 2017 onward	Rebate -- directly on consumers' residential electricity bills -- an amount equal to the provincial portion of the Harmonized Sales Tax (HST), ... per cent saving
Northern Industrial Electricity Rate Program	120	2010-2011 fiscal year onwards	Provides a $20 per megawatt hour rebate, up to a maximum of $20 million, for qualifying large northern industrial consumers.
Northern Ontario Energy Credit	25		Delivered as part of the Ontario Trillium Benefit, provides individuals living in northern Ontario with a credit of up to $146 per year for the 2016 benefit year, and families up to $224.
Ontario Energy Property Tax Credit	445		Delivered as part of the Ontario Trillium Benefit, provides up to $1,008 per year for low-to moderate-income individuals and families, and up to $1,148 for qualifying seniors.
Ontario Sales Tax Credit (?)			

Backpocket

Taxpayer funded Electricity Price Mitigation



Ontario

MINISTRY OF
ENERGY

Cost Shifts in Ontario's Electricity Sector

Working Draft

November 2016

CONFIDENTIAL DRAFT

Context

- Necessary investments in Ontario's electricity system have led to increased prices, prompting government to introduced a number of price mitigation programs for all consumer types.
  - In addition to existing rate mitigation programs, the 2016 Throne Speech announced a package of rate mitigation initiatives to address electricity prices for residential, commercial and industrial consumers.

- Ontario has a number of programs in place to manage residential electricity prices, including:
  - Ontario Electricity Support Program (OESP);
  - Rural or Remote Rate Protect (RRRP);
  - Northern Ontario Energy Credit (NOEC); and
  - Ontario Energy and Property Tax Credit (OEPTC).

- Ontario also has a number of programs in place to manage industrial electricity prices, including:
  - Industrial Conservation Initiative (ICI);
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  - Industrial Accelerator Program (IAP);
  - saveONenergy for Business Program; and
  - Demand Response.

Context (cont'd)

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in Ontario's Electricity Sector

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in Ontario's Electricity Sector (cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

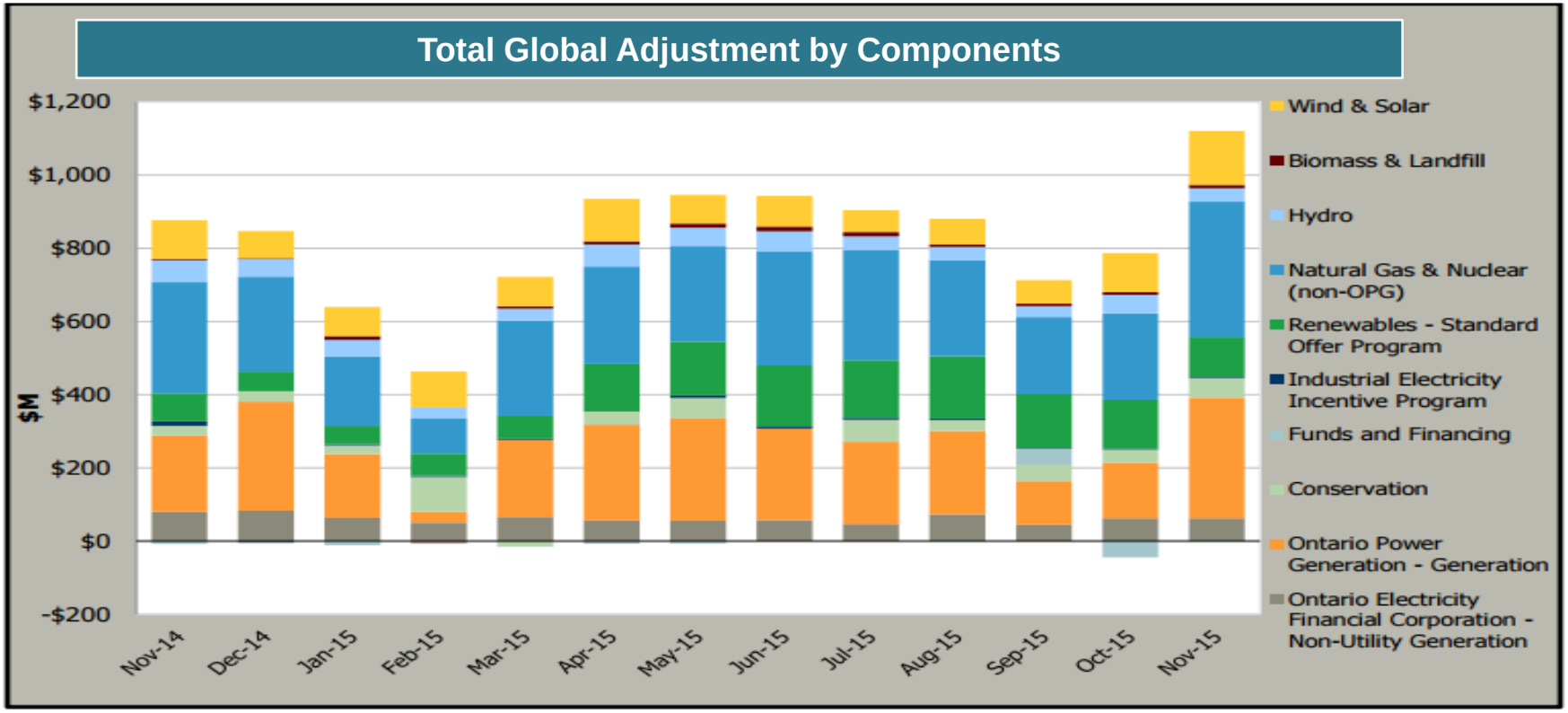
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Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

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Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,000
Ending DRC[2]	-	-	-	-	75	300	300
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[2]	445	445	445	445	445	445	445
TOTAL	1,621	1,583	1,591	1,654	1,526	1,190	1,890

1. 2016-17 onwards based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on estimates of Energy component of the rebate.

OCEB – Ontario Clean Energy Benefit
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- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011 – 2017.
- From 2011 – 2015 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1,190 million.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $1.9 billion.

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Additional Background on Taxpayer funded Electricity Price Mitigation

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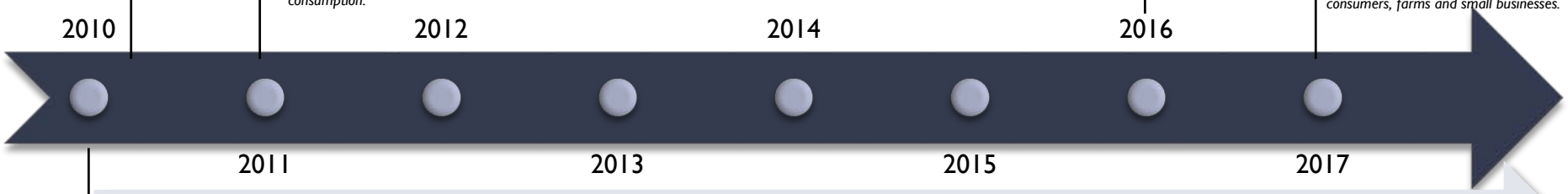
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Working Draft

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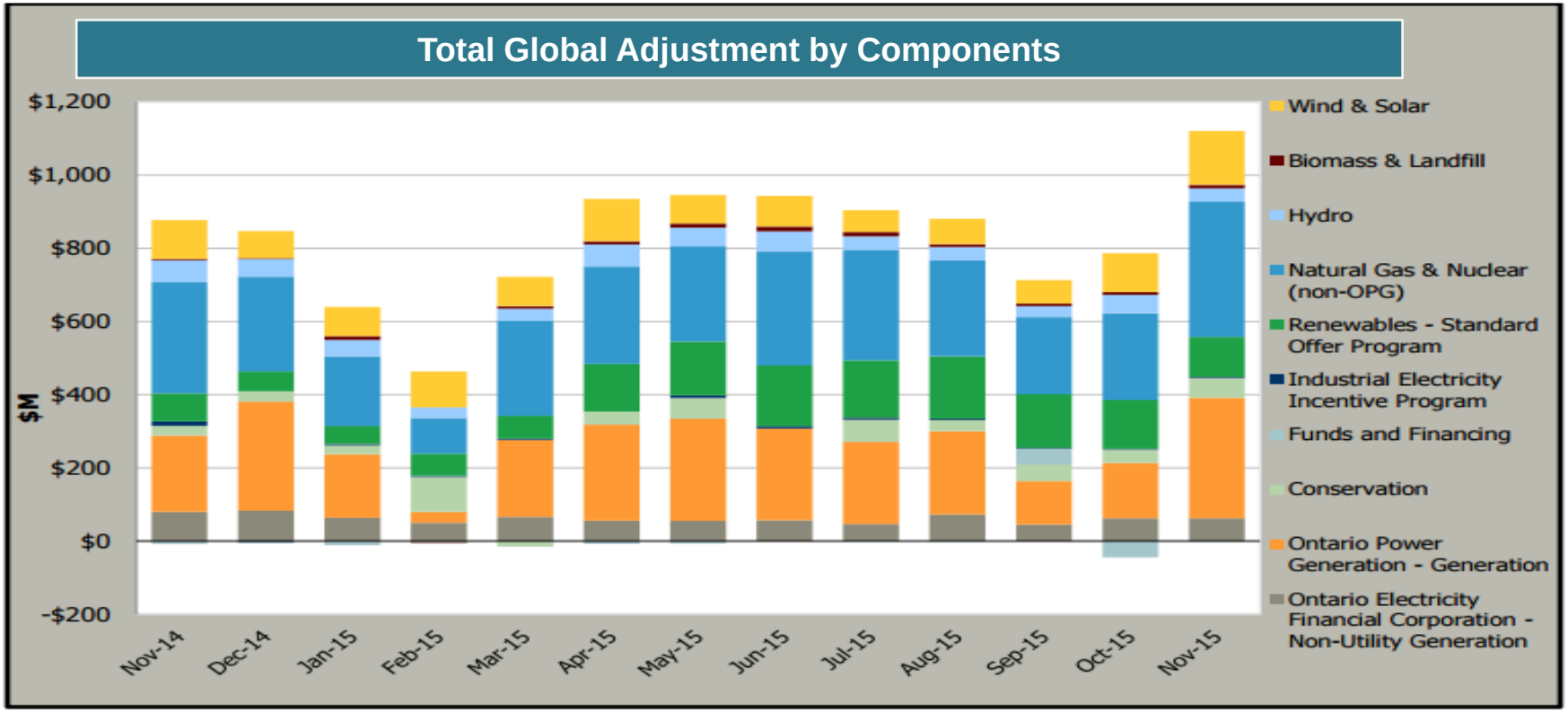
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- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1,190 million.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $1.9 billion.

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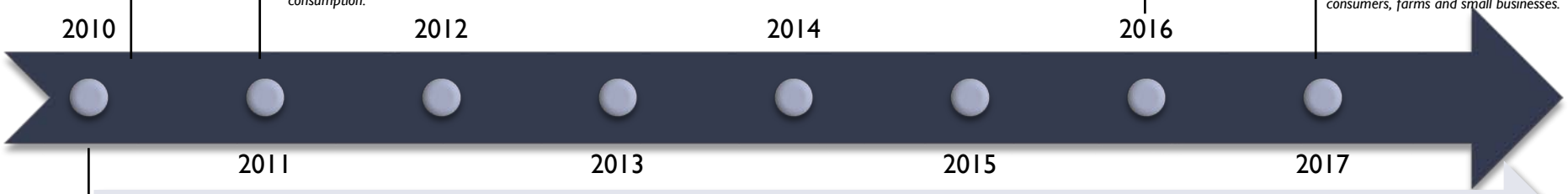
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Ontario

MINISTRY OF
ENERGY

Cost Shifts in Ontario's Electricity Sector

Working Draft

November 2016

CONFIDENTIAL DRAFT

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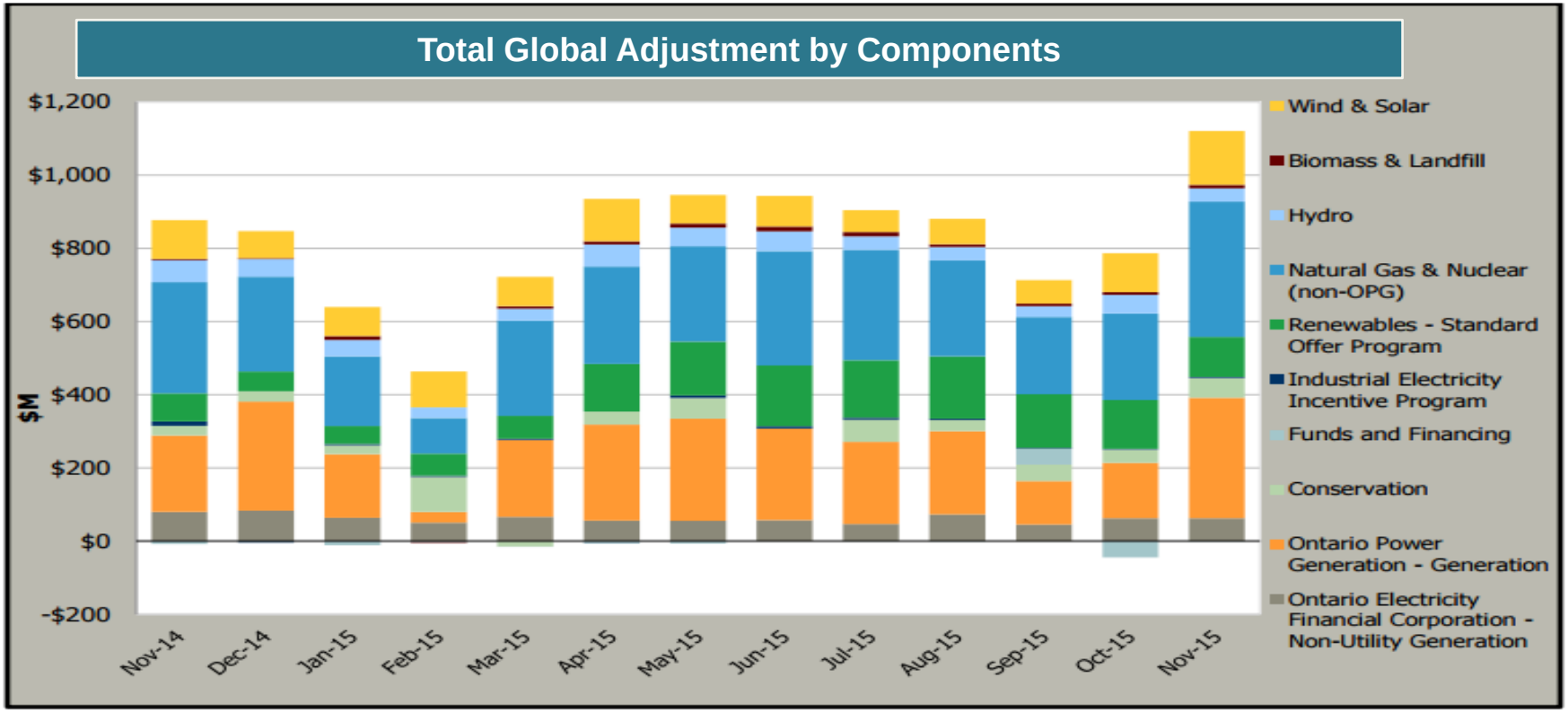
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Fiscal Implications of the Electricity Sector

- The electricity sector has a significant impact on the Province's fiscal position; through both the revenue and expense sides of the provinces financial statements.
- Electricity Rate mitigation programs funded through the tax base have a direct fiscal impact on the province's finances.
- The Province's electricity sector agencies and corporations are each consolidated into the government's financial statements, and directly affect the Province's surplus/deficit position.
  - Ontario Power Generation (OPG) financial results have a dollar-for-dollar impact on the Province.
  - Hydro One financial results have a direct impact on the Province, based on the Province's proportionate ownership.
    - The Province currently holds about 70 per cent of Hydro One.
  - Ontario Electricity Financial Corporation (OEFC), an agency of the Ministry of Finance, is consolidated line-by-line into the Province's accounts.
    - OEFC receives certain revenues from within the electricity sector, including the Debt Retirement Charge (DRC) and payments-in-lieu of taxes, to manage the debt and liabilities of the old Ontario Hydro, including the stranded portion of the debt.
    - ~~The Minister of Finance also has authority under the Electricity Act with respect to the DRC.~~

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Electricity Sector Revenues: Part of a "Closed System" via OEFC

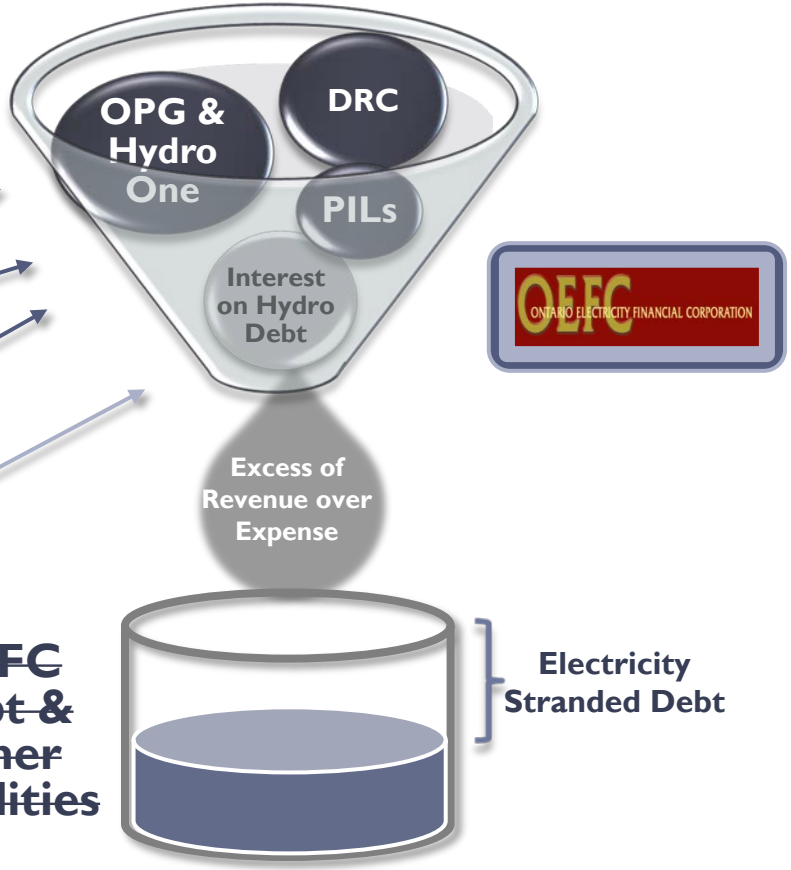
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Ontario Revenues

- Taxation Revenue
  - Personal Income Tax, Sales Tax, etc.
  - Electricity Payments-In-Lieu of Taxes (PILs)
  - Hydro One Provincial Corp Tax
- Federal Transfers
- Government Business Enterprises
  - OLG & LCBO
  - OPG & Hydro One
- Other Non-Tax Revenue
  - Electricity Debt Retirement Charge (DRC)

Ontario Expenses

- Interest on Debt
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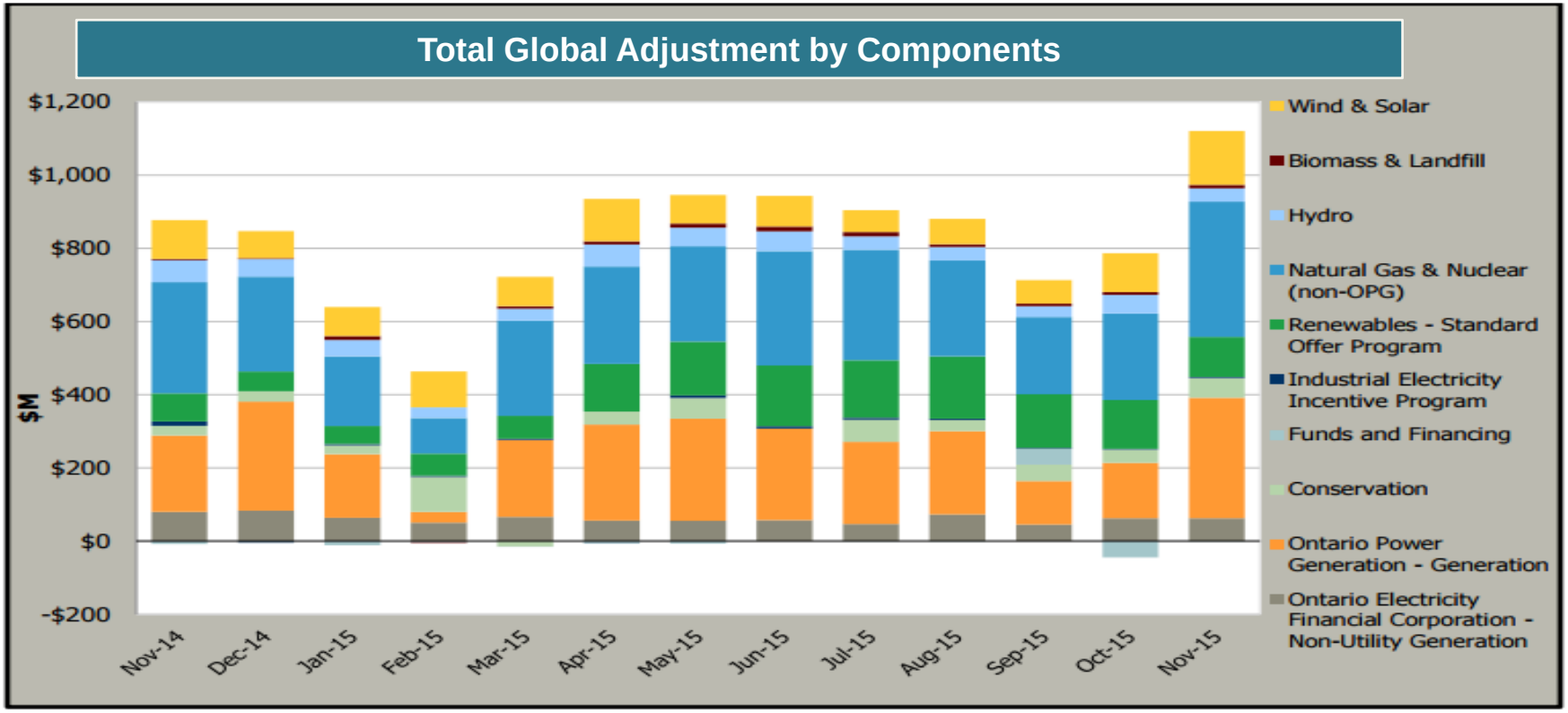
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As part of its commitment to reduce electricity cost pressures, the government has removed the Debt Retirement Charge (DRC) from residential electricity users' bills beginning on January 1, 2016. This will save a typical residential user about $70 each year and will mean ending the DRC earlier for these users than otherwise provided for in the Electricity Act, 1998.

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As of January 1, 2017, OREC will reduce electricity costs by an amount equal to the provincial portion of the HST for about five million residential consumers, farms and small businesses.

2010 2011 2012 2013 2014 2015 2016 2017

Northern Industrial Electricity Rate Program

History of Northern Industrial Relief

November 2006
The Ontario government announced the Northern Pulp and Paper Electricity Transition Program (NPPETP), a three-year $140 million, to be effective retroactively to October 1, 2006

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The government announced extension of the NPPETP by one year providing about $58 million with electricity price rebates of 1.8 cents/kWh.

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Transition from NPPETP to NIER: pulp and paper mills participating in NPPETP continued to receive the NPPETP rebate of 1.8 cents/kWh until September 30, 2010, with those qualifying for NIER receiving a top-up rebate of 0.2 cents/kWh.

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The government announced the extension of the NIER for three years, capping the rebates to a maximum of 2011-12 consumptions levels or $20 million, whichever is lower.

Fiscal Implications of the Electricity Sector

- The electricity sector has a significant impact on the Province's fiscal position; through both the revenue and expense sides of the provinces financial statements.
- Electricity Rate mitigation programs funded through the **tax base** have a direct fiscal impact on the province's finances.
  - Alternatively, electricity rate mitigation programs funded by the **rate base** shift costs from one group of rate payers to another.
- The Province's electricity sector agencies and corporations are each consolidated into the government's financial statements, and directly affect the Province's surplus/deficit position.
  - Ontario Power Generation (OPG) financial results have a dollar-for-dollar impact on the Province.
  - Hydro One financial results have a direct impact on the Province, based on the Province's proportionate ownership.
    - The Province currently holds about 70 per cent of Hydro One.
  - Ontario Electricity Financial Corporation (OEFC), an agency of the Ministry of Finance, is consolidated line-by-line into the Province's accounts.
    - OEFC receives certain revenues from within the electricity sector, including the Debt Retirement Charge (DRC) and payments-in-lieu of taxes, to manage the debt and liabilities of the old Ontario Hydro, including the stranded portion of the debt.
    - ~~The Minister of Finance also has authority under the Electricity Act with respect to the DRC.~~

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Electricity Sector Revenues: Part of a "Closed System" via OEFC

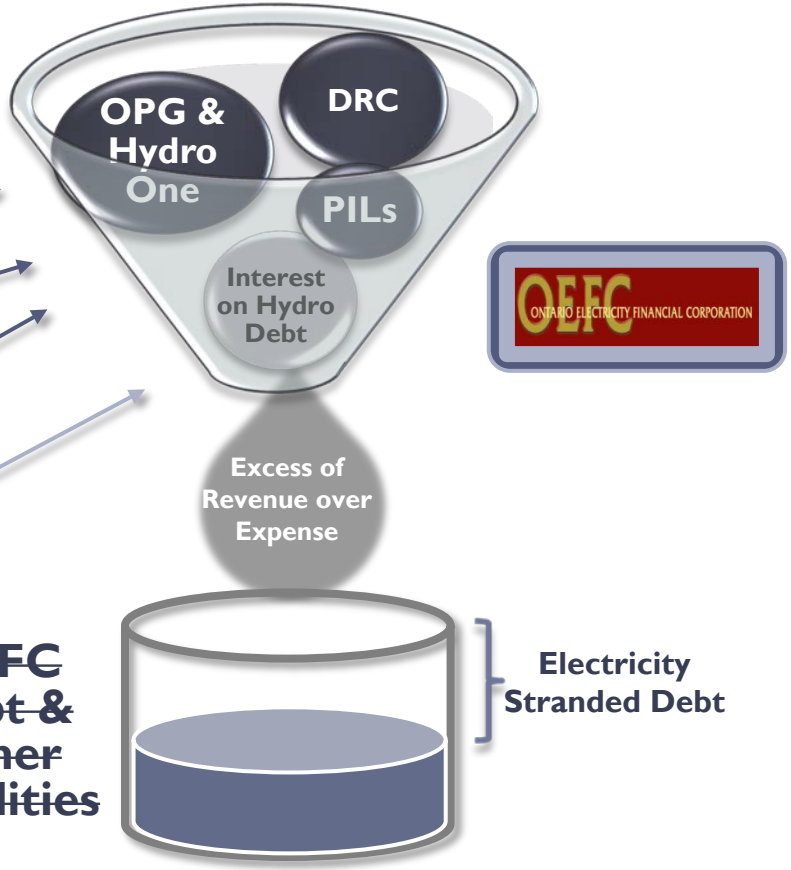
- OEFC manages certain dedicated Provincial electricity sector revenues and expenses, and services and pays down its electricity debt to reduce the stranded debt of the electricity sector

Ontario Revenues

- Taxation Revenue
  - Personal Income Tax, Sales Tax, etc.
  - Electricity Payments-In-Lieu of Taxes (PILs)
  - Hydro One Provincial Corp Tax
- Federal Transfers
- Government Business Enterprises
  - OLG & LCBO
  - OPG & Hydro One
- Other Non-Tax Revenue
  - Electricity Debt Retirement Charge (DRC)

Ontario Expenses

- Interest on Debt
  - Interest on Hydro Debt
  - Interest on Other Debt
- Education, Energy, Transportation, etc.



Ontario

MINISTRY OF
ENERGY

Cost Shifts in Ontario's Electricity Sector

Working Draft

November 2016

CONFIDENTIAL DRAFT

Context

- Necessary investments in Ontario's electricity system have led to increased prices, prompting government to introduced a number of price mitigation programs for all consumer types.
  - In addition to existing rate mitigation programs, the 2016 Throne Speech announced a package of rate mitigation initiatives to address electricity prices for residential, commercial and industrial consumers.

- Ontario has a number of programs in place to manage residential electricity prices, including:
  - Ontario Electricity Support Program (OESP);
  - Rural or Remote Rate Protect (RRRP);
  - Northern Ontario Energy Credit (NOEC);
  - Ontario Energy and Property Tax Credit (OEPTC);
  - Ontario Rebate for Electricity Customers (OREC); and
  - Ending the Debt Retirement Charge (DRC) from residential bills.

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  - Industrial Electricity Incentive (IEI);
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  - saveONenergy for Business Program; and
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Context (cont'd)

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
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Cost Shifts in Ontario's Electricity Sector

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
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Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

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Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in Ontario's Electricity Sector (cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

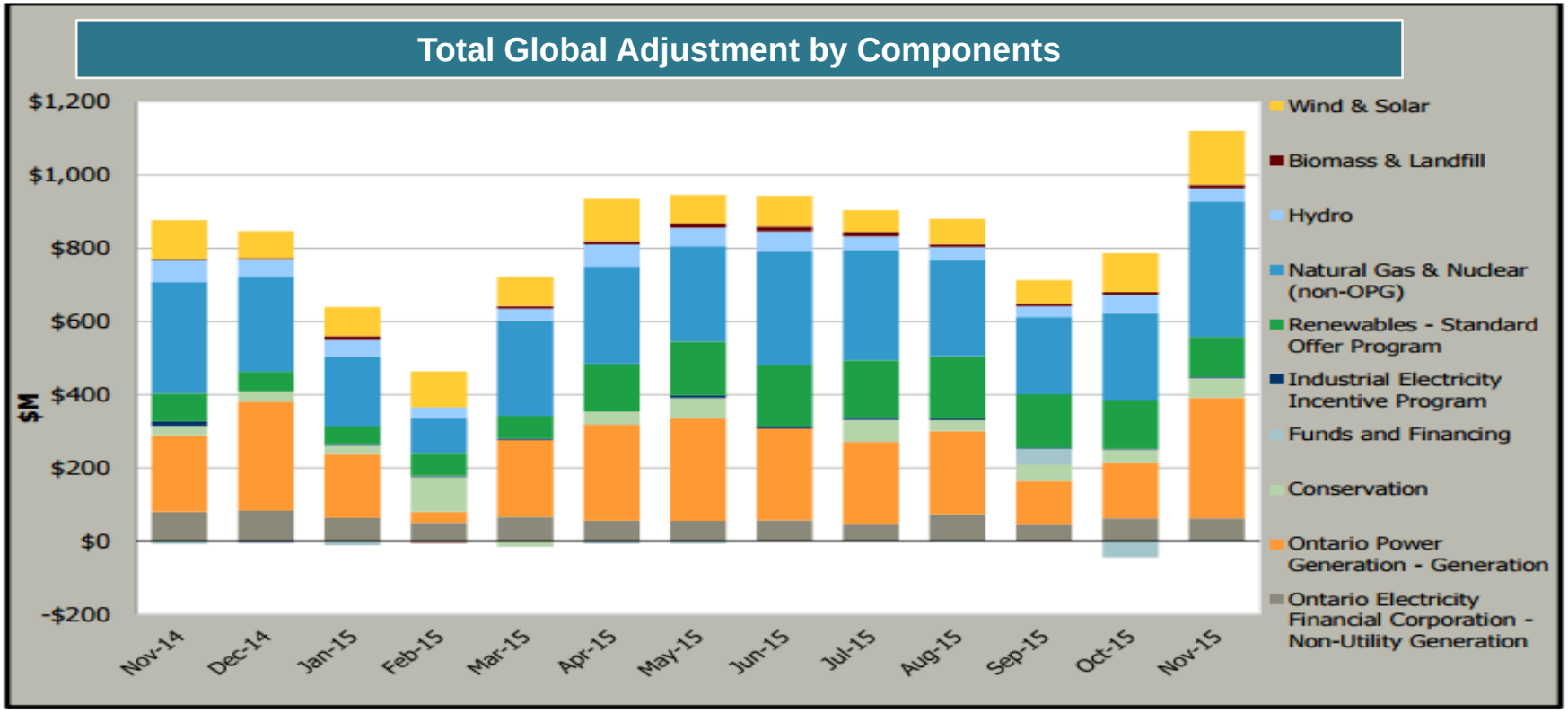
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- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

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Potential Fiscal Impact to the Electricity Sector

- The electricity sector has a significant impact on the Province's fiscal position; through both the revenue and expense sides of the Province's fiscal position.
  - Electricity Rate mitigation programs funded through the tax base have a direct fiscal impact on the province's finances.
  - Alternatively, electricity rate mitigation programs funded by the **rate base** shift costs from one group of ratepayers to another.
- The Province's electricity sector agencies and corporations are each consolidated into the government's financial statements, and directly affect the Province's surplus/deficit position.
  - Ontario Power Generation (OPG) financial results have a dollar-for-dollar impact on the Province.
    - Electricity price mitigation strategies involving OPG would lead to a direct fiscal impact.
  - Hydro One financial results have a direct impact on the Province, based on the Province's proportionate ownership.
    - The Province currently holds about 70 per cent of Hydro One.

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Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,200*
Ending DRC[2]	-	-	-	-	75	300	300
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	1,530	1,544	1,564	1,639	1,525	1,195	2,105

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.1 billion.

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Additional Background on Taxpayer funded Electricity Price Mitigation

Program	Annual Fiscal Impacts ($M)	Date	Details
Ontario Clean Energy Benefit (OCEB)	~1,000	Jan 1 2011 to Dec 31, 2015	OCEB provided over four million residential customers, and over 400,000 farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax. Effective September 1, 2012, electricity consumption eligible for the 10 per cent benefit was capped at the first 3,000 kWh of electricity consumed per month, and provided a full 10 per cent benefit to almost all residential customers and most small retail businesses. OCEB expired December 31, 2015, as planned. OCEB was put in place following the implementation of the Harmonised Sales Tax (HST). Unlike the previous provincial Retail Sales Tax (RST), the HST (and GST) included electricity in the taxable base.
Ending DRC from Residential Bills	~300	Jan 1, 2016 to Mar 31, 2018	The government removed the Debt Retirement Charge (DRC) from residential electricity users' bills as of January 1, 2016. This is saving a typical residential user about $70 each year and meant ending the DRC earlier for these users than otherwise provided for in the *Electricity Act, 1998*.
Ontario Rebate for Electricity Consumers (OREC)	~1,200	Jan 1, 2017 onward	This ongoing program will rebate -- directly on consumers' residential electricity bills -- an amount equal to the provincial portion of the Harmonized Sales Tax (HST), an eight per cent savings.
Northern Industrial Electricity Rate Program	120	March 2010	As announced in 2015 Budget, the government committed to ongoing support for northern industrials with $120 million allocated annually. The Northern Industrial Electricity Rate (NIER) was previously extended in 2012 for an additional three-year term, effective April 1, 2013 and also for a year effective April 1, 2016, with an allocation up to $120 million per year. Qualifying participants receive a rebate of two cents per kilowatt-hour (kWh) up to a maximum of $20 million per year per company. NIER was initially established as a three-year program in Budget 2010 and effective as of April 1, 2010, to provide an estimated $150 million per year to eligible large industrial companies in northern Ontario.
Northern Ontario Energy Credit	~25	Budget 2010 Announcement	Delivered as part of the Ontario Trillium Benefit, provides individuals living in northern Ontario with a credit of up to $146 per year for the 2016 benefit year, and families up to $224.[1]
Ontario Energy Property Tax Credit	~445	Budget 2010 Announcement	Delivered as part of the Ontario Trillium Benefit, provides up to $1,008 per year for low-to moderate-income individuals and families, and up to $1,148 for qualifying seniors. [1]

1. Both the energy portion of the Ontario Energy and Property Tax Credit (OEPTC) and NOEC were introduced/enhanced following the introduction of the HST and have a significant annual fiscal cost (totalling about $500 million annually).

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Timeline - Taxpayer funded Electricity Price Mitigation

Budget 2010: OEPTC, NOEC Proposed as part of the Ontario Trillium Benefit

In the 2011 Budget, the government combined the payments of three existing tax credits — the Ontario Sales Tax Credit, the Ontario Energy and Property Tax Credit, and the Northern Ontario Energy Credit — to create the OTB.
The OTB is paid in monthly instalments throughout the year, which helps people meet their expenses as bills arrive.

Ontario Clean Energy Benefit (Jan 1 2011 to Dec 31 2015)

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Ontario

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Cost Shift Impacts - Industrial Bill

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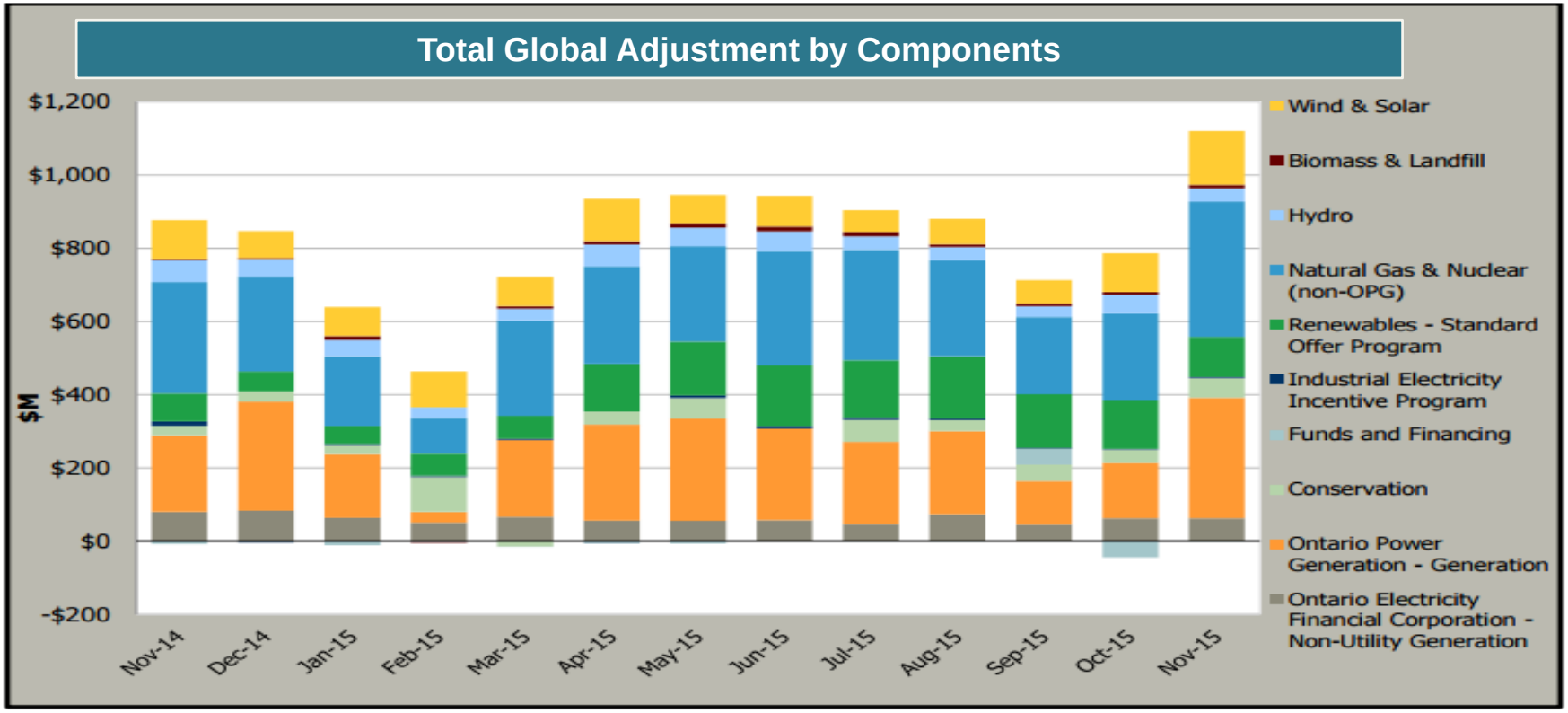
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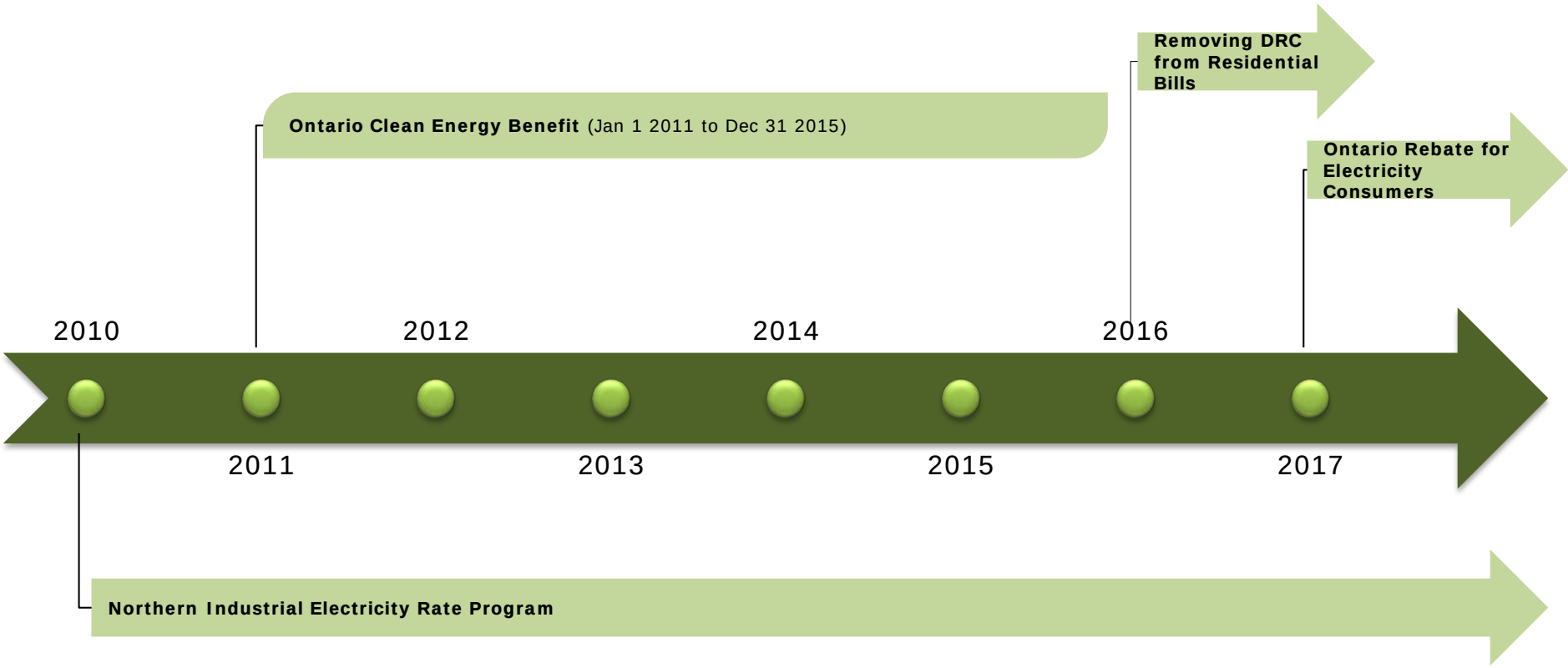


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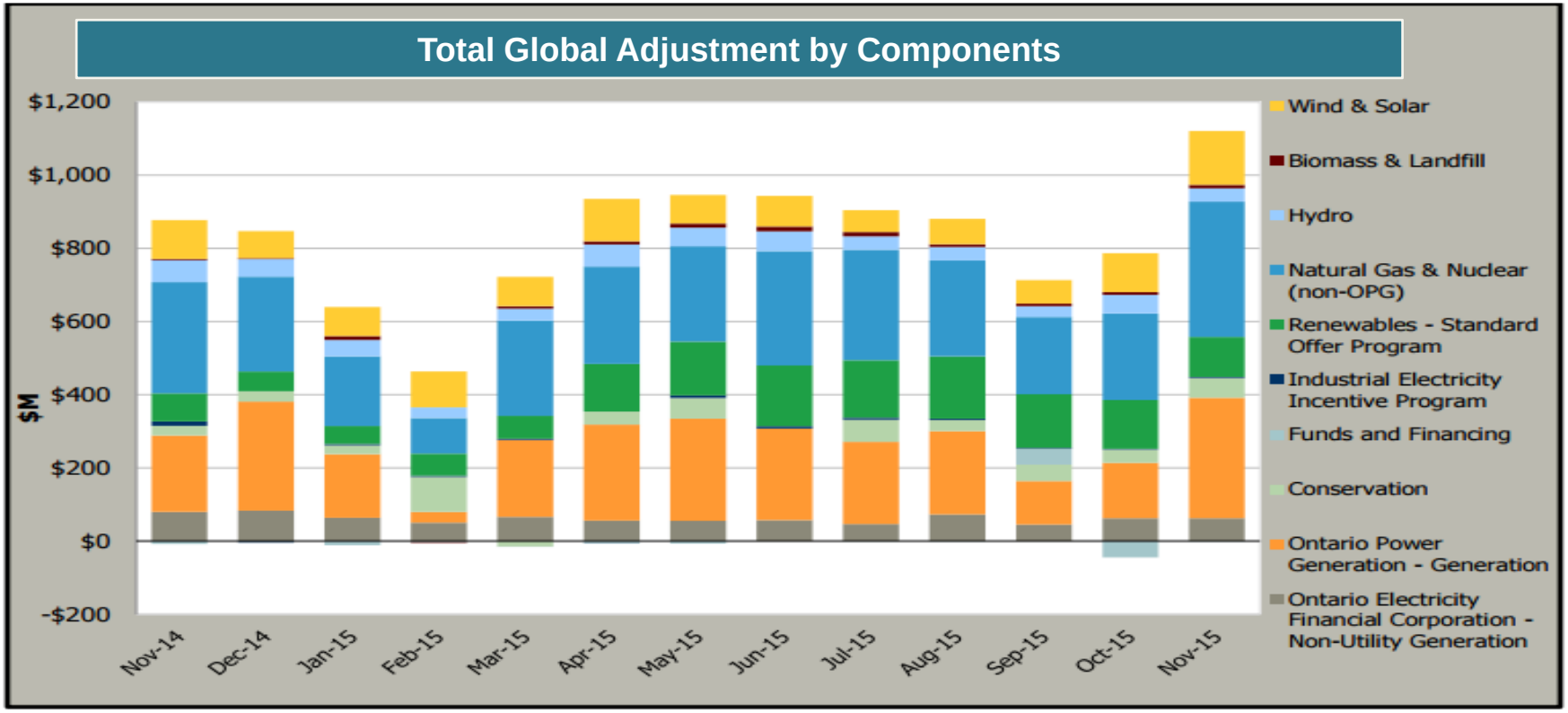
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IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Ontario Net Energy Demand across Demand Outlooks

Energy (TWh)	2015	2016	2017	2018
Outlook A	142.5	143.0	141.9	140.6
Outlook B	142.5	143.4	142.9	142.7
Outlook C	142.5	143.5	143.2	143.7
Outlook D	142.5	143.5	143.2	144.3

Ontario Net Summer Peak Demand across Demand Outlooks

Summer Peak Demand (MW)	2015	2016	2017	2018
Outlook A	23,965	23,971	23,900	23,705
Outlook B	23,965	24,046	24,083	24,041
Outlook C	23,965	24,048	24,088	24,108
Outlook D	23,965	24,048	24,088	24,166

Ontario Net Winter Peak Demand across Demand Outlooks

Winter Peak Demand (MW)	2015	2016	2017	2018
Outlook A	22,159	22,093	22,020	21,825
Outlook B	22,159	22,140	22,143	22,072
Outlook C	22,159	22,190	22,251	22,315
Outlook D	22,159	22,190	22,251	22,385

Net Summer minus Net Winter Peak	2015	2016	2017	2018
Outlook A	1,806	1,878	1,880	1,880
Outlook B	1,806	1,906	1,939	1,969
Outlook C	1,806	1,859	1,838	1,794
Outlook D	1,806	1,859	1,838	1,781

At Generator Level. Net of policy driven conservation including codes and standards

2019	2020	2021	2022	2023	2024	2025	2026
138.9	137.7	136.1	135.0	134.1	133.5	132.5	131.7
142.2	142.2	141.7	141.6	141.5	141.7	141.5	141.2
144.2	145.1	145.6	146.6	147.7	149.3	150.4	151.7
145.3	146.9	148.1	149.9	151.9	154.4	156.5	158.8

2019	2020	2021	2022	2023	2024	2025	2026
23,465	23,216	23,029	22,879	22,777	22,628	22,568	22,453
23,993	23,916	23,889	23,881	23,890	23,868	23,918	23,882
24,124	24,112	24,152	24,216	24,298	24,353	24,486	24,549
24,242	24,291	24,393	24,520	24,667	24,788	24,987	25,446

2019	2020	2021	2022	2023	2024	2025	2026
21,574	21,338	21,143	20,976	20,864	20,694	20,602	20,483
21,985	21,898	21,841	21,799	21,778	21,718	21,718	21,659
22,395	22,501	22,661	22,863	23,105	23,326	23,626	23,911
22,560	22,783	23,083	23,442	23,862	24,273	24,779	24,742

2019	2020	2021	2022	2023	2024	2025	2026
1,891	1,878	1,886	1,903	1,913	1,934	1,966	1,971
2,007	2,018	2,048	2,082	2,113	2,149	2,200	2,223
1,729	1,612	1,491	1,353	1,193	1,027	859	638
1,682	1,508	1,311	1,078	806	515	208	704

2027	2028	2029	2030	2031	2032	2033	2034
131.2	131.0	130.8	130.7	130.7	131.0	131.5	132.3
141.5	142.1	142.4	142.8	143.3	144.0	145.0	146.3
153.5	155.9	158.0	160.5	163.1	166.2	169.4	173.1
161.7	165.3	168.6	172.4	176.3	181.0	185.6	191.0

2027	2028	2029	2030	2031	2032	2033	2034
22,372	22,295	22,292	22,258	22,231	22,198	22,317	22,436
23,918	23,940	24,030	24,082	24,133	24,171	24,369	24,568
24,680	24,804	25,049	25,550	26,022	26,199	26,551	26,902
25,921	26,124	26,410	26,667	26,937	27,197	27,633	28,071

2027	2028	2029	2030	2031	2032	2033	2034
20,394	20,315	20,316	20,295	20,282	20,260	20,375	20,488
21,668	21,672	21,746	21,794	21,844	21,875	22,052	22,229
24,265	24,633	24,513	25,085	25,695	26,330	27,185	28,144
25,492	26,277	27,226	28,296	29,451	30,683	32,158	33,716

2027	2028	2029	2030	2031	2032	2033	2034
1,978	1,979	1,976	1,963	1,948	1,938	1,942	1,949
2,249	2,268	2,284	2,288	2,289	2,296	2,317	2,339
415	171	536	465	327	(131)	(634)	(1,242)
429	(153)	(816)	(1,629)	(2,513)	(3,486)	(4,525)	(5,645)

2035
133.4
147.8
177.1
196.7

2035
22,586
24,792
27,276
28,532

2035
20,622
22,422
29,167
35,379

2035
1,964
2,369
(1,891)
(6,847)

Table 1: Assumptions across Demand Outlooks

Sector	Outlook A	Outlook B
Residential (52 TWh in 2015)	48 TWh in 2035	51 TWh in 2035
Commercial (51 TWh in 2015)	49 TWh in 2035	54 TWh in 2035
Industrial (35 TWh in 2015)	29 TWh in 2035	35 TWh in 2035
Electric Vehicles (<1 TWh in 2015)	2 TWh in 2035	3 TWh in 2035
Transit (<1 TWh in 2015)	1 TWh in 2035	1 TWh in 2035
Other*	5 TWh	5 TWh
Total** (143 TWh in 2015)	133 TWh in 2035	148 TWh in 2035

* Others = Agriculture, Remote Communities, Generator Demand, IEI, and S

** At Generator Level. Total may not add up due to rounding

Outlook C	Outlook D
Oil heating switches to heat pumps, electric space and water heating gain 25% of gas market share (58 TWh in 2035)	Oil heating switches to heat pumps, electric space and water heating gain 50% of gas market share (64TWh in 2035)
Oil heating switches to heat pumps, electric space and water heating gain 25% of gas market share (63 TWh in 2035)	Oil heating switches to heat pumps, electric space and water heating gain 50% of gas market share (69 TWh in 2035)
5% of 2012 fossil energy switches to electric equivalent (43 TWh in 2035)	10% of 2012 fossil energy switches to electric equivalent (51 TWh in 2035)
2.4 million electric vehicles (EVs) by 2035 (8 TWh in 2035)	2.4 million EVs by 2035 (8 TWh in 2035)
Planned projects, 2017-2035 (1 TWh in 2035)	Planned projects, 2017-2035 (1 TWh in 2035)
5 TWh	5 TWh
177 TWh in 2035	197 TWh in 2035

Street Lighting

Ontario Net Electricity Demand by Sector, TWh

Residential Net Energy (TWh)	2015	2016	2017	2018	2019
Outlook A	52.1	51.5	51.8	51.3	51.1
Outlook B	52.1	51.6	52.0	51.6	51.6
Outlook C	52.1	51.6	52.0	51.7	51.8
Outlook D	52.1	51.6	52.0	51.8	51.9

Commercial Net Energy (TWh)	2015	2016	2017	2018	2019
Outlook A	51.3	51.2	51.5	51.0	50.6
Outlook B	51.3	51.5	52.1	51.8	51.7
Outlook C	51.3	51.6	52.4	52.3	52.4
Outlook D	51.3	51.6	52.4	52.4	52.5

Industrial Net Energy (TWh)	2015	2016	2017	2018	2019
Outlook A	34.7	35.3	34.1	33.8	32.8
Outlook B	34.7	35.3	34.4	34.6	34.4
Outlook C	34.7	35.3	34.4	35.0	35.3
Outlook D	34.7	35.3	34.4	35.5	36.1

Transportation (EVs and Transit) Net Energy (TWh)	2015	2016	2017	2018	2019
Outlook A	0.0	0.0	0.1	0.1	0.1
Outlook B	0.0	0.0	0.1	0.1	0.2
Outlook C	0.0	0.0	0.1	0.1	0.2
Outlook D	0.0	0.0	0.1	0.1	0.2

Other Net Energy (TWh)*	2015	2016	2017	2018	2019
Outlook A	5.0	5.0	5.1	5.2	5.2
Outlook B	5.0	5.0	5.1	5.2	5.2
Outlook C	5.0	5.0	5.1	5.2	5.2
Outlook D	5.0	5.0	5.1	5.2	5.2

* Others = Agriculture, Remote Communities, Generator Demand, IEI, and Street Lighting

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
50.6	49.9	49.4	49.0	48.5	48.1	47.9	47.8	47.7	47.7	47.7	47.8
51.3	50.8	50.3	50.1	49.7	49.5	49.4	49.3	49.3	49.4	49.5	49.7
51.7	51.4	51.2	51.3	51.2	51.4	51.7	52.1	52.6	53.2	53.8	54.5
51.9	51.7	51.7	52.0	52.2	52.7	53.3	54.1	54.9	55.9	57.0	58.2

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
50.0	49.6	49.4	49.5	49.4	49.4	49.2	49.0	48.9	48.8	48.5	48.4
51.3	51.2	51.3	51.5	51.6	51.9	51.9	51.9	52.0	52.1	52.1	52.1
52.4	52.6	53.0	53.7	54.2	54.8	55.3	55.7	56.3	56.9	57.5	58.1
52.7	53.0	53.6	54.5	55.2	56.1	56.8	57.6	58.5	59.5	60.4	61.6

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
32.2	31.8	31.2	30.4	29.8	29.4	28.8	28.4	28.0	28.0	28.0	27.9
34.6	34.8	34.8	34.3	34.1	34.1	33.6	33.7	33.5	33.6	33.8	33.8
35.9	36.5	37.0	37.0	37.2	37.6	37.6	38.0	38.3	38.9	39.5	40.0
37.2	38.3	39.2	39.6	40.3	41.1	41.5	42.4	43.1	44.2	45.2	46.1

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0.2	0.4	0.6	0.8	1.0	1.2	1.3	1.5	1.7	1.8	2.0	2.1
0.3	0.6	0.8	1.1	1.4	1.6	1.9	2.1	2.4	2.7	2.9	3.2
0.3	0.6	0.9	1.3	1.6	2.0	2.6	3.1	3.8	4.4	5.1	5.9
0.3	0.6	0.9	1.3	1.6	2.0	2.6	3.1	3.8	4.4	5.1	5.9

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
5.3	5.3	5.3	5.3	5.3	5.3	5.4	5.4	5.4	5.4	5.4	5.4
5.3	5.3	5.3	5.3	5.3	5.3	5.4	5.4	5.4	5.4	5.4	5.4
5.3	5.3	5.3	5.3	5.3	5.3	5.4	5.4	5.4	5.4	5.4	5.4
5.3	5.3	5.3	5.3	5.3	5.3	5.4	5.4	5.4	5.4	5.4	5.4

2032	2033	2034	2035
47.7	48.0	48.2	48.5
49.7	50.1	50.4	50.8
55.1	56.1	57.1	58.1
59.2	60.8	62.3	63.8

2032	2033	2034	2035
48.2	48.5	48.7	49.1
52.2	52.7	53.2	53.7
58.9	60.1	61.4	62.8
62.9	64.7	66.6	68.7

2032	2033	2034	2035
28.0	28.1	28.4	28.8
33.9	34.1	34.5	34.9
40.5	41.1	41.9	42.8
47.0	48.2	49.4	50.7

2032	2033	2034	2035
2.3	2.4	2.5	2.6
3.4	3.6	3.8	3.9
6.6	7.4	8.1	8.7
6.6	7.4	8.1	8.7

2032	2033	2034	2035
5.4	5.5	5.5	5.5
5.4	5.5	5.5	5.5
5.4	5.5	5.5	5.5
5.4	5.5	5.5	5.5

Assumptions of economic drivers underlying electricity demand outlooks

Driver	2005-2015	
	Outlook A	**Outlooks B,C,D**
Growth in number of residential households	15%	15%
Growth in commercial floor space	20%	20%
Ontario Industrial GDP (annual growth rate)	2%	-2%

2015-2025		2025-2035	
Outlook A	**Outlooks B,C,D**	**Outlook A**	**Outlooks B,C,D**
11%	14%	7%	9%
10%	15%	8%	11%
0%	1%	1%	1%

Residential Net Energy Demand and Monthly Intensity 2015-2035: Outlooks A,B,C,D

Residential Net Energy (TWh)	2015	2016	2017	2018	2019
Outlook A	52.1	51.5	51.8	51.3	51.1
Outlook B	52.1	51.6	52.0	51.6	51.6
Outlook C	52.1	51.6	52.0	51.7	51.8
Outlook D	52.1	51.6	52.0	51.8	51.9

Residential Intensity (kWh/HH/month)	2015	2016	2017	2018	2019
Outlook A	753	735	729	713	703
Outlook B	753	735	729	713	702
Outlook C	753	735	730	714	705
Outlook D	753	735	730	715	707

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
50.6	49.9	49.4	49.0	48.5	48.1	47.9	47.8	47.7	47.7	47.7
51.3	50.8	50.3	50.1	49.7	49.5	49.4	49.3	49.3	49.4	49.5
51.7	51.4	51.2	51.3	51.2	51.4	51.7	52.1	52.6	53.2	53.8
51.9	51.7	51.7	52.0	52.2	52.7	53.3	54.1	54.9	55.9	57.0

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
688	672	658	648	636	627	619	613	607	603	598
688	672	659	648	637	628	621	615	609	605	601
693	680	670	664	656	653	650	649	649	651	653
696	685	677	673	669	669	670	674	678	685	692

2031	2032	2033	2034	2035
47.8	47.7	48.0	48.2	48.5
49.7	49.7	50.1	50.4	50.8
54.5	55.1	56.1	57.1	58.1
58.2	59.2	60.8	62.3	63.8

2031	2032	2033	2034	2035
595	590	590	590	589
598	594	594	594	594
657	658	665	672	679
700	708	720	733	747

Total Housing Stock

	2015
Multi Res High Rise	23%
Multi Res Low Rise	11%
Row House	13%
Single Family	53%

New Housing Starts

	2020	2025	2030
Multi Res High Rise	27%	26%	27%
Multi Res Low Rise	11%	10%	10%
Row House	18%	20%	20%
Single Family	44%	43%	42%

2035
31%
12%
21%
36%

Residential Demand by End Use (TWh) 2015, 2025, 2035: Outlooks A,B,C,D

Net Energy (TWh)	2015	2025	2025	2025	2025
		A	B	C	D
AC Central	3.1	2.9	3.0	3.0	3.0
AC Room	0.5	0.5	0.5	0.5	0.5
Clothes Dryers	2.5	2.4	2.5	2.5	2.5
Clothes Washers	0.3	0.3	0.3	0.3	0.3
Computers	1.1	1.2	1.3	1.3	1.3
Cooking	2.5	2.1	2.2	2.2	2.2
Dehumidifiers	0.5	0.5	0.5	0.5	0.5
Dishwashers	0.5	0.4	0.5	0.5	0.5
Domestic Hot Water	4.1	3.2	3.3	3.8	4.2
Elevators	0.2	0.2	0.2	0.2	0.2
Forced Air Central Heating	1.5	1.2	1.2	2.7	3.6
Freezers	1.7	1.7	1.7	1.7	1.7
Lighting	7.9	5.9	6.0	6.0	6.0
Miscellaneous	4.0	4.7	4.9	4.9	4.9
Baseboard Heating	6.8	5.8	5.9	5.9	5.9
Other Consumer Electronics	3.7	3.9	4.1	4.1	4.1
Refrigerators	4.3	4.3	4.4	4.4	4.4
Set Top Boxes	0.9	0.8	0.8	0.8	0.8
Space Heating Room	0.1	0.1	0.1	0.1	0.1
Swimming Pool Pumps	0.6	0.6	0.6	0.6	0.6
Televisions	2.4	2.8	2.9	2.9	2.9
Ventilation And Circulation	3.1	2.5	2.6	2.6	2.6

2035	2035	2035	2035
A	B	C	D
2.9	3.0	3.0	3.0
0.5	0.5	0.5	0.5
2.1	2.2	2.2	2.2
0.3	0.3	0.3	0.3
1.3	1.4	1.4	1.4
2.2	2.3	2.3	2.3
0.4	0.4	0.4	0.4
0.5	0.5	0.5	0.5
3.1	3.3	5.6	7.9
0.2	0.2	0.2	0.2
1.3	1.5	6.4	9.9
1.7	1.8	1.8	1.8
4.7	4.9	4.9	4.9
5.5	5.8	5.8	5.8
5.5	5.7	5.7	5.7
4.6	4.8	4.8	4.8
4.6	4.6	4.6	4.6
0.9	0.9	0.9	0.9
0.1	0.1	0.1	0.1
0.6	0.6	0.6	0.6
3.3	3.5	3.5	3.5
2.2	2.5	2.5	2.5

Residential Space Heating Total Stock Shares				
Year	**Outlook A**	**Outlook B**	**Outlook C**	**Outlook D**
2015	18%	18%	18%	18%
2020	18%	18%	19%	19%
2025	17%	17%	22%	24%
2030	17%	17%	26%	32%
2035	17%	17%	31%	42%

Residential Space Heating New Stock Turnover Shares				
Year	**Outlook A**	**Outlook B**	**Outlook C**	**Outlook D**
2015	14%	14%	14%	14%
2020	16%	16%	22%	26%
2025	17%	17%	30%	38%
2030	17%	17%	36%	50%
2035	17%	17%	41%	60%

Residential Water Heating Total Stock Shares

Year	Outlook A	Outlook B	Outlook C	Outlook D
2015	23%	23%	23%	23%
2020	20%	20%	21%	21%
2025	19%	19%	22%	24%
2030	19%	19%	26%	32%
2035	19%	19%	32%	45%

Residential Water Heating New Stock Turnover Shares

Year	Outlook A	Outlook B	Outlook C	Outlook D
2015	19%	19%	19%	19%
2020	19%	19%	22%	26%
2025	19%	19%	28%	37%
2030	19%	19%	34%	48%
2035	19%	20%	40%	60%

	Residential Space Heating Additional Heat Pump Sales in the Year Indicated			
Year	**Outlook A**	**Outlook B**	**Outlook C**	**Outlook D**
2015	-	-	-	-
2020	5,887	7,500	30,553	43,624
2025	7,640	10,000	66,824	104,707
2030	8,156	10,000	75,566	123,438
2035	7,725	10,000	92,221	157,607

	Residential Water Heating Additional Heat Pump Sales in the Year Indicated			
Year	**Outlook A**	**Outlook B**	**Outlook C**	**Outlook D**
2015	-	-	-	-
2020	5,887	7,500	22,690	37,879
2025	7,640	10,000	43,706	77,412
2030	8,156	10,000	79,871	149,742
2035	7,725	10,000	102,783	195,566

Commercial Net Energy Demand and Intensity 2015-2035: Outlooks A,B,C,D

Commercial Net Energy (TWh)	2015	2016	2017	2018	2019
Outlook A	51.3	51.2	51.5	51.0	50.6
Outlook B	51.3	51.5	52.1	51.8	51.7
Outlook C	51.3	51.6	52.4	52.3	52.4
Outlook D	51.3	51.6	52.4	52.4	52.5

Commercial Intensity (kWh/sq ft)	2015	2016	2017	2018	2019
Outlook A	15.0	14.8	14.8	14.5	14.2
Outlook B	15.0	14.8	14.8	14.5	14.2
Outlook C	15.0	14.9	14.9	14.6	14.5
Outlook D	15.0	14.9	14.9	14.7	14.5

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
50.0	49.6	49.4	49.5	49.4	49.4	49.2	49.0	48.9	48.8	48.5
51.3	51.2	51.3	51.5	51.6	51.9	51.9	51.9	52.0	52.1	52.1
52.4	52.6	53.0	53.7	54.2	54.8	55.3	55.7	56.3	56.9	57.5
52.7	53.0	53.6	54.5	55.2	56.1	56.8	57.6	58.5	59.5	60.4

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
13.9	13.7	13.5	13.4	13.3	13.2	13.0	12.9	12.7	12.6	12.5
14.0	13.7	13.6	13.5	13.4	13.3	13.1	13.0	12.9	12.7	12.6
14.2	14.1	14.0	14.0	14.0	14.0	14.0	13.9	13.9	13.9	13.9
14.3	14.2	14.2	14.2	14.3	14.3	14.4	14.4	14.5	14.5	14.6

2031	2032	2033	2034	2035
48.4	48.2	48.5	48.7	49.1
52.1	52.2	52.7	53.2	53.7
58.1	58.9	60.1	61.4	62.8
61.6	62.9	64.7	66.6	68.7

2031	2032	2033	2034	2035
12.3	12.2	12.2	12.1	12.1
12.5	12.4	12.3	12.3	12.3
13.9	13.9	14.1	14.2	14.4
14.7	14.9	15.2	15.4	15.8

Commercial Demand by End Use (TWh) 2015, 2025, 2035: Outlooks A,B,C,D

Net Energy (TWh)	2015	2025	2025	2025	2025
		A	B	C	D
Space Heating	4.0	4.7	4.7	7.4	8.5
Computer Equipment	4.8	4.8	5.2	5.2	5.2
Cooking	0.9	0.8	0.8	0.8	0.8
Cooling Chillers	1.1	1.0	1.0	1.0	1.0
Cooling DX	3.6	3.5	3.6	3.6	3.6
Domestic Hot Water	0.8	0.4	0.4	0.7	0.8
Elevators	0.3	0.3	0.3	0.3	0.3
HVAC Fans Pumps	4.6	3.8	3.9	3.9	3.9
Lighting	18.7	17.9	19.0	19.0	19.0
Miscellaneous Equipment	4.9	5.4	5.7	5.7	5.7
Other Plug Loads	3.9	4.0	4.1	4.1	4.1
Refrigeration	3.9	3.0	3.0	3.0	3.0

2035	2035	2035	2035
A	B	C	D
5.0	5.1	13.3	18.6
4.7	5.4	5.4	5.4
0.8	0.8	0.8	0.8
1.0	1.1	1.1	1.1
3.4	3.8	3.8	3.8
0.4	0.4	1.3	1.9
0.3	0.3	0.3	0.3
3.3	3.6	3.6	3.6
17.6	19.6	19.6	19.6
5.9	6.6	6.6	6.6
4.0	4.2	4.2	4.2
2.6	2.7	2.7	2.7

Commercial Demand by Building Type (TWh) 2015, 2025, 2035: Outlooks A,B,C,D

Net Energy (TWh)	2015	2025	2025	2025	2025
		A	B	C	D
Food Retail	3.0	2.4	2.4	2.5	2.5
Hospital	1.2	1.1	1.1	1.2	1.2
Hotel	1.8	1.8	1.8	1.9	1.9
Non Food Retail	7.3	6.7	6.7	7.1	7.3
Office	16.2	15.3	16.4	17.3	17.7
Nursing Home	2.1	1.9	1.9	2.1	2.1
Other Commercial Buildings	6.1	6.0	6.9	7.4	7.6
Restaurant	2.3	2.2	2.2	2.2	2.3
Schools	4.1	4.7	4.7	5.0	5.1
University Colleges	2.5	2.7	2.7	2.8	2.9
Warehouse Wholesale	4.8	4.6	5.0	5.4	5.6

2035	2035	2035	2035
A	B	C	D
2.3	2.3	2.5	2.6
1.1	1.1	1.3	1.4
1.9	1.9	2.2	2.4
6.5	6.5	7.6	8.3
14.7	16.7	19.5	21.3
1.9	1.9	2.3	2.5
5.9	7.7	9.1	10.0
2.3	2.3	2.4	2.5
5.1	5.1	6.1	6.7
2.9	2.9	3.3	3.6
4.5	5.3	6.7	7.6

Commercial Space Heating Total Stock Shares				
Year	**Outlook A**	**Outlook B**	**Outlook C**	**Outlook D**
2015	10%	10%	10%	10%
2020	11%	10%	13%	14%
2025	11%	11%	18%	21%
2030	11%	11%	24%	31%
2035	11%	11%	31%	45%

Commercial Space Heating New Stock Turnover Shares				
Year	**Outlook A**	**Outlook B**	**Outlook C**	**Outlook D**
2015	5%	5%	5%	5%
2020	7%	6%	16%	19%
2025	7%	6%	22%	31%
2030	7%	6%	28%	44%
2035	7%	6%	34%	56%

Commercial Water Heating Total Stock Shares

Year	Outlook A	Outlook B	Outlook C	Outlook D
2015	19%	19%	19%	19%
2020	18%	17%	20%	21%
2025	17%	17%	23%	26%
2030	17%	17%	28%	35%
2035	17%	17%	35%	48%

Commercial Water Heating New Stock Turnover Shares

Year	Outlook A	Outlook B	Outlook C	Outlook D
2015	15%	15%	15%	15%
2020	17%	17%	25%	28%
2025	16%	16%	30%	38%
2030	16%	16%	35%	49%
2035	17%	17%	41%	61%

	Commercial Space Heating Heat Pump Square Footage Additions in the Year Indicated			
Year	**Outlook A**	**Outlook B**	**Outlook C**	**Outlook D**
2015	-	-	-	-
2020	-	-	28,917,731	40,370,716
2025	-	-	36,385,313	59,503,277
2030	-	-	52,264,593	91,066,047
2035	-	-	79,774,867	143,930,226

	Commercial Water Heating Heat Pump Square Footage Additions in the Year Indicated			
Year	**Outlook A**	**Outlook B**	**Outlook C**	**Outlook D**
2015	-	-	-	-
2020	-	-	25,778,179	36,627,618
2025	-	-	33,119,019	55,128,367
2030	-	-	48,142,138	84,986,428
2035	-	-	73,905,731	134,580,833

Industrial Net Energy Demand and Intensity 2015-2035: Outlooks A,B,C,D

Industrial Net Energy (TWh)	2015	2016	2017	2018	2019	2020
Outlook A	34.7	35.3	34.1	33.8	32.8	32.2
Outlook B	34.7	35.3	34.4	34.6	34.4	34.6
Outlook C	34.7	35.3	34.4	35.0	35.3	35.9
Outlook D	34.7	35.3	34.4	35.5	36.1	37.2

Industrial Intensity (kWh/$07 GDP)	2015	2016	2017	2018	2019	2020
Outlook A	0.39	0.40	0.38	0.38	0.38	0.37
Outlook B	0.39	0.40	0.38	0.38	0.37	0.37
Outlook C	0.39	0.40	0.38	0.39	0.38	0.39
Outlook D	0.39	0.40	0.38	0.39	0.39	0.40

2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
31.8	31.2	30.4	29.8	29.4	28.8	28.4	28.0	28.0	28.0	27.9
34.8	34.8	34.3	34.1	34.1	33.6	33.7	33.5	33.6	33.8	33.8
36.5	37.0	37.0	37.2	37.6	37.6	38.0	38.3	38.9	39.5	40.0
38.3	39.2	39.6	40.3	41.1	41.5	42.4	43.1	44.2	45.2	46.1

2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0.37	0.36	0.35	0.34	0.34	0.33	0.32	0.32	0.31	0.31	0.30
0.37	0.37	0.36	0.35	0.34	0.34	0.33	0.32	0.32	0.32	0.31
0.39	0.39	0.38	0.38	0.38	0.37	0.37	0.37	0.37	0.37	0.37
0.41	0.41	0.41	0.41	0.42	0.41	0.42	0.42	0.42	0.43	0.43

2032	2033	2034	2035
28.0	28.1	28.4	28.8
33.9	34.1	34.5	34.9
40.5	41.1	41.9	42.8
47.0	48.2	49.4	50.7

2032	2033	2034	2035
0.30	0.30	0.30	0.30
0.31	0.31	0.31	0.31
0.37	0.37	0.37	0.38
0.43	0.43	0.44	0.45

Industrial Demand by Subsector (TWh) 2015, 2025, 2035: Outlooks A,B,C,D

Net Energy (TWh)	2015	2025	2025	2025	2025
		A	B	C	D
Chemicals	3.1	3.5	3.5	3.9	4.2
Fabricated Metals	1.9	1.9	1.9	2.1	2.3
Food And Beverage	2.3	2.3	2.3	2.5	2.8
Mining	6.5	5.7	7.4	8.1	8.9
Transportation And Machinery	3.3	1.8	3.0	3.3	3.6
Miscellaneous Industrial	3.6	3.9	4.0	4.4	4.9
Non-Metallic Minerals	1.4	1.2	1.2	1.3	1.4
Paper Manufacturing	2.8	1.1	2.1	2.3	2.6
Petroleum Refineries	1.8	1.8	1.8	2.0	2.2
Plastic And Rubber	2.2	2.0	2.0	2.2	2.5
Primary Metals	4.7	3.1	3.9	4.3	4.7
Wood Products	1.1	0.9	0.9	1.0	1.1

2035	2035	2035	2035
A	B	C	D
4.0	4.0	4.9	5.9
2.0	2.0	2.5	2.9
2.6	2.6	3.2	3.7
4.6	7.0	8.6	10.1
1.9	3.1	3.8	4.5
3.9	4.4	5.3	6.3
1.2	1.2	1.4	1.7
0.6	1.9	2.3	2.7
2.0	2.0	2.5	2.9
2.1	2.1	2.6	3.1
2.7	3.7	4.5	5.4
1.0	1.0	1.2	1.4

Forecasts for Transportation Electrification Demand

Transportation Demand (TWh)	2015	2016	2017	2018	2019	2020
Transit (A & B)	0.0	0.0	0.0	0.1	0.1	0.1
Transit (C & D)	0.0	0.0	0.0	0.1	0.1	0.1
EV (A)	0.0	0.0	0.0	0.1	0.1	0.1
EV (B)	0.0	0.0	0.0	0.1	0.1	0.2
EV (C & D)	0.0	0.0	0.0	0.1	0.1	0.2

2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0.2	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
0.2	0.3	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
0.2	0.3	0.4	0.5	0.6	0.8	1.0	1.1	1.3	1.5	1.6
0.3	0.5	0.7	0.9	1.1	1.3	1.6	1.9	2.1	2.4	2.6
0.4	0.6	0.8	1.1	1.5	2.0	2.5	3.1	3.8	4.5	5.2

2032	2033	2034	2035
0.5	0.5	0.5	0.5
0.6	0.6	0.6	0.6
1.7	1.8	2.0	2.0
2.8	3.0	3.2	3.4
6.0	6.7	7.4	8.1

Forecasts for Electric Vehicle Stock

Thousands of EVs	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Outlook A	5	8	11	17	25	37	55
Outlook B	5	9	15	24	41	68	104
Outlooks C & D	5	9	15	24	41	68	109

2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
80	109	145	187	237	286	336	385	432	476	515
146	197	257	325	399	477	557	637	712	781	843
166	241	334	450	588	749	929	1126	1336	1554	1775

2033	2034	2035
549	579	605
902	955	1003
1993	2202	2401

Forecast for Agriculture

Net Energy (TWh)	2015	2016	2017	2018	2019	2020
Agriculture	1.9	1.9	1.9	1.9	1.9	1.9

2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9

2032	2033	2034	2035
1.9	1.9	1.9	1.9

Load Factor	Outlook A	Outlook B	Outlook C	Outlook D
2025	0.67	0.68	0.70	0.72
2035	0.67	0.68	0.69	0.63

Peak Contribution

Peak Contribution (%)	Residential (non heat/AC)	Commercial (non heat/AC)
2015	23%	25%
2035 - A	22%	25%
2035 - B	21%	25%
2035 - C	22%	16%
2035 - D	20%	13%

Industrial	Residential heat	Residential cooling	Commercial heat	Commercial cooling
16%	0%	17%	0%	18%
14%	0%	17%	0%	18%
15%	0%	16%	0%	18%
17%	14%	0%	24%	0%
17%	15%	0%	29%	0%

Transportation	Other
0%	2%
2%	2%
2%	2%
4%	3%
3%	3%

Proposal 8: End DRC Early for Commercial/Small Industrial

Fiscal Impacts

DRC Charge ($/MWh) 7

Estimated DRC - Class B (excl Residential) 357000000

Ontario Planning Outlook, Table 1:

Residential (52 TWh in 2015)
Commercial (51 TWh in 2015)
Industrial (35 TWh in 2015)
Electric Vehicles (<1 TWh in 2015)
Transit (<1 TWh in 2015)
Other*
Total** (143 TWh in 2015)

Class B Electricity Consumers

Demand
52
51
35
<1
<1
143

Electricity Price Examples

Toronto Hydro – 1,500 kWh / month

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	239	261	267
DRC	11		
Bill Before Tax	**250**	**261**	**267**
HST	32	34	35
Bill Before Rebates	**282**	**295**	**302**
OCEB	28		
8% Rebate			21
Total Bill	**254**	**295**	**281**

- Assumes electricity consumption is allocated 65 per cent off-peak, 17 per cent mid-peak, 18 per cent on-peak.
- 2016 electricity prices are current prices (set May 1, 2016) and not for 2016 overall. An overall 2016 electricity price could be estimated when the Regulated Price Plan rates are updated in mid-October and taking effect November 1, 2016.
- 2017 electricity commodity and regulatory price estimate is based on information in Energy slide deck showing an increase of approximately $2 in cost of supply between 2016 and 2017. Approximately $1.50 is assumed to be due to increase commodity prices and about $0.60 due to increased RRRP rate for a 750 ~~/~~kWh/month consumer. An additional $1 is included in the 2017 electricity charge due to a recent court decision.

Commented [SK21]: Apply these suggested edits further below.

Commented [SK22]: Which slide deck? Ontario Planning Outlook? LTEP 2013?

Commented [EK3R2]: I will send you the slide deck. It was one of the price mitigation decks.

Commented [SK24]: Do you mean the regulatory rate (OEB) decision?

Commented [EK5R4]: No, the GA lawsuit.

Commented [SK26]: The change in prices 2016 vs 2017 is $6. How is the discrepancy explained here? $2+$1.50+$0.60+$1 = $5.10

Same issues below

Commented [EK7R6]: The delivery rates also change for the particular distributors. Energy said their deck assumed constant delivery rates.

Hydro One Brampton – 1,000 kWh / month – Receiving enhanced OESP benefit of $45/month (senior couple with $24,000 annual income)

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	151	163	163
DRC	7		
Bill Before Tax	**158**	**163**	**163**
HST	20	21	21
Bill Before Rebates	**178**	**184**	**184**
OCEB	18		
OESP		45	45
8% Rebate			9
Total Bill	**160**	**139**	**130**

- Assumes electricity consumption is allocated 65 per cent off-peak, 17 per cent mid-peak, 18 per cent on-peak.
  - A household with seniors may have a flatter consumption profile with higher mid- and on-peak consumption than is assumed here.
- 2016 electricity prices are current prices (set May 1, 2016) and not for 2016 overall. An overall 2016 electricity price could be estimated when the Regulated Price Plan rates are updated in mid-October and taking effect November 1, 2016.
- 2017 electricity commodity and regulatory price estimate is based on information in Energy slide deck showing an increase of approximately $2 in cost of supply between 2016 and 2017. Approximately $1.50 is assumed to be due to increase commodity prices and about $0.60 due to increased RRRP rate for a 750/kWh/month consumer. An additional $1 is included in the 2017 electricity charge due to a recent court decision.
- $45/month OESP amount is only available to households using certain medical devices or with electric heating. First Nation and Métis households may also qualify for higher OESP amounts. The standard OESP amount for a two-person household with an annual income of $24,000 is $30/month. Using the higher OESP amount limits the generality of this example.

Hydro One R2 (Low Density) – 2,200 kWh / month

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	451	482	493
RRRP	32	32	60
DRC	16		
Bill Before Tax	**435**	**451**	**433**
HST	57	59	56
Bill Before Rebates	**492**	**509**	**490**
OCEB	49		
OESP			
8% Rebate			35
Total Bill	**442**	**509**	**455**

- Assumes electricity consumption is allocated 65 per cent off-peak, 17 per cent mid-peak, 18 per cent on-peak.
- 2016 electricity prices are current prices (set May 1, 2016) and not for 2016 overall. An overall 2016 electricity price could be estimated when the Regulated Price Plan rates are updated in mid-October and taking effect November 1, 2016.
- 2017 electricity commodity and regulatory price estimate is based on information in Energy slide deck showing an increase of approximately $2 in cost of supply between 2016 and 2017. Approximately $1.50 is assumed to be due to increase commodity prices and about $0.60 due to increased RRRP rate for a 750/kWh/month consumer. An additional $1 is included in the 2017 electricity charge due to a recent court decision.
- Hydro One 2017 distribution rates have not been determined. The estimate used in this analysis assumes a constant volumetric distribution rate and an increase to the fixed distribution charges such that the percentage increase in distribution charges between 2016 and 2017 is the same as the percentage increase between 2015 and 2016, for a 1,000 kWh consumer.
    - The increase is assumed only for the fixed distribution charge since distribution rates are being shifted to a fixed charge only over time.
- Energy Cabinet submission slide deck stated that updated RRRP would increase the benefit to $60/month.

Toronto Hydro – 600 kWh / month – Receiving OESP ($30/month for a 3-person household with $39,000 annual income)

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	109	119	124
DRC	4		
Bill Before Tax	**114**	**119**	**124**
HST	15	15	16
Bill Before Rebates	**128**	**134**	**140**
OCEB	13		
OESP		30	30
8% Rebate			8
Total Bill	**116**	**104**	**103**

- Assumes electricity consumption is allocated 65 per cent off-peak, 17 per cent mid-peak, 18 per cent on-peak.
- 2016 electricity prices are current prices (set May 1, 2016) and not for 2016 overall. An overall 2016 electricity price could be estimated when the Regulated Price Plan rates are updated in mid-October and taking effect November 1, 2016.
- 2017 electricity commodity and regulatory price estimate is based on information in Energy slide deck showing an increase of approximately $2 in cost of supply between 2016 and 2017. Approximately $1.50 is assumed to be due to increase commodity prices and about $0.60 due to increased RRRP rate for a 750/kWh/month consumer. An additional $1 is included in the 2017 electricity charge due to a recent court decision.

Hydro One R2 (Low Density) – 12,000 kWh / month – RPP eligible Farm

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	2,132	2,292	2,343
RRRP	32	32	60
DRC	84		
Bill Before Tax	**2,184**	**2,261**	**2,343**
HST	284	294	297
Bill Before Rebates	**2,469**	**2,554**	**2,580**
OCEB	247		
OESP			
8% Rebate			183
Total Bill	**2,222**	**2,554**	**2,398**

- Assumes the consumer is eligible for the RPP and has elected to be a Hydro One year-round residential consumer.
- Assumes electricity consumption is allocated 65 per cent off-peak, 17 per cent mid-peak, 18 per cent on-peak.
  - A farm may have a different profile than the above consumption profile.
- 2016 electricity prices are current prices (set May 1, 2016) and not for 2016 overall. An overall 2016 electricity price could be estimated when the Regulated Price Plan rates are updated in mid-October and taking effect November 1, 2016.
- 2017 electricity commodity and regulatory price estimate is based on information in Energy slide deck showing an increase of approximately $2 in cost of supply between 2016 and 2017. Approximately $1.50 is assumed to be due to increase commodity prices and about $0.60 due to increased RRRP rate for a 750/kWh/month consumer. An additional $1 is included in the 2017 electricity charge due to a recent court decision.
- Hydro One 2017 distribution rates have not been determined. The estimate used in this analysis assumes a constant volumetric distribution rate and an increase to the fixed distribution charges such that the percentage increase in distribution charges between 2016 and 2017 is the same as the percentage increase between 2015 and 2016, for a 1,000 kWh consumer.
  - The increase is assumed only for the fixed distribution charge since distribution rates are being shifted to a fixed charge only over time.
- Energy Cabinet submission slide deck stated that updated RRRP would increase the benefit to $60/month.

Hydro One Remote Communities – 1,000 kWh / month

	2015	2016	2017
Estimated Bill without RRRP	288	295	301
Estimated RRRP	181	186	190
Bill Before Tax	**107**	**109**	**112**
HST	14	14	15
Bill Before Rebates	**120**	**123**	**126**
OCEB	12		
OESP			
8% Rebate			9
Total Bill	**108**	**123**	**117**

- Hydro One Remotes is an integrated generation and distribution utility, with all of its operations regulated by the Ontario Energy Board. Hydro One Remotes owns and operates 19 distribution and generation systems in communities isolated from the transmission grid.
- Hydro One Remotes receives approximately $32 million in RRRP funding. Based on information included in an Ontario Energy Board order for rates effective May 1, 2014, Hydro One Remotes receives approximately 63 per cent of it funds to cover costs from RRRP. Assuming this percentage is applied across all consumers, an estimated bill and RRRP amount is included in the table above.
- Hydro One Remotes' consumers are not billed for electricity on a time-of-use basis, but instead are charged tiered rates for the first 1,000 kWh consumed in a month, the next 1,500 kWh and any additional kWh above 2,500 kWh in a month.
- Rates effective May 1, 2017, have not been determined. The estimate used in this analysis assumes a 2.1 per cent increase, the same increase that was applied to determine rates effective May 1, 2016.

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Commented [SK28]: If RRRP is shown in the Hydro One R2 table above, why isn't it shown here?

Commented [EK9R8]: RRRP is not an explicit credit provided to H1 Remote consumers. Based on the last cost of service application for H1 remotes, about 63% of its amounts to cover costs comes from RRRP. If this percentage is applied over all H1 remote consumers, an estimate of what the bill would be without RRRP could be made.

However, this number is only an estimate and does not appear in any distribution rate applications.

Commented [SK210]: Are they billed under a tiered system instead? Suggest providing clarification.

Electricity Price Examples

Toronto Hydro – 1,500 kWh / month

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	239	261	267
DRC	11		
Bill Before Tax	**250**	**261**	**267**
HST	32	34	35
Bill Before Rebates	**282**	**295**	**302**
OCEB	28		
8% Rebate			21
Total Bill	**254**	**295**	**281**

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- 2016 electricity prices are current prices (set May 1, 2016) and not for 2016 overall. An overall 2016 electricity price could be estimated when the Regulated Price Plan rates are updated in mid-October and taking effect November 1, 2016.
- 2017 electricity commodity and regulatory price estimate is based on information in Energy slide deck showing an increase of approximately $2 in cost of supply between 2016 and 2017. Approximately $1.50 is assumed to be due to increase commodity prices and about $0.60 due to increased RRRP rate for a 750 kWh/month consumer. An additional $1 is included in the 2017 electricity charge due to a recent court decision.

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Commented [EK3R2]: I will send you the slide deck. It was one of the price mitigation decks.

Commented [SK24]: Do you mean the regulatory rate (OEB) decision?

Commented [EK5R4]: No, the GA lawsuit.

Commented [SK26]: The change in prices 2016 vs 2017 is $6. How is the discrepancy explained here?
$2+$1.50+$0.60+$1 = $5.10

Same issues below

Commented [EK7R6]: The delivery rates also change for the particular distributors. Energy said their deck assumed constant delivery rates.

Hydro One Brampton – 1,000 kWh / month – Receiving enhanced OESP benefit of $45/month (senior couple with $24,000 annual income)

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	151	163	163
DRC	7		
Bill Before Tax	**158**	**163**	**163**
HST	20	21	21
Bill Before Rebates	**178**	**184**	**184**
OCEB	18		
OESP		45	45
8% Rebate			9
Total Bill	**160**	**139**	**130**

- Assumes electricity consumption is allocated 65 per cent off-peak, 17 per cent mid-peak, 18 per cent on-peak.
  - A household with seniors may have a flatter consumption profile with higher mid- and on-peak consumption than is assumed here.
- 2016 electricity prices are current prices (set May 1, 2016) and not for 2016 overall. An overall 2016 electricity price could be estimated when the Regulated Price Plan rates are updated in mid-October and taking effect November 1, 2016.
- 2017 electricity commodity and regulatory price estimate is based on information in Energy slide deck showing an increase of approximately $2 in cost of supply between 2016 and 2017. Approximately $1.50 is assumed to be due to increase commodity prices and about $0.60 due to increased RRRP rate for a 750/kWh/month consumer. An additional $1 is included in the 2017 electricity charge due to a recent court decision.
- $45/month OESP amount is only available to households using certain medical devices or with electric heating. First Nation and Métis households may also qualify for higher OESP amounts. The standard OESP amount for a two-person household with an annual income of $24,000 is $30/month. Using the higher OESP amount limits the generality of this example.

Hydro One R2 (Low Density) – 2,200 kWh / month

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	451	482	493
RRRP	32	32	60
DRC	16		
Bill Before Tax	**435**	**451**	**433**
HST	57	59	56
Bill Before Rebates	**492**	**509**	**490**
OCEB	49		
OESP			
8% Rebate			35
Total Bill	**442**	**509**	**455**

- Assumes electricity consumption is allocated 65 per cent off-peak, 17 per cent mid-peak, 18 per cent on-peak.
- 2016 electricity prices are current prices (set May 1, 2016) and not for 2016 overall. An overall 2016 electricity price could be estimated when the Regulated Price Plan rates are updated in mid-October and taking effect November 1, 2016.
- 2017 electricity commodity and regulatory price estimate is based on information in Energy slide deck showing an increase of approximately $2 in cost of supply between 2016 and 2017. Approximately $1.50 is assumed to be due to increase commodity prices and about $0.60 due to increased RRRP rate for a 750/kWh/month consumer. An additional $1 is included in the 2017 electricity charge due to a recent court decision.
- Hydro One 2017 distribution rates have not been determined. The estimate used in this analysis assumes a constant volumetric distribution rate and an increase to the fixed distribution charges such that the percentage increase in distribution charges between 2016 and 2017 is the same as the percentage increase between 2015 and 2016, for a 1,000 kWh consumer.
  - The increase is assumed only for the fixed distribution charge since distribution rates are being shifted to a fixed charge only over time.
- Energy Cabinet submission slide deck stated that updated RRRP would increase the benefit to $60/month.

Toronto Hydro – 600 kWh / month – Receiving OESP ($30/month for a 3-person household with $39,000 annual income)

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	109	119	124
DRC	4		
Bill Before Tax	**114**	**119**	**124**
HST	15	15	16
Bill Before Rebates	**128**	**134**	**140**
OCEB	13		
OESP		30	30
8% Rebate			8
Total Bill	**116**	**104**	**103**

- Assumes electricity consumption is allocated 65 per cent off-peak, 17 per cent mid-peak, 18 per cent on-peak.
- 2016 electricity prices are current prices (set May 1, 2016) and not for 2016 overall. An overall 2016 electricity price could be estimated when the Regulated Price Plan rates are updated in mid-October and taking effect November 1, 2016.
- 2017 electricity commodity and regulatory price estimate is based on information in Energy slide deck showing an increase of approximately $2 in cost of supply between 2016 and 2017. Approximately $1.50 is assumed to be due to increase commodity prices and about $0.60 due to increased RRRP rate for a 750/kWh/month consumer. An additional $1 is included in the 2017 electricity charge due to a recent court decision.

Hydro One R2 (Low Density) – 12,000 kWh / month – RPP eligible Farm

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	2,132	2,292	2,343
RRRP	32	32	60
DRC	84		
Bill Before Tax	**2,184**	**2,261**	**2,343**
HST	284	294	297
Bill Before Rebates	**2,469**	**2,554**	**2,580**
OCEB	247		
OESP			
8% Rebate			183
Total Bill	**2,222**	**2,554**	**2,398**

- Assumes the consumer is eligible for the RPP and has elected to be a Hydro One year-round residential consumer.
- Assumes electricity consumption is allocated 65 per cent off-peak, 17 per cent mid-peak, 18 per cent on-peak.
  - A farm may have a different profile than the above consumption profile.
- 2016 electricity prices are current prices (set May 1, 2016) and not for 2016 overall. An overall 2016 electricity price could be estimated when the Regulated Price Plan rates are updated in mid-October and taking effect November 1, 2016.
- 2017 electricity commodity and regulatory price estimate is based on information in Energy slide deck showing an increase of approximately $2 in cost of supply between 2016 and 2017. Approximately $1.50 is assumed to be due to increase commodity prices and about $0.60 due to increased RRRP rate for a 750/kWh/month consumer. An additional $1 is included in the 2017 electricity charge due to a recent court decision.
- Hydro One 2017 distribution rates have not been determined. The estimate used in this analysis assumes a constant volumetric distribution rate and an increase to the fixed distribution charges such that the percentage increase in distribution charges between 2016 and 2017 is the same as the percentage increase between 2015 and 2016, for a 1,000 kWh consumer.
  - The increase is assumed only for the fixed distribution charge since distribution rates are being shifted to a fixed charge only over time.
- Energy Cabinet submission slide deck stated that updated RRRP would increase the benefit to $60/month.

Hydro One Remote Communities – 1,000 kWh / month

	2015	2016	2017
Estimated Bill without RRRP	288	295	301
Estimated RRRP	181	186	190
Bill Before Tax	**107**	**109**	**112**
HST	14	14	15
Bill Before Rebates	**120**	**123**	**126**
OCEB	12		
OESP			
8% Rebate			9
Total Bill	**108**	**123**	**117**

- Hydro One Remotes is an integrated generation and distribution utility, with all of its operations regulated by the Ontario Energy Board. Hydro One Remotes owns and operates 19 distribution and generation systems in communities isolated from the transmission grid.
- Hydro One Remotes receives approximately $32 million in RRRP funding. Based on information included in an Ontario Energy Board order for rates effective May 1, 2014, Hydro One Remotes receives approximately 63 per cent of it funds to cover costs from RRRP. Assuming this percentage is applied across all consumers, an estimated bill and RRRP amount is included in the table above.
- Hydro One Remotes' consumers are not billed for electricity on a time-of-use basis, but instead are charged tiered rates for the first 1,000 kWh consumed in a month, the next 1,500 kWh and any additional kWh above 2,500 kWh in a month.
- Rates effective May 1, 2017, have not been determined. The estimate used in this analysis assumes a 2.1 per cent increase, the same increase that was applied to determine rates effective May 1, 2016.

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Commented [SK28]: If RRRP is shown in the Hydro One R2 table above, why isn't it shown here?

Commented [EK9R8]: RRRP is not an explicit credit provided to H1 Remote consumers. Based on the last cost of service application for H1 remotes, about 63% of its amounts to cover costs comes from RRRP. If this percentage is applied over all H1 remote consumers, an estimate of what the bill would be without RRRP could be made.

However, this number is only an estimate and does not appear in any distribution rate applications.

Commented [SK210]: Are they billed under a tiered system instead? Suggest providing clarification.

Electricity Price Examples

Toronto Hydro – 1,500 kWh / month

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	239	261	267
DRC	11		
Bill Before Tax	**250**	**261**	**267**
HST	32	34	35
Bill Before Rebates	**282**	**295**	**302**
OCEB	28		
8% Rebate			21
Total Bill	**254**	**295**	**281**

- Assumes electricity consumption is allocated 65 per cent off-peak, 17 per cent mid-peak, 18 per cent on-peak.
- 2016 electricity prices are current prices and not for 2016 overall. An overall 2016 electricity price could be estimated when the Regulated Price Plan rates are updated in mid-October and taking effect November 1.
- 2017 electricity estimate is based on information in Energy slide deck showing an increase of approximately $2 in cost of supply between 2016 and 2017. Approximately $1.50 is assumed to be due to increase commodity prices and about $0.60 due to increased RRRP rate for a 750/kWh/month consumer. An additional $1 is included in the 2017 electricity charge due to a recent court decision.

Hydro One Brampton – 1,000 kWh / month – Receiving enhanced OESP benefit of $45/month (senior couple with $24,000 annual income)

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	151	163	163
DRC	7		
Bill Before Tax	**158**	**163**	**163**
HST	20	21	21
Bill Before Rebates	**178**	**184**	**184**
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OESP		45	45
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  - A household with seniors may have a flatter consumption profile with higher mid- and on-peak consumption than is assumed here.
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Hydro One R2 (Low Density) – 2,200 kWh / month

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	451	482	493
RRRP	32	32	60
DRC	16		
Bill Before Tax	**435**	**451**	**433**
HST	57	59	56
Bill Before Rebates	**492**	**509**	**490**
OCEB	49		
OESP			
8% Rebate			35
Total Bill	**442**	**509**	**455**

- Assumes electricity consumption is allocated 65 per cent off-peak, 17 per cent mid-peak, 18 per cent on-peak.
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	2015	2016 (Current)	2017
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DRC	4		
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	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	2,132	2,292	2,343
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- Hydro One 2017 distribution rates have not been determined. The estimate used in this analysis assumes a constant volumetric distribution rate and an increase to the fixed distribution charges such that the percentage increase in distribution charges between 2016 and 2017 is the same as the percentage increase between 2015 and 2016, for a 1,000 kWh consumer.
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Hydro One Remote Communities – 1,000 kWh / month

	2015	2016	2017
Bill Before Tax	**107**	**109**	**112**
HST	14	14	15
Bill Before Rebates	**120**	**123**	**126**
OCEB	12		
OESP			
8% Rebate			9
Total Bill	**108**	**123**	**117**

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RPP Rates	2014	2015		2016
	Nov	May	Nov	May
	7.7	8	8.3	8.7
	11.4	12.2	12.8	13.2
	14	16.1	17.5	18

			Current	
Consumption (kWh)	**750**	**2015**	**2016**	**2017**
Off-peak	**65%**	7.95	8.7	9.05
Mid-peak	**17%**	12.03	13.2	13.55
On-peak	**18%**	15.63	18	18.35
	100%			

Electricity Charges	**2015**	**2016**	**2017**
Off-peak	38.76	42.41	44.12
Mid-peak	15.34	16.83	17.28
On-peak	21.11	24.30	24.77
Total Electricity Charge	**75.20**	**83.54**	**86.17**

Toronto Hydro

Delivery	**2015**	**2016**	**2017**
Monthly Charge	22.65	23.49	28.65
Retail Transmission	1.59	1.70	1.70
Volumetric Charge	1.78	1.877	1.514
Delivery Charges	**51.22**	**53.94**	**56.47**
Regulatory Charges	**4.69**	**4.92**	**5.54**
Electricity, Delivery, Regulatory	**131.11**	**142.40**	**148.18**
DRC	**5.25**		
Bill Before Tax	**136.36**	**142.40**	**148.18**
HST	**17.73**	**18.51**	**19.26**
Total Bill before Rebates	**154.09**	**160.91**	**167.45**
OCEB	**15.41**		

OESP		**0.00**	**0.00**
8% HST Rebate			**11.85**
Total Bill	**138.68**	**160.91**	**155.59**

2017 electricity estimate based on information in Energy
between 2016 and 2017. Approximately $1.50 is assumed
increased RRRP rate for a 750/kWh/month consumer. An
recent court decision.

Toronto Hydro Distribution rates effective May 1, 2014 a

1-May-14	**1-May-15**
20.96	23.49
1.366	1.70
1.6	1.877

Brampton

Delivery	**2015**	**2016**	**2017**
Monthly Charge	11.99	15.11	18.46
Retail Transmission	1.39	1.35	1.31
Volumetric Charge	1.44	1.23	0.51
Delivery Charges	**36.13**	**37.65**	**35.38**
Regulatory Charges	**4.67**	**4.90**	**5.52**
Electricity, Delivery, Regulatory	**116.01**	**126.10**	**127.07**
DRC	**5.25**		
Bill Before Tax	**121.26**	**126.10**	**127.07**
HST	**15.76**	**16.39**	**16.52**
Total Bill before Rebates	**137.02**	**142.49**	**143.59**
OCEB	**13.70**		

OESP		**0.00**	**0.00**
8% HST Rebate			**10.17**
Total Bill	**123.32**	**142.49**	**133.43**

slide deck showing an increase of approximately $2 in cost of supply
d to be due to increase commodity prices and about $0.60 due to
additional $1 is included in the 2017 electricity charge due to a

and May 1, 2015

Hydro One R2

Delivery	**2015**	**2016**	**2017**
Monthly Charge	73.71	75.61	77.74
Retail Transmission	1.08	1.11	1.11
Volumetric Charge	4.25	4.27	4.27
RRRP			
Delivery Charges	**122.43**	**125.61**	**128.01**
RRRP	**31.50**	**31.50**	**60.00**
Regulatory Charges	**4.97**	**5.22**	**5.40**
Electricity, Delivery, Regulatory	**202.61**	**214.37**	**219.58**
DRC	**5.25**		
Bill Before Tax	**176.36**	**182.87**	**159.58**
HST	**22.93**	**23.77**	**20.75**
Total Bill before Rebates	**199.29**	**206.64**	**180.33**
OCEB	**19.93**		

OESP		**0.00**	**0.00**
8% HST Rebate			**12.77**
Total Bill	**179.36**	**206.64**	**167.56**

Hydro One Remotes

	1-May-14	1-May-15	1-May-16	1-May-17
Fixed Charge	18.61	18.7	19.09	19.49
First 1,000 kWh	8.75	8.8	8.98	9.17
Next 1,500 kWh	11.68	11.73	11.98	12.23
Additional kWh	17.6	17.69	18.06	18.44
OESP			0.11	0.11

Consumption (kWh)	1,000

	2015	**2016**	**2017**
Estimated Bill w/o RRRP	**287.85**	**295.30**	**301.45**
RRRP	**181.34**	**186.04**	**189.92**
Bill Before Tax	**106.50**	**109.26**	**111.54**
HST	**13.85**	**14.20**	**14.50**
Total Bill before Rebates	**120.35**	**123.46**	**126.04**
OCEB	**12.03**		
OESP			
8% HST Rebate			**8.92**
Total Bill	**108.31**	**123.46**	**117.11**

Electricity Price Examples

Toronto Hydro – 1,500 kWh / month

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	239	261	267
DRC	11		
Bill Before Tax	**250**	**261**	**267**
HST	32	34	35
Bill Before Rebates	**282**	**295**	**302**
OCEB	28		
8% Rebate			21
Total Bill	**254**	**295**	**281**

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Hydro One Brampton – 1,000 kWh / month – Receiving enhanced OESP benefit of $45/month (senior couple with $24,000 annual income)

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	151	163	163
DRC	7		
Bill Before Tax	**158**	**163**	**163**
HST	20	21	21
Bill Before Rebates	**178**	**184**	**184**
OCEB	18		
OESP		45	45
8% Rebate			9
Total Bill	**160**	**139**	**130**

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- $45/month OESP amount is only available to households using certain medical devices or with electric heating. First Nation and Métis households may also qualify for higher OESP amounts. The standard OESP amount for a two-person household with an annual income of $24,000 is $30/month. Using the higher OESP amount limits the generality of this example.

Hydro One R2 (Low Density) – 2,200 kWh / month

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	451	482	493
RRRP	32	32	60
DRC	16		
Bill Before Tax	**435**	**451**	**433**
HST	57	59	56
Bill Before Rebates	**492**	**509**	**490**
OCEB	49		
OESP			
8% Rebate			35
Total Bill	**442**	**509**	**455**

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- Hydro One 2017 distribution rates have not been determined. The estimate used in this analysis assumes a constant volumetric distribution rate and an increase to the fixed distribution charges such that the percentage increase in distribution charges between 2016 and 2017 is the same as the percentage increase between 2015 and 2016, for a 1,000 kWh consumer.
  - The increase is assumed only for the fixed distribution charge since distribution rates are being shifted to a fixed charge only over time.
- Energy Cabinet submission slide deck stated that updated RRRP would increase the benefit to $60/month.

Toronto Hydro – 600 kWh / month – Receiving OESP ($30/month for a 3-person household with $39,000 annual income)

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	109	119	124
DRC	4		
Bill Before Tax	**114**	**119**	**124**
HST	15	15	16
Bill Before Rebates	**128**	**134**	**140**
OCEB	13		
OESP		30	30
8% Rebate			8
Total Bill	**116**	**104**	**103**

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Hydro One R2 (Low Density) – 12,000 kWh / month – RPP eligible Farm

	2015	2016 (Current)	2017
Electricity, Delivery, Regulatory Charges	2,132	2,292	2,343
RRRP	32	32	60
DRC	84		
Bill Before Tax	**2,184**	**2,261**	**2,343**
HST	284	294	297
Bill Before Rebates	**2,469**	**2,554**	**2,580**
OCEB	247		
OESP			
8% Rebate			183
Total Bill	**2,222**	**2,554**	**2,398**

- Assumes the consumer is eligible for the RPP and has elected to be a Hydro One year-round residential consumer.
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  - A farm may have a different profile than the above consumption profile.
- 2016 electricity prices are current prices (set May 1, 2016) and not for 2016 overall. An overall 2016 electricity price could be estimated when the Regulated Price Plan rates are updated in mid-October and taking effect November 1, 2016.
- 2017 electricity commodity and regulatory price estimate is based on information in Energy slide deck showing an increase of approximately $2 in cost of supply between 2016 and 2017. Approximately $1.50 is assumed to be due to increase commodity prices and about $0.60 due to increased RRRP rate for a 750/kWh/month consumer. An additional $1 is included in the 2017 electricity charge due to a recent court decision.
- Hydro One 2017 distribution rates have not been determined. The estimate used in this analysis assumes a constant volumetric distribution rate and an increase to the fixed distribution charges such that the percentage increase in distribution charges between 2016 and 2017 is the same as the percentage increase between 2015 and 2016, for a 1,000 kWh consumer.
  - The increase is assumed only for the fixed distribution charge since distribution rates are being shifted to a fixed charge only over time.
- Energy Cabinet submission slide deck stated that updated RRRP would increase the benefit to $60/month.

Hydro One Remote Communities – 1,000 kWh / month

	2015	2016	2017
Bill Before Tax	**107**	**109**	**112**
HST	14	14	15
Bill Before Rebates	**120**	**123**	**126**
OCEB	12		
OESP			
8% Rebate			9
Total Bill	**108**	**123**	**117**

- Hydro One Remotes is an integrated generation and distribution utility, with all of its operations regulated by the Ontario Energy Board. Hydro One Remotes owns and operates 19 distribution and generation systems in communities isolated from the transmission grid.
- Hydro One Remotes receives approximately $32 million in RRRP funding. Based on information included in an Ontario Energy Board order for rates effective May 1, 2014, Hydro One Remotes receives approximately 63 per cent of it funds to cover costs from RRRP. Assuming this percentage is applied across all consumers, an estimated bill and RRRP amount is included in the table above.
- Hydro One Remotes' consumers are not billed for electricity on a time-of-use basis, but instead are charged tiered rates for the first 1,000 kWh consumed in a month, the next 1,500 kWh and any additional kWh above 2,500 kWh in a month.
- Rates effective May 1, 2017, have not been determined. The estimate used in this analysis assumes a 2.1 per cent increase, the same increase that was applied to determine rates effective May 1, 2016.

Impact of Select Electricity Relief Programs and Tax Credits on Residential Monthly Electricity Bills

Ministry of Finance / Ministry of Energy

October 14, 2016

Overview

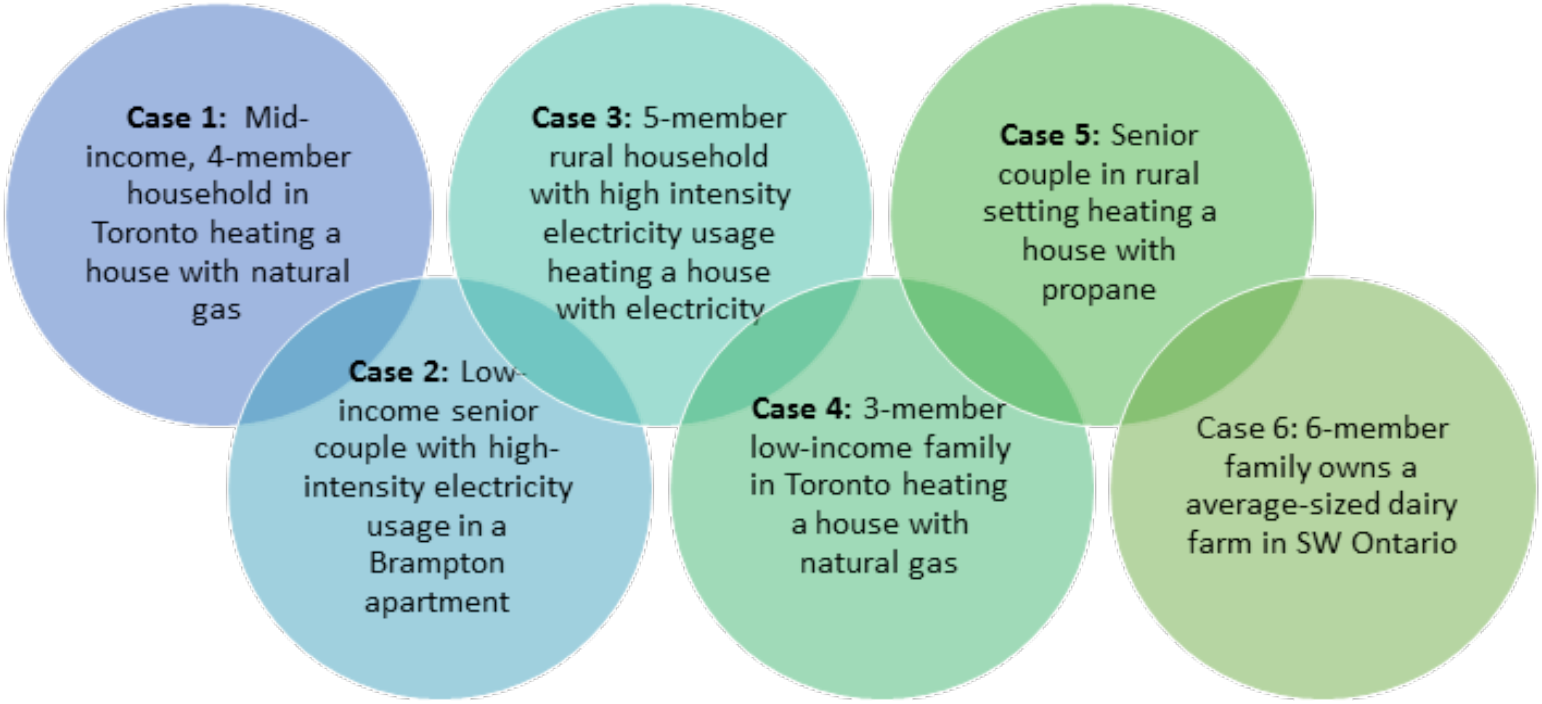
- The Financial Accountability Office (FAO) released a commentary on September 27, 2016, that showed average household home energy costs (multiple fuels, including electricity) by region and by income, using the Statistics Canada Survey of Household Spending (2012-2014). It found:
  - average spending on home energy varies significantly by region - northern families spend more on average; and
  - average home energy spending also varies with household income - higher income families spend more on home energy, though it is a lower percentage of their income.
- MOF, using Statistics Canada publicly-available information, produced similar results on home energy spending by income.
- The FAO did not calculate the cost of home energy net of government support programs, although the report did highlight a number of existing supports.
- The Ministry of Finance and Ministry of Energy worked together to create case examples that demonstrate the residential monthly electricity costs after taking into account select electricity relief programs and tax credits attributable to electricity usage.
- The cases chosen show that:
  - low-income families are well-supported;
  - northern and farm families are paying higher electricity costs reflecting higher usage and cost of distribution; and
  - modest income families receive little support.

Enhancing the FAO Analysis

- Attempting to enhance the FAO analysis by including the average benefit from the support programs to show net home energy costs would be unreliable and underestimate their benefit.
  - Trying to determine reasonable average credit and benefit amounts for the income groups used in the FAO report would be, at best, an educated guess. This was a crucial caveat raised by the FAO in their report.
  - MOF has, in the past, linked tax family data to aggregate consumption costs based on some earlier Statistics Canada surveys; however, attempts to categorize these costs into specific spending areas did not yield reliable results. The FAO required Statistics Canada to compile results from a multi-year average of the survey as sample sizes were small, and regional variances were significant.
  - Electricity consumption data from smart meters is not available to the government, thus making it challenging to replicate FAO results using observed consumption. Other energy use is also not available at the household level. Future legislation allowing access to Smart Meter data is anticipated (for further details, see appendix).
- Case examples of representative families are a good alternative to demonstrate the scenarios where government mitigation efforts have a significant impact.

Approach Used to Build the Cases

- Representative case examples have been prepared to show monthly residential electricity costs faced by select Ontario families, less select government supports to help them with those costs. These case examples represent an after-tax scenario.



Approach Used to Build the Cases (cont'd)

- Costs have been estimated assuming a time-of-usage pattern, total electricity usage for the particular case and using published electricity rates. For 2017, commodity costs and rates were projected by Ministry of Energy staff.
- Electricity relief programs and tax credits that have been considered include:
  - the Ontario Electricity Support Program (OESP) (2016);
  - a proposed 8% electricity bill rebate reflecting an amount equal to the provincial portion of the Harmonized Sales Tax;
  - an enhanced Rural or Remote Rate Protection (2017)[1];
  - a portion of the Ontario Sales Tax Credit (OSTC) and the federal Goods and Services Tax (GST) credit attributable to electricity usage; and
  - the energy (not just electricity) component of the Ontario Energy and Property Tax Credit (OEPTC).
- Some of the supports mentioned above would appear on the bill, such as the OESP and proposed 8% rebate; while others, such as the OSTC, OEPTC, and federal GST credit do not directly affect the electricity bill, but provide notional cost offsets.
- The various conservation programs that are available to families in Ontario to lower their electricity costs have not been included in the analysis (see appendix for details).

[1] The proposed 8% rebate and RRRP enhancement were not identified in the FAO report.

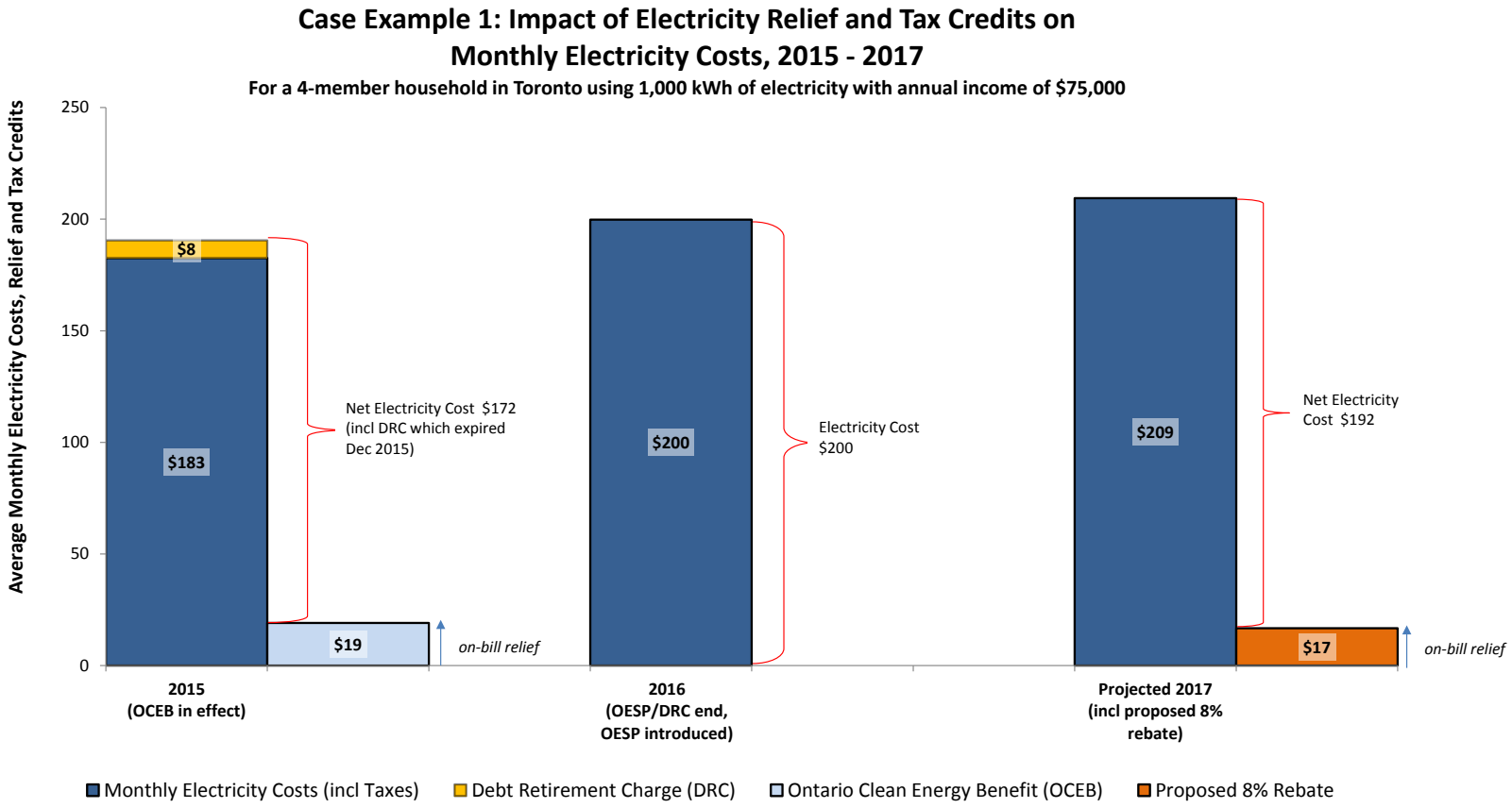
Methodology, Caveats, and Assumptions

- Each case has been assigned an appropriate electricity service provider, e.g., if the case represents a low-density (R2) area, it is a Hydro One – R2 customer.
- Homes heated with electricity tend to have higher total energy bills than those heated with natural gas.
- The Ontario Sales Tax Credit and federal Goods and Services Tax credit amounts presented here have been pro-rated based on the total Harmonized Sales Tax revenues attributable to electricity usage.
- The energy component of the Ontario Energy and Property Tax Credit has been allocated to each case; the estimate is based on occupancy cost information of similar families living in similar areas with similar incomes and household sizes.
- 2017 electricity delivery rates have not yet been determined. For 2017, this analysis assumes a 1.7% increase from 2016 rates for each service provider. This represents an assumed 2% increase allowance for inflation, reduced by 0.3% to represent a modest productivity factor used by the Ontario Energy Board to incent efficiency gains. Actual rates will vary.
- To focus the examples on on-bill support, incomes, property taxes and rents are held constant.

Methodology, Caveats, and Assumptions (cont'd)

- The Debt Retirement Charge (DRC) was 0.7 cents per kWh of electricity consumed by residential customers (the DRC ended December 2015).
- The proposed 8% electricity bill rebate, Ontario Electricity Support Program and Rural or Remote Rate Protection (RRRP) rates have been estimated by Ministry of Energy staff and have been applied pre-tax. The proposed $29 RRRP-enhancement has been reflected in the 2017 scenarios.
- Sensitivity analysis on 'time-of-use' patterns and electricity usage shows minimal differences in monthly costs. And, net electricity cost is calculated as the monthly electricity bill less the benefits received from select electricity relief programs and tax credits.
- For 2016 and 2017, some cases are assumed to be high-intensity users (e.g., electric heating) for the OESP, making them entitled to more generous payments.
- Most of the cases would have received the maximum support from the Ontario Clean Energy Benefit in 2015 as their monthly usage was below 3,000 kWh, except for the dairy farm example.

Moderate and Higher-Income Families Get Some Support

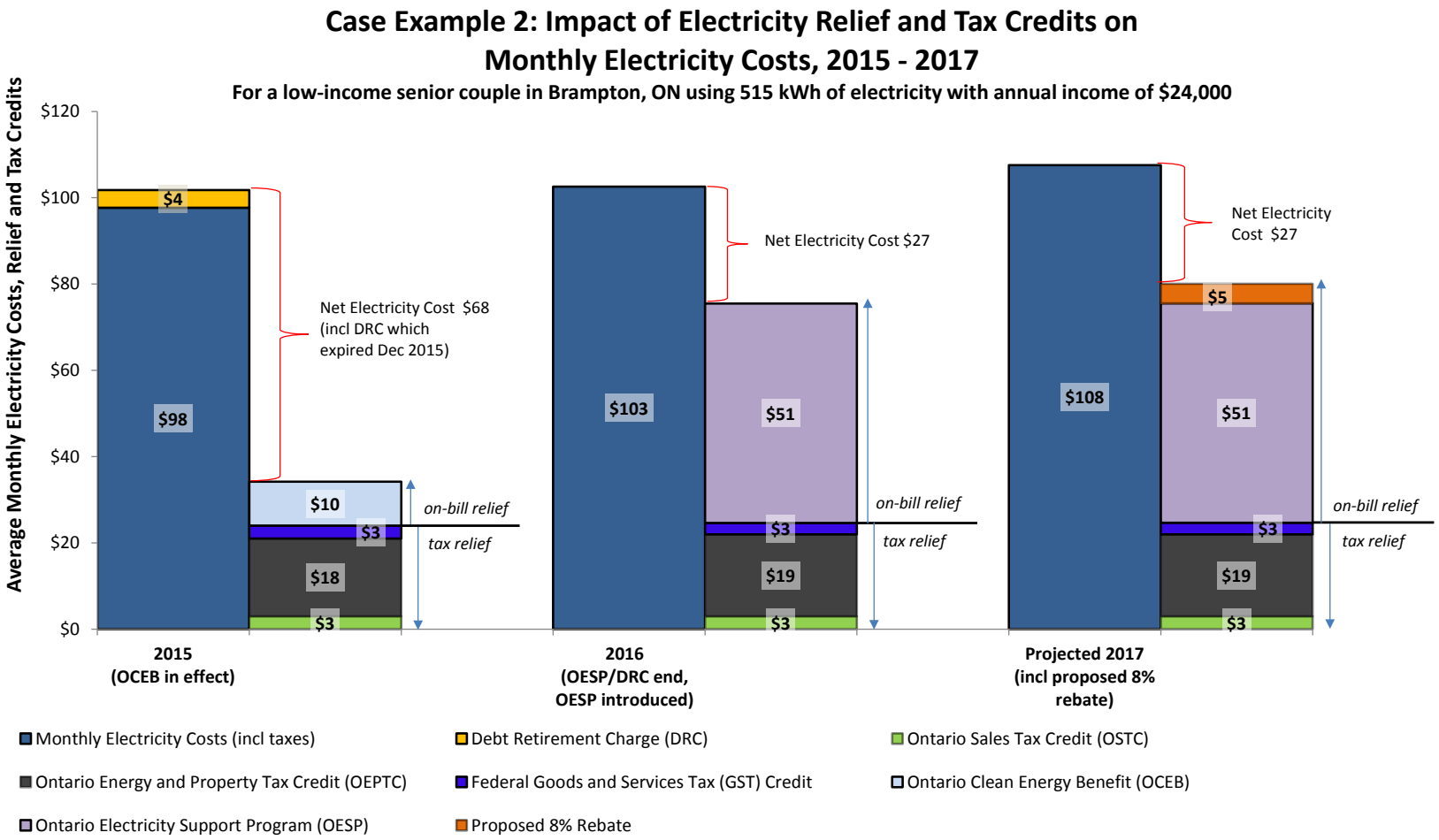


Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family owns a house in Toronto and pays property taxes of about $3,500.
2. The family has an electricity meter with Toronto Hydro.
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 62%, mid-peak 23% and on- peak 15%) and total electricity usage of 1,000 kWh a month.
4. For 2016 and 2017, this family is not entitled to any Ontario Electricity Support Program payments. The OESP cut-off for a 4-member household is $39,000.
5. The family, at its current income level, is not entitled to the Ontario Sales Tax Credit, Ontario Energy and Property Tax Credit and federal Goods and Services Tax credit.

Vulnerable Low-Income Seniors are Well Supported



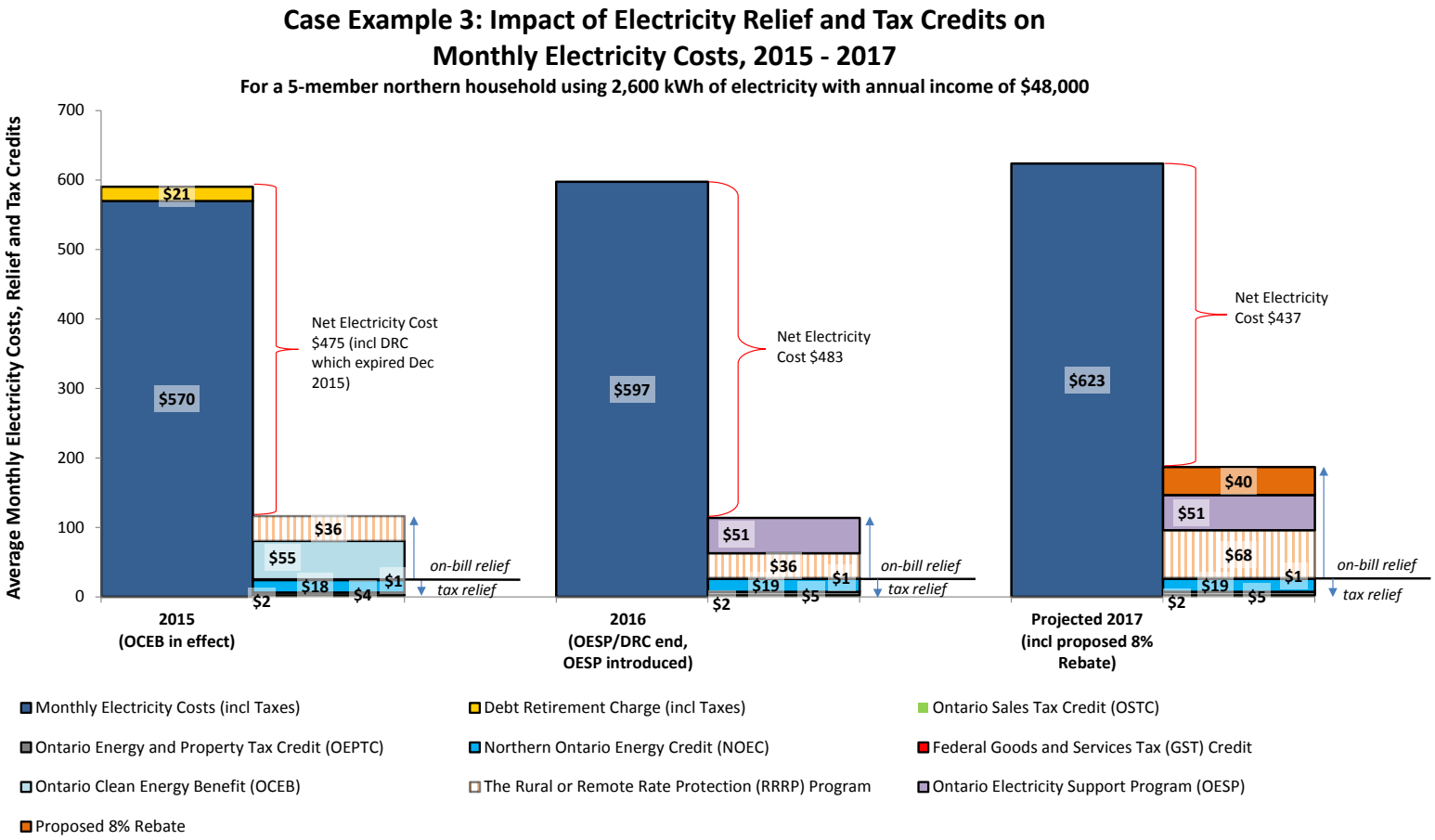
Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family rents an apartment in Brampton, ON ($700 a month) with a separate meter with Hydro One Brampton Network Inc.
2. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 60%, mid-peak 20% and on-peak 20%) and total electricity usage of 515 kWh a month.

3 For 2016 and 2017, the family is assumed to have high-intensity electricity usage (e.g., by using certain medical equipment), making them eligible for more generous OESP payments.

Families in the North Face Higher Costs Reflecting Higher Usage

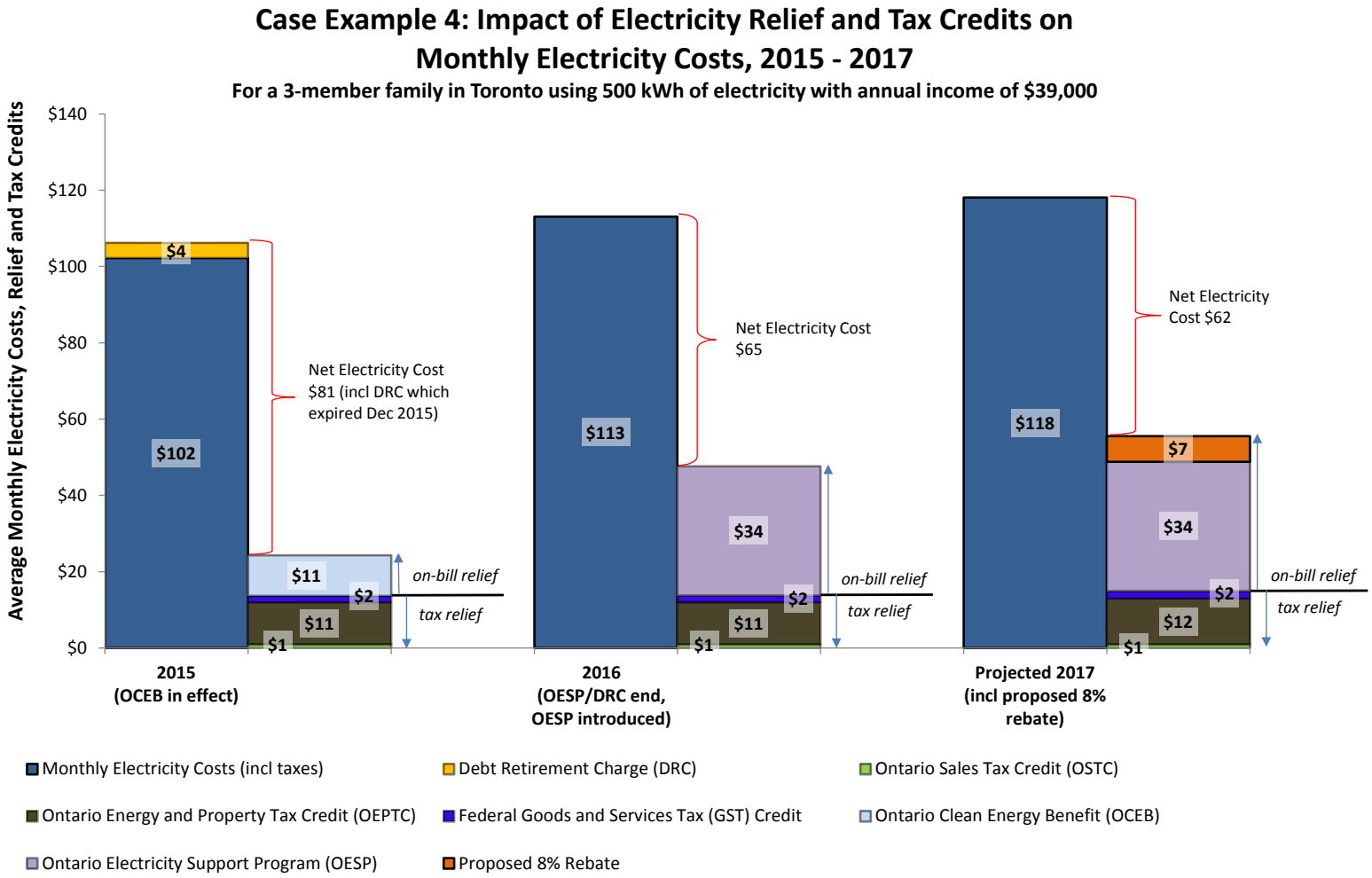


Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family lives in northern Ontario, owns a house that is heated with electricity. In low-density, rural areas, reliance on electricity for home heating is more common. The family pays property taxes of $2,500.
2. The family is a client of the Hydro One Networks Inc. – Low Density (R2).
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 65%, mid-peak 18% and on-peak 17%) and total electricity usage of 2,600 kWh a month. The time-of-usage pattern used here is close to the average pattern, given that the heating load is relatively flat and information is not available on specific heating profile for this type of home.
4. For 2016 and 2017, the family is entitled to high-intensity OESP payments resulting from electric heating.

Low-Income Families Receive Increased Support for Electricity

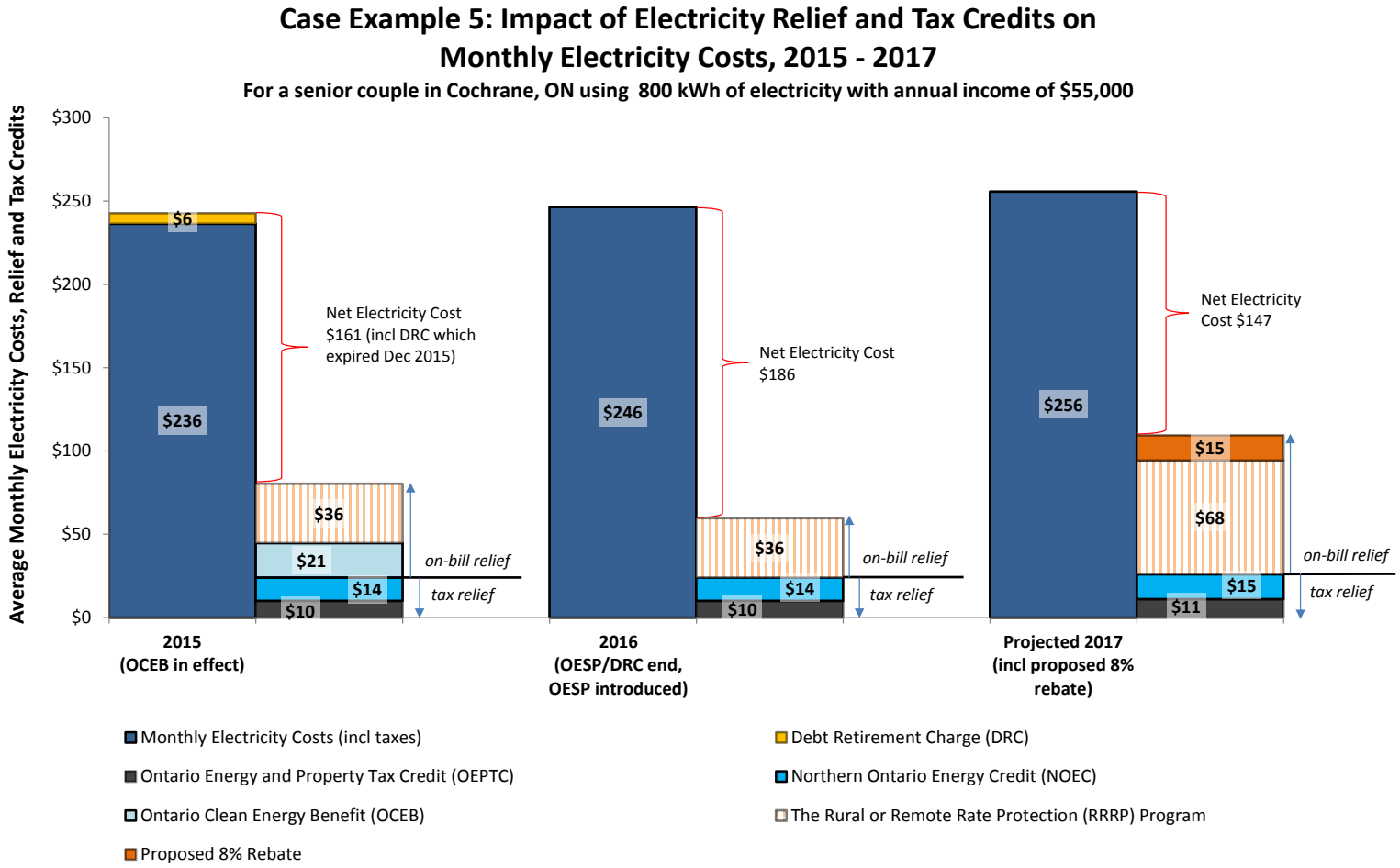


Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family lives in Toronto, owns a house and pays about $2,800 in property taxes.
2. This family is a client of the Toronto Hydro.
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 65%, mid-peak 18% and on-peak 17%) and total electricity usage of 500 kWh a month.

Rural and Remote Senior Families will Receive Enhanced Support

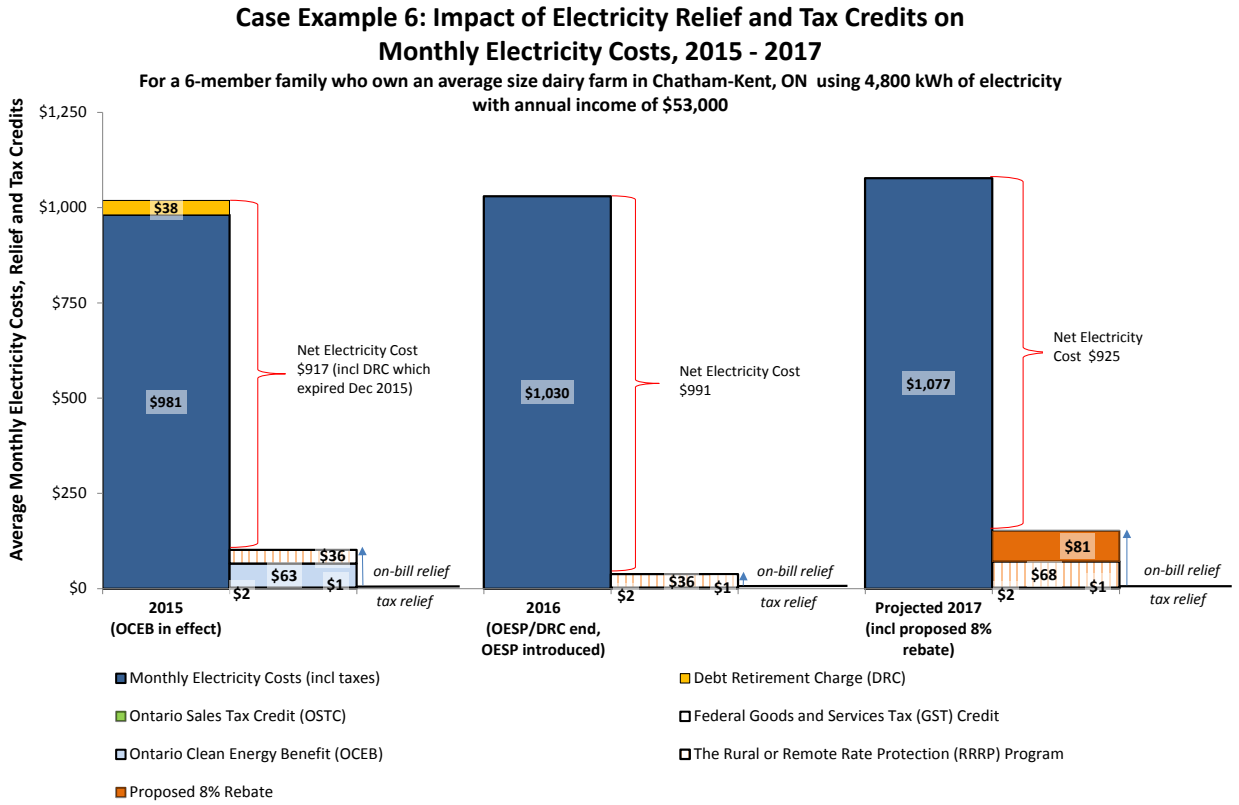


Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family lives in a propane-heated home in the District of Cochrane, North-eastern Ontario; and pays about $2,250 in property taxes.
2. The family is a client of the Hydro One Networks Inc. – Low Density (R2), making them eligible for Rural or Remote Rate Protection (RRRP).
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 60%, mid-peak 20% and on-peak 20%) and total electricity usage of 800 kWh a month.
4. The family, at its current income level, is not entitled to the Ontario Sales Tax Credit and federal Goods and Services Tax credit.
5. For 2016 and 2017, this family is not entitled to any Ontario Electricity Support Program payments. The OESP cut-off for a 2-member household is $28,000.

Farm Families Receive Modest Support for Electricity Costs



Source: Ministry of Finance / Ministry of Energy

NOTES:

1. This example assumes the family owns an average-sized dairy farm, which is not incorporated and files farm income under personal income taxes, in Chatham-Kent, South-western Ontario; and pays about $2,000 in property taxes for their residential home.
2. The family is a client of the Hydro One Networks Inc. – Low Density (R2), making them eligible for Rural or Remote Rate Protection (RRRP).
3. Monthly electricity costs (including delivery and regulatory charges) were estimated by the Ministry of Energy, assuming a 'time-of-use' pattern (off-peak 65%, mid-peak 18% and on-peak 17%) and total electricity usage of 4,800 kWh a month. This is an estimated average monthly consumption for an average-sized dairy farm (source: an OMAFRA study).
4. As the family lives on the farm, they pay residential electricity rates for their farm operations, as well.
5. The family received the Ontario Clean Energy Benefit (OCEB) in 2015 only for up to 3,000 kWh per month of electricity usage. The OCEB provided 10% rebate only on up to 3,000 kWh of monthly electricity usage.
6. For 2016 and 2017, this family is not entitled to any Ontario Electricity Support Program payments. The OESP cut-off for a 6-member household is $48,000.

Appendix 1: Government Supports

On-Bill Relief:

- Both the Ontario Clean Energy Benefit (OCEB) and the Debt Retirement Charge (DRC) ended December 2015.
  - The OCEB provided typical residential consumers[2] relief of about $16 a month and typical residential consumers paid DRC of about $5.25 a month (pre-tax).
- Effective January 2016, the government has introduced the Ontario Electricity Support Program (OESP).
  - The OESP provides ongoing, on-bill relief (up to $75 a month) for low-income electricity ratepayers who apply for the program.
- The government has recently announced its proposal to provide further support, including:
  - A proposed 8% electricity bill rebate reflecting the provincial portion of the Harmonized Sales Tax (HST), effective January 1, 2017, if passed by the legislature; and
  - A proposed enhancement of about $29 a month to the existing Rural or Remote Rate Protection (RRRP) program, also effective January 1, 2017, to be enacted by Regulation.

[2] Utilizing 750 kWh of electricity a month

Appendix 1: Government Supports (cont'd)

Ontario Tax Relief:

- The Ontario Sales Tax Credit (OSTC) provides relief to low- to moderate-income Ontarians to help with their sales taxes.
- The Ontario Energy and Property Tax Credit (OEPTC) provides relief to low- to moderate-income Ontarians, including seniors, to help them with the sales tax on home energy (including electricity) and for property taxes.
    - The energy component of the OEPTC is a flat, notional amount that, with certain exceptions, is not tied to actual home energy costs paid.
- The Northern Ontario Energy Credit (NOEC) provides relief to low- to moderate-income residents of northern Ontario to help them with the higher energy costs they face.
- The OSTC, OEPTC and NOEC are delivered to eligible recipients by the Canada Revenue Agency on behalf of the Province through the Ontario Trillium Benefit.
    - Tax credits are paid out over a benefit year of July to June based on prior year's income.

Federal Tax Relief:

- The federal Goods and Services Tax (GST) credit provides relief to low- to moderate-income Canadians for the federal portion of sales taxes they pay.

Appendix 2: Further details about Smart Meter data

- Electricity consumption data that is warehoused in Ontario's Meter Data Management and Repository (MDMR) in anonymized and currently does not enable analytics at a regional scale.
- Changes imposed by the Ontario Energy Board through a licence change for the Smart Metering Entity (SME) – which runs the MDMR – will enable this type of analytics.
    - These changes will take effect on January 1, 2017.
- Government access to that data is currently restricted but work is underway to enable third party access. However the SME may be able to undertake province-wide analytics upon request.

Appendix 3: Conservation and Efficiency Programs

- Ontario's electricity and natural gas conservation programs offer financial incentives to help households with the costs of installing energy-efficient equipment and improving the energy efficiency of their home. Electricity conservation programs are delivered by the Independent Electricity System Operator (IESO) in collaboration with local electricity utilities. Natural gas conservation programs are delivered by Ontario's two main natural as utilities; Enbridge Gas Distribution and Union Gas
- Households can generally achieve between 10% and 30% in energy savings by participating in these programs. The level of energy savings achieved depends on a range of factors which include the types of measures being undertaken and the age of the home.

Case 1: Toronto based semi-detached home (mid-income family- natural gas fuel source for space and water heating)

The specific household in this scenario could undertake energy efficiency upgrades through the following programs to help further manage energy costs.

Appendix 3: Conservation and Efficiency Programs (cont'd)

Electricity Conservation Programs (offered by the IESO in collaboration with the local electricity utility)

- The **saveONenergy Heating and Cooling Incentive** provides up to $650 in rebates to help offset the cost of purchasing and installing new heating and cooling equipment in the home, such as a high efficiency furnace with an electronically commutated motor (ECM), or an ENERGY STAR certified central air conditioner.
- **saveONenergy Coupons** can help households save on a wide range of energy-efficient products including LED bulbs, power bars with integrated timers or auto-shutoff and more.

Natural Gas Conservation Programs (offered by Enbridge Gas Distribution)

- The **Home Energy Conservation Program** provides financial incentives up to $2,100 for homeowners to undertake natural gas reducing retrofits like upgrades to furnace, windows and insulation.
- The **Smart Thermostat Program** provides a $100 rebate to customers that install an adaptive thermostat.

Appendix 3: Conservation and Efficiency Programs (cont'd)

Case 2: Brampton based apartment (senior couple- natural gas fuel source for space and water heating, paid through rent)

Participation in energy efficiency programs for apartments is generally managed by the apartment building owner, given that most heating and cooling systems are central building wide systems. The specific apartment building in this scenario could undertake energy efficiency upgrades through the following programs to help tenants further manage energy costs.

Electricity Conservation Programs (offered by the IESO in collaboration with the local electricity utility)

- The **saveONenergy Retrofit Program** provides apartment buildings energy efficiency incentives up to 50% of the total project cost. Eligible measures include lighting retrofits, HVAC redesign, insulation upgrades, variable frequency drives and chiller replacement.
- The **saveONenergy Audit Incentive** helps apartment buildings covers up to 50% of the cost of an energy audit to identify opportunities for energy efficiency upgrades and eligible incentives.
- **saveONenergy Coupons** can help individual apartments dwellers save on a wide range of energy-efficient products including LED bulbs, power bars with integrated timers or auto-shutoff and more.

Appendix 3: Conservation and Efficiency Programs (cont'd)

Natural Gas Conservation Program (offered by Enbridge Gas Distribution)

- The Multi-Residential Incentive Program provides apartment buildings technical assistance and financial incentives up to $100,000 to implement energy efficient technologies. Eligible projects can include boiler replacements, heat recovery projects and building controls.

Case 3: Electricity heated Ontario based detached home (electricity fuel source for space and water heating)

The specific household in this scenario could undertake energy efficiency upgrades through the following programs to help further manage energy costs.

Electricity Conservation Programs (offered by the IESO in collaboration with the local electricity utility)

- The **saveONenergy Heating and Cooling Incentive** provides up to $650 in rebates to help offset the cost of purchasing and installing new heating and cooling equipment in the home, such as a high efficiency furnace with an electronically commutated motor (ECM), or an ENERGY STAR certified central air conditioner.
- **saveONenergy Coupons** can help households save on a wide range of energy-efficient products including LED bulbs, power bars with integrated timers or auto-shutoff and more.

Appendix 3: Conservation and Efficiency Programs (cont'd)

Case 4: Toronto based row house (low-income family- natural gas fuel source for space and water heating)

The specific low-income household in this scenario could undertake energy efficiency upgrades through the following programs to help further manage energy costs. The list includes some programs that are specific to low-income households.

Electricity Conservation Programs (offered by the IESO in collaboration with the local electricity utility)

- The **saveONenergy Home Assistance Program** helps income-eligible households manage their energy use and costs by offering detailed in-home energy assessments and installing energy-saving measures at no cost.

Appendix 3: Conservation and Efficiency Programs (cont'd)

Natural Gas Conservation Programs (offered by Enbridge Gas Distribution)

- The **Home Winterproofing Program** provides low income households with a free home assessment and weatherization services (e.g. insulation and air sealing) at no cost to the participant.

Case 5: Cochrane District based detached home (propane fuel source for space and water heating)

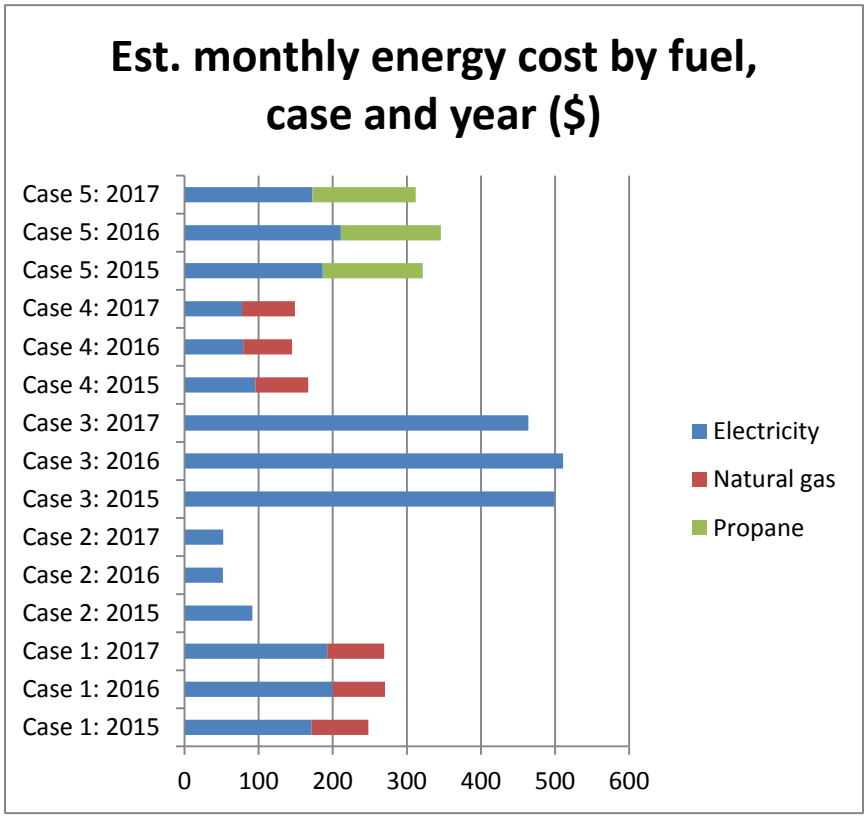
The specific household in this scenario could undertake energy efficiency upgrades through the following programs to help further manage energy costs.

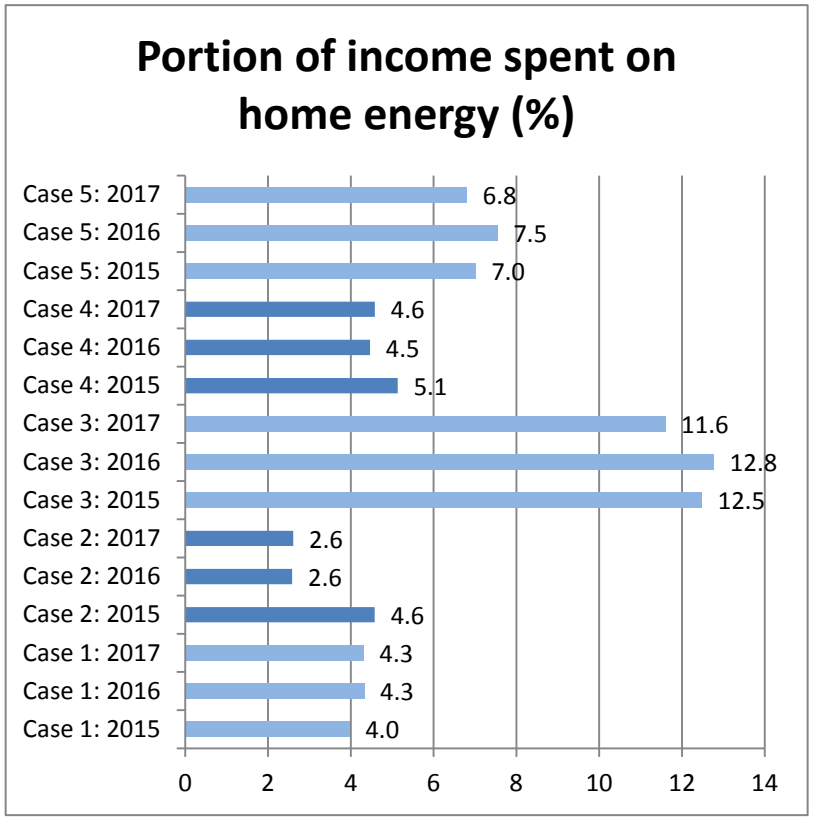
Electricity Conservation Programs (offered by the IESO in collaboration with the local electricity utility)

- The **saveONenergy Heating and Cooling Incentive** provides up to $650 in rebates to help offset the cost of purchasing and installing new heating and cooling equipment in the home, such as a high efficiency furnace with an electronically commutated motor (ECM), or an ENERGY STAR certified central air conditioner.
- **saveONenergy Coupons** can help households save on a wide range of energy-efficient products including LED bulbs, power bars with integrated timers or auto-shutoff and more.

Appendix 4: Total Estimated Energy Costs

The following graphs show estimated household energy costs 2015-2017 for each case as absolute costs ($/ month) and as a percentage of income. The cases illustrate a number of Ontario household configurations, based on certain assumptions.





Source: Ministry of Finance / Ministry of Energy

Natural gas and propane costs, are based on typical homes and calculated as rough estimates to provide context on total home energy costs. 2017 forecasts assume constant commodity prices from 2016 but include carbon costs under cap-and-trade.

Fair Hydro Investor Presentation Comments

Slide #	Reference	Comment
Slide 4	Images	Consider removing the nuclear and large hydro images as the plan only covers costs form renewables procurements, gas and conservation.
Slide 6	First bullet	Suggest using "proxy consumer" instead of "average" in this context, which would be more accurate and consistent with legislation as covered later in the presentation.
Slide 6	Second bullet	Suggest changing “8% rebate in the provincial portion…” to “ 8% rebate equivalent to the provincial portion…”.
Slide 6	Third bullet	Language suggest that bills will increase back to status quo in 2021 – suggest adding language regarding increases back up to and past the status quo over time.
Slide 7	First bullet	Consider replacing the phrase starting from “in an amount…” with “in such an amount that the total OPG-held subordinated debt does not exceed 49% of all outstanding debt”, for clarity.
Slide 11	First bullet	Suggest rewording to the following: “As part of the restructuring of Ontario’s electricity industry under the Energy Competition Act, 1998, the municipal electricity utilities became municipally-owned business corporations, including local distribution companies (“LDCs”).” – Some LDCs continue to be municipally-owned, while others have been sold to or acquired by Hydro One or private-sector owners.”
Slide 14	Second bullet	Consider replacing “previously established regulated rate” with “regulated rate established in the first year of the Rate Reduction Period”.
Slide 14	Last bullet	Similar to comment on Slide 6 above, suggest referencing increases back up to and beyond status quo over time.
Slide 15	Third bullet	Consider adding in the words “in favour of the Trust” at the end of the bullet [IESO Security Agreement]. Also, can we clarify whether the $2 billion credit facility is provided by the OFA or the OEFC? Who is the actual lender?
Slide 15	Last bullet	It’s “Ontario Electricity Financial Corporation” (i.e., not “Financing”). Also, consider rewording so as not to suggest that the $2 billion facility is solely for “carrying costs”. Also, suggest that the last clause on security be a stand-alone bullet, not part of the OEF credit facility bullet.
Slide 16	Second bullet	Consider rephrasing to align better with the offering memorandum and legislation.
Slide 16	Third bullet	Consider adding in the word “mainly” before “in respect of …” [see O.Reg. 206/17 section 5].
Slide 16	Bill image	Consider removing as text description should be sufficient.
Slide 17	Second bullet	Consider replacing the words “dealt with” with “mitigated” to avoid suggesting that the risk is eliminated.

Slide 17	Number 2 in the process chart	Consider adding in the word “amount” at the end [O.Reg. 206/17 section 8(2)].
Slide 17	Number 6 in the process chart	Consider replacing the words “in a trust” with “in trust” [FHPA section 16(3)].
Slide 18	Chart	Consider adding explanation of readjustment amount.
Slide 20	OEB’s relationship with OPG in the diagram	Consider replacing “review of OPG Fees” with “review and approval of OPG Fees” to better align with the language in O. Reg. 206/17. Consider replacing “Management Agreement” with “Regulation”.
Slide 20	IESO’s relationship with the Fair Hydro Trust	Note that the Acknowledgement and Indemnity Agreement is made to the Indenture Trustee. Consider editing to avoid confusion.
Slide 20	Ontario Caption	Suggest just having “Province of Ontario” (i.e., omit “(Ministry of Energy)”)
Slide 21	"Suspension Notice"	May wish to consider noting in the sentence that post-suspension refinancing is covered by the guarantee. As this was something Torys made a point of including in the agreement for financeability, suggest including for investors.
Slide 23	Key Terms – Moratorium Period (bullet 3)	Consider replacing “(until May 1, 2021)” to “(until April 30, 2021) and up to July 31, 2021” [see section 21(4) of FHPA and section 9.1 of O. Reg. 206/17]. Consider removing “which will be offered, as regulatory assets, for transfer to the Trust in a subsequent period”, since this is not expressly provided in the MTSA [also see section 16 of O. Reg. 206/17].
Slide 28	Third bullet	Consider replacing “fit under the fair allocation curve” with “ensure reasonable alignment with fair allocation amounts”. [see paragraph 1 of section 21(3) of FHPA].
Slide 31	Chart	The post-FHP bill should not follow the status quo trajectory between 2025 and 2028 – bill should be above status quo including rebates as the FAA is positive for those years (Fair Adjustment would be used to offset the majority of the CEA but the amount of the FAA would remain).
Slide 36	First bullet	Consider removing references to “statutorily mandated”. Remittances from IESO are mandated under s. 9.1 of O. Reg. 206/17.
Slide 38	Political Risk	Consider reviewing the characterization of the risk to align with the risk as described in the Agreements.
Slide 38	Third bullet	Please note reference to ability to disconnect service for non-payment by LDCs isn’t fully reflective of the requirement, consider revising to be more reflective of the actual mechanism.

Fair Hydro Investor Presentation Comments

Slide #	Reference	Comment
Disclaimers	Last par.	How will this presentation be used, and is it in conjunction with the offering memorandum? [MOF LSB]
Slide 4	Images	Consider removing the nuclear and large hydro images as the plan only covers costs from renewables procurements, gas and conservation.
Slide 6	First bullet	Suggest using "proxy consumer" instead of "average" in this context, which would be more accurate and consistent with legislation as covered later in the presentation.[MOF LSB: Where is Proxy Consumer explained?]
Slide 6	Second bullet	Suggest changing "8% rebate in the provincial portion…" to " 8% rebate equivalent to the provincial portion…".
Slide 6	Third bullet	Language suggest that bills will increase back to status quo in 2021 – suggest adding language regarding increases back up to and past the status quo over time.
Slide 7	First bullet	Consider replacing the phrase starting from "in an amount…" with "in such an amount that the total OPG-held subordinated debt does not exceed 49% of all outstanding debt", for clarity.
Slide 11	First bullet	Suggest rewording to the following: "As part of the restructuring of Ontario's electricity industry under the Energy Competition Act, 1998, the municipal electricity utilities became municipally-owned business corporations, including local distribution companies ("LDCs")." – Some LDCs continue to be municipally-owned, while others have been sold to or acquired by Hydro One or private-sector owners."
Slide 14	Second bullet	Consider replacing "previously established regulated rate" with "regulated rate established in the first year of the Rate Reduction Period".
Slide 14	Last bullet	Similar to comment on Slide 6 above, suggest referencing increases back up to and beyond status quo beyond the moratorium period~~over time~~.
Slide 15	Third bullet of Moratorium Period section	Consider adding in the words "in favour of the Trust" at the end of the bullet [IESO Security Agreement].
Slide 15	Last bullet	The $2 billion credit facility is provided by the Ontario Financing Authority, not the OEFC. Also, consider rewording so as not to suggest that the $2 billion facility is solely for "carrying costs". Also, suggest that the last clause on security be a stand-alone bullet, not part of the OFA credit facility bullet, and should come before the other part of this bullet (i.e., become the third bullet of this section).

Slide 16	Second bullet	Consider rephrasing to align better with the offering memorandum and legislation.
Slide 16	Third bullet	Consider adding in the word "mainly" before "in respect of …" [see O.Reg. 206/17 section 5]. [MOF LSB: This is a defined term in the Act.]
Slide 16	Bill image	Consider removing as text description should be sufficient.
Slide 17	Second bullet	Consider replacing the words "dealt with" with "mitigated" to avoid suggesting that the risk is eliminated.
Slide 17	Number 2 in the process chart	Consider adding in the word "amount" at the end [O.Reg. 206/17 section 8(2)].
Slide 17	Number 6 in the process chart	Consider replacing the words "in a trust" with "in trust" [FHPA section 16(3)].
Slide 18	Chart	Consider adding explanation of readjustment amount.
Slide 20	Chart	Should the Province's indemnity to OPG [& IESO] be referred to here? Also consider whether Management Agreement should be included?
Slide 20	OEB's relationship with OPG in the diagram	Consider replacing "review of OPG Fees" with "review and approval of OPG Fees" to better align with the language in O. Reg. 206/17. Consider replacing "Management Agreement" with "Regulation".
Slide 20	IESO's relationship with the Fair Hydro Trust	Note that the Acknowledgement and Indemnity Agreement is made to the Indenture Trustee. Consider editing to avoid confusion.
Slide 20	Ontario Caption	Suggest just having "Province of Ontario" (i.e., omit "(Ministry of Energy)") [MOF LSB: Agree, as MOF is also signatory to some agreements.]
Slide 21	"Suspension Notice"	May wish to consider noting in the sentence that post-suspension refinancing is covered by the guarantee. As this was something Torys made a point of including in the agreement for financeability, suggest including for investors.
Below is a track changes on slides 21 and 22		
Change of Law Protection Agreement		
Parties	• Province of Ontario ~~as Obligor~~ and (2) Indenture Trustee as trustee of the FHT, on behalf of Specified Creditors, ~~as Beneficiaries~~ and (3) OPG as Financial Services Manager ("FSM")	
Purpose	• Provides assurance to Specified Creditors ~~investors~~ that upon the occurrence of a Protection Event, the Province of Ontario will ~~have an obligation to make~~ pay~~ments~~ Approved Obligations on behalf of the Trust, with [limited rights of acceleration][NTD: Consider how to phrase acceleration issue].	
Key Terms	• Term: Continues for as long as any obligations of the Trust that are secured under the	

	Master Trust Indenture (MTI) remain outstanding [MOF LSB: Only if such amounts are covered by the Limited Guarantee] • Mandatory Payment: Upon the occurrence of a Protection Event, the Indenture Trustee has the right to require the Province to pay all Approved ~~o~~Obligations when due and payable • Priority of Payments: The priority of payments is governed by the waterfall provision under the MTI • Adherence Conditions: OPG as FSM is required to comply with certain conditions, including the delivery of an Adherence Compliance Certificate, prior to the issuance of debt which is to benefit from C~~c~~hange in ~~l~~Law ~~p~~Protection Agreement from the Province • Suspension Notice: The Province may deliver a suspension notice upon the occurrence of a program breach, a default in performance, or misrepresentation by OPG as FSM, and any new funding ~~after which date~~ funding obligations that are incurred after the date of a suspension notice will not have the benefit of the Change of Law Protection, ~~upon the occurrence of a program breach, a default in performance, or misrepresentation by OPG as FSM~~ [MOF LSB: Should the pre-approved refinancing provisions be referred to here?]
Protection Events	The occurrence of any of the following events: • The Legislature repeals (and does not replace on an equivalent basis) or amends the FHP Act or any portion thereof as in effect on the date hereof • The Legislature enacts or amends any other statute • The Lieutenant Governor in Council repeals (and does not replace on an equivalent basis) the regulations made under the Act or any portion thereof as in effect on the date hereof • The Lieutenant Governor in Council, a minister of the Crown, an official of the government or a board or commission all the members of which are appointed by the Lieutenant Governor in Council makes or amends any "regulation" (as defined in Part III of the Legislation Act, 2006) as in effect on the date hereof • The implementation of a change in the organization or structure of the IESO or Ontario's electricity market undertaken at the initiative of the Province or an entity controlled by the Province • A court of competent jurisdiction determines that all or a portion of the Act or the regulations made under the Act, is ultra vires or invalid in a way that adversely affects the ability of the Trust to adversely affects the ability of the Financing Entity to receive amounts in respect of its Investment Interest so that it can pay Approved Obligations when due and payable~~pay its obligations~~ in each case that adversely affects the ability of the Trust to pay its obligations when due and payable, taking into account any funds available in reserve accounts, any credit enhancement available and any reasonably expected potential effect of a true-up amount

Slide 23	Key Terms – Moratorium Period (bullet 3)	Consider replacing "(until May 1, 2021)" to "(until April 30, 2021) and up to July 31, 2021" [see section 21(4) of FHPA and section 9.1 of O. Reg. 206/17]. Consider removing "which will be offered, as regulatory assets, for transfer to the Trust in a subsequent period", since this is not expressly provided in the MTSA [also see section 16 of O. Reg. 206/17].
Slide 28	Third bullet	Consider replacing "fit under the fair allocation curve" with "ensure reasonable alignment with fair allocation amounts". [see paragraph 1 of section 21(3) of FHPA].
Slide 31	Chart	The post-FHP bill should not follow the status quo trajectory between 2025 and 2028 – bill should be above status quo including rebates as the FAA is positive for those years (Fair Adjustment would be used to offset the majority of the CEA but the amount of the FAA would remain).
Slide 33	Acceleration Bullet	Should this reference cap in regulation? [MOF LSB]
Slide 36	First bullet	Consider removing references to "statutorily mandated". Remittances from IESO are mandated under s. 9.1 of O. Reg. 206/17.
Slide 36	Guarantor	Should this refer to a limited guarantee to make relationship clear? [MOF LSB]
Slide 38	Political Risk	Consider reviewing the characterization of the risk to align with the risk as described in the Agreements.
Slide 38	Third bullet	Please note reference to ability to disconnect service for non-payment by LDCs isn't fully reflective of the requirement, consider revising to be more reflective of the actual mechanism.

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Ontario Rebate for Electricity Consumers Act, 2016

EXPLANATORY NOTE

The *Ontario Rebate for Electricity Consumers Act, 2016* authorizes financial assistance for certain Ontario electricity consumers in respect of electricity costs. Consumers receive the financial assistance by means of an 8 per cent reduction in the amount payable before tax under their electricity accounts for each billing period. The amount of financial assistance for a billing period is required to be shown on invoices issued to consumers for the billing period.

The Act authorizes the making of regulations to reimburse electricity vendors for amounts credited to consumers' accounts under the Act. The Act authorizes the making of various other regulations, including to set out other ways for consumers to receive financial assistance, to alter the default rules in the Act for how to calculate the financial assistance and to limit or alter who is entitled to financial assistance. The Act amends the *Ontario Clean Energy Benefit Act, 2010* to authorize the making of regulations under that Act in respect of cut-off dates for financial assistance under that Act.

The Act contains administrative and enforcement provisions, including requirements relating to record keeping by electricity vendors and authorization for inspections and inquiries with respect to amounts of financial assistance provided and reimbursements to electricity vendors. The *Ontario Energy Board Act, 1998* is amended so that provisions of the *Ontario Rebate for Electricity Consumers Act, 2016* and regulations made under it will be enforceable by the Ontario Energy Board.

An Act in respect of the cost of electricity

CONTENTS

2.	Base invoice amount
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16.	Repeal
17.	Ontario Clean Energy Benefit Act, 2010
6.1	Cut-off dates for financial assistance, reimbursement
18.	Ontario Energy Board Act, 1998
19.	Commencement
20.	Short title

Her Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

Definitions

1. (1) In this Act,

"billing period" means a period of time that is wholly or partly in the eligible period and for which an invoice in respect of an eligible account is issued; ("période de facturation")

"Board" means the Ontario Energy Board; ("Commission")

"consumer" means a person,

(a) to whom an invoice is issued in respect of an eligible account for a billing period, or

(b) who is prescribed by the regulations or who satisfies such conditions as may be prescribed by the regulations; ("consommateur")

"distribution system" has the same meaning as in section 3 of the *Ontario Energy Board Act, 1998*; ("réseau de distribution")

"electricity vendor" means the IESO, a licensed distributor, a licensed retailer or a person prescribed by the regulations; ("vendeur d'électricité")

"eligible account" means, in respect of a consumer, an account with an electricity vendor, or with a person prescribed by the regulations, for the provision of electricity in Ontario if,

(a) the consumer has a demand for electricity of 50 kilowatts or less, or such other amount of demand for electricity as may be prescribed,

(b) the consumer annually uses not more than 250,000 kilowatt hours of electricity, or such other amount of use of electricity as may be prescribed,

(c) the consumer,

(i) carries on a business that is a farming business for the purposes of the *Farm Registration and Farm Organizations Funding Act, 1993*, and

(ii) holds a valid registration number assigned under that Act or the consumer's obligation to file a farming business registration form was waived pursuant to an order made under subsection 22 (6) of that Act,

(d) the account relates to,

(i) a dwelling,

(ii) a property, within the meaning of the *Condominium Act, 1998*,

(iii) a residential complex, within the meaning of subsection 2 (1) of the *Residential Tenancies Act, 2006*, without regard to section 5 of that Act, or

(iv) a property that includes one or more housing units and that is owned or leased by a co-operative within the meaning of the *Co-operative Corporations Act*, or

(e) the consumer or the account satisfies such conditions as may be prescribed by the regulations; ("compte admissible")

"eligible period" means the period commencing January 1, 2017; ("période admissible")

"IESO" has the same meaning as in subsection 2 (1) of the *Electricity Act, 1998*; ("SIERE")

"licensed distributor" means a person licensed under Part V of the *Ontario Energy Board Act, 1998* to own or operate a distribution system; ("distributeur titulaire d'un permis")

"licensed retailer" means a person who is licensed under Part V of the *Ontario Energy Board Act, 1998* to retail electricity; ("détaillant titulaire d'un permis")

"market rules" means the market rules made under section 32 of the *Electricity Act, 1998*; (règles du marché")

"regulations" means the regulations made under this Act; ("règlement")

"retail" has the same meaning as in section 56 of the *Ontario Energy Board Act, 1998*; ("vendre au détail")

"unit sub-metering" means activities that are unit sub-metering for the purposes of the *Ontario Energy Board Act, 1998*; ("activités liées aux compteurs divisionnaires d'unité")

"unit sub-meter provider" means a person who is licensed to engage in unit sub-metering by the Board under Part V of the *Ontario Energy Board Act, 1998*. ("fournisseur de compteurs divisionnaires d'unité")

Eligible account

(2) For the purposes of this Act, if a consumer would, but for this subsection, have an eligible account with a licensed retailer and with a licensed distributor, but only one of them issues an invoice to the consumer for a billing period for all amounts payable by the consumer to them for the billing period,

(a) the consumer is deemed to have an eligible account for the billing period only with whichever of them issues the invoice for the billing period; and

(b) the licensed distributor or licensed retailer who issues the invoice for the billing period is deemed to be imposing all charges and other amounts payable under the invoice for the purposes of determining the amount of financial assistance to which the consumer is entitled.

Base invoice amount

2. (1) For the purposes of this Act, the base invoice amount for a billing period in respect of an eligible account is determined in accordance with the regulations and, unless otherwise prescribed by the regulations, includes, if the invoice is issued by a licensed distributor or a licensed retailer, amounts in respect of,

(a) the commodity price of the electricity;

(b) the rates and charges set out in the applicable rate order issued by the Board under subsection 78 (3) of the *Ontario Energy Board Act, 1998* that are not required under subsection (2) or the regulations to be excluded;

(c) any adjustment on the invoice required pursuant to section 25.33 of the *Electricity Act, 1998*;

(d) any debt retirement charge payable by the consumer under subsection 85 (4) of the *Electricity Act, 1998*; and

(e) anything else prescribed by the regulations.

Exclusions

(2) Except as otherwise prescribed by the regulations, the base invoice amount for a billing period must exclude,

(a) the balance of any amounts carried forward from previous invoices;

(b) all penalties and interest;

(c) any charges that do not relate to the consumption of electricity;

(d) the fixed monthly service charge payable by a generation facility, within the meaning of section 56 of the *Ontario Energy Board Act, 1998*, that is classified as “microFIT” in a rate order issued by the Board under subsection 78 (3) of that Act;

(e) charges labelled as “specific service charges” or “retail service charges” in the applicable rate order issued by the Board under subsection 78 (3) of the *Ontario Energy Board Act, 1998*;

(f) the amount of any harmonized sales tax payable under Part IX of the *Excise Tax Act* (Canada); and

(g) any other amounts prescribed by the regulations.

Financial assistance

3. (1) A consumer who has an eligible account during a billing period is entitled to receive financial assistance in respect of the cost of electricity during the billing period in an amount equal to 8 per cent of the base invoice amount for the billing period in respect of the eligible account.

Exception

(2) Despite subsection (1), a consumer is not entitled to receive financial assistance under this Act,

(a) in respect of electricity consumed in generation station service;

(b) in such circumstances as may be prescribed by the regulations; or

(c) if the regulations prescribe that the consumer is not entitled to receive financial assistance.

Payment of financial assistance

(3) The financial assistance to which a consumer is entitled under this Act shall be paid,

(a) by crediting the consumer's eligible account; or

(b) in such other manner as may be prescribed by the regulations.

Money appropriated by the Legislature

(4) The money required for the purposes of this Act shall be paid out of the money appropriated for those purposes by the Legislature.

No assignment of financial assistance

(5) An assignment by a consumer to another person or entity, including a licensed retailer, of the consumer's entitlement to any payment, rebate or credit does not apply to any financial assistance to which the consumer is entitled under this Act, whether the assignment was made before or after this subsection comes into force.

Same

(6) Subsection (7) applies if,

(a) a consumer provides to another person electricity in respect of which the consumer is entitled to financial assistance under subsection (1); and

(b) an invoice for the electricity is issued to the person by the consumer, by an agent of the consumer or by a unit sub-meter provider providing unit sub-metering for the consumer.

Requirement to pass on benefit

(7) Despite subsections (1) and (5), the consumer and every unit sub-meter provider providing unit sub-metering for the consumer shall ensure that each person who is liable to pay an invoice referred to in clause (6) (b) receives a credit, determined in the manner prescribed by the regulations, in respect of the financial assistance to which the consumer is entitled with respect to electricity the consumer provides to the person.

Invoices

4. (1) Unless otherwise prescribed by the regulations, every electricity vendor who issues an invoice for a billing period to a consumer in respect of an eligible account shall clearly show on the invoice,

(a) a credit equal to the amount of the financial assistance provided to the consumer for the billing period; and

(b) the net amount of the invoice after the credit.

Invoice issued by consumer, etc.

(2) An invoice that is issued by a consumer, an agent of a consumer, a unit sub-meter provider or another person prescribed by the regulations must be in the form required by the regulations and contain or be accompanied by the information required by the regulations.

Transitional

(3) If, for technical or operational reasons, an electricity vendor or a person referred to in subsection (2) is unable to adapt its invoices to comply with this Act and the regulations by the time it issues its first invoice for electricity consumed in 2017 in respect of an eligible account,

(a) the electricity vendor or person shall adapt its invoices as soon as possible and, in any event, no later than July 1, 2017; and

(b) consumers continue to be entitled to receive the financial assistance to which they are entitled under this Act and may receive it as a lump sum credit on the invoice for the first billing period after the invoices have been adapted or by such other means as may be prescribed by the regulations.

Financial arrangements
Purposes
5. (1) The purposes of this section are,

(a) to ensure that financial assistance under this Act and the regulations is provided to those persons entitled to receive it; and

(b) to authorize the making of financial arrangements to reimburse electricity vendors, and other persons prescribed by the regulations, for financial assistance provided under this Act and the regulations.

Regulations
(2) The Lieutenant Governor in Council may, for the purpose of this section, make regulations,

(a) authorizing the Minister of Energy to make payments to persons who are electricity vendors or persons prescribed by the regulations in respect of the amount of financial assistance to which consumers are entitled under this Act and prescribing methods for determining the amounts payable;

(b) requiring the IESO to make payments to licensed distributors, or to persons prescribed by the regulations, in respect of financial assistance provided under this Act or the regulations and prescribing methods for determining the amounts payable;

(c) requiring a licensed distributor to make payments to other licensed distributors or licensed retailers in respect of financial assistance under this Act and prescribing methods for determining the amounts payable;

(d) requiring a person who is an electricity vendor or a person prescribed by the regulations to make payments in respect of financial assistance to consumers or other persons entitled to receive the financial assistance and prescribing the circumstances in which such payments are to be made and methods for determining the amounts payable;

(e) authorizing the Minister of Energy to make payments of financial assistance directly to consumers and prescribing the circumstances when such payments are to be made;

(f) requiring a person who is an electricity vendor or a person prescribed by the regulations to make payments to the Minister of Finance in respect of amounts received by them or in circumstances prescribed by the regulations and prescribing methods for determining the amounts payable;

(g) authorizing payments referred to in clause (a), (b), (c), (d) or (f) to be made by way of set-offs and credits and prescribing conditions entitling or requiring amounts to be set off or credited;

(h) governing the payments required under clause (a), (b), (c), (d) or (f), including methods for paying the amounts payable and when the payments must be made, and governing methods for determining amounts to be set off or credited, including the times within which amounts must or may be set off or credited;

(i) for the purposes of this Act and the regulations, requiring persons who are electricity vendors or persons prescribed by the regulations to provide information to the Minister of Energy, the Minister of Finance, the IESO, the Board or licensed distributors and prescribing the information to be provided and when it must be provided;

(j) governing the establishment and maintenance of variance accounts required for the purposes of this Act.

Conflict with market rules and codes

(3) In the event of a conflict, a regulation made under subsection (2) prevails over the market rules to the extent of the conflict and prevails over a code issued by the Board under section 70.1 of the *Ontario Energy Board Act, 1998* to the extent of the conflict.

Provision of information

(4) A person may do anything required by a regulation made under clause (2) (i) despite any agreement to the contrary and, if the person does so,

(a) the person is not liable for doing the thing in contravention of any agreement to the contrary; and

(b) doing the thing is deemed not to constitute a breach, termination, repudiation or frustration of any contract.

Limitation periods for financial assistance, reimbursement

Financial assistance

6. (1) Despite any past entitlement of a consumer to financial assistance under this Act, no financial assistance is payable to a consumer after a limitation period prescribed by the regulations in respect of the consumer, other than in such circumstances as may be prescribed by the regulations.

Reimbursement

(2) Despite any requirement under this Act to reimburse an electricity vendor or other person for financial assistance provided by them to consumers, no amounts for reimbursement are payable to the electricity vendor or other person after a limitation period prescribed by the regulations in respect of the electricity vendor or other person, where such reimbursement is based on a consumer's past entitlement not yet paid or reimbursed under this Act, other than in such circumstances as may be prescribed by the regulations.

Definition

7. In sections 8, 9 and 10,

"Minister" means the Minister of Finance or such other member of the Executive Council to whom the administration of those sections is assigned under the *Executive Council Act*.

Records

8. (1) Every electricity vendor and every person prescribed by the regulations shall keep at a location in Ontario such records as are necessary to determine and verify compliance with this Act and the regulations and any records required by the regulations to be kept.

Electronic records

(2) If a person keeps records in an electronic form, the person shall ensure that, from the time the records are first made and for as long as they are required to be retained,

(a) they remain complete and unaltered, apart from any changes or additions made in the normal course of communication, storage or display; and

(b) they are capable of being printed and of being produced in electronically readable format for inspection, examination or audit.

Retention of records

(3) Records required to be kept under subsection (1) shall not be destroyed unless authorization has been given in writing by the Minister.

Offence

(4) Every person who fails to keep records in accordance with this section is guilty of an offence and, on conviction, is liable to a fine of not less than $50 and not more than $5,000.

Inspections and inquiries

9. (1) The Minister may appoint one or more inspectors who are authorized to exercise any of the powers and perform any of the duties of a person authorized by the Minister under subsection 31 (1) of the *Retail Sales Tax Act* for any purpose related to the administration and enforcement of this Act.

Same

(2) Subsections 31 (1), (2), (2.1) and (2.2) of the *Retail Sales Tax Act* apply, with necessary modifications, with respect to the administration and enforcement of this Act.

Admission of evidence

(3) The Minister, or a person authorized by the Minister, may, for any purpose related to the administration of this Act or the regulations, reproduce from original data stored electronically any information previously submitted as required under this Act or the regulations in any form by any person, and the electronically reproduced document shall be admissible in evidence and shall have the same probative force as the original document would have had if it had been proved in the ordinary way.

Inquiry

(4) The Minister may, for any purpose related to the administration of this Act or the regulations, authorize any person, whether or not the person is an employee in the Ministry of the Minister, to make such inquiry as the Minister considers necessary with reference to anything relating to the administration of this Act or the regulations.

Copies

(5) If a book, record or other document is examined or produced under this section, the person by whom it is examined or to whom it is produced or any officer of the Ministry may make, or cause to be made, one or more copies of it, and a document purporting to be certified by the person to be a copy made pursuant to this section is admissible in evidence and has the same probative force as the original document would have if proved in the ordinary way.

Compliance

(6) No person shall hinder or molest or interfere with any person doing anything that the person is authorized by this section to do or prevent or attempt to prevent any person doing any such thing.

Same

(7) Despite any other law to the contrary, every person shall, unless the person is unable to do so, do everything he, she or it is required by this section to do.

Administration of oaths

(8) Declarations or affidavits in connection with statements of information submitted pursuant to this section may be taken before any person having authority to administer an oath or before any person specially authorized for that purpose by the Lieutenant Governor in Council, but any person so specially authorized shall not charge any fee for doing so.

Application of Public Inquiries Act, 2009

(9) Section 33 of the *Public Inquiries Act, 2009* applies to an inquiry under subsection (4).

Recovery of overpayments

Definitions

10. (1) In this section,

"inspector" means an inspector referred to in section 9; ("inspecteur")

"overpayment" means an amount received by a person in excess of any reimbursement to which the person is entitled under this Act and the regulations. ("trop-perçu")

Notice of overpayment

(2) If it appears to an inspector that a person has received an overpayment, the Minister may send a written notice to the person advising the person of the following:

1. That the person has received an overpayment.

2. The amount of the overpayment and how it was calculated.

3. The required steps to be taken by the person with respect to the overpayment.

4. The date, not more than six months after the date of the notice, by which these steps must be completed.

5. That the Minister has the authority to assess the person for the amount of the overpayment, plus interest, if the person fails to complete the required steps by the specified date.

Calculation of amount of overpayment

(3) For the purposes of this section, an inspector shall calculate an overpayment or the outstanding balance of an overpayment in the manner and form and using such procedures as the Minister considers adequate and expedient.

Assessment

(4) If a person fails to complete the steps required in a notice under subsection (2) within the time specified in the notice, and any additional time requested by the person and permitted by the Minister, the Minister may assess or reassess the amount of the overpayment, or the outstanding balance of the overpayment, based on the inspector's calculation described in subsection (3).

Penalty

(5) If the Minister makes an assessment or reassessment under subsection (4) and is satisfied that the person's non-compliance with the required steps in the notice was attributable to neglect, carelessness, wilful default or fraud, the Minister may assess a penalty against the person equal to the outstanding balance of the overpayment when the penalty is assessed.

Time limit

(6) The Minister shall not assess or reassess under subsection (4) more than 48 months after the end of the month in which the person received the overpayment.

Exception, where misrepresentation, etc.

(7) Subsection (6) does not apply if the Minister establishes that the person has made a misrepresentation that is attributable to neglect, carelessness or wilful default or has committed any fraud in supplying information under this Act or the regulations or in omitting to disclose information.

Deemed debt retirement charge

(8) An amount assessed or reassessed by the Minister under this section is deemed for the purposes of the administration and enforcement of this Act to be a debt retirement charge, as defined in subsection 85 (1) of the *Electricity Act, 1998*, that has been collected, on the last day of the month in which the person received the overpayment, by the person as a collector appointed under subsection 85.3 (1) of the *Electricity Act, 1998* and, for those purposes,

(a) sections 85.11, 85.12, 85.14, 85.17 and 85.30 of that Act apply with necessary modifications;

(b) in the application of sections 85.11 and 85.14 of that Act and without limiting the generality of clause (a), references to the Financial Corporation are read as references to the Minister of Finance and references to the Minister of Finance are read as references to the Minister as defined in section 7 of this Act;

(c) the regulations made under that Act for the purposes of calculating the rate or rates of interest payable under section 85.11 of that Act and the manner of calculating the amount of interest apply with necessary modifications; and

(d) sections 23 and 36, subsections 37 (1), (1.1) and (2) and sections 37.1, 38 and 39 of the *Retail Sales Tax Act* apply with necessary modifications.

Disposition of repaid amounts

(9) If all or part of an overpayment is repaid to the Minister of Finance, the Minister of Energy shall make such financial arrangements and payments as may be necessary to ensure that any electricity vendor or other person entitled to all or part of the overpayment receives the appropriate amount.

Confidentiality

11. (1) Except as authorized by this section, no person employed by the Government of Ontario shall,

(a) knowingly communicate or knowingly allow to be communicated to any person any information obtained by or on behalf of the Minister of Energy or the Minister of Finance for the purposes of this Act; or

(b) knowingly allow any person to inspect or to have access to any record or thing obtained by or on behalf of either Minister for the purposes of this Act.

Testimony

(2) No person employed by the Government of Ontario shall be required, in connection with any legal proceedings,

(a) to give evidence relating to any information obtained by or on behalf of the Minister of Energy or Minister of Finance for the purposes of this Act; or

(b) to produce any record or thing obtained by or on behalf of either Minister for the purposes of this Act.

Exception

(3) Subsections (1) and (2) do not apply in respect of,

(a) criminal proceedings under any Act of the Parliament of Canada;

(b) proceedings in respect of the trial of any person for an offence under an Act of the Legislature; or

(c) proceedings relating to the administration or enforcement of this Act or Part V.1 or VI of the *Electricity Act, 1998*.

Communication

(4) A person employed by the Government of Ontario may, in the course of duties in connection with the administration or enforcement of this Act,

(a) communicate or allow to be communicated to another person employed by the Government of Ontario in the administration or enforcement of any law or to an employee of the Board information obtained by or on behalf of either Minister for the purposes of this Act; and

(b) allow another person employed by the Government of Ontario in the administration or enforcement of any law or an employee of the Board to inspect or have access to any record or thing obtained by or on behalf of either Minister for the purposes of this Act.

Reciprocal communication

(5) A person who receives information or obtains access to any record or thing under subsection (4) has a duty to communicate or furnish to that Minister on a reciprocal basis any information, record or thing obtained by the person that affects the administration or enforcement of this Act.

Use of information

(6) Any information, record or thing communicated or furnished under this section may be used only for the administration or enforcement of this Act or an Act that is administered or enforced by the person receiving the information, record or thing.

Same

(7) The Minister of Finance may permit information or a copy of any record or thing obtained by or on behalf of the Minister of Finance for the purposes of this Act to be given to,

(a) the person from whom the information, record or thing was obtained;

(b) any person by whom an amount is payable or has been paid under this Act; or

(c) the legal representative of a person mentioned in clause (a) or (b) or the agent of the person authorized in writing in that behalf.

Information

(8) The Minister of Finance may permit information or a copy of any record or thing obtained by or on behalf of the Minister of Finance for the purposes of this Act to be given to any person employed by any government if,

(a) the information, record or thing obtained by that government for the purpose of any Act that imposes a tax or duty are communicated or furnished on a reciprocal basis to the Minister; and

(b) the information, record or thing will not be used for any purpose other than the administration or enforcement of a law that provides for the imposition of a tax or duty.

Offence

(9) Every person who contravenes any provision of this section is guilty of an offence and on conviction is liable to a fine of not more than $2,000.

Offences

False statements, etc., and fraud

12. (1) Every person who engages in any of the following acts or omissions is guilty of an offence:

1. Making, participating in, assenting to or acquiescing in the making of a false or deceptive statement in any document or answer required or submitted under this Act or the regulations.

2. Destroying, altering, mutilating, hiding or otherwise disposing of information or records of an electricity vendor or other person, for the purpose of evading compliance with this Act or the regulations.

3. Making, assenting to or acquiescing in the making of a false or deceptive entry of a material particular in a record of an electricity vendor or other person required to maintain records for the purposes of this Act.

4. Omitting to make or assenting to or acquiescing in the omission of an entry of a material particular in a record of an electricity vendor or other person required to maintain records for the purposes of this Act.

5. Wilfully evading or attempting to evade, in any manner, compliance with an obligation under this Act or the regulations.

Penalty upon conviction

(2) A person convicted of an offence under subsection (1) is liable to either or both of the following penalties in addition to any other penalty assessed under this Act:

1. A fine in an amount that is not less than $1,000 and not more than $10,000.

2. Imprisonment for a term of not more than two years.

General offence

(3) Every person who contravenes, by any act or omission, a requirement imposed under this Act is guilty of an offence and, on conviction, is liable, where no other penalty is provided for the offence, to a fine of not less than $50 and not more than $5,000.

Limitation period

13. A proceeding to prosecute an offence under this Act must be commenced within six years after the date on which the matter of the offence arose.

Payment of fines

14. Fines imposed on conviction of an offence under this Act are payable to the Minister of Finance on behalf of the Crown in right of Ontario.

Regulations

15. (1) The Lieutenant Governor in Council may make regulations,

(a) subject to the Minister of Energy's powers under subsection (2), prescribing anything required to be or referred to in this Act as being prescribed by the regulations;

(b) defining any word or expression used in this Act that is not already expressly defined in this Act;

(c) requiring any person to take such action or refrain from taking such action as may be necessary for the purposes of or in connection with any regulation made under this Act;

(d) governing information that must or may be provided to consumers concerning this Act and eligibility for financial assistance under it;

(e) governing the determination of the base invoice amount for a billing period with respect to a class of electricity vendors or a class of consumers;

(f) prescribing a method of paying or crediting to a consumer an amount of financial assistance to which the consumer is entitled under this Act and the circumstances in which the method applies;

(g) requiring a unit sub-meter provider to provide financial assistance in respect of the cost of electricity and prescribing,

(i) the circumstances in which the financial assistance is to be provided,

(ii) the person or class of persons entitled to receive the financial assistance,

(iii) the method of determining the amount of the financial assistance to be provided,

(iv) the manner for paying or otherwise providing the financial assistance;

(h) setting out one or more limitation periods for the purposes of subsection 6 (1) or (2), and governing the circumstances in which that subsection does not apply;

(i) respecting records to be kept by electricity vendors or by persons prescribed by the regulations;

(j) providing for matters which, in the opinion of the Lieutenant Governor in Council, are necessary or desirable to facilitate the implementation of this Act and the regulations.

Regulations, Minister of Energy

(2) The Minister of Energy may make regulations,

(a) prescribing information that must or may be included on invoices issued to consumers or that must or may accompany invoices issued to consumers or payments of financial assistance under this Act;

(b) governing the presentation of financial assistance under this Act on invoices issued to consumers;

(c) prescribing anything required to be or referred to in section 4 as being prescribed by the regulations.

Retroactive regulations

(3) A regulation made under this Act is, if it so provides, effective with reference to a period before it is filed.

Subdelegation

(4) The Lieutenant Governor in Council may, by regulation, delegate to the Minister of Energy the power to make some or all of the regulations under subsection (1).

Ontario Clean Energy Benefit Act, 2010

16. (1) The *Ontario Clean Energy Benefit Act, 2010* is amended by adding the following section:

Cut-off dates for financial assistance, reimbursement
Financial assistance

6.1 (1) Despite any entitlement of consumers to financial assistance under this Act, no financial assistance is payable to a consumer after the date prescribed by the regulations in respect of the consumer, other than in such circumstances as may be prescribed by the regulations.

Reimbursement

(2) Despite any requirement under this Act to reimburse an electricity vendor or other person for financial assistance provided by them to consumers, no amounts for reimbursement are payable to the electricity vendor or other person after the date prescribed by the regulations in respect of the electricity vendor or other person, other than in such circumstances as may be prescribed by the regulations.

(2) Subsection 15 (1) of the Act is amended by adding the following clause:

(i.1) setting out one or more dates for the purposes of subsection 6.1 (1) or (2), and governing the circumstances in which that subsection does not apply;

Ontario Energy Board Act, 1998

17. (1) The definition of "enforceable provision" in section 3 of the *Ontario Energy Board Act, 1998* is amended by adding the following clause:

(c.2) a provision of the *Ontario Rebate for Electricity Consumers Act, 2016* or the regulations made under it,

(2) Section 70 of the Act is amended by adding the following subsection:

Deemed condition of licences, unit sub-meter provider, *Ontario Rebate for Electricity Consumers Act, 2016*

(2.3) Every licence issued to a unit sub-meter provider is deemed to contain the condition that the unit sub-meter provider is required to comply with the *Ontario Rebate for Electricity Consumers Act, 2016* and the regulations made under it.

Commencement

18. Subject to subsection (2), this Act comes into force on the later of January 1, 2017 and the day it receives Royal Assent.

Short title

19. The short title of this Act is the *Ontario Rebate for Electricity Consumers Act, 2016*.

HST on Electricity

Issue:

The Ministry of Energy is proposing to remove the provincial portion of the Harmonized Sales Tax (HST) from electricity bills as a means to mitigate increasing electricity prices.

Key Messages:

- The HST applies to electricity, as it does to most goods and services.
  - Businesses are generally able to claim input tax credits for the HST they pay.
- Ontario already provides tax relief to low- to moderate-income individuals and families for the sales tax they pay through the Ontario Sales Tax Credit and the Ontario Energy and Property Tax Credit (OEPTC).
- Additional assistance with the cost of energy is provided to:
  - low- to moderate-income families and single people living in Northern Ontario, through the Northern Ontario Energy Credit; and
  - lower-income households through government-provided housing benefits, and the Ontario Energy Board's Ontario Electricity Support Program, which provides direct energy bill assistance.
- Targeted HST relief could be provided to those most in need by enhancing amounts provided through existing programs.
  - The cost of enhancing existing amounts would be lower than the cost of removing the provincial portion of the HST from all residential electricity bills.
  - This is because they are targeted to people with higher needs whereas a broad exemption would benefit all ratepayers, including higher-income people.
  - The amount of sales tax relief that some low-income Ontarians get through existing tax credits may exceed the amount of provincial sales tax they pay.
- Broad, comprehensive relief could be provided by way of a federally-administered point-of-sale rebate or a provincially-administered rebate (similar to the former Ontario Clean Energy Benefit).
  - The provincial amount of HST attributable to residential electricity bills is around $735 million for the 2017-18 fiscal year.
- Broad, comprehensive relief from the HST on electricity could undermine the government's efforts to encourage energy conservation and could lead to higher greenhouse gas emissions.
  - Removing the HST from electricity would ~~subsidize electricity consumption,~~ likely lead~~ing~~ to higher consumption than would otherwise be the case.
  - The Environmental Commissioner of Ontario criticized the former Ontario Clean Energy Benefit (OCEB), describing it as a perverse incentive that rewarded increased electricity consumption.
    - HST relief on electricity would have similar effects to the OCEB.
  - Natural gas (a source of greenhouse gas emissions) accounted for 9% of Ontario's electricity generation in 2014 and 2015.

Commented [GH1]: All or residential?

Commented [JK2]: The first part does not appear accurate.

Commented [JK3]: Is this factchecked?

        - This figure is expected to grow when nuclear units are taken offline in the coming years (e.g., for refurbishment).[1]
    - Ontario's Long-Term Energy Plan, released in 2013, projected that greenhouse gas emissions from Ontario's electricity sector would increase over the next two decades.
- As noted in Budget 2016, Ontario's forthcoming cap and trade program will not result in increased electricity costs. In fact, residential users will experience a modest benefit of up to $2 per month, on average.
    - Cap and trade proceeds will be used to offset the cost of greenhouse gas pollution reduction initiatives that are currently funded by residential and industrial consumers through their bills.

HST Overview:

- The HST is a federally imposed and administered tax with a combined rate of 13 per cent. The federal portion is five per cent. In Ontario, the provincial portion is eight per cent.
    - In general, the HST is consistent with the GST and follows the same rules and tax base.
    - The federal government is responsible for deciding how a particular item is taxed under GST/HST.
    - Electricity has been taxed under GST since its inception.

- Based on the most recent Ministry of Finance estimate, the provincial portion of the HST on electricity is about $735 million in 2017-18.
    - Ontario's Climate Change Action Plan contains a number of initiatives that would lead to increased electricity consumption (for example, through greater use of electric vehicles and electric heating). The tax expenditure for an HST rebate would thus be expected to grow substantially in coming years.

Commented [SK4]: Please confirm this is for residential electricity bills.

- Businesses are generally able to claim input tax credits (ITCs) for the HST they pay.
    - The HST is a value-added tax that applies at each stage of the supply chain. Businesses that make taxable sales collect HST from their customers and remit it to the Canada Revenue Agency. At the same time, they claim ITCs to recover the HST they pay on their business inputs, typically by netting the amount off the HST they remit.

Relief currently provided:

- To help low- to moderate-income individuals and families with the sales tax they pay on home energy costs, Ontario provides tax relief through the energy component of the Ontario Energy and Property Tax Credit (OEPTC).

[1] Natural gas accounted for about 28% of Ontario's installed energy capacity in June 2016, according to the IESO.

    - For the 2016 benefit year, eligible families and single people could get up to $224 to help with these costs, totaling about $445 million in tax relief.

- The Ontario Sales Tax Credit (OSTC) was enhanced in 2010 to help low- to moderate-income individuals and families with the overall sales taxes they pay.
    - For the 2016 benefit year, eligible individuals can get up to $291 plus additional amounts of up to $291 for their spouse and each of their dependent children under age 19.
    - The 2016 OSTC is estimated to provide about $1.3 billion in tax relief.

- In 2010, the Northern Ontario Energy Credit (NOEC) was introduced specifically to help Ontarians living in the North with the higher energy costs they face due to their more severe winters and heavier reliance on more expensive home heating fuels.
    - Eligible single people can get up to $146 and eligible families can get up to $224 for the 2016 benefit year, and the credit is estimated to provide about $25 million in assistance.

- As part of its commitment to reduce electricity cost pressures, the government has also introduced rate mitigation measures, including:
    - ~~Removing~~ Removed the Debt Retirement Charge (DRC) cost from residential users' electricity bills, beginning on January 1, 2016, saving a typical residential ratepayer about $70 each year.
    - The Ontario Electricity Support Program (OESP), implemented by the Ontario Energy Board (OEB). This program provides a monthly assistance of $30 to $50 directly on the electricity bills of eligible low-income families, as of January 1, 2016. People whose electricity bill are typically high because of high electricity usage to power medical devices can get monthly assistance of $45 to $75.

Additional Electricity Price Mitigation:

- Additional sales or electricity cost relief could be provided through one or a combination of Ontario's existing programs meant to help low- to moderate-income people with such costs (e.g., enhance the OEPTC energy component, NOEC).

- Ontario could work with the OEB to target additional sales tax relief to people who qualify for the OESP.
    - This would require a formal arrangement under which Ontario would remit funds to be delivered to eligible people by the OEB and electricity distribution companies.

- A new home energy benefit could be introduced, but such a program would:
    - Add complexity to the tax and benefit system due to overlaps with existing programs;

- Likely be considered income support and, therefore, be taxable to the recipient; and
- May result in Ontario incurring higher administration costs.

Federally Administered Point of Sale Rebate:

- Under the HST agreement with the federal government, Ontario can designate items as eligible for a point-of-sale (POS) rebate of the eight per cent provincial portion of the HST in certain circumstances and within a certain envelope of rebate "room."
  - For a POS rebate on residential electricity to be in place by Jan 1, 2017, for example, Ontario would need to give the federal government notice of the change before September 3, 2016.
  - See appendix for additional criteria.

- At $735 million and growing, a POS rebate on electricity would likely exceed the amount of rebate room available (estimated at around $500 million).
  - The exact amount of room available would need to be agreed upon by the governments of Canada and Ontario.

- Ontario could attempt to negotiate an amendment to the HST agreement with the federal government to permit the province to designate electricity as eligible for a POS rebate.
  - The federal government may not agree. It could, for example, object to a special amendment on the grounds that subsidizing electricity consumption is not compatible with federal and provincial governments' commitments to work to reduce greenhouse gas emissions.

Provincially Administered Rebate (similar to the Ontario Clean Energy Benefit):

- The HST agreement has no limitations on provincially-administered point-of-sale rebate equivalents since the CRA would play no role in administering them.

- In the case of providing an 8% reduction on a residential customer's electricity bill, it is likely that the structure and administration could be very similar to that of the now discontinued Ontario Clean Energy Benefit (OCEB).
  - The OCEB ended on December 31, 2015. Other measures to help mitigate electricity costs have been implemented, in addition to the tax credits implemented at the time of transition to HST.

- A provincially-administered rebate could likely be shown on customers' bills, similar to the way the OCEB was shown.
  - Confirmation of this would require consultation with the Ministry of Energy.

- It would be difficult to limit the rebate only to electricity used residentially.

- The OCEB applied to small business and farms, as well as to residential customers and therefore did not face the same challenges.
- It is probable that some businesses that claim input tax credits ITCs or benefit from Public Service Body rebates could be given the electricity rebate (e.g. home offices, apartment buildings, long term care homes, farms), resulting in "double dipping."
- Ontario cannot introduce new restrictions to a business's ability to claim an ITC.

- Ontario does not currently provide any provincially-administered HST rebates.
  - Providing a rebate for the provincial portion of the HST on electricity could set a difficult precedent.
    - Ontario is often asked to provide HST relief for supplies such as gasoline and home heating fuels.

Commented [SK5]: Suggest moving / copying this to the Key Messages section. This seems to be an important consideration for any provincial HST rebate and ought to be brought up earlier.

Eric Gent / Svetlana Diomin
Tax Policy Division
Ministry of Finance
August 9, 2016

Appendix: Federally-Administered Point-of-Sale Rebate

Comprehensive Integrated Tax Coordination Agreement (CITCA)
The CITCA is the HST agreement between Canada and Ontario.

- The HST is established under federal legislation (the *Excise Tax Act*).
- The Canada Revenue Agency collects, administers and enforces the HST.
- The federal government is the policy lead on all HST matters. Ontario is bound by any federal tax base changes or rulings.
- Any change to the HST in Ontario requires, at a minimum, changes to federal regulations.

Under the CITCA, Ontario maintains flexibility in particular areas, including the ability to designate items or services as eligible for a POS rebate of the 8% provincial portion of the HST, subject to certain constraints:

- The cost of the new rebate must not exceed Ontario's POS "room" (the total value of POS rebates must not exceed 5% of the Goods and Services Tax base in Ontario).
- There must be Statistics Canada data (or a mutually agreed upon alternative data source) to determine the expenditure in the Province attributable to the item or service.
- The Canada Revenue Agency must be capable of administering the rebate.
- Business must be able to comply with the rebate.

Process to Create a New POS Rebate
If Ontario wishes to make a permitted change to the HST, the amendment process in CITCA must be followed, which would a minimum of four months, unless Canada and Ontario agree otherwise.

1. Ontario must give at least 120 days' notice of the proposed HST change to the federal government (effective date could be earlier or later if agreed to by the parties).
    - The effective date of the HST change must be January 1, April 1 or July 1. It may only be October 1 if mutually agreed.
2. Ontario must give 60 days' notice to the public of the proposed HST change (unless the federal government agrees otherwise).
3. After the public announcement, Ontario must obtain the approval of the provincial Legislature (e.g., by way of motion) to make the HST change (unless the federal government agrees otherwise).
4. Canada must amend Cabinet regulations to implement the HST change, and make transitional rules.
5. To implement a new point-of-sale rebate, the *Retail Sales Tax Act* and regulations must be amended.
6. The Minister of Finance of Ontario and the Minister of Finance of Canada must amend CITCA in writing.

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5. To implement a new point-of-sale rebate, the *Retail Sales Tax Act* and regulations must be amended.
6. The Minister of Finance of Ontario and the Minister of Finance of Canada must amend CITCA in writing.

Date	Ontario rebate for electricity consumers (8% provincial rebate) balancing amount
Jan-17	$31,992,580.05
Feb-17	$95,013,244.08
Mar-17	$83,187,907.15
Apr-17	$71,076,542.05
May-17	$72,432,710.89
Jun-17	$66,265,038.17
Jul-17	$66,793,141.00
Aug-17	$68,627,166.18
Sep-17	$59,244,469.20
Oct-17	$62,590,230.24
Nov-17	$57,354,991.68
Dec-17	$58,767,522.04
Jan-18	$77,613,791.68
Feb-18	$67,166,855.25
Mar-18	$63,614,917.06
Apr-18	$61,926,992.22
May-18	$60,272,292.64
Jun-18	$58,139,471.51
Jul-18	$68,061,551.33

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From: Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]
To: Risa Thau [Risa.Thau@ofina.on.ca]; Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]; George Sakura [George.Sakura@ofina.on.ca]; Kevin Hwang [Kevin.Hwang@ofina.on.ca]; Gavin He [Gavin.He@ofina.on.ca]
CC: Dade, Christine (ENERGY) [Christine.Dade@ontario.ca]; Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Mike Smith (ENERGY) [Mike.Smith@ontario.ca]; Tai An (ENERGY) [Tai.An@ontario.ca]; Lim, Ryan (ENERGY) [Ryan.Lim@ontario.ca]; Jose Yee (MEDTE/MRI) [Jose.Yee@ontario.ca]; Karen Clark (ENE) [Karen.Clark2@ontario.ca]; Barre, Amanda (ENERGY) [Amanda.Barre@ontario.ca]; Lita delaRea (ENERGY) [Lita.delaRea@ontario.ca]
Subject: July 2018 Social Program Payment
Date: Thursday, August 16, 2018 15:39:01
Attachment 1: July 2018 IESO Invoice.pdf
Attachment 2: OFHP IESO Settlement Statement July 2018.xlsx

Hello Risa,

Please find below the payment information for the attached invoice for the Fair Hydro Plan programs for the July 2018 claim period. Please let me know if you require any additional information to process these payments. OREC payment approval has been shared separately.

Program	Payment Amount	TP Line	IFIS Account String
On-Reserve First Nations Delivery Credit	$1,428,577.91	TP_On-Reserved First Nations Delivery Credit	029-290501-0000-981653-577210
Distribution Rate Protection	$15,687,096.18	TP_Distribution Rate Protection	029-290501-0000-981655-577210
Rural and Remote Rate Protection	$19,872,279.47	TP_Rural or Remote Rate Protection Program	029-290501-0000-981658-577210
Ontario Electricity Support Program	$13,846,440.45	TP_Ontario Electricity Support Program	029-290501-0000-981654-577210
Total	**$50,834,394.01**		

Thank you,

Robert Hunter
Senior Policy Advisor

Ministry of Energy, Northern Development and Mines: Distribution and Agency Policy Branch
77 Grenville Street, 6th Floor
Toronto, ON M7A 2C1
Phone: (416) 325-6899
Email: robert.a.hunter@ontario.ca

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002
Issue / Re-Issue Date: 15-AUG-2018

MINISTRY OF ENERGY
Hearst Block 4th Flr, 900 Bay St.
Toronto, ON M7A 2E1
Canada

Invoice: PI00023763
Invoice Date: 15-AUG-2018
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**

Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-JUL-2018 To 31-JUL-2018

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$1,428,577.91
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$15,687,096.18
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$68,061,551.33
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$19,872,279.47
2470	MOE - ONTARIO ELECTRICITY SUPPORT PROGRAM BALANCING AMOUNT	$13,846,440.45
Invoice Total:	$CAD	118,895,945.34

Payment Due Date 17-AUG-2018

This invoice also constitutes a debit/credit note for GST/HST purposes

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
HYDRO ONE NETWORKS INC.	MP	1753	31-Jul-18	0	0	-19872279.47	ONZN		P	102007		0	0	MOE - Rural and Remote Settlement Debit, current month balancing amount
Total						**(19,872,279.47)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Jul-18	0	0	69.18	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
ATIKOKAN HYDRO INC.	MP	756	31-Jul-18	0	0	-253.77	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Jul-18	0	0	-2343.91	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Jul-18	0	0	-851.65	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ATIKOKAN HYDRO INC.	MP	756	31-Jul-18	0	0	-14247.27	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
INNPOWER CORPORATION	MP	756	31-Jul-18	0	0	-99845.85	ONZN		P	104299		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	31-Jul-18	0	0	-106457.26	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
SIOUX LOOKOUT HYDRO INC.	MP	756	31-Jul-18	0	0	-8498.94	ONZN		P	113601		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
LAKELAND POWER DISTRIBUTION LTD.	MP	756	31-Jul-18	0	0	-7272.9	ONZN		P	113624		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	31-Jul-18	0	0	6439.37	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
HYDRO ONE NETWORKS INC.	MP	756	31-Jul-18	0	0	-15453833.18	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
Total						**(15,687,096.18)**								

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Name														
HYDRO ONE NETWORKS INC.	MP	755	31-Jul-18	0	0	-591.44	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
HYDRO ONE NETWORKS INC.	MP	755	31-Jul-18	0	0	-49690.34	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
ALGOMA POWER INC.	MP	755	31-Jul-18	0	0	-862.65	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
CANADIAN NIAGARA POWER INC.	MP	755	31-Jul-18	0	0	-10898.48	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
HYDRO ONE NETWORKS INC.	MP	755	31-Jul-18	0	0	-1224109.52	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
PUC DISTRIBUTION INC.	MP	755	31-Jul-18	0	0	-8748.7	ONZN		P	102316		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
ATTAWAPISKAT POWER CORPORATION	MP	755	31-Jul-18	0	0	-20105.67	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	755	31-Jul-18	0	0	-25187.53	ONZN		P	104271		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
FORT ALBANY POWER CORPORATION	MP	755	31-Jul-18	0	0	-11111.42	ONZN		P	105832		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
KASHECHEWAN POWER CORPORATION	MP	755	31-Jul-18	0	0	-11667.62	ONZN		P	105833		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
CANADIAN NIAGARA POWER INC.	MP	755	31-Jul-18	0	0	-12934.15	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
ALGOMA POWER INC.	MP	755	31-Jul-18	0	0	-40750.91	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	755	31-Jul-18	0	0	-11919.48	ONZN		P	102741		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
Total						**(1,428,577.91)**								

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	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
IESO Balancing Amount	MP	2470	31-Jul-18	0	0	-13846440.45	ONZN		P			0	0	OESP Balancing Amount for 2018/07
Total						**(13,846,440.45)**								

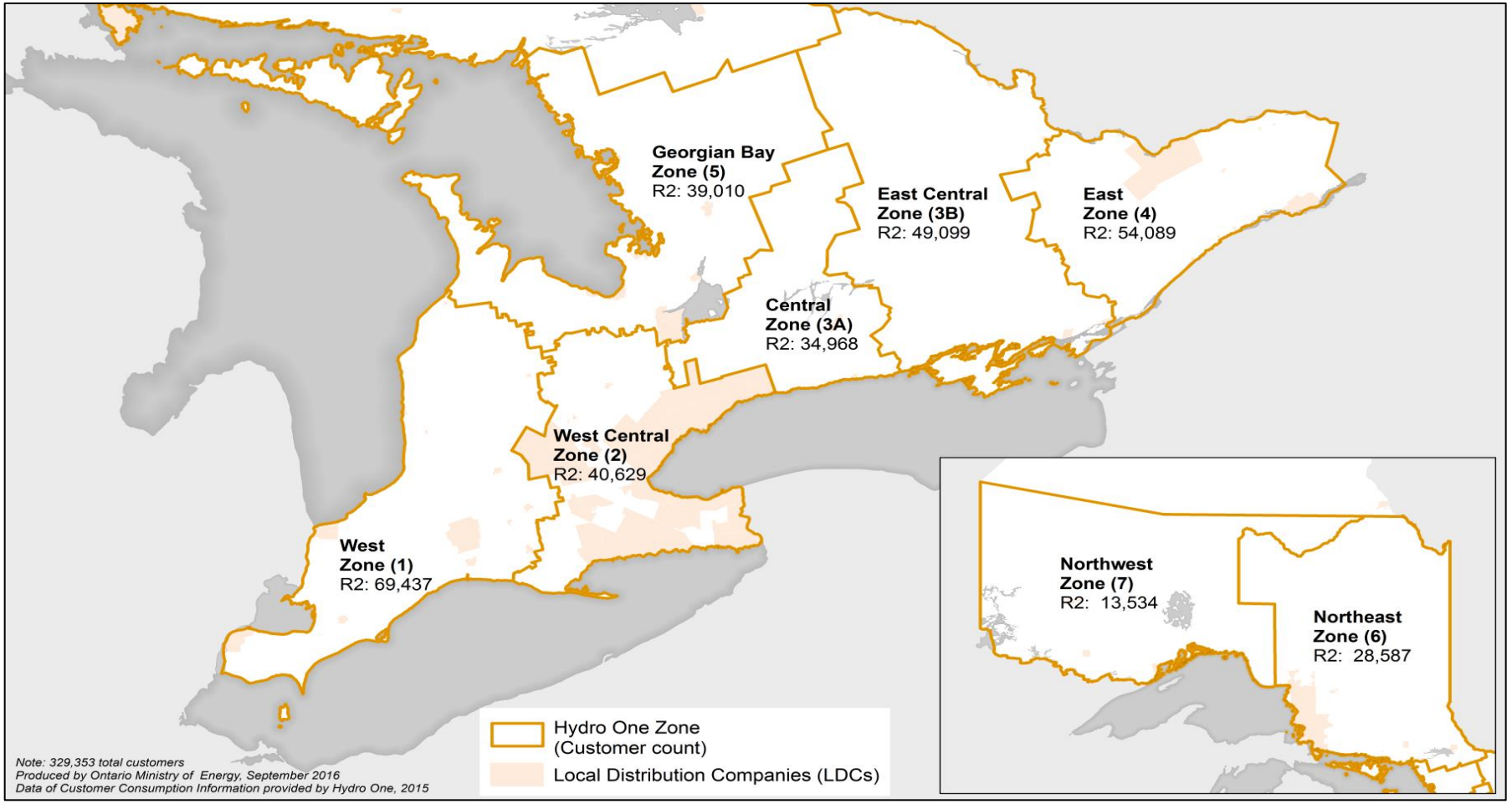
Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	
113601	SIOUX LOOKOUT HYDRO INC.	

Participation Name
Distributor-Metered Market Participant
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Rural or Remote Rate Protection (RRRP) Update – R2 Customers by Region



Ministry of Energy PRRT Review

December 2, 2016

PRRT Review

- The Ministry of Energy's Program Review, Renewal, & Transformation (PRRT) submission was made available to CEFD on November 29, 2016.

- Items related to CEFD, the electricity market, OEFC, and the broader OFA included:
  - Greenhouse Gas Reduction Account – Cap & Trade and Electric Vehicles
  - Net Metering
  - Strategic Asset Management – Hydro One
  - Ontario Rebate for Electricity Consumers
  - Natural Gas Access Loan Program

GGRA – Cap & Trade

- For 2017, the first year of the Program, forecast of economy-wide GHG emissions is 172.5 Mt
- For 2020, the last year of the first compliance period, forecast economy-wide GHG emissions is 173.5Mt.
- Province's baseline for 2017 is 82% of the economy-wide GHG emissions, which is 141.3Mt, which becomes the cap. Ratio (82%) remains the same for 2020.
  - Remainder 18% is "non-energy emissions, i.e., waste and agriculture etc.)
- The goal of the Cap and Trade Program is to reduce emissions by 18.7Mt, from the projected 142.3Mt (173.5Mt*82%) to 126.86Mt (154.7Mt*82%).

- *Note: The Ministry of Energy estimates approximately 3.3Mt of GHG emissions reductions by 2020 associated with "planned/committed" electricity sector initiatives that were developed following the 2013 Long-Term Energy Plan (LTEP).*

GGRA – Cap & Trade (*cont.*)

- Ontario's cap and trade program will result in an increase in electricity prices. Recycling cap and trade auction proceeds to lower the cost of electricity would offset electricity consumers' contributions to investments/initiatives which reduce greenhouse gas (GHG) emissions (e.g., non-emitting generation, conservation programs, etc.).
- Due to the long-term nature (i.e., typically 20 years) of electricity generation contracts and conservation programs, the associated costs are ongoing and are expected to be about $7 billion dollars annually during the first cap and trade compliance period (2017-2020).
-

	2016-17	2017-18	2018-19	2019-20	2020-21	Total
Expected Proceeds	0.478	1.8	1.8	1.8	1.8	7.678

https://news.ontario.ca/ene/en/2016/11/how-cap-and-trade-works-1.html

- In the Climate Change Action Plan, the Greenhouse Gas Reduction Account (GGRA) funding is estimated to range from $5.96 billion to $8.3 billion.

- **Note: The PRRT states that the proceeds are expected to be "$7 billion annually", whereas this should be over the 4-year compliance period.**

GGRA – Cap & Trade (*cont.*)

- Cap and Trade Proceeds Recycling to Keep Electricity Prices Affordable Initiative
- Total CCAP funding requirement: $1,107 million (between 2017-18 to 2020-21)

- For FY 2017-18, the Ministry of Energy is requesting an Operating Expense line item of $249 million.

- **Question:** Is this funding going to be offset by CCAP proceeds?

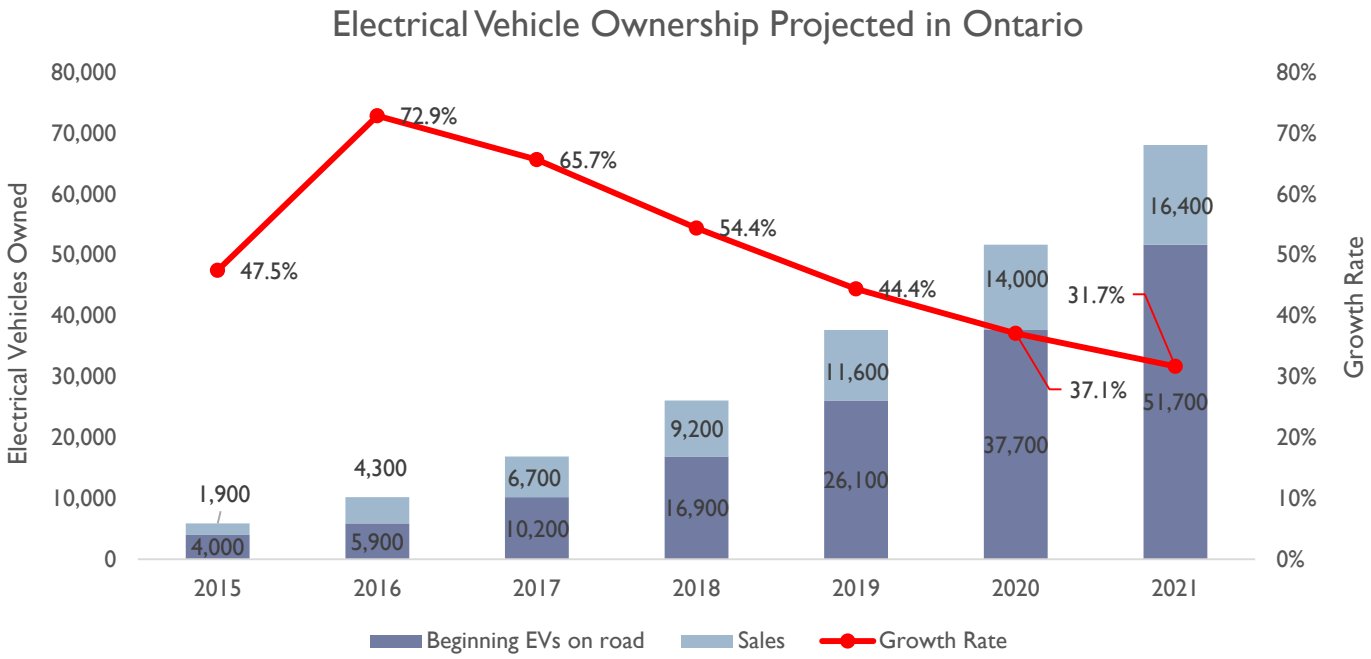
GGRA – Cap & Trade (*cont.*)

- **Question:** The PRRT states that no mechanism has been determined for how the proceeds will be recycled to industrials/commercial customers. As per the latest deck (September 12, 2016), the mechanism is redirecting the proceeds volumetrically to Class B and Class A.

- **Comment:** *While the impact of cap and trade would be added to electricity bills as of January 2017, the offsetting effect of proceeds recycling may not occur immediately depending on implementation and potential alignment with the first auction expected in March 2017.*

GGRA – Electric Vehicles

- The proposed 4-year free overnight charging program is expected to spur growth in Electrical Vehicle (EV) sales.
- Growth assumptions used by Ministry of Energy for in line with FleetCarma forecast which has Ontario experiencing a 77% increase in EV sales in Q3 2016 and 63% for the last 9 months.
- This is a new program announced in the Climate Change Action Plan (CCAP), which was released on June 8, 2016 by the Ministry of Environment and Climate Change (MOECC).



Strategic Asset Management

- 2.5% of Hydro One outstanding common shares (approximately 15M) is planned to be sold from the Province to First Nations in Ontario in 2017-2018.
- The cost of sale will be $18 per share which is above the book value but below the estimated per share market price of $27.00 at the time of issuance.
- The estimated $9 per share difference between the market price and the selling price will results in a $135M conferred benefit, a non-cash expense.
- $45M ($15M per year, for three years) will also be provided by the Province towards a First Nations investment vehicle, provided that First Nation participation reaches at least 80%.
- The purchase would be financed with a 25-year loan from the Province of approximately $268M.
- The Ministry of Energy is also asking for additional funding in case it decides to complete the Broadening Hydro One Ownership Plan in 2017-18.
  - Requesting an additional $70M, on top of a prior amount of $70M, for estimated costs associated with the share offering of approximately 30% of the outstanding shares to bring the Province's ownership close to 40$.
  - Requesting 5 permanent FTEs (currently temporary) to support future Hydro One transactions at a cost of $0.93M annually.

Strategic Asset Management

- The Ministry of Energy's KPI 5 is related to Proceeds from Hydro One
  - Target of $9B in gross proceeds and other revenue benefits by 2018-2019; $4B for infrastructure and $5B to reduce debt.
  - The non-cash benefit of $2.4B (reflecting the DTB) is included in this amount.
  - Current value of proceeds is estimated at $7.3B
  - KPI Assessment: feasible to obtain by 2018-2019.
- **Comment:** *Unclear what is being lumped in to the category of "gross proceeds and other revenue benefits". From IPO, $1.8B from share sales ($1B towards debt, $0.8B towards infrastructure) and $2.4 DTB towards infrastructure. From secondary offering, $2B from share sales ($1.3B towards debt, $0.6B infrastructure). Including Pre-IPO H1 Dividend of $0.8B, roughly $7B total. Can reduce ownership to 40% by selling approximately 180M shares for $4B in proceeds in 2017-2018. From this viewpoint, $9B is easily obtainable.*

Electricity Pricing – Program Note 6

- The PRRT submission provides an update to the Ministry's cost estimates and appropriation requirements for the out-years.

Millions ($)	2017-18	2018-19	2019-20	2020-21
Preliminary Allocation	1,006.00	1,004.00	1,004.00	1,004.00
Updated Forecast	**1,100.00**	**1,100.00**	**1,200.00**	**1,200.00**

Question: Should we update our forecasts with this? i.e., OPG and H1 Risks etc., chart?

Electricity Pricing – Program Note 6

- The Ministry is asking for the following Operating Expenses:

Millions ($)	2017-18	2018-19	2019-20	2020-21
Expenditure Increase – OREC	94	96	196	196
Expenditure Increase – Salary and Wages	0.61	0.61	0.61	0.61
Expenditure Increase – Program Delivery	2.5	2.5	2.5	2.5

Electricity Pricing – Program Note 6

The PRRT submission states the following on the role of the OFA related to the delivery of OREC:

- *"The ministry's partners in this initiative – the IESO, OFA and the Ministry of Finance – are not providing program administration support. Rather, the IESO and OFA are only making payments on behalf of the Ministry of Energy, and the Ministry of Finance is tasked with auditing entities post payment."*

Further goes on to say, as one of Energy's roles:

- *"Liaise with IESO, OEB and LDCs to come up with accurate fiscal/allocation forecasting."*

Question: Does the OFA have a role to play in the fiscal forecasting?

Natural Gas Access Loan Program

- Ministry of Infrastructure is asking for $5.6M in 2017-18 to support program expenses for this program.
- MOI is noting a risk of $10.8M to the 2017-18 Natural Gas Interest Incentive Transfer Payment which represents the province's cost of borrowing to make interest-free loans (for a total interest cost of $16.2M).
  - The actual interest cost to the province is contingent upon a number of factors that will be known at the time that loans are made, including:
    - The amount and term of approved loans
    - The repayment profile of approved loans
    - Applicable market interest rates to the province's cost of borrowing, based on consultation with the OFA
  - The OFA has advised that interest expense for the Loan Program is subject to prevailing borrowing rates in the market at the time that loans are made. This means the interest incentive transfer payment line is subject to fluctuations depending on when loans are made and repaid.
  - To reflect this additional risk, MOI modelled an additional scenario, using a higher interest rate (3.072% from Q2 in 2016), leading to an additional $2.9M risk to the 2017-18 and $1.6M to the 2018-19 Natural Gas Interest Incentive Transfer Payment line.
  - As loans are approved under the program and actual loan disbursement schedules are developed, MOI will work with the OFA to refine applicable interest rates and report back through subsequent in-year submissions and PRRT

Green Investment Fund Annual Report Back

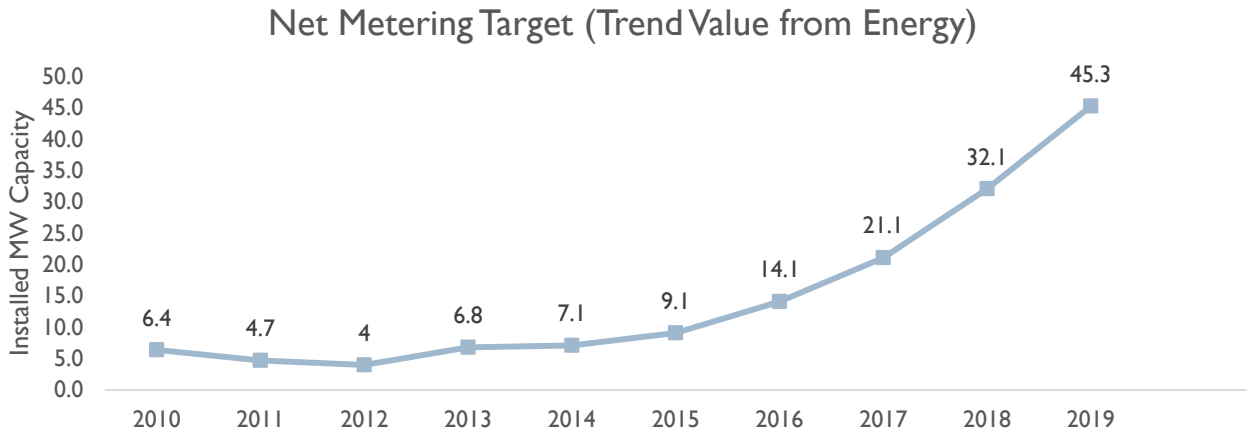
- Ontario's Green Investment Fund (GIF) was announced in the 2015 Fall Economic Statement. GIF is a down payment on the province's cap and trade program that commits $325 million to programs that will fight climate change, grown the economy and create jobs.
  - GIF programs will: help homeowners use less energy; support more electric vehicle charging stations across Ontario; retrofit social housing developments; help businesses reduce emissions; help fund local environmental organizations; and help provide Indigenous communities with training, tools and infrastructure to address climate change.

Key Performance Indicators

- The Ministry of Energy has stated 5 KPIs:
  - Targeting 45 MW of net metered capacity expected by 2019; current value is 9 MW.
  - Increase energy efficiency and conservation from 9.9 TWh in 2014 to 30 THw by 2032.
  - Targeting to lower the 2013 LTEP forecast for average consumer electricity costs to below $188/MWh.
  - Reduce CO2 emissions from 9.2Mt in FY 2013-2014 TO 8.03Mt in FY2031-32 to achieve GHG emission reduction targets; current annual emissions forecasted to be 7Mt with 2013 LTEP forecasting 5Mt per year going forward from 2020.
  - Proceeds raised from sale of Hydro One target value of $9B, with the current value at $7.2B. Targeting to achieve

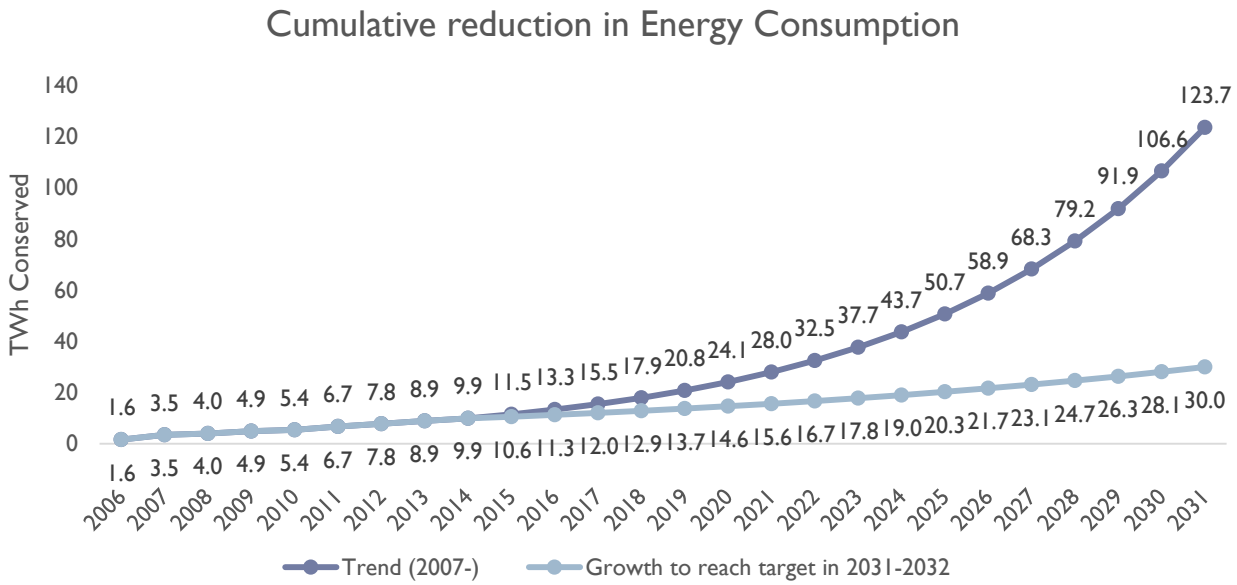
KPI 1 - Net Metering

- Net Metering
  - Target of 45.3 MW of installed net metering capacity by 2019.
  - Net Metering expected to increase as the 500kW maximum output capacity restriction is proposed to be removed, allowing larger participants to be eligible for the program.
  - Unclear if cumulative or annual goal.
  - KPI target is obtainable as 18-32 MW expected to be installed in 2017-2018.
  - **Question:** Does KPI target align with the changes in regulations?



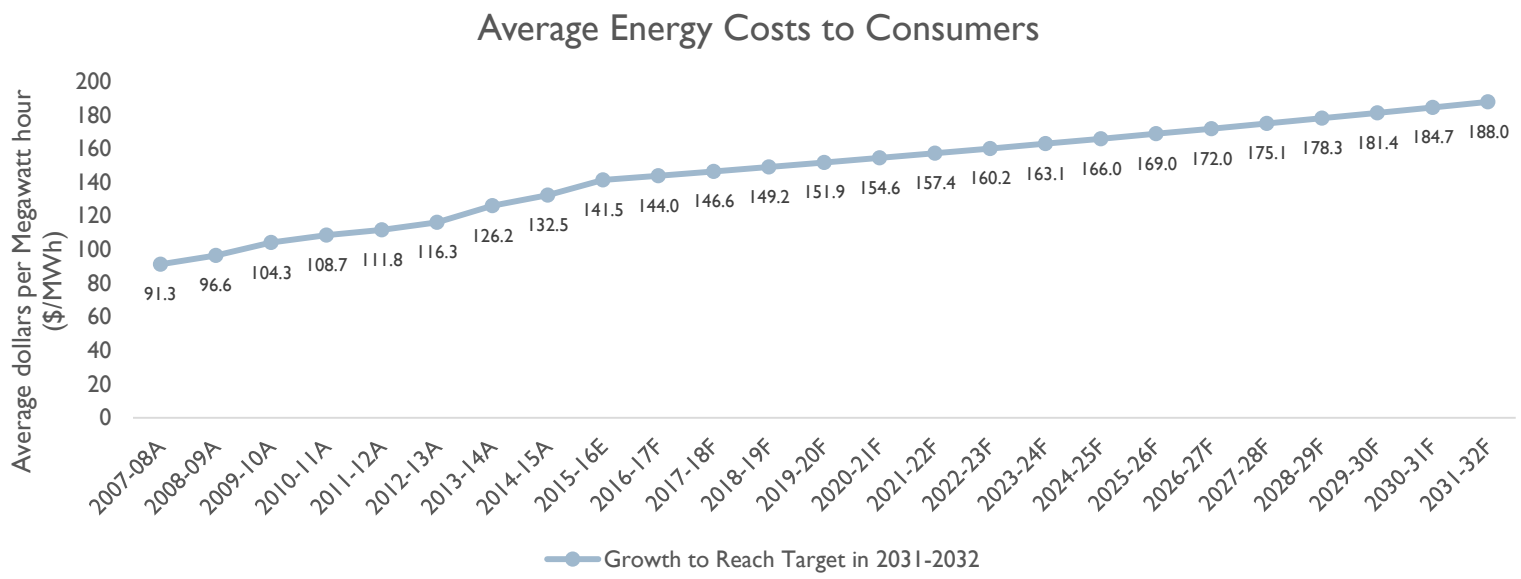
KPI – 2 Conservation

- CAGR of 16% since 2007
- Growth of 6.74% needed to obtain 2031-2032 target of 30 cumulative TWh conserved.



KPI 3 - Electricity Pricing

- KPI 3 – Electricity Prices
  - CAGR of last 10 years (2007-08 to 2015-16) is 5.62% for $/MWh for consumer energy costs.
  - KPI Target is $188.0 per MWh by 2031-32, which assumes a CAGR of 1.79% for the remaining years, slightly above the 1.6% average inflation rate over the last 10 years from 2007 to 2015.
  - The IESO Ontario Planning outlook expects electricity costs to remain relatively stable in 2016 dollars, decreasing on average over 0.3% per year in 2016 dollars (but increasing 0.4% in the first 10 years) so this KPI is align with that forecast.
  - **Question:** How does the 8% HST rebate factor into the calculation of energy costs, if at all?



NIER Offset Calculations

NIER Rebate Amount:	20	$/MWh
Industrial Electricity Prices - Ontario North:	6.35	c/kWh
Industrial Electricity Prices - Ontario North:	63.5	$/MWh
HST Rebate	8%	

	2015-16		Implied Co
	Rebate Cap	Rebate Paid	Capped
Weyerhaeuser Company Limited*	$ 1,169,060.00	$ 1,169,060.00	58,453
Flakeboard Company Limited	$ 1,960,900.00	$ 1,960,900.00	98,045
Glencore (Xstrata)	$ 20,000,000.00	$ 20,000,000.00	1,000,000
Tembec*	$ 13,793,620.00	$ 12,219,907.70	689,681
Essar Steel Algoma Inc.	$ 12,158,420.00	$ 11,165,050.70	607,921
Domtar Inc.*	$ 2,827,760.00	$ 2,337,581.80	141,388
Goldcorp Inc.	$ 11,163,580.00	$ 11,163,580.00	558,179
Vale Canada Limited	$ 20,000,000.00	$ 20,000,000.00	1,000,000
Ainsworth Lumber Co. Ltd.	$ 1,061,120.00	$ 1,017,288.86	53,056
Kirkland Lake Gold Inc.	$ 1,291,940.00	$ 1,291,940.00	64,597
Williams Operating Corporation	$ 4,099,200.00	$ 4,021,555.56	204,960
DeBeers Canada Inc.	$ 2,195,520.00	$ 2,195,520.00	109,776
Resolute FP*	$ 12,400,000.00	$ 7,476,928.90	620,000
North American Palladium	$ 3,177,260.00	$ 3,177,260.00	158,863
Georgia Pacific	$ 1,427,360.00	$ 1,427,360.00	71,368
St Mary's Paper*	$ -	$ -	-
AV Terrace Bay Inc.	$ 4,027,735.00	$ 3,861,075.18	201,387
Alamos Gold Inc.	$ 3,957,960.00	$ 3,957,960.00	197,898
TOTAL	$ 116,711,435.00	$ 108,442,968.70	5,835,572

Source: Ontario Energy Report - Q1 2016

Source: Ontario Energy Report - Q1 2016

nsumption (MWh)	Potential Offset Amount	
Actual	Capped	Actual
58,453	$ 390,466.04	$ 390,466.04
98,045	$ 654,940.60	$ 654,940.60
1,000,000	$ 6,680,000.00	$ 6,680,000.00
610,995	$ 4,607,069.08	$ 4,081,449.17
558,253	$ 4,060,912.28	$ 3,729,126.93
116,879	$ 944,471.84	$ 780,752.32
558,179	$ 3,728,635.72	$ 3,728,635.72
1,000,000	$ 6,680,000.00	$ 6,680,000.00
50,864	$ 354,414.08	$ 339,774.48
64,597	$ 431,507.96	$ 431,507.96
201,078	$ 1,369,132.80	$ 1,343,199.56
109,776	$ 733,303.68	$ 733,303.68
373,846	$ 4,141,600.00	$ 2,497,294.25
158,863	$ 1,061,204.84	$ 1,061,204.84
71,368	$ 476,738.24	$ 476,738.24
-	$ -	$ -
193,054	$ 1,345,263.49	$ 1,289,599.11
197,898	$ 1,321,958.64	$ 1,321,958.64
5,422,148	**$ 38,981,619.29**	**$ 36,219,951.55**

	2010-11*		2011-12		2012-13		2013-14		2014-15		2015-16		GRAND TOTAL	
Company	**Rebate Cap**	**Rebate Paid**	**Rebate Cap**	**Rebate Paid**	**Rebate Cap**	**Rebate Paid**	**Rebate Cap**	**Rebate Paid**	**Rebate Cap**	**Rebate Paid**	**Rebate Cap**	**Rebate Paid**	**Aggregate Rebate Cap**	**Aggregate Rebate Paid**
Weyerhaeuser Company Limited*	2,290,455.00	1,200,209.58	2,290,455.00	1,169,065.32	2,290,455.00	1,281,937.82	$ 1,169,060.00	$ 1,169,060.00	$ 1,169,060.00	$ 1,169,060.00	$ 1,169,060.00	$ 1,169,060.00	**10,378,545.00**	**7,158,392.72**
Flakeboard Company Limited	2,254,161.00	1,913,504.60	2,254,161.00	1,960,902.96	2,254,161.00	1,960,889.52	$ 1,960,900.00	$ 1,960,900.00	$ 1,960,900.00	$ 1,960,900.00	$ 1,960,900.00	$ 1,960,900.00	**12,645,183.00**	**11,717,997.08**
Glencore (Xstrata)	20,000,000.00	20,000,000.00	20,000,000.00	20,000,000.00	20,000,000.00	20,000,000.00	$ 20,000,000.00	$ 20,000,000.00	$ 20,000,000.00	$ 20,000,000.00	$ 20,000,000.00	$ 20,000,000.00	**120,000,000.00**	**120,000,000.00**
Tembec*	16,675,230.00	7,975,915.29	16,675,230.00	13,793,620.08	16,675,230.00	13,702,549.32	$ 13,793,620.00	$ 13,218,638.98	$ 13,793,620.00	$ 12,654,500.12	$ 13,793,620.00	$ 12,219,907.70	**91,406,550.00**	**73,565,131.49**
Essar Steel Algoma Inc.	18,768,138.00	11,532,007.84	18,768,138.00	12,158,416.60	18,768,138.00	12,509,986.34	$ 12,158,420.00	$ 12,158,420.00	$ 12,158,420.00	$ 12,158,420.00	$ 12,158,420.00	$ 11,165,050.70	**92,779,674.00**	**71,682,301.48**
Domtar Inc.*	4,670,196.00	2,146,954.96	4,670,196.00	3,989,787.62	4,670,196.00	2,928,316.50	$ 3,307,760.00	$ 2,598,181.34	$ 2,827,760.00	$ 2,262,268.64	$ 2,827,760.00	$ 2,337,581.80	**22,973,868.00**	**16,263,090.86**
Goldcorp Inc.	11,637,885.00	10,956,334.14	11,637,885.00	11,163,581.74	11,637,885.00	11,637,885.00	$ 11,163,580.00	$ 11,163,580.00	$ 11,163,580.00	$ 11,163,580.00	$ 11,163,580.00	$ 11,163,580.00	**68,404,395.00**	**67,248,540.88**
Vale Canada Limited	20,000,000.00	20,000,000.00	20,000,000.00	20,000,000.00	20,000,000.00	20,000,000.00	$ 20,000,000.00	$ 20,000,000.00	$ 20,000,000.00	$ 20,000,000.00	$ 20,000,000.00	$ 20,000,000.00	**120,000,000.00**	**120,000,000.00**
Ainsworth Lumber Co. Ltd.	1,167,894.00	988,364.96	1,167,894.00	1,061,126.66	1,167,894.00	1,059,408.08	$ 1,061,120.00	$ 1,008,598.84	$ 1,061,120.00	$ 1,017,096.06	$ 1,061,120.00	$ 1,017,288.86	**6,687,042.00**	**6,151,883.46**
Kirkland Lake Gold Inc.	1,246,600.00	1,083,996.06	1,246,600.00	1,246,600.00	1,246,600.00	1,246,600.00	$ 1,291,940.00	$ 1,291,940.00	$ 1,291,940.00	$ 1,291,940.00	$ 1,291,940.00	$ 1,291,940.00	**7,615,620.00**	**7,453,016.06**
Williams Operating Corporation	5,410,702.00	4,037,728.90	5,410,702.00	4,099,190.28	5,410,702.00	4,104,751.84	$ 4,099,200.00	$ 4,099,200.00	$ 4,099,200.00	$ 3,797,808.44	$ 4,099,200.00	$ 4,021,555.56	**28,529,706.00**	**24,160,235.02**
DeBeers Canada Inc.	1,893,460.00	1,893,460.44	1,893,460.00	1,893,460.00	1,893,460.00	1,893,460.00	$ 2,195,520.00	$ 2,195,520.00	$ 2,195,520.00	$ 2,195,520.00	$ 2,195,520.00	$ 2,195,520.00	**12,266,940.00**	**12,266,940.44**
Resolute FP*	20,000,000.00	13,621,034.45	20,000,000.00	20,000,000.00	20,000,000.00	20,000,000.00	$ 18,371,220.00	$ 15,683,483.46	$ 18,371,220.00	$ 9,436,663.59	$ 12,400,000.00	$ 7,476,928.90	**109,142,440.00**	**86,218,110.40**
North American Palladium	5,408,496.00	1,860,980.20	5,408,496.00	3,177,251.64	5,408,496.00	3,528,658.32	$ 3,177,260.00	$ 3,177,260.00	$ 3,177,260.00	$ 3,177,260.00	$ 3,177,260.00	$ 3,177,260.00	**25,757,268.00**	**18,098,670.16**
Georgia Pacific	1,976,804.00	1,627,800.00	1,976,804.00	1,427,358.16	1,976,804.00	1,620,916.10	$ 1,427,360.00	$ 1,427,360.00	$ 1,427,360.00	$ 1,427,360.00	$ 1,427,360.00	$ 1,427,360.00	**10,212,492.00**	**8,958,154.26**
St Mary's Paper*	7,550,647.00	1,457,789.33	7,550,647.00		7,550,647.00	-							**22,651,941.00**	**1,457,789.33**
AV Terrace Bay Inc.	-	-	-	-	2,498,758.48	2,436,178.60	$ 4,027,735.00	$ 4,027,735.00	$ 4,027,735.00	$ 4,027,735.00	$ 4,027,735.00	$ 3,861,075.18	**14,581,963.48**	**14,352,723.78**
Alamos Gold Inc.											$ 3,957,960.00	$ 3,957,960.00	**3,957,960.00**	**3,957,960.00**
TOTAL	**140,950,668.00**	**102,296,080.75**	**140,950,668.00**	**117,140,361.06**	**143,449,426.48**	**119,911,537.44**	**$ 119,204,695.00**	**$ 115,179,877.62**	**$ 118,724,695.00**	**$ 107,740,111.85**	**$ 116,711,435.00**	**$ 108,442,968.70**	**779,991,587.48**	**670,710,937.42**

*** denotes participants in the Northern Pulp and Paper Electricity Transition Program (NPPETP) from April - October 2010 that received a NIER rebate top-up of $2/MWh**

Market Participants

Source: http://www.ieso.ca/Pages/Participate/Participants.aspx (Retrieved August 23, 2016, 1

IGNOR

Market Participant Name
437967 ONTARIO LIMITED
AIM HARROW WIND FARM LP
AIM SOP PHASE 1 LP
AINSWORTH ENGINEERED CANADA LIMITED PARTNERSHIP
AIR LIQUIDE CANADA INC.
AIR PRODUCTS CANADA LTD.
ALDERVILLE SOLAR LIMITED PARTNERSHIP
ALGOMA POWER INC.
ALGONQUIN POWER (NAGAGAMI) LIMITED PARTNERSHIP
ALLETE, INC. D/B/A MINNESOTA POWER
ANDRE GAUTHIER HOLDING INC.
ARCELORMITTAL DOFASCO INC.
ARIA LP
ASW STEEL INC.
ATIKOKAN HYDRO INC.
ATLANTIC PACKAGING PRODUCTS LTD.
ATLANTIC POWER LIMITED PARTNERSHIP
ATLANTIC POWER SERVICES CANADA LP
ATOMIC ENERGY OF CANADA LIMITED
ATTAWAPISKAT POWER CORPORATION
AURICO GOLD INC.
AURORA SMITHS FALLS 1 LIMITED PARTNERSHIP
AURORA SMITHS FALLS 2 LIMITED PARTNERSHIP
AURORA SMITHS FALLS 3 LIMITED PARTNERSHIP
AURORA SMITHS FALLS 4 LIMITED PARTNERSHIP
AURORA SMITHS FALLS 5 LIMITED PARTNERSHIP

AURORA SMITHS FALLS 6 LIMITED PARTNERSHIP
AURORA WAUBAUSHENE 3 LIMITED PARTNERSHIP
AURORA WAUBAUSHENE 4 LIMITED PARTNERSHIP
AV TERRACE BAY INC.
B2M LIMITED PARTNERSHIP
BARRICK GOLD CORPORATION - HOLT McDERMOTT MINE
BEAMLIGHT LP
BEAVER POWER CORPORATION
BECKWITH SOLAR INC.
BJ ENERGY LLC
BLACKOUT POWER TRADING INC
BLUEARTH ASSET MANAGEMENT INC.
BLUEWATER POWER DISTRIBUTION CORPORATION
BORNISH WIND, LP
BOWATER CANADIAN FOREST PRODUCTS INC.
BP CANADA ENERGY GROUP ULC
BP ENERGY COMPANY
BRANT COUNTY POWER INC.
BRANTFORD POWER INC.
BRANTGATE SOLAR FARM PARTNERSHIP
BRIGHTON BEACH POWER L.P.
BROCKVILLE SOLAR INC.
BROOKFIELD ENERGY MARKETING LP
BROOKFIELD POWER WIND PRINCE LP
BROOKFIELD RENEWABLE ENERGY MARKETING LP
BRUCE POWER INC.
BURLINGTON HYDRO INC.
BUTTCON ENERGY INC.
CAESARS ENTERTAINMENT WINDSOR LIMITED
CAMBRIDGE AND NORTH DUMFRIES HYDRO INC.

CANADIAN ENERGY PROTECTION CORP.
CANADIAN HYDRO DEVELOPERS, INC.
CANADIAN NIAGARA POWER INC.
CANADIAN RENEWABLE ENERGY CORPORATION
CANADIAN SOLAR 1 INC.
CANADIAN WOOD PRODUCTS - MONTREAL INC.
CAPITAL POWER (PDN) L.P.
CARDINAL POWER OF CANADA, L.P.
CARGILL ENERGY TRADING CANADA, INC.
CARMA BILLING SERVICES INC.
CARMEUSE LIME (SPRAGGE) LIMITED
CARMICHAEL LIMITED PARTNERSHIP
CASTLETON COMMODITIES MERCHANT TRADING L.P.
CAT LAKE POWER UTILITY LTD.
CEDAR POINT II LIMITED PARTNERSHIP
CENTRE LANE TRADING LIMITED
CENTRE WELLINGTON HYDRO LTD.
CHAPLEAU PUBLIC UTILITIES CORPORATION
CHI-WIIKWEDONG LP
CHUBU TT ENERGY MANAGEMENT INC
CITADEL FINANCIAL PRODUCTS S.A.R.L.
CITIGROUP ENERGY CANADA ULC
CITYLIGHTS LP
CLEAN POWER OPERATING TRUST
COCHRANE POWER CORPORATION
COLLUS POWERSTREAM CORP.
COMBER WIND LIMITED PARTNERSHIP
COMSATEC INC.

CONESTOGO WIND LP
CONSUMERS ENERGY COMPANY
COOPERATIVE HYDRO EMBRUN INC.
CORNWALL SOLAR INC.
CP ENERGY MARKETING L.P.
CP REGIONAL POWER SERVICES LIMITED PARTNERSHIP
CP RENEWABLE ENERGY (KINGSBRIDGE) LP
CPOWER, INC.
CSI GLENARM LP
CSI VAL CARON LP
CYTEC CANADA INC.
DB ENERGY TRADING LLC
DE BEERS CANADA INC.
DETOUR GOLD CORPORATION
DIRECT ENERGY BUSINESS SERVICES LIMITED
DIRECT ENERGY MARKETING INC.
DIRECT ENERGY MARKETING LIMITED
DISCOVERYLIGHT LP
DOMTAR INC.
DTE ENERGY TRADING INC.
DUFFERIN WIND POWER INC.
DYNASTY POWER INC.
DYNEGY POWER MARKETING, INC.
DYNO NOBEL NITROGEN INC.
E. L. K. ENERGY INC.
EACOM TIMBER CORPORATION
EAST DURHAM WIND, LP

EAST LAKE ST. CLAIR WIND LP

EAST WINDSOR COGENERATION LP

EDF EN CANADA SOLAR ARNPRIOR A LIMITED PARTNERSHIP

EDF EN CANADA SOLAR ARNPRIOR B LIMITED PARTNERSHIP

EDF TRADING NORTH AMERICA, LLC

EDWARDSBURGH SOLAR FARM PARTNERSHIP

EMERA ENERGY INCORPORATED

EMERALD ENERGY FROM WASTE INC.

ENBALA POWER NETWORKS INC.

ENBRIDGE PIPELINES INC.

ENBRIDGE RENEWABLE ENERGY INFRASTRUCTURE LP

ENERCAN ENERGY MANAGEMENT

ENERCARE CONNECTIONS INC.

ENERGY ADVANTAGE INC.

ENERGY CURTAILMENT SPECIALISTS, INC.

ENERGY OTTAWA INC.

ENERGY PROFILES LIMITED

ENERNOC LTD.

ENERSHIFT CORPORATION

ENERSOURCE HYDRO MISSISSAUGA INC.

ENTEGRUS POWERLINES INC.

ENVIDA COMMUNITY ENERGY INC.

ENWAVE ENERGY CORPORATION

ENWIN UTILITIES LTD.

ERIE SHORES WIND FARM LIMITED PARTNERSHIP

ERIE THAMES POWERLINES CORPORATION

ERIEAU WIND LP
ERNESTOWN WINDPARK LP
ESPANOLA REGIONAL HYDRO DISTRIBUTION CORPORATION
ESSAR STEEL ALGOMA INC.
ESSEX POWERLINES CORPORATION
ESSROC CANADA INC.
EXELON GENERATION COMPANY, LLC
FALCONBRIDGE LIMITED - GECO DIVISION
FALCONBRIDGE LIMITED - MATTABI DIVISION
FESTIVAL HYDRO INC.
FIERA AXIUM SOLAR ELMSLEY EAST LIMITED PARTNERSHIP
FIERA AXIUM SOLAR ELMSLEY WEST LIMITED PARTNERSHIP
FIERA AXIUM SOLAR ST. ISIDORE A LIMITED PARTNERSHIP
FIERA AXIUM SOLAR ST. ISIDORE B LIMITED PARTNERSHIP
FIERA SOLAR INGERSOLL 1 L.P.
FIERA SOLAR ORILLIA 3 L.P.
FIRST NICKEL INC.
FIVE NATIONS ENERGY INC
FLAKEBOARD COMPANY LIMITED
FNX MINING COMPANY INC.
FORD MOTOR COMPANY OF CANADA, LIMITED
FORD MOTOR COMPANY OF CANADA, LIMITED - ESSEX SITE
FORD MOTOR COMPANY OF CANADA, LIMITED - ST. THOMAS
FORD MOTOR COMPANY OF CANADA, LIMITED - WINDSOR
FORT ALBANY POWER CORPORATION
FORT FRANCES POWER CORPORATION
FORTISONTARIO INC.
FOTOLIGHT LP
FREEPOINT COMMODITIES LLC

FWRN LP
GBE POWER INC.
GDF SUEZ ENERGY MARKETING NA, INC.
GEMINI-SRF POWER CORPORATION
GENERAL MOTORS OF CANADA LTD
GENSET RESOURCE MANAGEMENT INC.
GEORGIA-PACIFIC CANADA, INC.
GERDAU AMERISTEEL CORPORATION
GERDAU AMERISTEEL CORPORATION -CAMBRIDGE
GLEN MILLER POWER, LIMITED PARTNERSHIP
GLENCORE CANADA CORPORATION
GOLDCORP CANADA LTD.
GOLDLIGHT LP
GOODLIGHT LP
GOREWAY STATION PARTNERSHIP
GOSFIELD WIND LIMITED PARTNERSHIP
GOSHEN WIND, LP
GRAND BEND WIND LIMITED PARTNERSHIP
GRAND RENEWABLE SOLAR LP
GRAND RENEWABLE WIND LP
GRAND VALLEY 1 LIMITED PARTNERSHIP
GRAND VALLEY 2 LIMITED PARTNERSHIP
GRAND VALLEY WIND FARMS INC.
GREAT BAY ENERGY VI, LLC
GREAT CIRCLE POWER CORPORATION
GREAT LAKES POWER LIMITED - GENERATION DIVISION
GREAT LAKES POWER TRANSMISSION LP
GREATER SUDBURY HYDRO INC.
GREATER TORONTO AIRPORTS AUTHORITY
GREENFIELD ENERGY CENTRE LP
GREENFIELD SOUTH POWER CORPORATION

GREENWICH WINDFARM, LP
GRIMSBY POWER INCORPORATED
GUELPH HYDRO ELECTRIC SYSTEMS INC.
H2O POWER LIMITED PARTNERSHIP
HALDIMAND COUNTY HYDRO INC.
HALTON HILLS HYDRO INC.
HAMILTON RENEWABLE POWER INC.
HAMILTON SOLAR FARM PARTNERSHIP
HAMILTON SPECIALTY BAR (2007) INC.
HEARST POWER DISTRIBUTION COMPANY LIMITED
HORIZON UTILITIES CORPORATION
HQ ENERGY MARKETING INC.
HURON WIND L.P.
HYDRO 2000 INC.
HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.
HYDRO ONE BRAMPTON NETWORKS INC.
HYDRO ONE NETWORKS INC.
HYDRO OTTAWA LIMITED
IBERDROLA RENEWABLES, INC.
IBM CANADA LTD.
ILLUMINATION LP
IMPERIAL OIL LIMITED
INDEX ENERGY MILLS ROAD CORPORATION
INGREDION CANADA INCORPORATED
INMET MINING CORPORATION
INNPOWER CORPORATION
INTERLAKE ACQUISITION CORPORATION LIMITED
INVISTA CANADA COMPANY
IROQUOIS FALLS POWER CORP.
IVACO ROLLING MILLS 2004 L.P.
JERICHO WIND, LP

JUNGBUNZLAUER CANADA INC.
JUST ENERGY NEW YORK CORP.
K2 WIND ONTARIO LIMITED PARTNERSHIP
KASHECHEWAN POWER CORPORATION
KENORA HYDRO ELECTRIC CORPORATION LTD.
KERWOOD WIND, LP
KIEWIT-ALARIE, A PARTNERSHIP
KINGSTON COGEN LIMITED PARTNERSHIP
KINGSTON HYDRO CORPORATION
KINGSTON SOLAR LP
KIRKLAND LAKE GOLD INC.
KIRKLAND LAKE POWER CORP
KITCHENER-WILMOT HYDRO INC.
KRUGER ENERGY CHATHAM LIMITED PARTNERSHIP
KRUGER ENERGY INC.
KRUGER ENERGY PORT ALMA LIMITED PARTNERSHIP
LAC DES ILES MINES LTD./NORTH AMERICAN PALLADIUM
LAFARGE CANADA INC. CEMENT OPERATIONS
LAKE HURON PRIMARY WATER SUPPLY SYSTEM
LAKE SHORE GOLD CORP.
LAKE SUPERIOR POWER LIMITED PARTNERSHIP
LAKEFRONT UTILITIES INC
LAKELAND POWER DISTRIBUTION LTD.
LANXESS INC.
LITTLE CREEK LP
LOBLAWS INC.
LONDON HYDRO INC.
LONG SAULT JOINT VENTURE
LOWER MATTAGAMI ENERGY LIMITED PARTNERSHIP
LOWER MATTAGAMI LIMITED PARTNERSHIP
LUNARLIGHT LP
MAG ENERGY SOLUTIONS INC.
MAGELLAN AEROSPACE, HALEY

MANITOBA HYDRO ELECTRIC BOARD
MARATHON PULP INC.
MCLEAN'S MOUNTAIN WIND LIMITED PARTNERSHIP
MCMASTER UNIVERSITY
MELANCTHON WOLFE WIND LP
MERCURIA COMMODITIES CANADA CORPORATION
MERRILL LYNCH COMMODITIES CANADA, ULC
MET FIERA SOLAR ADELAIDE 1 L.P.
MET FIERA SOLAR BREEN 2 L.P.
MET FIERA SOLAR MIDHURST 4 L.P.
MET FIERA SOLAR MIDHURST 6 LP
MET FIERA SOLAR ORILLIA 1 L.P.
MET FIERA SOLAR ORILLIA 2 L.P.
MIDLAND POWER UTILITY CORPORATION
MIGHTYSOLAR LP
MILMAN MINING INC.
MILTON HYDRO DISTRIBUTION INC.
MISSISSAGI POWER TRUST
MMFX STEEL OF CANADA, INC.
MOORE SOLAR, LP
MORGAN STANLEY CAPITAL GROUP INC.
NALCOR ENERGY MARKETING CORPORATION
NAMEWAMINIKAN HYDRO INC
NATIONAL RESEARCH COUNCIL CANADA
NEW GOLD INC.
NEW OSPVF 1 LIMITED PARTNERSHIP

NEW OSPVF 10 LIMITED PARTNERSHIP
NEW OSPVF 11 LIMITED PARTNERSHIP
NEW OSPVF 7 LIMITED PARTNERSHIP
NEW YORK POWER AUTHORITY
NEWMARKET - TAY POWER DISTRIBUTION LTD.
NEXTERA ENERGY POWER MARKETING, LLC
NIAGARA PENINSULA ENERGY INC.
NIAGARA-ON-THE-LAKE HYDRO INC.
NOBLE AMERICAS GAS & POWER CORP.
NODIN KITAGAN 2 LIMITED PARTNERSHIP
NODIN KITAGAN LIMITED PARTNERSHIP
NORAMPAC INC. - TRENTON DIVISION
NORFOLK POWER DISTRIBUTION INC.
NORTH BAY HYDRO DISTRIBUTION LIMITED
NORTHERN ONTARIO WIRES, INC.
NORTHERN STATES POWER COMPANY
NORTHLAND POWER INC.
NORTHLAND POWER SOLAR ABITIBI L.P.
NORTHLAND POWER SOLAR BELLEVILLE NORTH L.P.
NORTHLAND POWER SOLAR BELLEVILLE SOUTH L.P.
NORTHLAND POWER SOLAR BURKS FALLS EAST L.P.
NORTHLAND POWER SOLAR BURKS FALLS WEST L.P.
NORTHLAND POWER SOLAR CROSBY L.P.
NORTHLAND POWER SOLAR EMPIRE L.P.
NORTHLAND POWER SOLAR GLENDALE
NORTHLAND POWER SOLAR LONG LAKE L.P.
NORTHLAND POWER SOLAR MARTIN'S MEADOWS L.P.
NORTHLAND POWER SOLAR MCCANN L.P.

NORTHLAND POWER SOLAR NORTH BURGESS L.P.
NORTHLAND POWER SOLAR RIDEAU L.P.
NORTHPOINT ENERGY SOLUTIONS INC.
NOVA CHEMICALS (CANADA) LTD.
NOVELIS INC.
NRG POWER MARKETING LLC
NRSTOR L.P. 1
O.N.TEL INC.
OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.
ODEM ELECTRIC BILLING SERVICES INC.
ONTARIO CLEAN WATER AGENCY
ONTARIO ELECTRICITY FINANCIAL CORPORATION
ONTARIO POWER GENERATION INC.
ONTARIO SOLAR PV FIELDS 1 LIMITED PARTNERSHIP
ONTARIO SOLAR PV FIELDS 10 LIMITED PARTNERSHIP
ONTARIO SOLAR PV FIELDS 11 LIMITED PARTNERSHIP
ONTARIO SOLAR PV FIELDS 7 LIMITED PARTNERSHIP
ORANGEVILLE HYDRO LIMITED
ORILLIA POWER DISTRIBUTION CORPORATION
ORO-MEDONTE SOLAR FARM INC.
OSHAWA PUC NETWORKS INCORPORATED
OTTAWA RIVER POWER CORPORATION
OXY VINYLS CANADA CO.
PANABRASIVE INC.
PAR-PAK LTD
PARRY SOUND POWER CORPORATION
PENINSULA POWER, LLC
PETERBOROUGH DISTRIBUTION INC.
PETERBOROUGH UTILITIES INC.

PIC MOBERT HYDRO INC.
PLAINS MIDSTREAM CANADA ULC
PLANT-E CORP.
PLATEAU WIND INC.
POINTE-AUX-ROCHES WIND INC.
PORT HOPE SOLAR FARM PARTNERSHIP
PORTLANDS ENERGY CENTRE INC.
POWEREX CORP
POWERSTREAM ENERGY SERVICES INC.
POWERSTREAM INC.
POWERTRAIL INC.
PPL ENERGYPLUS, LLC
PRAXAIR CANADA INC.
PRIORITY SUBMETERING SOLUTIONS INC.
PROVIDENT ENERGY MANAGEMENT INC.
PUC DISTRIBUTION INC.
QUEENS UNIVERSITY AT KINGSTON
RAINBOW ENERGY MARKETING CORPORATION
RAINY RIVER FIRST NATIONS SOLAR 1 LIMITED PARTNERSHIP
RAINY RIVER FIRST NATIONS SOLAR 2 LIMITED PARTNERSHIP
RAINY RIVER FIRST NATIONS SOLAR 3 LIMITED PARTNERSHIP
RALEIGH WIND POWER PARTNERSHIP
RAYLIGHT LP
RBC ENERGY SERVICES LP
RE SMITHS FALLS 1 ULC

RE SMITHS FALLS 3 ULC
RE SMITHS FALLS 4 ULC
RE SUNNINGDALE 1 ULC
RE SUNNINGDALE LP
RED LAKE GOLD MINES
REGIONAL MUNICIPALITY OF DURHAM
RENFREW HYDRO INC.
RES CANADA ENERGY STORAGE LP
RESOLUTE FP CANADA INC.
RIDEAU ST.LAWRENCE DISTRIBUTION INC.
RIDGEFIELD SOLAR FARM PARTNERSHIP
ROCTOP INVESTMENTS INC.
ROSEPLAIN SOLAR FARM PARTNERSHIP
ROYAL BANK OF CANADA
RTK WP CANADA, ULC
SAINT-GOBAIN CERAMIC MATERIALS CANADA INC.
SANDRINGHAM SOLAR ENERGY PARTNERSHIP
SARACEN POWER LP
SCOTIA CAPITAL ENERGY INC.
SESCO ENTERPRISES CANADA LTD.
SHELL CANADA PRODUCTS
SHELL ENERGY NORTH AMERICA (CANADA) INC.
SIFTO CANADA CORP.
SILVERCREEK NOMINEE INC.
SIOUX LOOKOUT HYDRO INC.

SKY GENERATION LP
SKYJACK INC.
SOMBRA SOLAR, LP
SOUTH DUNDAS WIND FARM LIMITED PARTNERSHIP
SOUTH GLENGARRY SOLAR FARM PARTNERSHIP
SOUTH KENT WIND LP
SP ARMOW WIND ONTARIO LP
SPARKLELIGHT LP
ST. ANDREW GOLDFIELDS LTD.
ST. CLAIR POWER, L.P.
ST. COLUMBAN ENERGY LP
ST. MARYS CEMENT INC. (CANADA)
ST. THOMAS ENERGY INC.
STARDALE SOLAR L.P.
STRATACON INC.
SUMMERHAVEN WIND, LP
SUN E SKY 13TH SIDEROAD LP
SUN E SKY ERIE RIDGE LP
SUN E SKY RYERSE LP
SUN-CANADIAN PIPE LINE COMPANY LIMITED
SUNCOR ADELAIDE WIND LIMITED PARTNERSHIP
SUNCOR ENERGY MARKETING INC.
SUNCOR ENERGY PRODUCTS INC. - RIPLEY
SUNCOR ENERGY PRODUCTS PARTNERSHIP
SUNDERLAND SOLAR FARM LIMITED PARTNERSHIP

SUNE ALFRED LP
SUNE DEMORESTVILLE LP
SUNE HWY 2 S LP
SUNE NEWBORO 4 LP
SUNE NORFOLK BLOOMSBURG LP
SUNE ODESSA LP
SUNE RAY LP
SUNE RUTLEY LP
SUNE SANDHURST GP CORP
SUNE SANDHURST LP
SUNE SOLAR SPIRIT LP
SUNE TAYLOR KIDD LP
SUNE UNITY LP
SUNE WELLAND RIDGE LP
SUNE WESTBROOK LP
SUNNY SHORES L.P.
SUNPOWER ENERGY SYSTEMS CANADA CORPORATION
TALBOT WINDFARM LP
TARGRAY AMERICAS INC.
TEC ENERGY INC.
TEMBEC ENTERPRISES INC.
TEMBEC-KAPUSKASING OPERATIONS
TEMPEST POWER CORP.
TENASKA POWER CANADA, A DIVISION OF TPS CORP.
TERRA INTERNATIONAL (CANADA) INC.
THOROLD COGEN L.P.
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.

TILLSONBURG HYDRO INCORPORATED
TORONTO DISTRICT SCHOOL BOARD
TORONTO HYDRO ENERGY SERVICES INC.
TORONTO HYDRO-ELECTRIC SYSTEM LIMITED
TOYOTA MOTOR MANUFACTURING CANADA INC.
TRACTEBEL CANADA INC., WEST WINDSOR POWER
TRAILSTONE POWER, LLC
TRANSALTA (SC) L.P.
TRANSALTA COGENERATION LP
TRANSALTA ENERGY MARKETING CORP.
TRANSALTA GENERATION PARTNERSHIP
TRANSCANADA ENERGY LTD.
TRANSCANADA PIPELINES LIMITED
TRANSCANADA POWER MARKETING LTD.
TRILLIANT ENERGY SERVICES INC.
TWIN FALLS LIMITED PARTNERSHIP
U.S. STEEL CANADA INC.
UMBATA FALLS LIMITED PARTNERSHIP
UMH ENERGY PARTNERSHIP
VALE CANADA LIMITED
VALERIE FALLS LIMITED PARTNERSHIP
VARNA WIND, LP
VCHARGE, INC.
VERIDIAN CONNECTIONS INC.
VERIDIAN CONNECTIONS INC. - GRAVENHURST
VITOL INC.
W&E INTERNATIONAL (CANADA) CORP.
WASAGA DISTRIBUTION INC.
WASHINGTON MILLS ELECTRO MINERALS CORPORATION
WATERLOO NORTH HYDRO INC.
WELLAND HYDRO ELECTRIC SYSTEM CORP.
WELLINGTON NORTH POWER INC.
WESCAST INDUSTRIES INC.
WESDOME GOLD MINES LTD.

WEST COAST HURON ENERGY INC.
WESTARIO POWER INC
WEYERHAEUSER COMPANY LIMITED
WHITBY COGENERATION LIMITED PARTNERSHIP
WHITBY HYDRO ELECTRIC CORPORATION
WILLIAMS OPERATING CORPORATION

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Participant Classification
Pending Authorization
Program Participant
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Participant/Service Program Type
Centralized Forecasting Participant
Centralized Forecasting Participant
Consumer
Consumer
Consumer
Centralized Forecasting Participant
Local Distribution Company
Generator
Energy Trader, Financial Market Participant
Financial Market Participant
Consumer
Centralized Forecasting Participant
Consumer
Local Distribution Company
Consumer
Generator
Generator
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Local Distribution Company
Consumer
Centralized Forecasting Participant
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Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Consumer
Transmitter
Consumer
Generator
Centralized Forecasting Participant
Financial Market Participant
Generator
Local Distribution Company
Centralized Forecasting Participant, Generator
Capacity Based Demand Response, Consumer, Generator
Energy Trader, Financial Market Participant
Financial Market Participant
Local Distribution Company
Local Distribution Company
Centralized Forecasting Participant
Generator
Centralized Forecasting Participant
Generator, Energy Trader, Financial Market Participant
Centralized Forecasting Participant, Generator
Energy Trader
Energy Trader, Generator, Financial Market Participant
Local Distribution Company
Consumer
Local Distribution Company

Generator, Centralized Forecasting Participant
Local Distribution Company, Transmitter
Generator, Centralized Forecasting Participant
Centralized Forecasting Participant
Energy Trader, Financial Market Participant
Generator, Centralized Forecasting Participant
Generator
Energy Trader, Financial Market Participant
Submetering Provider
Consumer
Generator
Financial Market Participant
Local Distribution Company
Centralized Forecasting Participant, Generator
Energy Trader, Financial Market Participant
Local Distribution Company
Local Distribution Company
Generator
Energy Trader
Financial Market Participant
Energy Trader, Financial Market Participant
Centralized Forecasting Participant
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Local Distribution Company
Generator, Centralized Forecasting Participant
Demand Response Auction, Energy Trader, Financial Market Participant

Centralized Forecasting Participant
Energy Trader
Smart Metering Cost Recovery - Embedded Smart
Centralized Forecasting Participant
Energy Trader, Generator, Financial Market Participant
Generator
Generator, Centralized Forecasting Participant
Centralized Forecasting Participant
Consumer
Energy Trader, Financial Market Participant
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Consumer
Submetering Provider
Energy Trader, Financial Market Participant
Energy Trader, Retailer, Financial Market Participant
Centralized Forecasting Participant
Consumer
Energy Trader, Financial Market Participant
Generator, Centralized Forecasting Participant
Energy Trader, Financial Market Participant
Energy Trader, Financial Market Participant
Consumer
Local Distribution Company
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Centralized Forecasting Participant

Generator, Centralized Forecasting Participant
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Energy Trader, Financial Market Participant
Centralized Forecasting Participant
Energy Trader, Financial Market Participant
Generator
Consumer, Regulation Service Provider
Consumer
Generator, Centralized Forecasting Participant
Submetering Provider
Submetering Provider
Retailer
Demand Response Auction, Capacity Based Demand Response, Submetering Provider
Demand Response Auction, Retailer
Retailer
Demand Response Auction, Capacity Based Demand Response
Demand Response Auction, Capacity Based Demand Response
Local Distribution Company
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Demand Response Auction
Local Distribution Company
Generator, Centralized Forecasting Participant
Local Distribution Company

Generator, Centralized Forecasting Participant
Centralized Forecasting Participant
Smart Metering Cost Recovery - Embedded Smart
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Energy Trader, Financial Market Participant
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Local Distribution Company
Local Distribution Company
Energy Trader, Generator, Financial Market Participant
Centralized Forecasting Participant

Energy Trader
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Demand Response Auction, Consumer
Demand Response Auction, Consumer
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Consumer, Financial Market Participant
Consumer, Financial Market Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
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Generator, Centralized Forecasting Participant
Centralized Forecasting Participant, Generator
Centralized Forecasting Participant, Generator
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Centralized Forecasting Participant, Generator
Centralized Forecasting Participant, Generator
Energy Trader
Demand Response Provider
Energy Trader, Generator
Transmitter
Local Distribution Company
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Generator, Centralized Forecasting Participant
Local Distribution Company
Local Distribution Company
Generator, Consumer
Local Distribution Company
Local Distribution Company
Generator
Centralized Forecasting Participant
Consumer
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Local Distribution Company
Energy Trader, Financial Market Participant
Centralized Forecasting Participant
Smart Metering Cost Recovery - Embedded Smart
Local Distribution Company
Local Distribution Company
Local Distribution Company, Transmitter
Local Distribution Company
Consumer
Centralized Forecasting Participant
Demand Response Auction, Consumer
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Local Distribution Company
Energy Trader
Energy Trader, Generator, Consumer
Generator
Demand Response Auction, Consumer
Centralized Forecasting Participant, Generator

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Generator, Centralized Forecasting Participant
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Generator, Centralized Forecasting Participant
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Local Distribution Company
Local Distribution Company, Smart Metering Cost Recovery - Embedded Smart
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Centralized Forecasting Participant
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Local Distribution Company
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Centralized Forecasting Participant
Energy Trader, Financial Market Participant
Consumer

Energy Trader, Financial Market Participant
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Generator, Centralized Forecasting Participant
Consumer
Generator
Energy Trader, Financial Market Participant
Energy Trader, Financial Market Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
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Centralized Forecasting Participant
Centralized Forecasting Participant
Local Distribution Company
Centralized Forecasting Participant
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Local Distribution Company
Generator
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Centralized Forecasting Participant
Energy Trader, Financial Market Participant
Energy Trader, Financial Market Participant
Consumer
Centralized Forecasting Participant

Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Energy Trader, Financial Market Participant
Local Distribution Company
Energy Trader, Generator, Financial Market Participant
Local Distribution Company
Local Distribution Company
Energy Trader, Financial Market Participant
Generator
Generator
Consumer
Local Distribution Company
Local Distribution Company
Local Distribution Company
Generator
Generator
Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Generator
Centralized Forecasting Participant
Generator
Generator
Centralized Forecasting Participant

Centralized Forecasting Participant
Centralized Forecasting Participant
Energy Trader, Financial Market Participant
Consumer, Retailer, Financial Market Participant
Consumer
Demand Response Auction, Generator, Regulation Service Provider
Consumer
Local Distribution Company
Submetering Provider
Consumer
Generator, Financial Market Participant
Generator, Energy Trader, Financial Market Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Local Distribution Company
Local Distribution Company
Centralized Forecasting Participant
Local Distribution Company
Smart Metering Cost Recovery - Embedded Smart
Consumer
Consumer
Consumer
Local Distribution Company
Energy Trader
Local Distribution Company
Retailer

Generator
Consumer
Centralized Forecasting Participant
Generator, Centralized Forecasting Participant
Centralized Forecasting Participant
Generator
Energy Trader, Financial Market Participant
Submetering Provider
Demand Response Auction, Local Distribution Company
Generator
Energy Trader, Financial Market Participant
Consumer
Submetering Provider
Submetering Provider
Local Distribution Company
Demand Response Auction, Capacity Based Demand Response, Submetering Provider
Energy Trader, Financial Market Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Generator, Centralized Forecasting Participant
Centralized Forecasting Participant
Energy Trader, Financial Market Participant
Centralized Forecasting Participant

Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Consumer
Smart Metering Cost Recovery - Embedded Smart
Generator
Demand Response Auction, Consumer, Generator
Local Distribution Company
Centralized Forecasting Participant
Energy Trader
Centralized Forecasting Participant
Energy Trader, Financial Market Participant
Consumer
Consumer
Centralized Forecasting Participant
Energy Trader, Financial Market Participant
Energy Trader, Retailer, Financial Market Participant
Energy Trader, Financial Market Participant
Consumer
Energy Trader, Generator, Financial Market Participant
Consumer
Generator, Centralized Forecasting Participant
Centralized Forecasting Participant

Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Generator, Centralized Forecasting Participant
Centralized Forecasting Participant, Generator
Centralized Forecasting Participant
Consumer
Generator
Centralized Forecasting Participant
Consumer
Local Distribution Company
Centralized Forecasting Participant
Submetering Provider
Generator, Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Consumer
Centralized Forecasting Participant, Generator
Energy Trader, Financial Market Participant, Generator
Generator, Centralized Forecasting Participant
Consumer
Centralized Forecasting Participant

Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
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Centralized Forecasting Participant
Centralized Forecasting Participant
Centralized Forecasting Participant
Generator, Centralized Forecasting Participant
Energy Trader, Financial Market Participant
Energy Trader, Financial Market Participant
Demand Response Auction, Capacity Based Demand Response, Consumer
Centralized Forecasting Participant
Energy Trader, Financial Market Participant
Consumer
Generator
Local Distribution Company

Local Distribution Company
Energy Trader
Retailer, Financial Market Participant
Local Distribution Company
Consumer
Generator
Energy Trader
Generator
Generator
Energy Trader, Financial Market Participant
Generator
Generator, Centralized Forecasting Participant, Financial Market Participant
Consumer
Energy Trader, Financial Market Participant
Submetering Provider
Generator
Demand Response Auction, Consumer
Generator
Generator
Consumer
Generator
Generator, Centralized Forecasting Participant
Local Distribution Company
Local Distribution Company
Energy Trader, Financial Market Participant
Retailer
Local Distribution Company
Consumer
Local Distribution Company
Local Distribution Company
Local Distribution Company
Consumer
Consumer

Local Distribution Company
Local Distribution Company
Consumer
Generator
Local Distribution Company
Consumer

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Ministry of Energy

Ontario Reducing Electricity Costs for Families and Businesses

Five Million Families, Farms and Small Businesses Will See Bill Reductions

NEWS September 13, 2016

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Over the last number of years, Ontario's economy has recovered from the impact of the global recession. While the province and independent economic analysis projects consistent economic growth for Ontario, many families are not yet feeling the impact of the recovery in their everyday lives. Therefore, Ontario intends to take action to help with the costs related to electricity.

Together, these actions would provide a benefit to all electricity consumers in Ontario, including:

- ~~Providing residential customers with an eight per cent rebate equal to the provincial portion of the HST, totaling about $130 on average per year for the typical household.~~ ~~Reducing Ontario residential electricity bills by 8 per cent on the amount before tax, an average savings of about $130 annually or $11 each month~~
- Decreasing total bills for eligible rural customers by an average of $540 a year or $45 each month
- Eligible larger businesses and institutions would also benefit from the plan through the expansion of the Industrial Conservation Initiative

~~About~ More than five million residential consumers, farms and small businesses, along with more than ~~one thousand~~1,000 ICI eligible businesses and institutions ~~industrial customers~~ would see a reduction in their electricity bills.

Helping Ontarians with the cost of everyday living and helping businesses compete are part of the government's economic plan to build Ontario up and deliver on its number-one priority: to grow the economy and create jobs. The four-part plan includes helping more people get and create the jobs of the future by expanding access to high-quality college and university education. The plan is making the largest investment in hospitals, schools, roads, bridges and transit in Ontario's history and is investing in a low-carbon economy driven by innovative, high-growth, export-oriented businesses. The plan is also helping working Ontarians achieve a more secure retirement.

QUOTES

"The actions we're announcing today would benefit all ratepayers in a meaningful way. Many rural and remote northern customers would receive significant rate relief through these initiatives. Expanding incentives across Ontario would create more opportunity for businesses to be competitive and manage

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Commented [JK1]: Does the 1,000 refer to only the newly ICI eligible or all ICI eligible?

DR

their electricity costs. Rebating provincial taxes from electricity bills would provide extra relief for families, farms and small businesses."
- Glenn Thibeault, Minister of Energy

QUICK FACTS

- Since 2003, Ontario has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables – this represents about 40 per cent of our current supply.
- Ontario eliminated coal-fired electricity generation, replacing it with cleaner sources of energy, which has decreased electricity sector emissions by approximately 80 per cent since 2003.
- Earlier this year, the province introduced the Ontario Electricity Support Program (OESP) to provide a monthly credit to low-income households who have applied and meet the eligibility requirements.
- These actions support priorities laid out in the government's Climate Change Action Plan to direct cap and trade proceeds towards greenhouse gas reduction initiatives that keep electricity rates affordable. Furthermore, this meets the 2016 Budget commitment to ensure the net impact of cap and trade does not result in an overall increase in electricity cost for commercial and industrial consumers.
- ~~As outlined in the 2016 Budget and the Climate Change Action Plan, the government intends to recycle a portion of the cap and trade auction proceeds to offset the impact of cap and trade on industrial and commercial electricity consumers and encourage the reduction of greenhouse gas emissions.~~
- The ICI provides a strong incentive for large electricity consumers to shift their electricity consumption to off-peak hours to reduce their bills by up to one-third. Expanding the ICI would reduce cost pressures on the electricity system by enabling more consumers to lower their electricity demand during peak periods.

LEARN MORE

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Commented [SK22]: Is natural gas considered 'clean'?

Suggest rephrasing to imply it is 'cleaner' than the alternative (coal).

- -

Katrina Xavier, Minister's Office, 416-325-2690
Aslan Hart, Communications, 416-326-4542

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Commented [RK1]: Has OEP signed off on this?

Commented [RK2]: If they do not take a rewrite, can we suggest a more minimalist edit, along the lines of the following?

▪Reducing Ontario residential electricity bills by 8 per cent of the amount of electricity costs before tax, an average savings of about $130 annually or $11 per month.

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Commented [RK3]: It does now have "many" to qualify "northern" – which is the case so long as they are eligible rural or remote customers.

Commented [RK4]: Don't want to imply non rural and remote are not getting significant relief.

competitive and manage their electricity costs. Rebating the provincial portion of taxes from electricity bills would provide extra relief for families, farms and small businesses."
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Suggest rephrasing to imply it is 'cleaner' than the alternative (coal).

- -

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Suggest rephrasing to imply it is 'cleaner' than the alternative (coal).

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Commented [LP1]: In an effort to keep language consistent, "consumers" vs. customers/ratepayers

Commented [LP2]: This bullet is more accurate. We recommend using this bullet and deleting the second one.

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Commented [LP3]: We recommend deleting this bullet and using the first one instead. However, if you wish to go with this bullet please note our suggested edits.

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- -

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Month	Total AQEW	Class A AQEW	CLASS B AQEW	Embedded GEN	Excluded Consumption	TOTAL CLASS B Load for Allocation
Jan	12,104,121	2,325,765	9,778,356	473,005	12,357	10,239,004
Feb	11,249,947	2,234,225	9,015,722	478,447	16,513	9,477,657
Mar	11,098,465	2,336,834	8,761,631	529,570	14,734	9,276,467
Apr	10,271,558	2,316,791	7,954,766	660,273	12,790	8,602,249
May	10,312,358	2,311,716	8,000,642	664,109	10,868	8,653,883
June	10,906,462	2,308,144	8,598,318	612,019	9,386	9,200,951
July	12,247,167	2,283,798	9,963,369	545,844	14,093	10,495,121
Aug	12,826,850	2,375,381	10,451,469	524,559	13,723	10,962,305
Sept						
Oct						
Nov						
Dec						
Total	91,016,928	18,492,656	72,524,273	4,487,827	104,463	76,907,636

Total Global Adjustment $	**Class A GA$**	**Clas B GA$**	**Peak Demand Factor**
$1,070,643,210	$130,771,124	$939,872,086	0.12214258
$1,063,698,605	$129,922,892	$933,775,713	0.12214258
$1,120,138,944	$136,816,661	$983,322,284	0.12214258
$1,090,660,721	$133,216,114	$957,444,606	0.12214258
$1,060,759,407	$129,563,891	$931,195,516	0.12214258
$995,308,314	$121,569,525	$873,738,789	0.12214258
$981,770,430	$111,884,227	$869,886,203	0.11396170
$878,644,674	$100,131,841	$778,512,833	0.11396170
$8,261,624,305	$993,876,275	$7,267,748,030	

August 2016 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
12,826,850
2,375,381
10,451,469
524,559
13,723
10,962,305

$	878,644,674
$	100,131,841
$	778,512,833
	0.11396170

July 2016 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
12,247,167
2,283,798
9,963,369
545,844
14,093
10,495,121

$	981,770,430
$	111,884,227
$	869,886,203
	0.11396170

June 2016 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
10,906,462
2,308,144
8,598,318
612,019
9,386
9,200,951

$	995,308,314
$	121,569,525
$	873,738,789
	0.12214258

May 2016 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
10,312,358
2,311,716
8,000,642
664,109
10,868
8,653,883

$	1,060,759,407
$	129,563,891
$	931,195,516
	0.12214258

April 2016 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
10,271,558
2,316,791
7,954,766
660,273
12,790
8,602,249

$	1,090,660,721
$	133,216,114
$	957,444,606
	0.12214258

March 2016 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
11,098,465
2,336,834
8,761,631
529,570
14,734
9,276,467

$	1,120,138,944
$	136,816,661
$	983,322,284
	0.12214258

February 2016 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
11,249,947
2,234,225
9,015,722
478,447
16,513
9,477,657

$	1,063,698,605
$	129,922,892
$	933,775,713
	0.12214258

January 2016 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
12,104,121
2,325,765
9,778,356
473,005
12,357
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Month	Total AQEW	Class A AQEW	CLASS B AQEW	Embedded GEN	Excluded Consumption	TOTAL CLASS B Load for Allocation
Jan	12,847,678	2,084,465	10,763,212	462,633	20,890	11,204,955
Feb	12,077,789	1,986,521	10,091,268	399,678	19,776	10,471,170
Mar	11,827,930	2,143,191	9,684,739	494,881	20,878	10,158,742
Apr	10,236,952	2,087,296	8,149,655	652,276	16,901	8,785,030
May	10,386,270	2,114,955	8,271,315	529,316	17,418	8,783,214
June	10,442,855	2,060,759	8,382,096	577,160	15,921	8,943,335
July	11,878,019	2,306,719	9,571,299	520,648	21,274	10,070,673
Aug	11,552,110	2,357,204	9,194,906	471,688	20,227	9,646,368
Sept	11,179,067	2,309,596	8,869,471	503,415	27,108	9,345,778
Oct	10,538,710	2,365,575	8,173,135	497,440	30,247	8,640,328
Nov	10,494,634	2,273,070	8,221,564	477,484	15,870	8,683,178
Dec	11,107,827	2,246,123	8,861,704	436,467	14,324	9,283,847
Total	134,569,840	26,335,475	108,234,365	6,023,088	240,834	114,016,619

Total Global Adjustment $	**Class A GA$**	**Clas B GA$**	**Peak Demand Factor**
$628,116,244	$60,215,476	$567,900,769	0.09586677
$458,754,390	$43,979,302	$414,775,088	0.09586677
$706,816,671	$67,760,231	$639,056,440	0.09586677
$928,654,671	$89,027,124	$839,627,548	0.09586677
$939,140,737	$90,032,389	$849,108,348	0.09586677
$943,069,508	$90,409,028	$852,660,481	0.09586677
$904,090,409	$110,267,613	$793,822,797	0.12196525
$879,181,661	$107,385,516	$771,796,144	0.12214258
$713,396,336	$87,136,069	$626,260,267	0.12214258
$742,600,148	$90,703,098	$651,897,050	0.12214258
$1,119,279,840	$136,711,727	$982,568,113	0.12214258
$999,585,710	$122,091,978	$877,493,732	0.12214258
$9,962,686,326	$1,095,719,550	$8,866,966,776	

December 2015 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
11,107,827
2,246,123
8,861,704
436,467
14,324
9,283,847

$	999,585,710
$	122,091,978
$	877,493,732
	0.12214258

November 2015 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
10,494,634
2,273,070
8,221,564
477,484
15,870
8,683,178

$	1,119,279,840
$	136,711,727
$	982,568,113
	0.12214258

October 2015 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
10,538,710
2,365,575
8,173,135
497,440
30,247
8,640,328

$	742,600,148
$	90,703,098
$	651,897,050
	0.12214258

September 2015 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
11,179,067
2,309,596
8,869,471
503,415
27,108
9,345,778

$	713,396,336
$	87,136,069
$	626,260,267
	0.12214258

August 2015 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
11,552,110
2,357,204
9,194,906
471,688
20,227
9,646,368

$	879,181,661
$	107,385,516
$	771,796,144
	0.12214258

July 2015 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
11,878,019
2,306,719
9,571,299
520,648
21,274
10,070,673

$	904,090,409
$	110,267,613
$	793,822,797
	0.12196525

June 2015 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
10,442,855
2,060,759
8,382,096
577,160
15,921
8,943,335

$	943,069,508
$	90,409,028
$	852,660,481
	0.09586677

May 2015 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
10,386,270
2,114,955
8,271,315
529,316
17,418
8,783,214

$	939,140,737
$	90,032,389
$	849,108,348
	0.09586677

April 2015 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
10,236,952
2,087,296
8,149,655
652,276
16,901
8,785,030

$	928,654,671
$	89,027,124
$	839,627,548
	0.09586677

March 2015 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
11,827,930
2,143,191
9,684,739
494,881
20,878
10,158,742

$	706,816,671
$	67,760,231
$	639,056,440
	0.09586677

February 2015 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
12,077,789
1,986,521
10,091,268
399,678
19,776
10,471,170

$	458,754,390
$	43,979,302
$	414,775,088
	0.09586677

January 2015 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
12,847,678
2,084,465
10,763,212
462,633
20,890
11,204,955

$	628,116,244
$	60,215,476
$	567,900,769
	0.09586677

Month	Total AQEW	Class A AQEW	CLASS B AQEW	Embedded GEN	Excluded Consumption	TOTAL CLASS B Load for Allocation
Jan	13,328,023	2,161,556	11,166,467	400,322	23,618	11,543,171
Feb	11,825,671	2,067,747	9,757,924	336,417	19,541	10,074,800
Mar	12,412,016	2,236,220	10,175,796	435,674	22,060	10,589,409
Apr	10,631,857	2,141,240	8,490,616	476,811	23,003	8,944,424
May	10,428,530	2,139,306	8,289,223	484,002	15,594	8,757,631
June	11,033,703	2,153,703	8,880,000	466,648	15,958	9,330,691
July	11,490,278	2,203,226	9,287,052	447,087	21,185	9,712,954
Aug	11,468,769	2,231,394	9,237,375	385,056	27,990	9,594,441
Sept	10,656,919	2,150,083	8,506,837	422,636	22,176	8,907,297
Oct	10,639,787	2,143,941	8,495,846	437,843	17,544	8,916,146
Nov	11,287,752	2,123,604	9,164,148	406,264	12,969	9,557,443
Dec	11,939,009	2,107,296	9,831,714	425,614	12,458	10,244,869
Total	137,142,314	25,859,315	111,282,999	5,124,375	234,095	116,173,279

Total Global Adjustment $	**Class A GA$**	**Clas B GA$**	**Peak Demand Factor**
$160,703,230	$16,722,314	$143,980,916	0.10405711
$149,534,148	$15,560,091	$133,974,056	0.10405711
-$1,108,196	-$115,316	-$992,880	0.10405711
$520,643,567	$54,176,665	$466,466,902	0.10405711
$703,392,944	$73,088,611	$630,304,333	0.10390865
$626,884,065	$65,138,677	$561,745,388	0.10390865
$672,311,617	$64,826,760	$607,484,857	0.09642368
$717,608,852	$68,794,843	$648,814,010	0.09586677
$784,468,017	$75,204,415	$709,263,602	0.09586677
$987,539,342	$94,672,207	$892,867,135	0.09586677
$870,196,641	$83,422,941	$786,773,700	0.09586677
$843,465,079	$80,860,273	$762,604,807	0.09586677
$7,035,639,307	$692,352,481	$6,343,286,826	

December 2014 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
11,939,009
2,107,296
9,831,714
425,614
12,458
10,244,869

$	843,465,079
$	80,860,273
$	762,604,807
	0.09586677

November 2014 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
11,287,752
2,123,604
9,164,148
406,264
12,969
9,557,443

$	870,196,641
$	83,422,941
$	786,773,700
	0.09586677

October 2014 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
10,639,787
2,143,941
8,495,846
437,843
17,544
8,916,146

$	987,539,342
$	94,672,207
$	892,867,135
	0.09586677

September 2014 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Class B GA$
Peak Demand Factor

MWH
10,656,919
2,150,083
8,506,837
422,636
22,176
8,907,297

$	784,468,017
$	75,204,415
$	709,263,602
	0.09586677

August 2014 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
11,468,769
2,231,394
9,237,375
385,056
27,990
9,594,441

$	717,608,852
$	68,794,843
$	648,814,010
	0.09586677

July 2014 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
11,490,278
2,203,226
9,287,052
447,087
21,185
9,712,954

$	672,311,617
$	64,826,760
$	607,484,857
	0.09642368

June 2014 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
11,033,703
2,153,703
8,880,000
466,648
15,958
9,330,691

$	626,884,065
$	65,138,677
$	561,745,388
	0.10390865

May 2014 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
10,428,530
2,139,306
8,289,223
484,002
15,594
8,757,631

$	703,392,944
$	73,088,611
$	630,304,333
	0.10390865

April 2014 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
10,631,857
2,141,240
8,490,616
476,811
23,003
8,944,424

$	520,643,567
$	54,176,665
$	466,466,902
	0.10405711

March 2014 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
12,412,016
2,236,220
10,175,796
435,674
22,060
10,589,409

-$	1,108,196
-$	115,316
-$	992,880
	0.10405711

February 2014 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
11,825,671
2,067,747
9,757,924
336,417
19,541
10,074,800

$	149,534,148
$	15,560,091
$	133,974,056
	0.10405711

January 2014 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
13,328,023
2,161,556
11,166,467
400,322
23,618
11,543,171

$	160,703,230
$	16,722,314
$	143,980,916
	0.10405711

Month	Total AQEW	Class A AQEW	CLASS B AQEW	Embedded GEN	Excluded Consumption	TOTAL CLASS B Load for Allocation
Jan	12,647,423	2,046,868	10,600,555	301,107	33,733	10,867,929
Feb	11,515,240	1,914,114	9,601,126	289,137	13,886	9,876,376
Mar	11,757,578	1,995,390	9,762,188	352,918	17,842	10,097,264
Apr	10,740,825	1,789,920	8,950,906	488,168	29,918	9,409,156
May	10,574,639	1,956,120	8,618,520	362,079	27,139	8,953,460
June	10,882,868	1,916,493	8,966,375	289,556	26,290	9,229,642
July	12,426,194	2,016,882	10,409,312	356,788	34,262	10,731,844
Aug	11,822,472	2,144,675	9,677,797	398,069	35,431	10,040,435
Sept	10,626,902	2,080,759	8,546,143	335,452	33,055	8,848,541
Oct	10,877,471	2,195,503	8,681,968	351,730	32,070	9,001,628
Nov	11,399,627	2,144,667	9,254,961	422,093	18,768	9,658,286
Dec	12,547,918	2,098,682	10,449,237	329,114	18,982	10,759,369
Total	137,819,158	24,300,073	113,519,087	4,276,212	321,376	117,473,928

Total Global Adjustment $	**Class A GA$**	**Clas B GA$**	**Peak Demand Factor**
$605,956,346	$62,567,562	$543,388,784	0.10325424
$527,700,886	$54,547,807	$473,153,079	0.10336880
$554,807,967	$57,349,834	$497,458,133	0.10336880
$614,806,752	$63,551,836	$551,254,916	0.10336880
$657,201,974	$67,934,179	$589,267,794	0.10336880
$724,596,076	$74,900,627	$649,695,450	0.10336880
$609,580,628	$63,449,364	$546,131,264	0.10408691
$699,840,395	$72,844,224	$626,996,171	0.10408691
$657,359,157	$68,405,977	$588,953,180	0.10406180
$634,176,606	$65,993,559	$568,183,047	0.10406180
$846,999,195	$88,140,261	$758,858,935	0.10406180
$591,657,265	$61,566,145	$530,091,120	0.10405711
$7,724,683,248	$801,251,375	$6,923,431,873	

December 2013 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
12,547,918
2,098,682
10,449,237
329,114
18,982
10,759,369

$	591,657,265
$	61,566,145
$	530,091,120
	0.10405711

November 2013 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
11,399,627
2,144,667
9,254,961
422,093
18,768
9,658,286

$	846,999,195
$	88,140,261
$	758,858,935
	0.1040618

October 2013 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
10,877,471
2,195,503
8,681,968
351,730
32,070
9,001,628

$	634,176,606
$	65,993,559
$	568,183,047
	0.1040618

September 2013 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
10,626,902
2,080,759
8,546,143
335,452
33,055
8,848,541

$	657,359,157
$	68,405,977
$	588,953,180
	0.1040618

August 2013 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
11,822,472
2,144,675
9,677,797
398,069
35,431
10,040,435

$	699,840,395
$	72,844,224
$	626,996,171
	0.10408691

July 2013 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
12,426,194
2,016,882
10,409,312
356,788
34,262
10,731,844

$	609,580,628
$	63,449,364
$	546,131,264
	0.10408691

June 2013 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
10,882,868
1,916,493
8,966,375
289,556
26,290
9,229,642

$	724,596,076
$	74,900,627
$	649,695,450
	0.1033688

May 2013 - GA Allocation data

Total AQEW
-
Class A AQEW
CLASS B AQEW
+
Embedded GEN
-
Excluded Consumption
TOTAL CLASS B Load for Allocation

Total Global Adjustment $
Class A GA$
Clas B GA$
Peak Demand Factor

MWH
10,574,639
1,956,120
8,618,520
362,079
27,139
8,953,460

$	657,201,974
$	67,934,179
$	589,267,794
	0.1033688

April 2013 - GA Allocation data

	MWH
Total AQEW	10,740,825
-	
Class A AQEW	1,789,920
CLASS B AQEW	8,950,906
+	
Embedded GEN	488,168
-	
Excluded Consumption	29,918
TOTAL CLASS B Load for Allocation	9,409,156

Total Global Adjustment $	$	614,806,752
Class A GA$	$	63,551,836
Clas B GA$	$	551,254,916
Peak Demand Factor		0.1033688

March 2013 - GA Allocation data

	MWH
Total AQEW	11,757,578
-	
Class A AQEW	1,995,390
CLASS B AQEW	9,762,188
+	
Embedded GEN	352,918
-	
Excluded Consumption	17,842
TOTAL CLASS B Load for Allocation	10,097,264

Total Global Adjustment $	$	554,807,967
Class A GA$	$	57,349,834
Clas B GA$	$	497,458,133
Peak Demand Factor		0.1033688

February 2013 - GA Allocation data

	MWH
Total AQEW	11,515,240
-	
Class A AQEW	1,914,114
CLASS B AQEW	9,601,126
+	
Embedded GEN	289,137
-	
Excluded Consumption	13,886
TOTAL CLASS B Load for Allocation	9,876,376

Total Global Adjustment $	$	527,700,886
Class A GA$	$	54,547,807
Clas B GA$	$	473,153,079
Peak Demand Factor		0.1033688

January 2013 - GA Allocation data

	MWH
Total AQEW	12,647,423
-	
Class A AQEW	2,046,868
CLASS B AQEW	10,600,555
+	
Embedded GEN	301,107
-	
Excluded Consumption	33,733
TOTAL CLASS B Load for Allocation	10,867,929

Total Global Adjustment $	$	605,956,346
Class A GA$	$	62,567,562
Clas B GA$	$	543,388,784
Peak Demand Factor		0.10325424

November 2012 - GA Allocation data

	MWH
Total AQEW	11,905,547
-	
Class A AQEW	1,940,831
CLASS B AQEW	9,964,716
+	
Embedded GEN	285,071
-	
Excluded Consumption	30,836
TOTAL CLASS B Load for Allocation	10,218,952

Total Global Adjustment $	$	462,985,650
Class A GA$	$	47,774,336
Clas B GA$	$	415,211,314
Peak Demand Factor		0.10318751

November 2012 - GA Allocation data

	MWH
Total AQEW	11,278,642
-	
Class A AQEW	2,012,722
CLASS B AQEW	9,265,920
+	
Embedded GEN	271,131
-	
Excluded Consumption	27,179
TOTAL CLASS B Load for Allocation	9,509,872

Total Global Adjustment $	$	575,208,392
Class A GA$	$	59,167,626
Clas B GA$	$	516,040,766
Peak Demand Factor		0.10286294

October 2012 - GA Allocation data

	MWH
Total AQEW	10,900,883
-	
Class A AQEW	2,029,476
CLASS B AQEW	8,871,408
+	
Embedded GEN	278,004
-	
Excluded Consumption	34,642
TOTAL CLASS B Load for Allocation	9,114,770

Total Global Adjustment $	$	545,591,889
Class A GA$	$	55,289,382
Clas B GA$	$	490,302,507
Peak Demand Factor		0.10133835

September 2012 - GA Allocation data

	MWH
Total AQEW	10,812,042
-	
Class A AQEW	1,947,235
CLASS B AQEW	8,864,807
+	
Embedded GEN	215,553
-	
Excluded Consumption	38,170
TOTAL CLASS B Load for Allocation	9,042,191

Total Global Adjustment $	$	478,914,594
Class A GA$	$	48,409,401
Clas B GA$	$	430,505,193
Peak Demand Factor		0.10108149

August 2012 - GA Allocation data

	MWH
Total AQEW	12,372,266
-	
Class A AQEW	2,087,680
CLASS B AQEW	10,284,586
+	
Embedded GEN	218,206
-	
Excluded Consumption	39,277
TOTAL CLASS B Load for Allocation	10,463,515

Total Global Adjustment $	$	484,832,901
Class A GA$	$	48,972,128
Clas B GA$	$	489,817,759
Peak Demand Factor		0.10222683

July 2012 - GA Allocation data

	MWH
Total AQEW	13,167,379
-	
Class A AQEW	2,056,251
CLASS B AQEW	11,111,129
+	
Embedded GEN	224,480
-	
Excluded Consumption	41,032
TOTAL CLASS B Load for Allocation	11,294,576

Total Global Adjustment $	$	421,657,603
Class A GA$	$	42,438,290
Clas B GA$	$	379,219,313
Peak Demand Factor		0.10064633

June 2012 - GA Allocation data

	MWH
Total AQEW	11,557,688
-	
Class A AQEW	1,807,368
CLASS B AQEW	9,750,319
+	
Embedded GEN	280,043
-	
Excluded Consumption	35,265
TOTAL CLASS B Load for Allocation	9,995,097

Total Global Adjustment $	$	584,836,353
Class A GA$	$	58,215,306
Clas B GA$	$	526,621,046
Peak Demand Factor		0.09954119

May 2012 - GA Allocation data

	MWH
Total AQEW	10,921,686
-	
Class A AQEW	1,949,039
CLASS B AQEW	8,972,647
+	
Embedded GEN	273,589
-	
Excluded Consumption	30,595
TOTAL CLASS B Load for Allocation	9,215,640

Total Global Adjustment $	$	578,188,856
Class A GA$	$	57,553,607
Clas B GA$	$	520,624,504
Peak Demand Factor		0.09954119

April 2012 - GA Allocation data

	MWH
Total AQEW	10,430,493
-	
Class A AQEW	1,869,978
CLASS B AQEW	8,560,515
+	
Embedded GEN	287,085
-	
Excluded Consumption	28,508
TOTAL CLASS B Load for Allocation	8,819,093

Total Global Adjustment $	$	594,728,963
Class A GA$	$	59,220,184
Clas B GA$	$	535,508,779
Peak Demand Factor		0.09957508

March 2012 - GA Allocation data

	MWH
Total AQEW	11,262,788
-	
Class A AQEW	1,915,552
CLASS B AQEW	9,347,235
+	
Embedded GEN	304,304
-	
Excluded Consumption	24,729
TOTAL CLASS B Load for Allocation	9,626,811

Total Global Adjustment $	$	666,515,554
Class A GA$	$	66,368,340
Clas B GA$	$	600,147,215
Peak Demand Factor		0.09957508

February 2012 - GA Allocation data

	MWH
Total AQEW	11,369,137
-	
Class A AQEW	1,819,388
CLASS B AQEW	9,549,749
+	
Embedded GEN	259,661
-	
Excluded Consumption	26,640
TOTAL CLASS B Load for Allocation	9,782,770

Total Global Adjustment $	$	549,975,675
Class A GA$	$	54,763,872
Clas B GA$	$	495,211,803
Peak Demand Factor		0.09957508

January 2012 - GA Allocation data

	MWH
Total AQEW	12,497,503
-	
Class A AQEW	1,891,865
CLASS B AQEW	10,605,638
+	
Embedded GEN	290,100
-	
Excluded Consumption	29,895
TOTAL CLASS B Load for Allocation	10,865,843

Total Global Adjustment $	$	512,347,625
Class A GA$	$	51,017,056
Clas B GA$	$	461,330,570
Peak Demand Factor		0.09957508

December 2011 - GA Allocation data

	MWH
Total AQEW	11,893,787
-	
Class A AQEW	1,807,864
CLASS B AQEW	10,085,923
+	
Embedded GEN	278,802
-	
Excluded Consumption	28,995
TOTAL CLASS B Load for Allocation	10,335,731

Total Global Adjustment $	$	540,458,223
Class A GA$	$	53,816,171
Clas B GA$	$	486,642,053
Peak Demand Factor		0.09957508

November 2011 - GA Allocation data

	MWH
Total AQEW	10,883,510
-	
Class A AQEW	1,818,078
CLASS B AQEW	9,065,432
+	
Embedded GEN	267,297
-	
Excluded Consumption	14,037
TOTAL CLASS B Load for Allocation	9,318,692

Total Global Adjustment $	$	451,020,116
Class A GA$	$	44,910,364
Clas B GA$	$	406,109,752
Peak Demand Factor		0.09957508

October 2011 - GA Allocation data

	MWH
Total AQEW	10,804,905
-	
Class A AQEW	1,913,542
CLASS B AQEW	8,891,363
+	
Embedded GEN	211,046
-	
Excluded Consumption	31,170
TOTAL CLASS B Load for Allocation	9,071,240

Total Global Adjustment $	$	456,870,112
Class A GA$	$	45,492,878
Clas B GA$	$	411,377,234
Peak Demand Factor		0.09957508

September 2011 - GA Allocation data

	MWH
Total AQEW	10,918,652
-	
Class A AQEW	1,893,483
CLASS B AQEW	9,025,170
+	
Embedded GEN	168,994
-	
Excluded Consumption	48,302
TOTAL CLASS B Load for Allocation	9,145,861

Total Global Adjustment $	$	391,468,827
Class A GA$	$	38,980,540
Clas B GA$	$	352,488,288
Peak Demand Factor		0.09957508

August 2011 - GA Allocation data

	MWH
Total AQEW	12,281,682
-	
Class A AQEW	1,944,232
CLASS B AQEW	10,337,450
+	
Embedded GEN	189,009
-	
Excluded Consumption	36,087
TOTAL CLASS B Load for Allocation	10,490,372

Total Global Adjustment $	$	426,153,523
Class A GA$	$	42,434,271
Clas B GA$	$	383,719,252
Peak Demand Factor		0.09957508

July 2011 - GA Allocation data

	MWH
Total AQEW	12969441
-	
Class A AQEW	1,863,383
CLASS B AQEW	11,106,058
+	
Embedded GEN	200,436
-	
Excluded Consumption	33,473
TOTAL CLASS B Load for Allocation	11,273,021

Total Global Adjustment $	$	391,700,994
Class A GA$	$	39,003,658
Clas B GA$	$	352,697,336
Peak Demand Factor		0.09957508

Year to Date 2011 - GA Allocation data (September)

	MWH
Total AQEW	138,630,409
-	
Class A AQEW	22,728,668
CLASS B AQEW	115,901,741
+	
Embedded GEN	2,831,157
-	
Excluded Consumption	350,168
TOTAL CLASS B Load for Allocation	118,382,730

Total Global Adjustment $	5,309,712,152
Class A GA$	553,357,286
Clas B GA$	4,756,354,865
Peak Demand Factor (Jan-Jun)	0.10887593
Peak Demand Factor (Jul-Dec)	0.09957508

June 2011 - GA Allocation data

	MWH
Total AQEW	10,964,964
-	
Class A AQEW	1,847,675
CLASS B AQEW	9,117,288
+	
Embedded GEN	218,894
-	
Excluded Consumption	18,487
TOTAL CLASS B Load for Allocation	9,317,695

Total Global Adjustment $		$423,140,323.26
Class A GA$	$	46,045,841
Clas B GA$	$	377,094,482
Peak Demand Factor		0.10887593

May 2011 - GA Allocation data

	MWH
Total AQEW	10,568,314
-	
Class A AQEW	1,933,429
CLASS B AQEW	8,634,885
+	
Embedded GEN	261,085
-	
Excluded Consumption	23,560
TOTAL CLASS B Load for Allocation	8,872,410

Total Global Adjustment $	$	498,229,322
Class A GA$	$	54,245,181
Clas B GA$	$	443,984,141
Peak Demand Factor		0.10887593

April 2011 - GA Allocation data

	MWH
Total AQEW	10,888,933
-	
Class A AQEW	1,996,233
CLASS B AQEW	8,892,700
+	
Embedded GEN	266,583
-	
Excluded Consumption	27,120
TOTAL CLASS B Load for Allocation	9,132,162

Total Global Adjustment $	$	440,436,684
Class A GA$	$	47,952,954
Clas B GA$	$	392,483,731
Peak Demand Factor		0.10887593

March 2011 - GA Allocation data

	MWH
Total AQEW	12,097,068
-	
Class A AQEW	1,987,339
CLASS B AQEW	10,109,729
+	
Embedded GEN	266,580
-	
Excluded Consumption	27,120
TOTAL CLASS B Load for Allocation	10,349,190

Total Global Adjustment $	$	427,712,982
Class A GA$	$	46,567,649
Clas B GA$	$	381,145,333
Peak Demand Factor		0.10887593

February 2011 - GA Allocation data

	MWH
Total AQEW	11,586,544
-	
Class A AQEW	1,821,355
CLASS B AQEW	9,765,189
+	
Embedded GEN	233,940
-	
Excluded Consumption	30,643
TOTAL CLASS B Load for Allocation	9,968,486

Total Global Adjustment $	$	393,446,399
Class A GA$	$	42,836,843
Clas B GA$	$	350,609,556
Peak Demand Factor		0.10887593

January 2011 - GA Allocation data

	MWH
Total AQEW	13,056,516
-	
Class A AQEW	1,981,255
CLASS B AQEW	11,075,261
+	
Embedded GEN	252,084
-	
Excluded Consumption	33,446
TOTAL CLASS B Load for Allocation	11,293,899

Total Global Adjustment $	$	469,074,645
Class A GA$	$	51,070,938
Clas B GA$	$	418,003,707
Peak Demand Factor		0.10887593

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8618519.783
362079.014
27139.07
8953459.727
657201973.7
67934179.38
605041975.5
0.1033688

- GA Allocation data

	MWH
Total AQEW	
-	
Class A AQEW	
CLASS B AQEW	
+	
Embedded GEN	
-	
Excluded Consumption	
TOTAL CLASS B Load for Allocation	

Total Global Adjustment $	
Class A GA$	
Clas B GA$	
Peak Demand Factor	

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
HYDRO ONE NETWORKS INC.	MP	1753	31-Jul-18	0	0	-19872279.47	ONZN		P	102007		0	0	MOE - Rural and Remote Settlement Debit, current month balancing amount
Total						**(19,872,279.47)**								

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Jul-18	0	0	69.18	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
ATIKOKAN HYDRO INC.	MP	756	31-Jul-18	0	0	-253.77	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Jul-18	0	0	-2343.91	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Jul-18	0	0	-851.65	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ATIKOKAN HYDRO INC.	MP	756	31-Jul-18	0	0	-14247.27	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
INNPOWER CORPORATION	MP	756	31-Jul-18	0	0	-99845.85	ONZN		P	104299		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	31-Jul-18	0	0	-106457.26	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
SIOUX LOOKOUT HYDRO INC.	MP	756	31-Jul-18	0	0	-8498.94	ONZN		P	113601		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
LAKELAND POWER DISTRIBUTION LTD.	MP	756	31-Jul-18	0	0	-7272.9	ONZN		P	113624		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
ALGOMA POWER INC.	MP	756	31-Jul-18	0	0	6439.37	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, previous month bal
HYDRO ONE NETWORKS INC.	MP	756	31-Jul-18	0	0	-15453833.18	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
Total						**(15,687,096.18)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
HYDRO ONE NETWORKS INC.	MP	755	31-Jul-18	0	0	-591.44	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
HYDRO ONE NETWORKS INC.	MP	755	31-Jul-18	0	0	-49690.34	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
ALGOMA POWER INC.	MP	755	31-Jul-18	0	0	-862.65	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
CANADIAN NIAGARA POWER INC.	MP	755	31-Jul-18	0	0	-10898.48	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, previous mon
HYDRO ONE NETWORKS INC.	MP	755	31-Jul-18	0	0	-1224109.52	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
PUC DISTRIBUTION INC.	MP	755	31-Jul-18	0	0	-8748.7	ONZN		P	102316		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
ATTAWAPISKAT POWER CORPORATION	MP	755	31-Jul-18	0	0	-20105.67	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
BLUEWATER POWER DISTRIBUTION CORPORATION	MP	755	31-Jul-18	0	0	-25187.53	ONZN		P	104271		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
FORT ALBANY POWER CORPORATION	MP	755	31-Jul-18	0	0	-11111.42	ONZN		P	105832		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
KASHECHEWAN POWER CORPORATION	MP	755	31-Jul-18	0	0	-11667.62	ONZN		P	105833		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
CANADIAN NIAGARA POWER INC.	MP	755	31-Jul-18	0	0	-12934.15	ONZN		P	102110		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
ALGOMA POWER INC.	MP	755	31-Jul-18	0	0	-40750.91	ONZN		P	110073		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	755	31-Jul-18	0	0	-11919.48	ONZN		P	102741		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
Total						**(1,428,577.91)**								

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	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
IESO Balancing Amount	MP	2470	31-Jul-18	0	0	-13846440.45	ONZN		P			0	0	OESP Balancing Amount for 2018/07
Total						**(13,846,440.45)**								

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES
107810	O.N.TEL INC.	
113601	SIOUX LOOKOUT HYDRO INC.	

Participation Name
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OPG BP	$ millions		2016	2017	2018
General and Corporate Requirements			400	1500	850
Scenario 1 - 50/50					
Short		50%	200	750	425
10-year spread		1.35%	$ 2.70	$ 10.13	$ 5.74
Long		50%	200	750	425
30-year spread		1.795%	$ 3.59	$ 10.13	$ 5.74
	Total		$ 6.29	$ 20.25	$ 11.48
	Cumulative		$ 6.29	$ 26.54	$ 38.02
Scenario 2 - 0/100					
Short		0%	0	0	0
10-year spread		1.35%	$ -	$ -	$ -
Long		100%	400	1500	850
30-year spread		1.795%	$ 7.18	$ 26.93	$ 15.26
	Total		$ 7.18	$ 26.93	$ 15.26
	Cumulative		$ 7.18	$ 34.11	$ 49.36

	2019	2020	2021
	600	550	100
	300	275	50
$	4.05	$ 3.71	$ 0.68
	300	275	50
$	4.05	$ 3.71	$ 0.68
$	8.10	$ 7.43	$ 1.35
$	46.12	$ 53.54	$ 54.89

	0	0	0
$	-	$ -	$ -
	600	550	100
$	10.77	$ 9.87	$ 1.80
$	10.77	$ 9.87	$ 1.80
$	60.13	$ 70.01	$ 71.80

	3,300,000,000.00
	1.00%
	33,000,000.00

KEY MESSAGES

- Ontario's Government is committed to taking action to help people in their everyday lives and ensure that everyone in the province has equitable access to energy.

- We've heard clearly from families and businesses that the costs of rebuilding our power system, after years of neglect, require relief, so today we're taking immediate action to reduce bills for all consumers.

- After years of careful fiscal management and prudent stewardship of the economy leading to consistent economic growth, Ontario is in a position to take action to help with the cost of electricity as an everyday expense.

- Our plan to reduce bills involves three key actions:

    1. On January 1, 2017 we will rebate all provincial taxes from electricity bills, reducing bills by 8% and saving the average family $11 on each monthly bill.
    2. We will modernize programs that reduce distribution rates for rural and ~~northern~~ remote consumers, reducing the average bill by up to 20% or $45 each month.
    3. We will expand eligibility of the Industrial Conservation Initiative to allow more than one thousand new businesses to qualify and reduce their electricity bills by up to ~~for~~ a one third ~~reduction in bills~~.

- These actions build on a foundation of efforts to provide support for low-income families, incent industrial consumers, expand natural gas to more communities, and grid-connect remote first nations communities.

Commented [JK1]: Equitable access? And to energy and not electricity?

Commented [JK2]: All consumers?

Commented [JK3]: Hopefully the government's stewardship led to the consistent growth.

Commented [SK24]: Presumably not all northern consumers would be classified under Hydro One's R2 classification.

Commented [SK25]: Note, the one third reduction is not a certainty.

Want to imply here that it is 'up to' one third.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

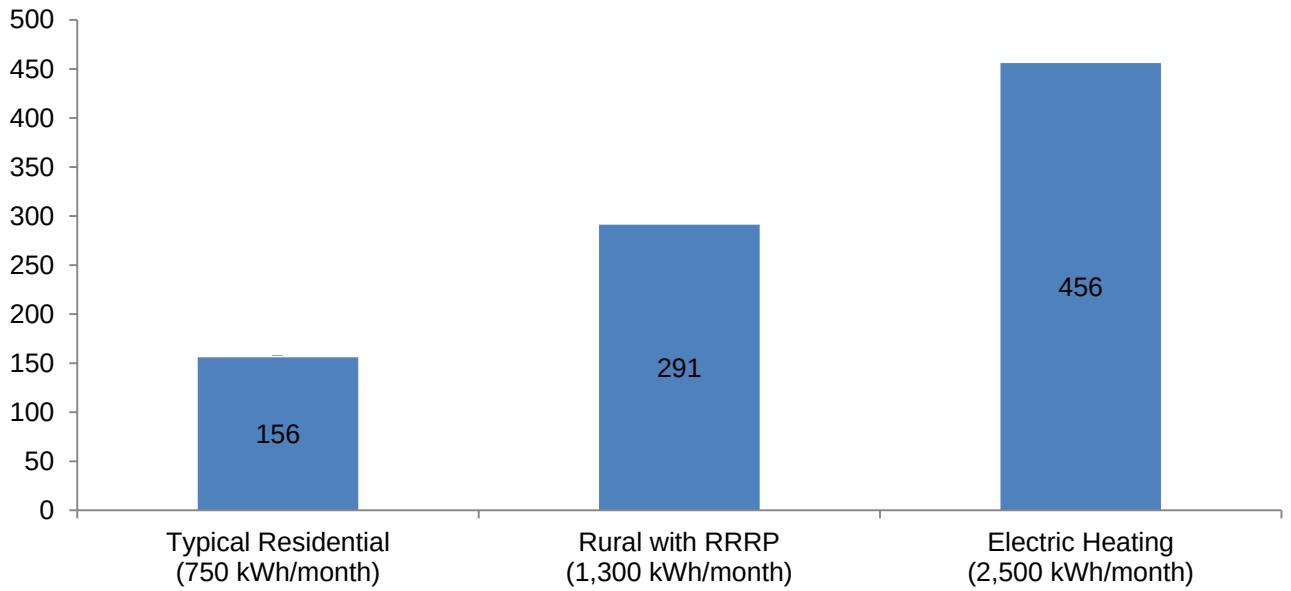
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

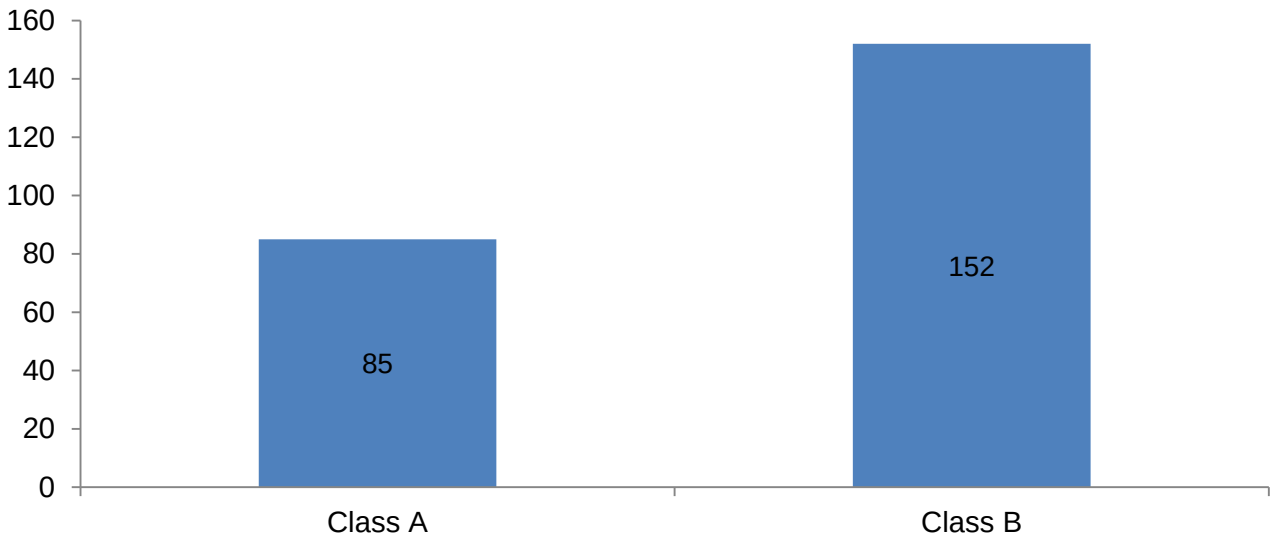


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Current Status on Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,100*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,005**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.0 billion and before considering any additional funding from the tax base.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total decrease on typical monthly bill	**8.38**	**8.23**	**7.75**	**9.26**	**8.52**	**8.17**	

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total increase on industrial bill	**19.96**	**18.97**	**18.34**	**17.14**	**14.45**	**13.7**	

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of about $450 ~~[placeholder for OFA]~~ on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $30 ~~20 to $35~~ million annual fiscal pressure in 2017 to the province ~~[TBC by OPG / OFA]~~ based on new borrowing and increasing to about $70M by 2021.

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.
- A summary of the annual fiscal impacts of the proposed initiatives is presented in the next slide.

Proposed Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
OCEB	-	-	-	-	-
OREC	300	1,100*	1,100*	1,200*	1,200*
Ending DRC[2]	330	330	--	--	--
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
CURRENT TOTAL	**1,195**	**2,005**	**1,715**	**1,826**	**1,826**
1. OESP		106	119	127	132
2. RRRP		292	300	306	315
3. First Nations Delivery Rate		18	18	18	18
4. Fund ICI through Tax Base		900+	900+	900+	900+
5. Departure Tax		TBD	TBD	TBD	TBD
6. Conservation Amortisation					
7. DRC Ended for Class B					
8. Other					
TOTAL	**1195**	**3,421**	**3,152**	**3,177**	**3,191**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

- As shown above if all measures proposed in this deck were to be accepted taxpayer funded contributions to electricity price mitigation would increase to about $3.2 billion by 2020-21. That is a 67% increase from the current forecast for 2016-17.
- These amounts were not considered in the 2016-17 Fiscal Plan and could put at risk the Province's fiscal objectives for 2017-18 and beyond.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

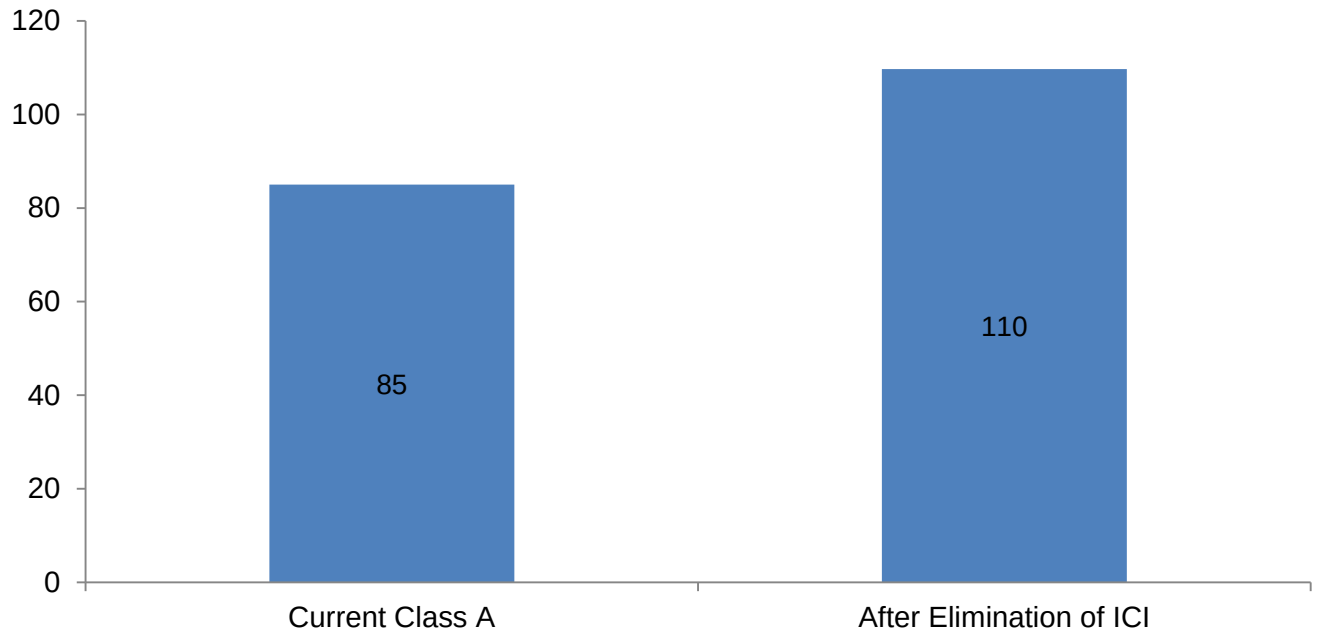
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

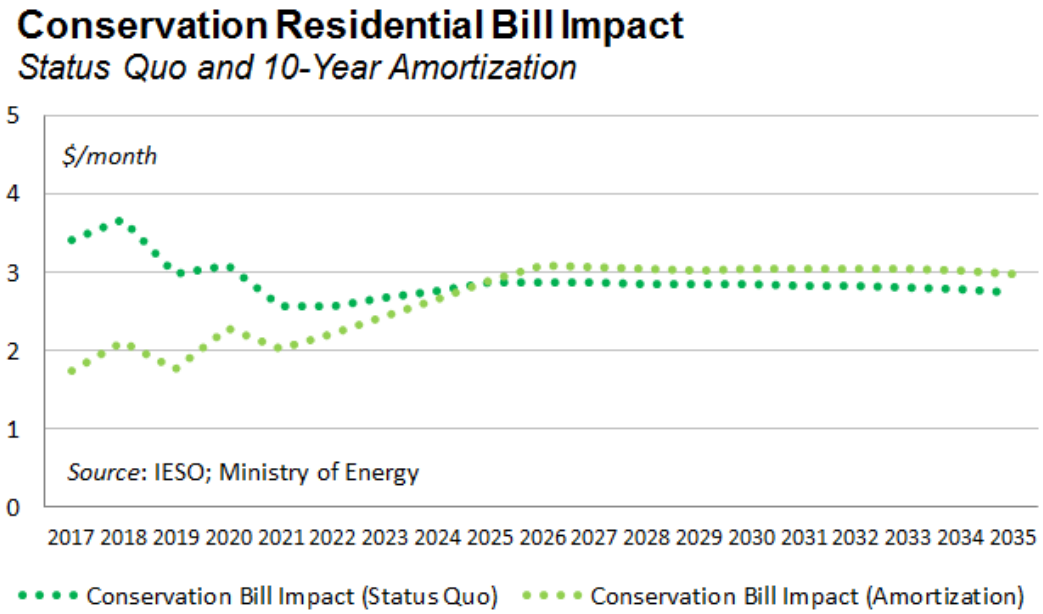
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

- As shown before the positive impact to residential ratepayers is very limited (between $8 and $9 per month) while the impact to the Province's fiscal position would be material (about $1.2 to $1.5 billion a year).

Appendix

Electricity Consumer Classes

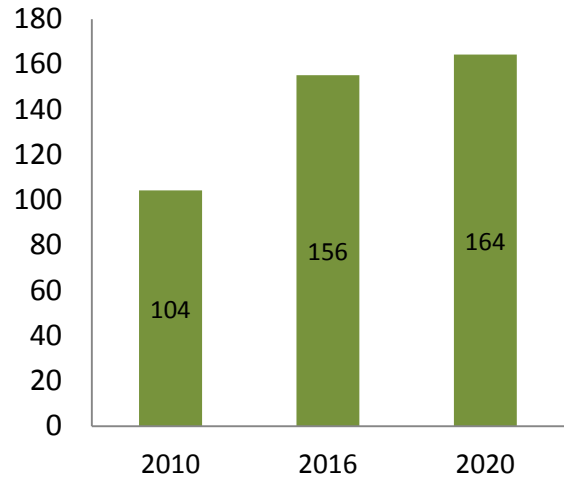
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

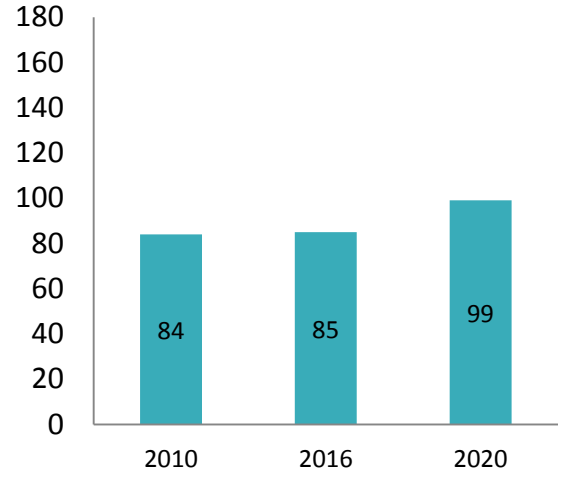
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

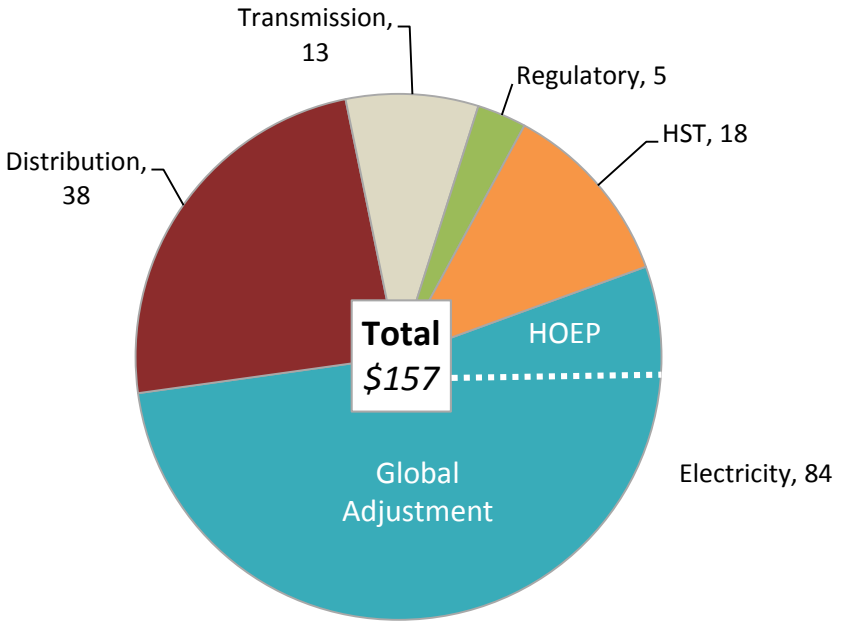
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



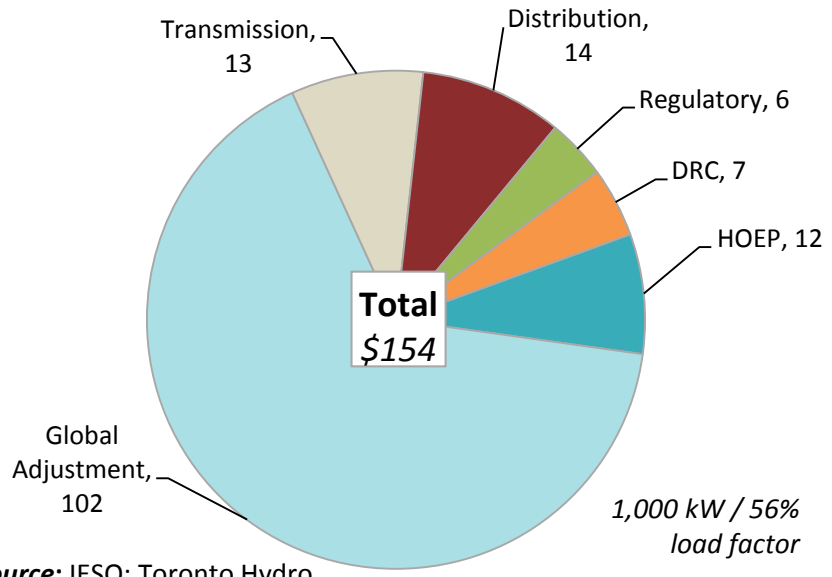
***Source*: OEB, Toronto Hydro**

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

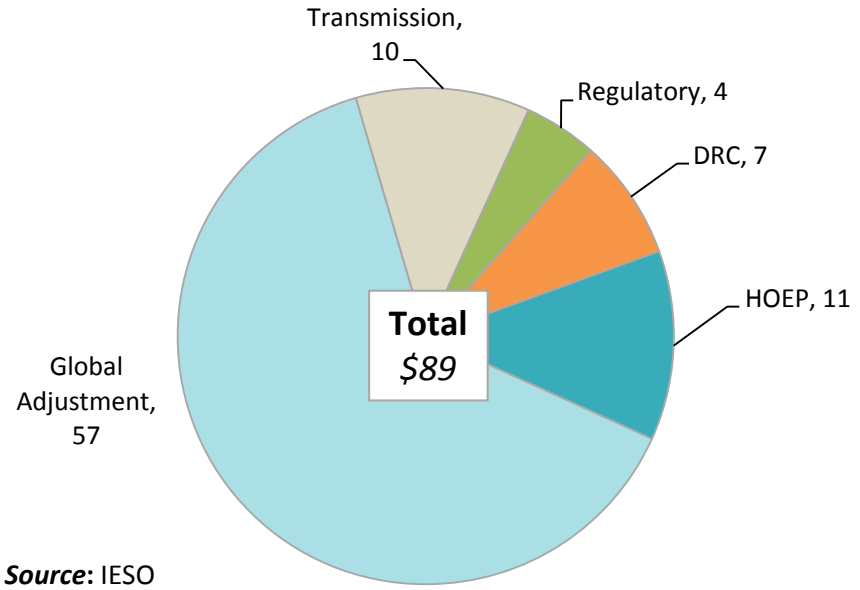
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



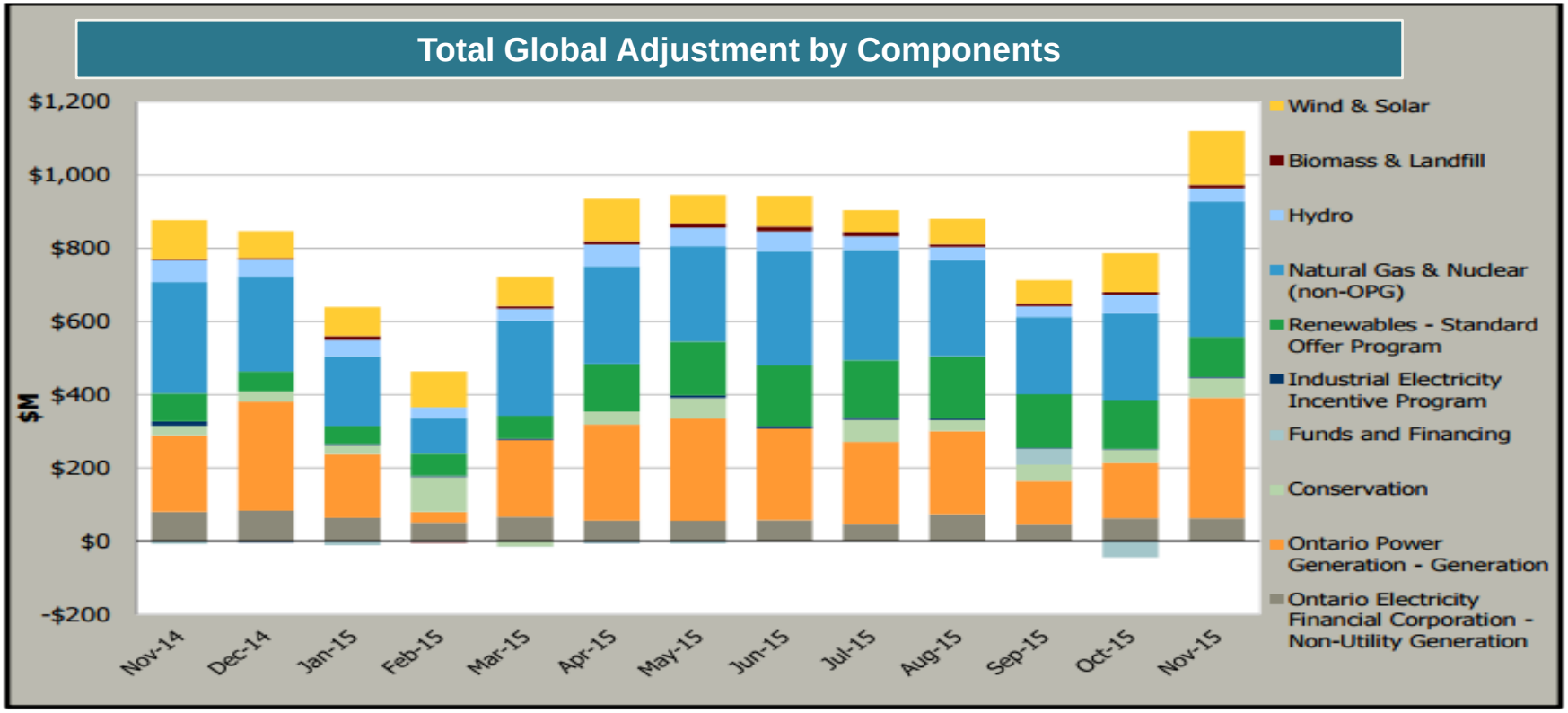
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

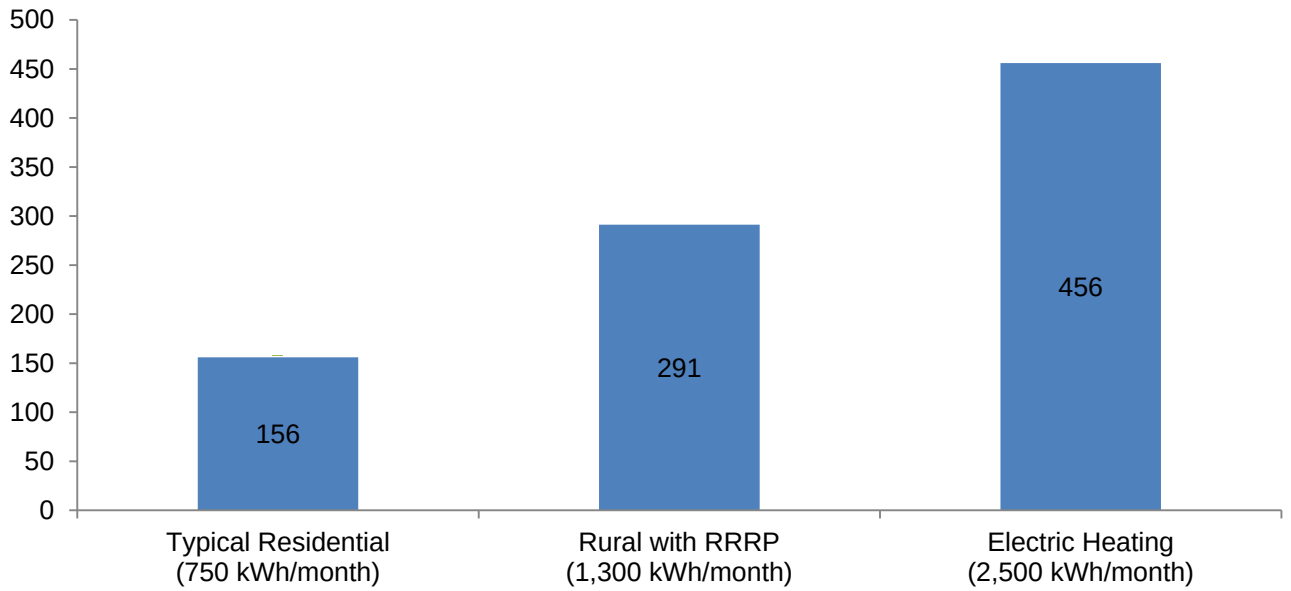
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

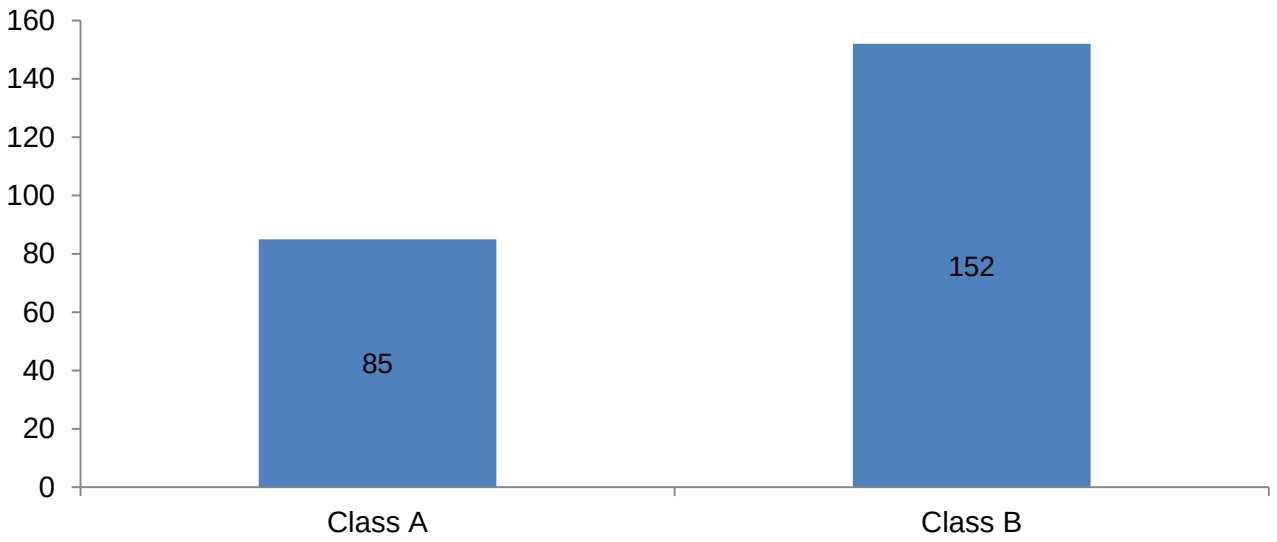


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Current Status on Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,100*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,005**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.0 billion and before considering any additional funding from the tax base.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total decrease on typical monthly bill	**8.38**	**8.23**	**7.75**	**9.26**	**8.52**	**8.17**	

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total increase on industrial bill	**19.96**	**18.97**	**18.34**	**17.14**	**14.45**	**13.7**	

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of about $[TBD based on Energy's estimate of affected consumption] ~~[placeholder for OFA]~~ on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $30 ~~20 to $35~~ million annual fiscal pressure in 2017 to the province ~~[TBC by OPG / OFA]~~ based on new borrowing and increasing to about $70M by 2021.

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.

- A summary of the annual fiscal impacts of the proposed initiatives is presented in the next slide.

Proposed Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
OCEB	-	-	-	-	-
OREC	300	1,100*	1,100*	1,200*	1,200*
Ending DRC[2]	330	330	--	--	--
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
CURRENT TOTAL	**1,195**	**2,005**	**1,715**	**1,826**	**1,826**
1. OESP		106	119	127	132
2. RRRP		292	300	306	315
3. First Nations Delivery Rate		18	18	18	18
4. Fund ICI through Tax Base		900+	900+	900+	900+
5. Departure Tax		TBD	TBD	TBD	TBD
6. Conservation Amortisation	N/A	N/A	N/A	N/A	N/A
7. DRC Ended for Class B	110	450			
8. Other					
TOTAL	**1,305**	**3,871**	**3,152**	**3,177**	**3,191**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

- As shown above if all measures proposed in this deck were to be accepted taxpayer funded contributions to electricity price mitigation would increase to about $3.2 billion by 2020-21. That is a 145% increase from the current forecast for 2016-17.
- These amounts were not considered in the 2016-17 Fiscal Plan and could put at risk the Province's fiscal objectives for 2017-18 and beyond.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

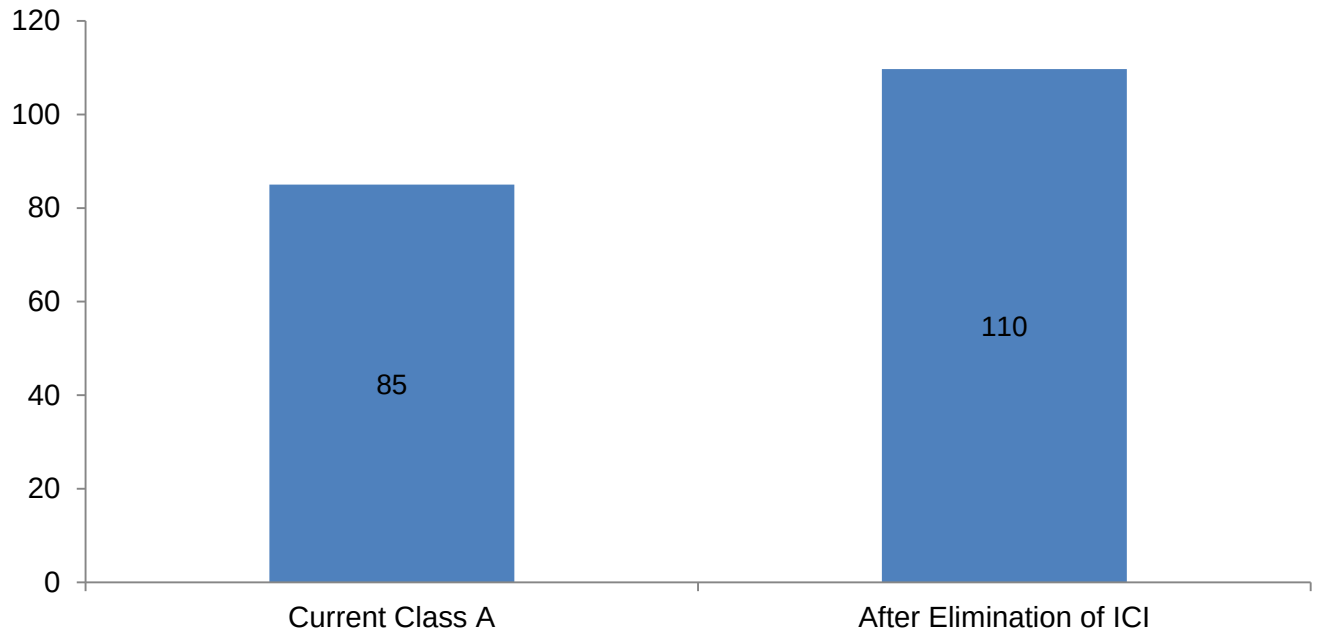
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

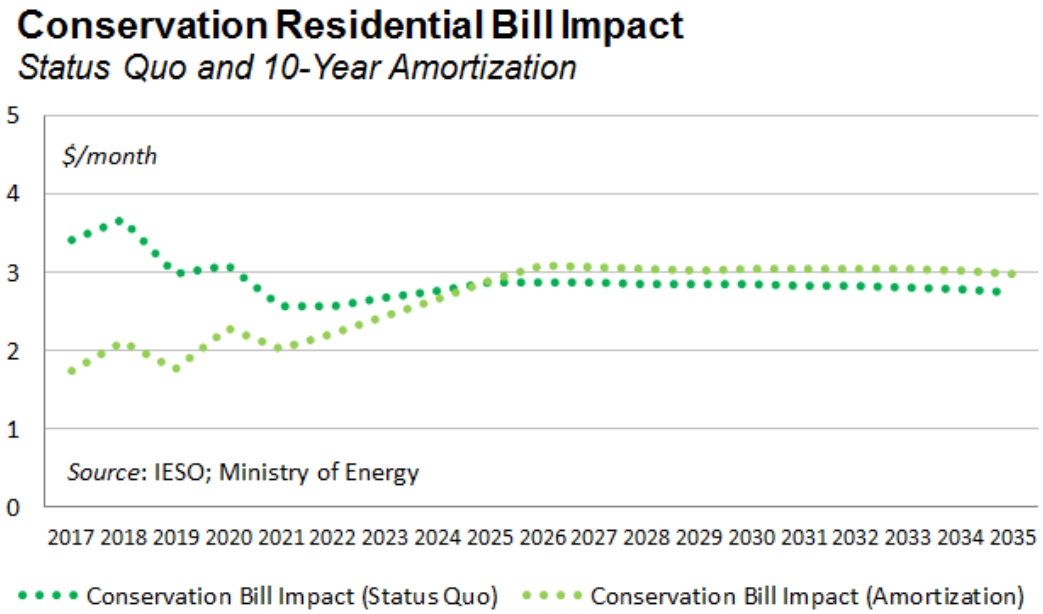
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

- As shown before the positive impact to residential ratepayers is very limited (between $8 and $9 per month) while the impact to the Province's fiscal position would be material (about $1.2 to $1.5 billion a year).

Appendix

Electricity Consumer Classes

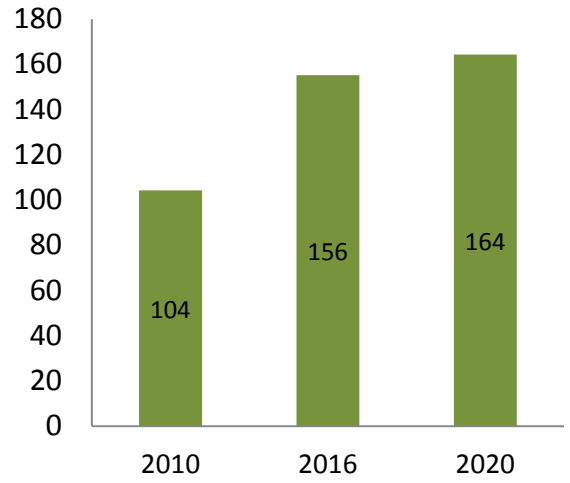
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

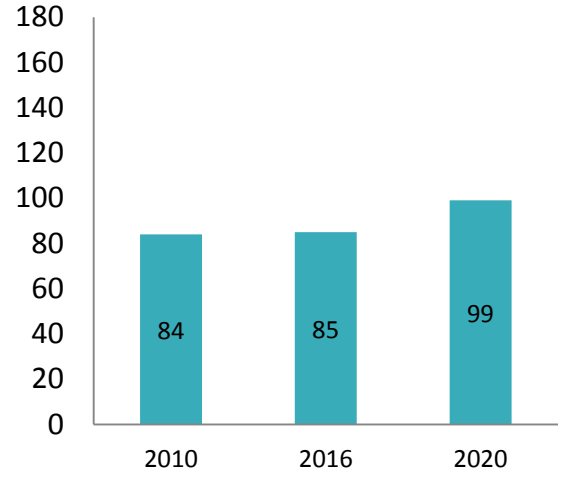
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

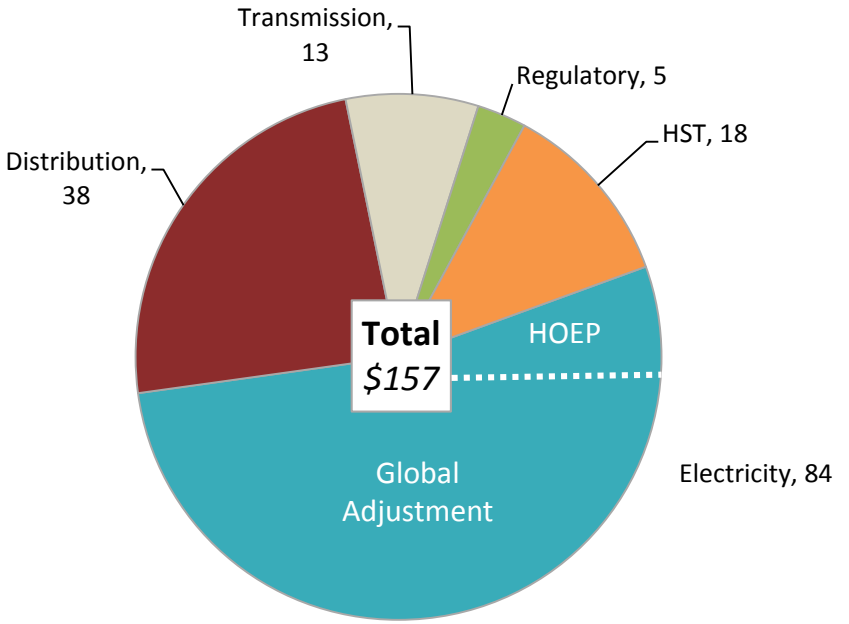
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



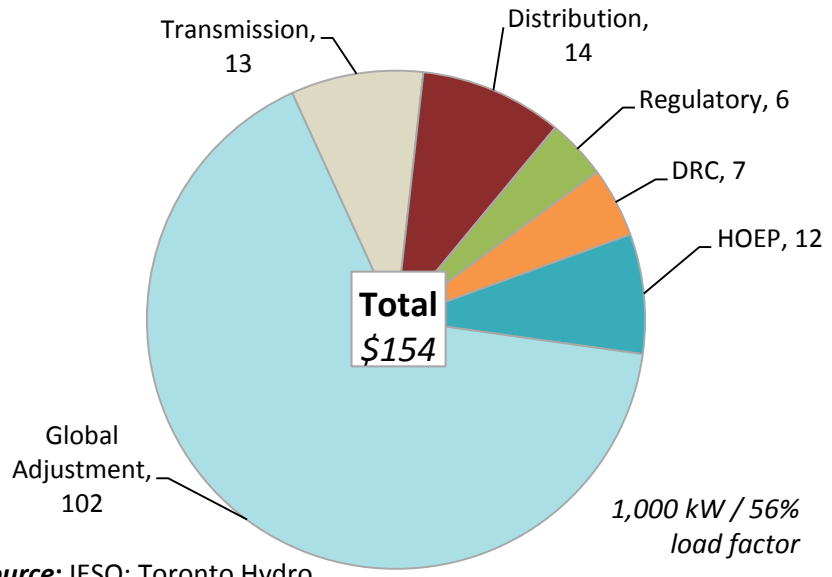
***Source*: OEB, Toronto Hydro**

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

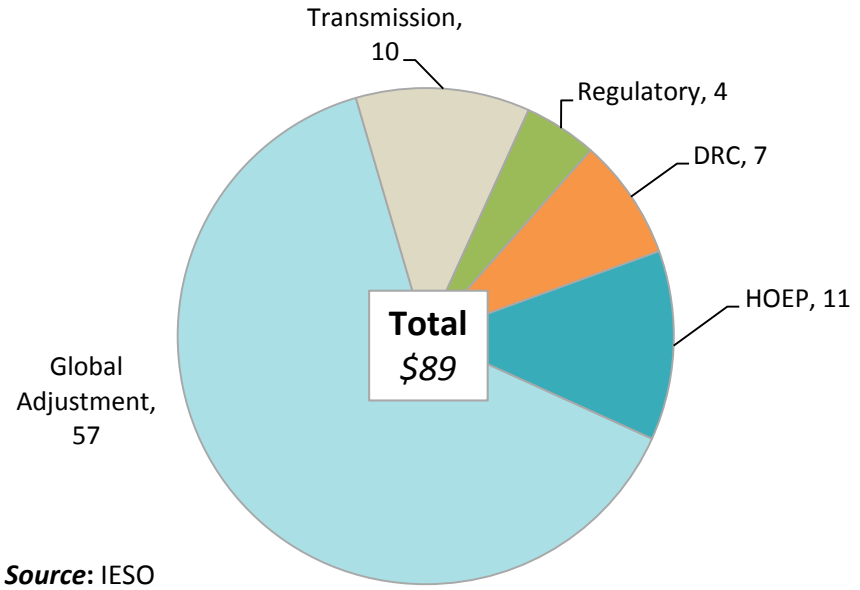
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



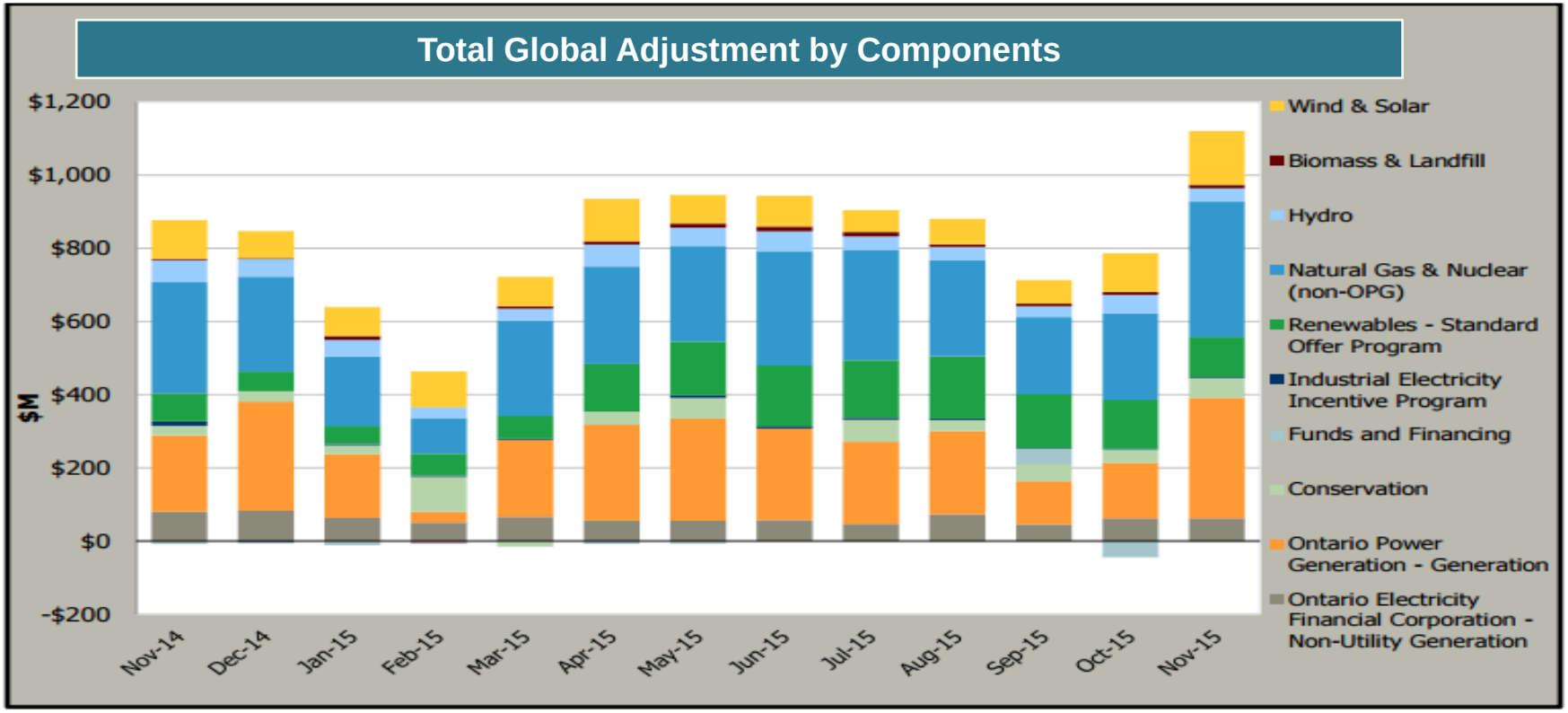
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

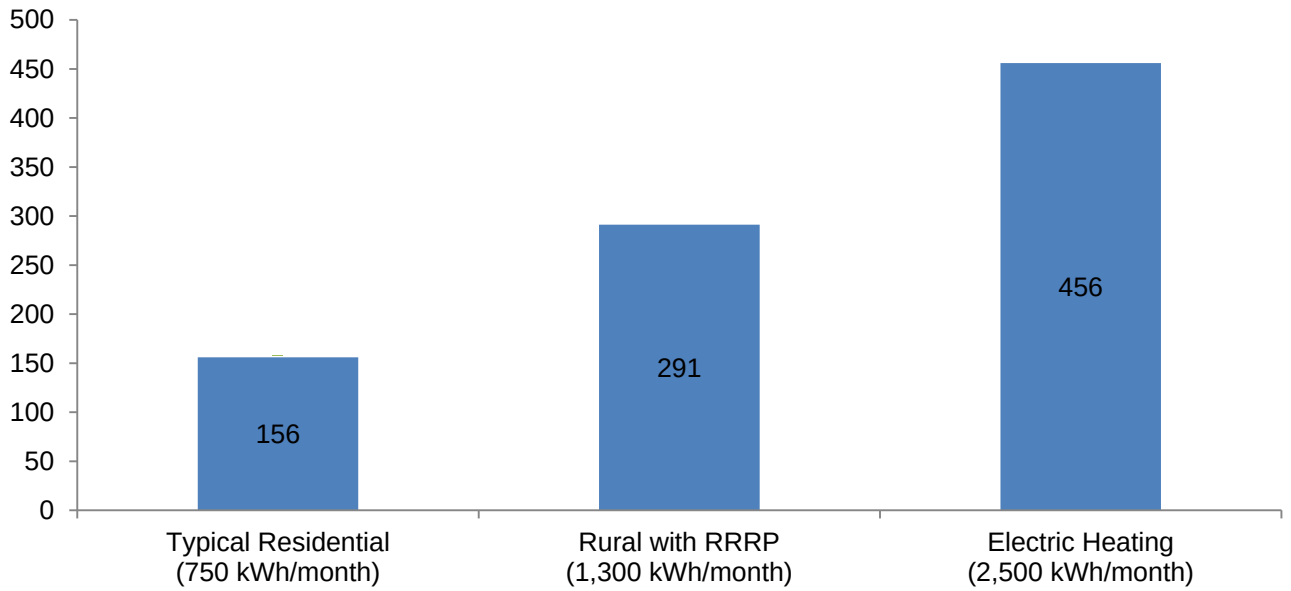
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

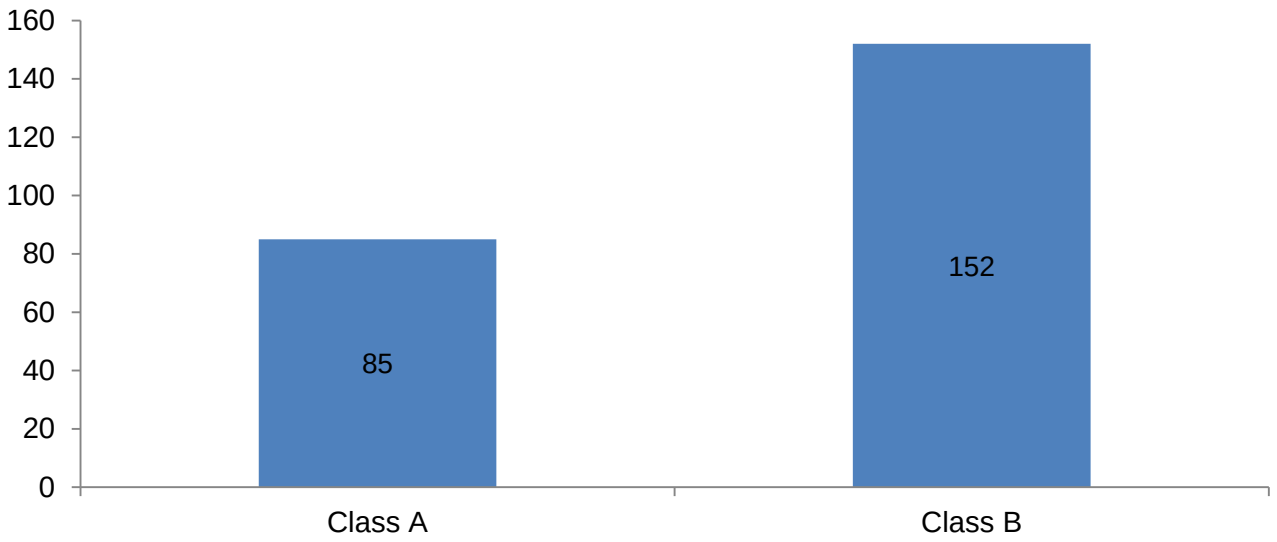


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Current Status on Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,100*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,005**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.0 billion and before considering any additional funding from the tax base.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total decrease on typical monthly bill	**8.38**	**8.23**	**7.75**	**9.26**	**8.52**	**8.17**	

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total increase on industrial bill	**19.96**	**18.97**	**18.34**	**17.14**	**14.45**	**13.7**	

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of about $[TBD based on Energy's estimate of affected consumption] ~~[placeholder for OFA]~~ on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $30 ~~20 to $35~~ million annual fiscal pressure in 2017 to the province ~~[TBC by OPG / OFA]~~ based only new borrowing and increasing to about $70M by 2021.

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.

- A summary of the annual fiscal impacts of the proposed initiatives is presented in the next slide.

Proposed Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
OCEB	-	-	-	-	-
OREC	300	1,100*	1,100*	1,200*	1,200*
Ending DRC[2]	330	330	--	--	--
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
CURRENT TOTAL	**1,195**	**2,005**	**1,715**	**1,826**	**1,826**
1. OESP		106	119	127	132
2. RRRP		292	300	306	315
3. First Nations Delivery Rate		18	18	18	18
4. Fund ICI through Tax Base		900+	900+	900+	900+
5. Departure Tax		TBD	TBD	TBD	TBD
6. Conservation Amortisation	N/A	N/A	N/A	N/A	N/A
7. DRC Ended for Class B	110	450	--	--	--
8. Other					
TOTAL	**1,305**	**3,871**	**3,152**	**3,177**	**3,191**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

- As shown above if all measures proposed in this deck were to be accepted taxpayer funded contributions to electricity price mitigation would increase to about $3.2 billion by 2020-21. That is a 145% increase from the current forecast for 2016-17 or a 93% increase when comparing against the current expected funding for 2017-18.
- These amounts were not considered in the 2016-17 Fiscal Plan and could put at risk the Province's fiscal objectives for 2017-18 and beyond.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

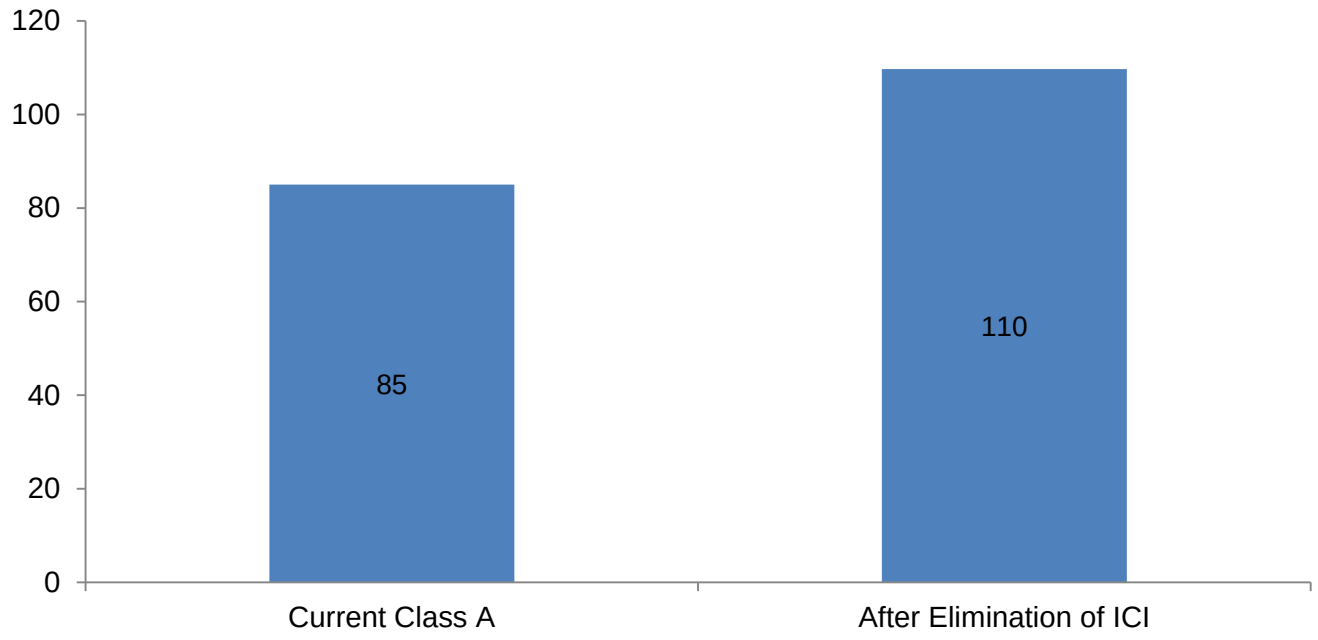
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

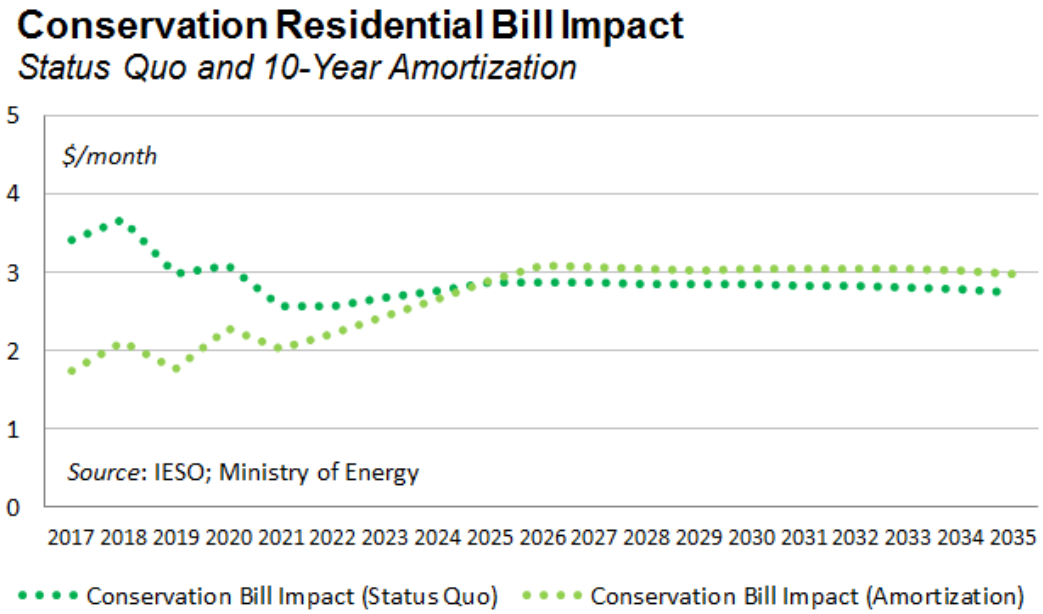
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

- As shown before the positive impact to residential ratepayers is very limited (between $8 and $9 per month) while the impact to the Province's fiscal position would be material (about $1.5 billion a year).

Appendix

Electricity Consumer Classes

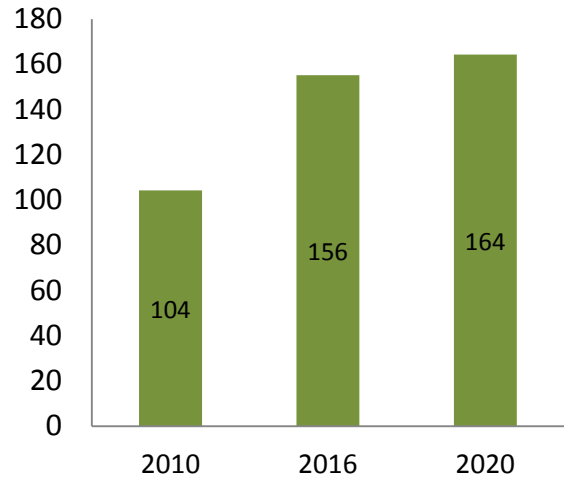
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

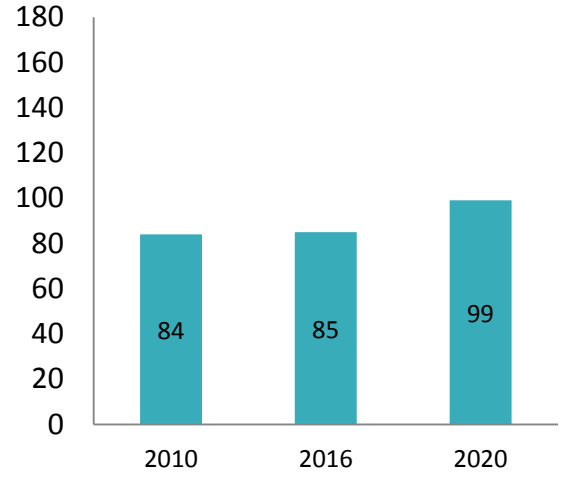
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

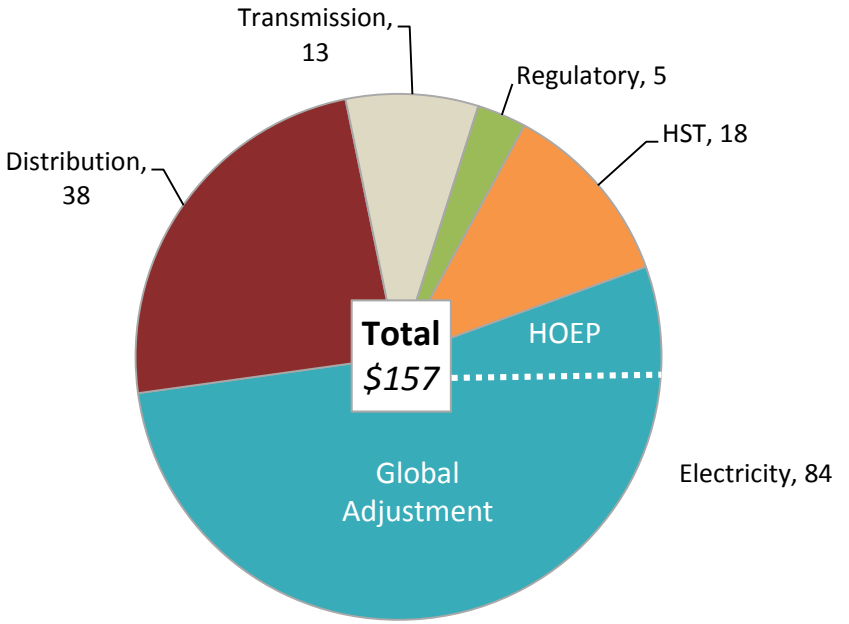
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



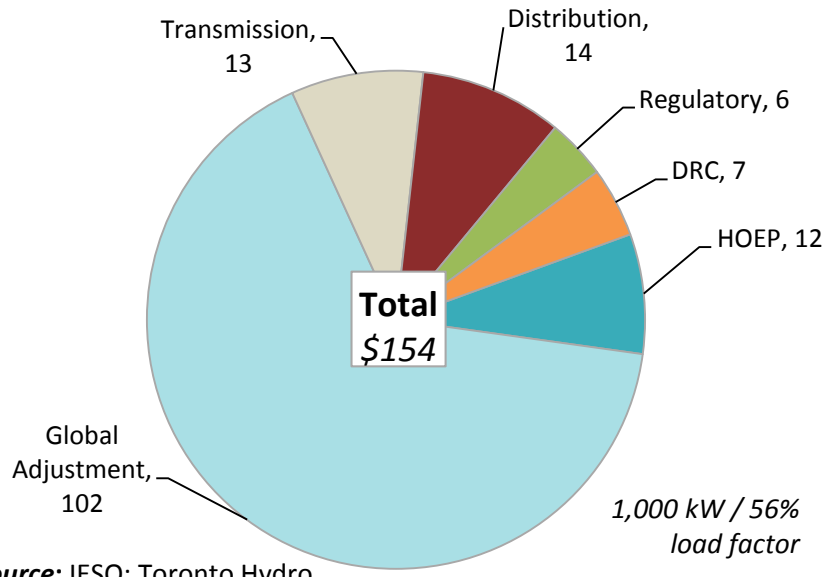
***Source*: OEB, Toronto Hydro**

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

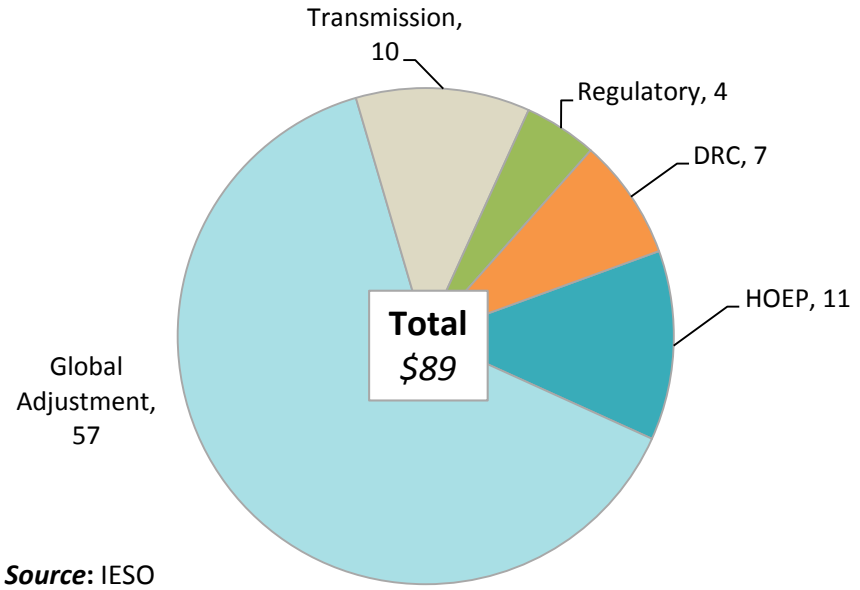
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



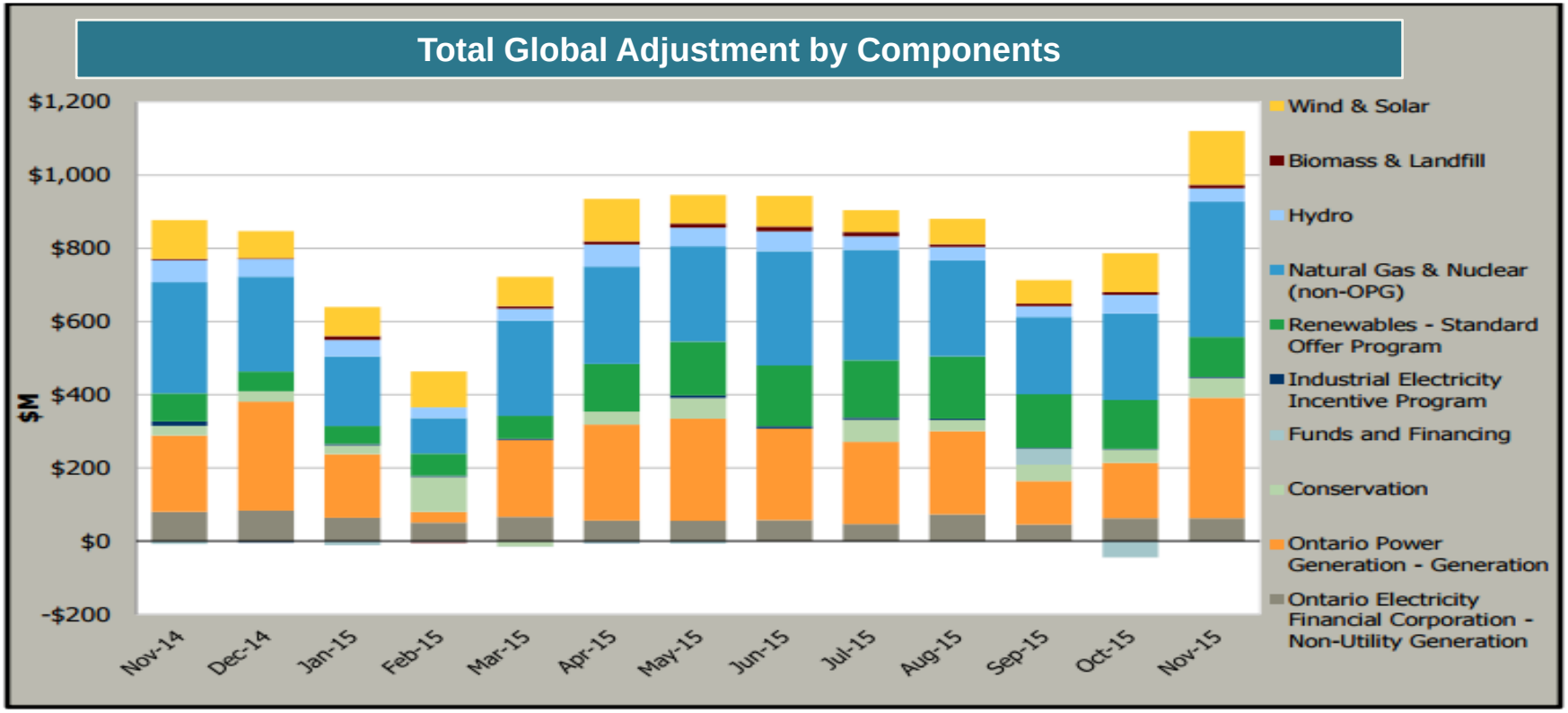
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

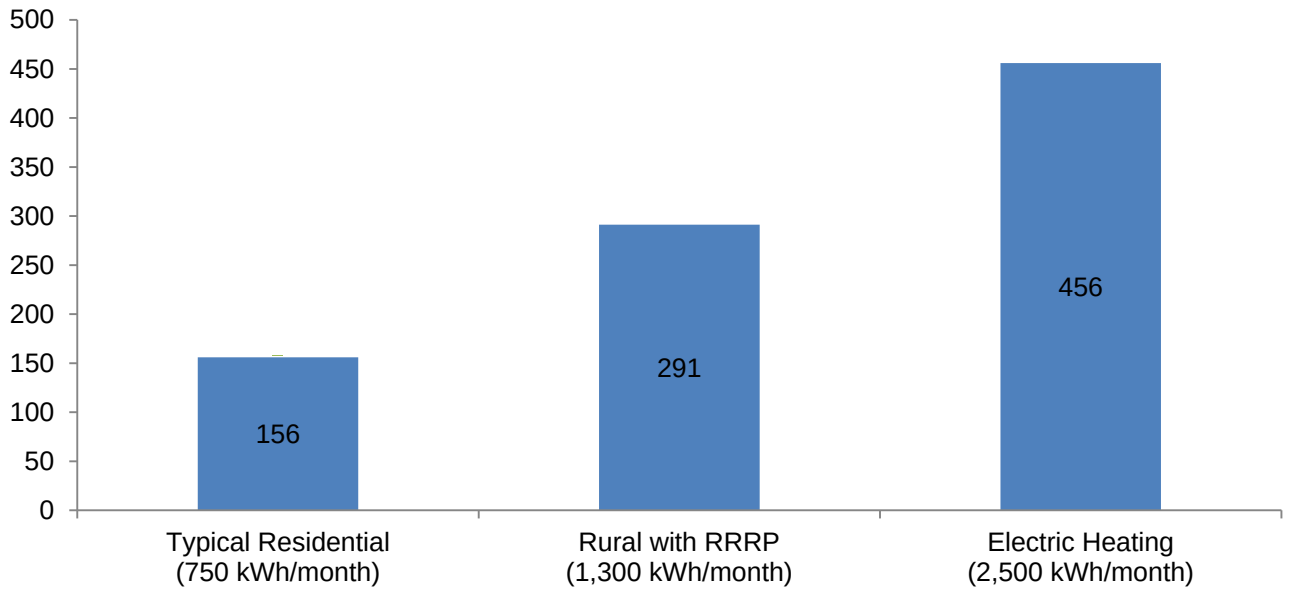
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

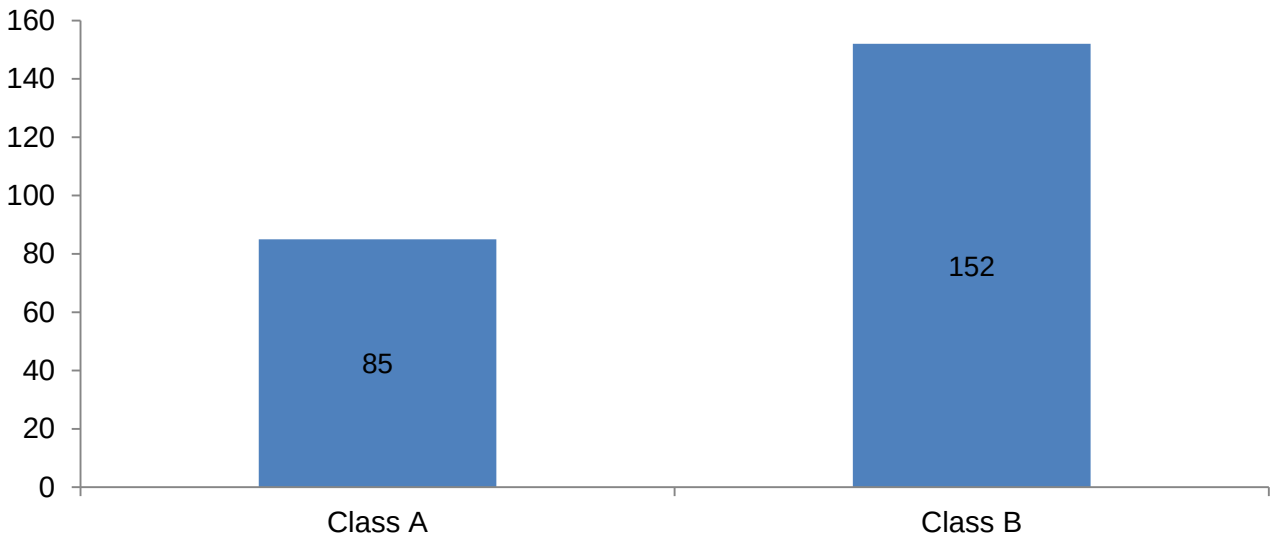


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Current Status on Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,100*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,005**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.0 billion and before considering any additional funding from the tax base.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total decrease on typical monthly bill	**8.38**	**8.23**	**7.75**	**9.26**	**8.52**	**8.17**	

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total increase on industrial bill	**19.96**	**18.97**	**18.34**	**17.14**	**14.45**	**13.7**	

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of about $[TBD based on Energy's estimate of affected consumption] ~~[placeholder for OFA]~~ on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $30 ~~20 to $35~~ million annual fiscal pressure in 2017 to the province ~~[TBC by OPG / OFA]~~ based only new borrowing and increasing to about $70M by 2021.

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.

- A summary of the annual fiscal impacts of the proposed initiatives is presented in the next slide.

Proposed Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
OCEB	-	-	-	-	-
OREC	300	1,100*	1,100*	1,200*	1,200*
Ending DRC[2]	330	330	--	--	--
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
CURRENT TOTAL	**1,195**	**2,005**	**1,715**	**1,826**	**1,826**
1. OESP		106	119	127	132
2. RRRP		292	300	306	315
3. First Nations Delivery Rate		18	18	18	18
4. Fund ICI through Tax Base		900+	900+	900+	900+
5. Departure Tax		TBD	TBD	TBD	TBD
6. Conservation Amortisation	N/A	N/A	N/A	N/A	N/A
7. DRC Ended for Class B	110	450	--	--	--
8. Other					
TOTAL	**1,305**	**3,871**	**3,152**	**3,177**	**3,191**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

- As shown above if all measures proposed in this deck were to be accepted taxpayer funded contributions to electricity price mitigation would increase to about $3.2 billion by 2020-21. That is a 145% increase from the current forecast for 2016-17 or a 93% increase when comparing against the current expected funding for 2017-18.
- These amounts were not considered in the 2016-17 Fiscal Plan and could put at risk the Province's fiscal objectives for 2017-18 and beyond.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

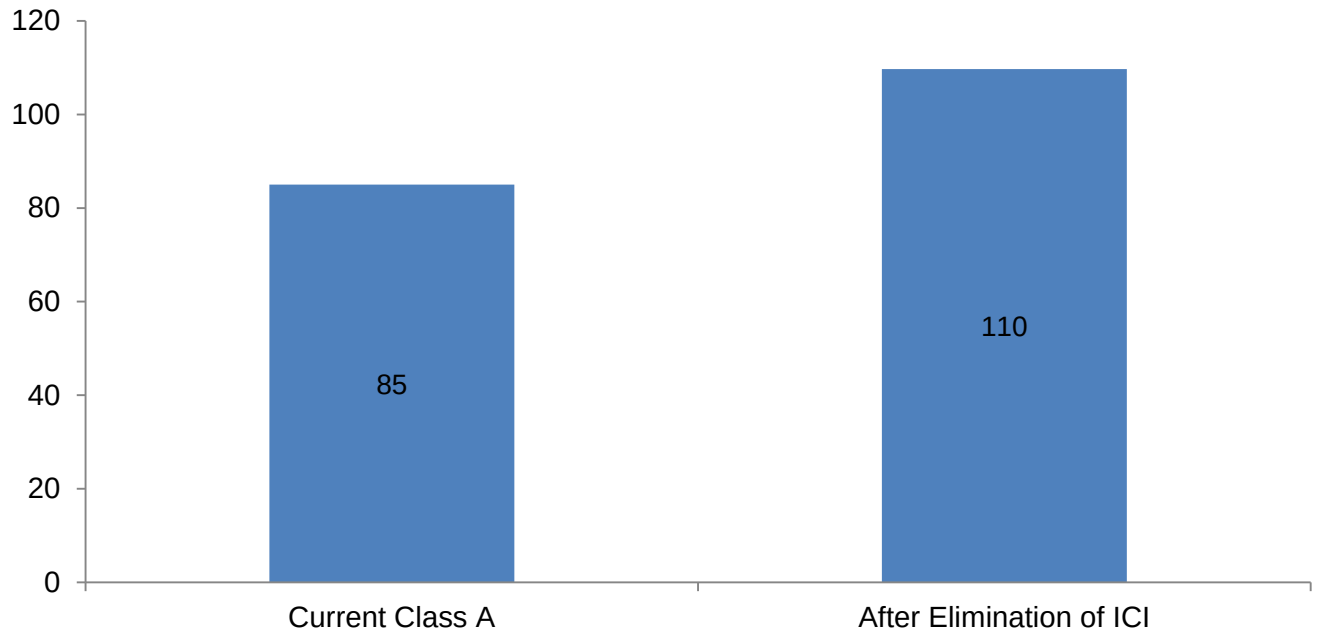
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

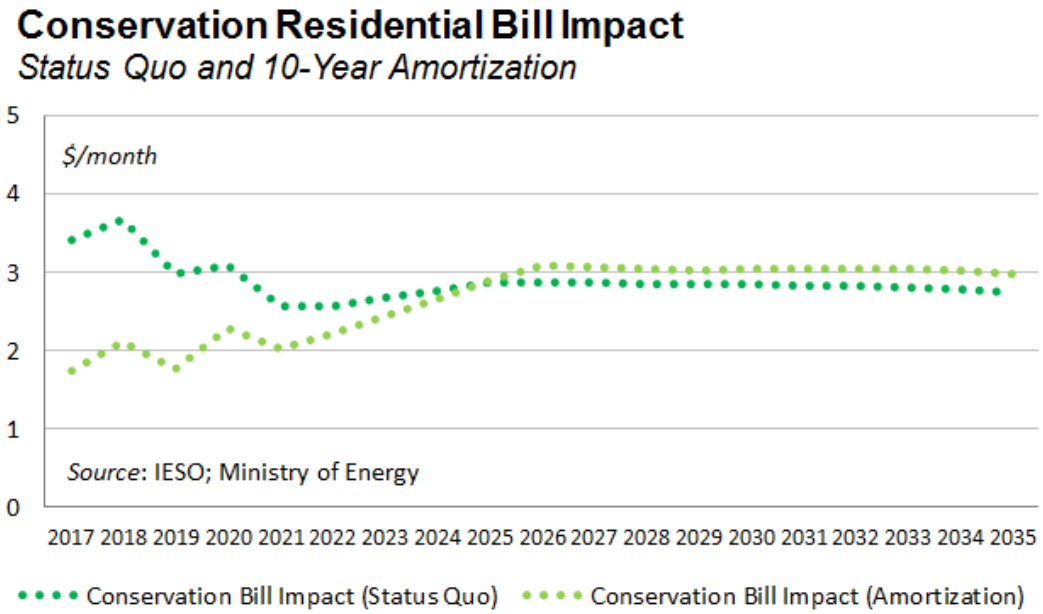
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

- As shown before the positive impact to residential ratepayers is very limited (between $8 and $9 per month) while the impact to the Province's fiscal position would be material (about $1.5 billion a year).

Appendix

Electricity Consumer Classes

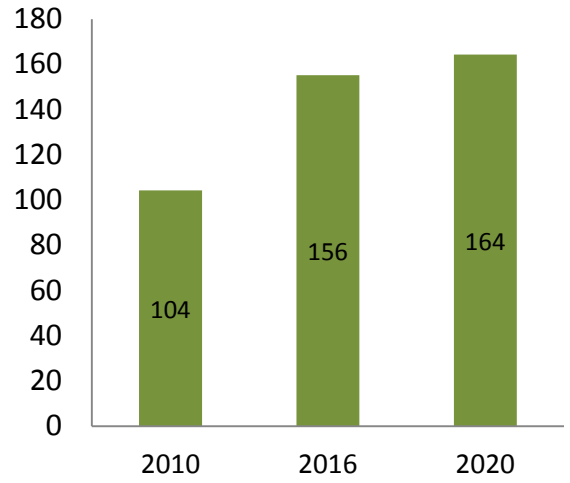
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

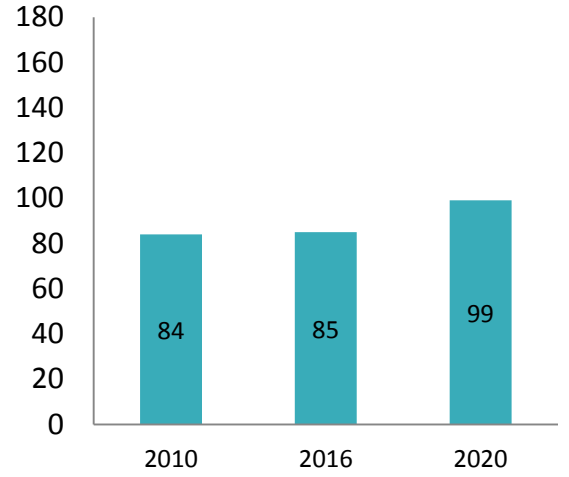
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

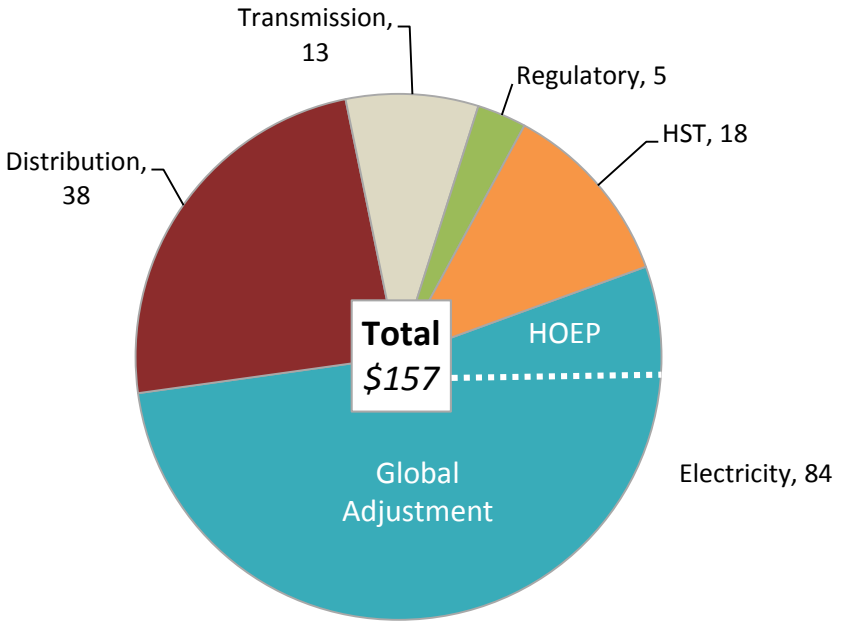
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



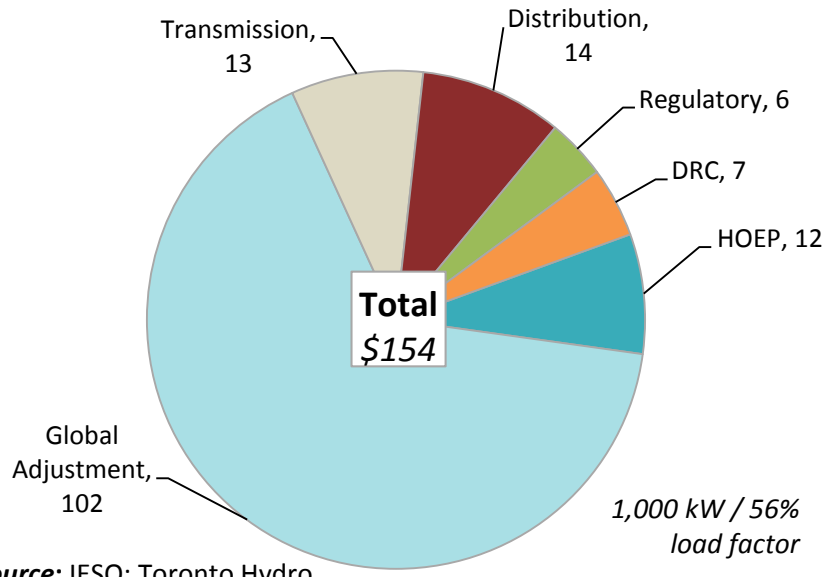
***Source*: OEB, Toronto Hydro**

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

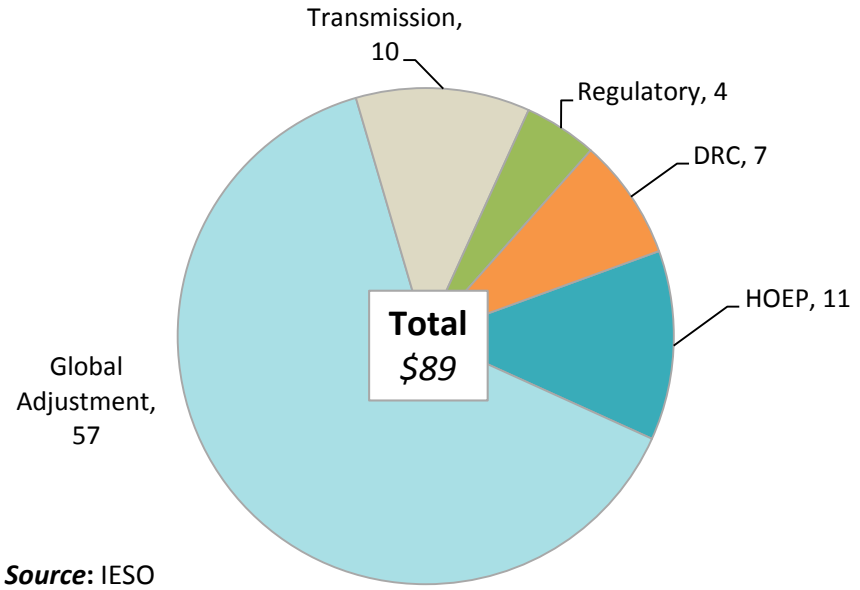
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



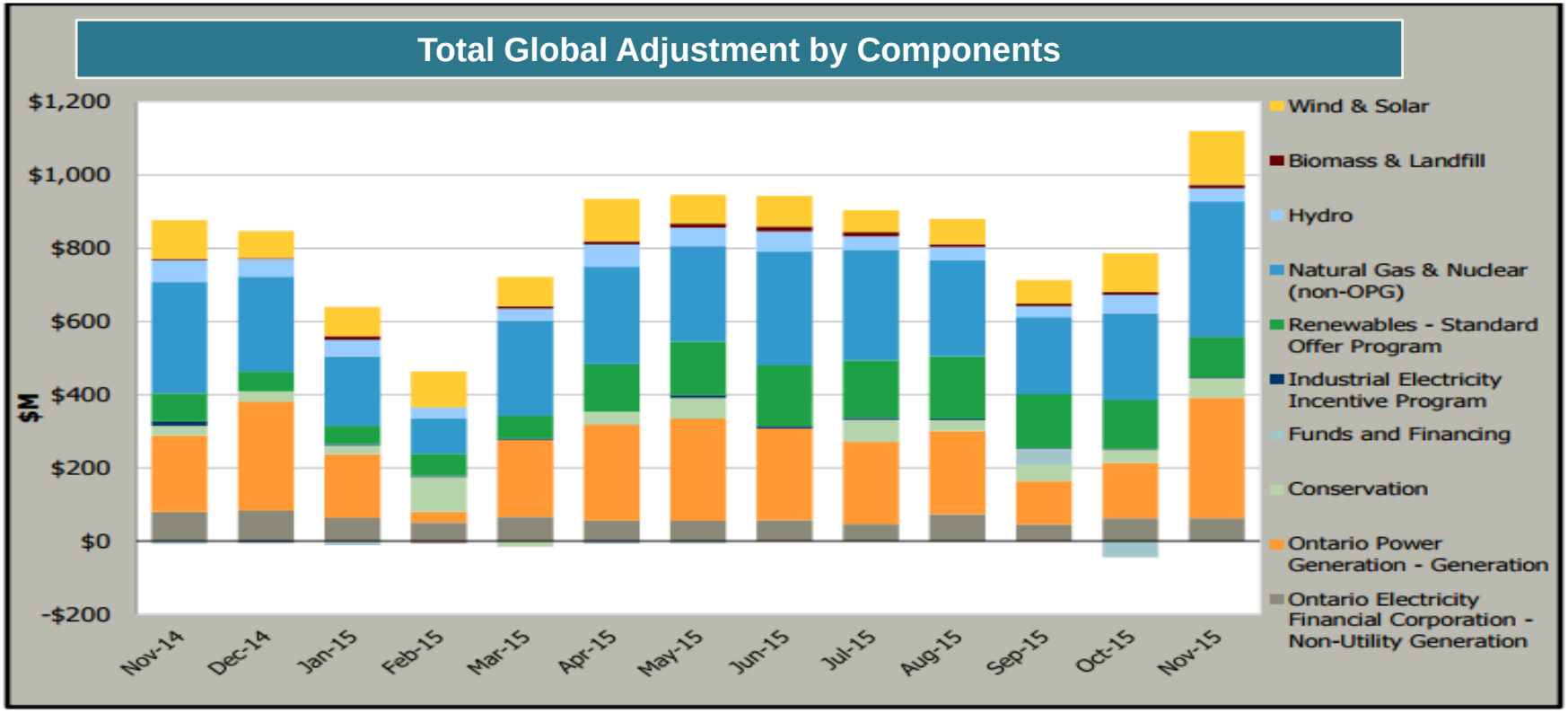
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

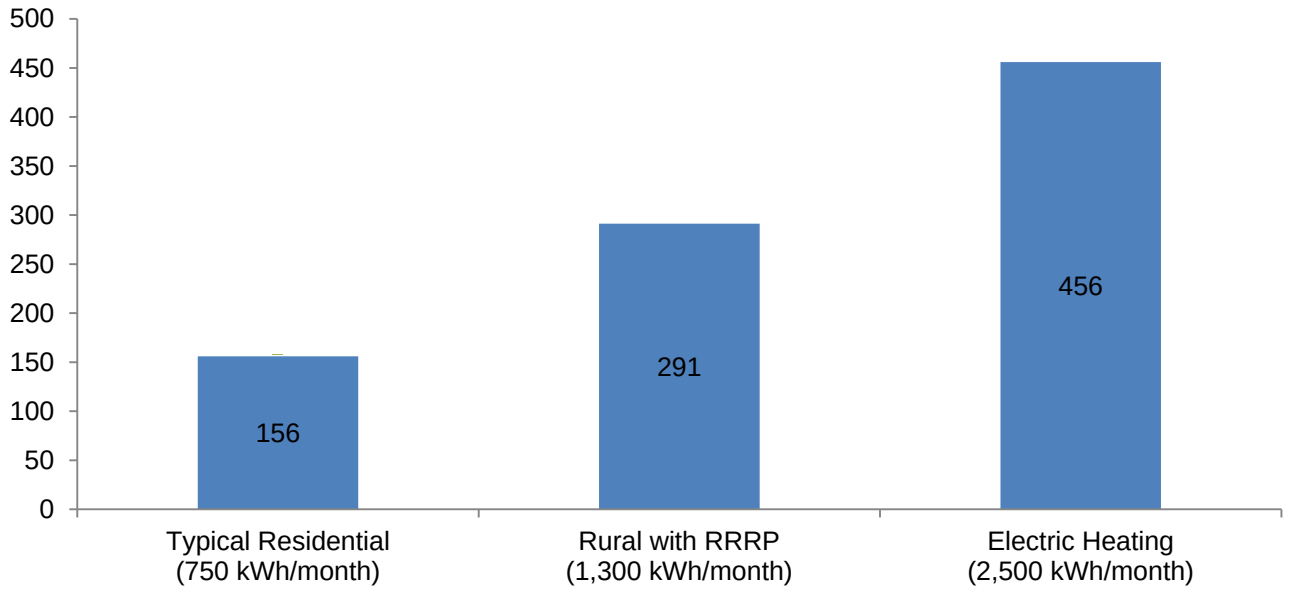
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 Long-Term Energy Plan (2013 LTEP) forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

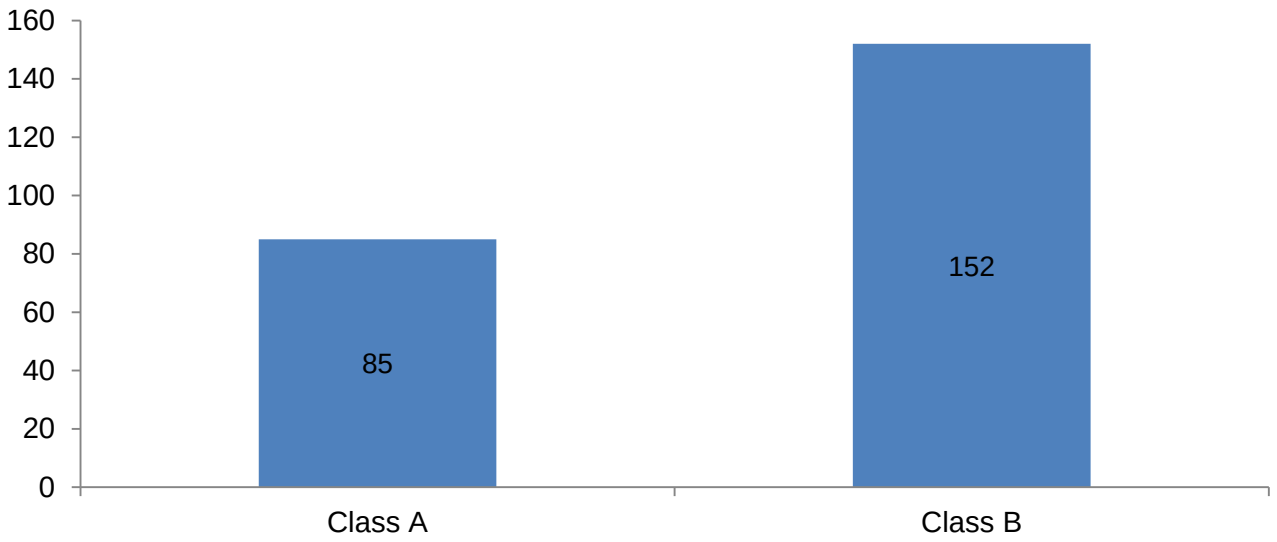


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Current Status on Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,100*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,005**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from Energy PRRT Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.5 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.0 billion and before considering any additional funding from the tax base.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how ~~government~~ electricity sector programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);¸(**NTD: If it provides system benefits, why not paid through the rate base)**
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total decrease on typical monthly bill	**8.38**	**8.23**	**7.75**	**9.26**	**8.52**	**8.17**	

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total increase on industrial bill	**19.96**	**18.97**	**18.34**	**17.14**	**14.45**	**13.7**	

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of about $450 million ~~[placeholder for OFA]~~ on the Province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan (before the planned ICI expansion).

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $30 ~~20 to $35~~ million annual fiscal pressure in 2017 to the province ~~[TBC by OPG / OFA]~~ based on new borrowing and increasing to about $70M by 2021.

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.
- A summary of the annual fiscal impacts of the proposed initiatives is presented in the next slide.

Proposed Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
OCEB	-	-	-	-	-
OREC	300	1,100*	1,100*	1,200*	1,200*
Ending DRC[2]	330	330	--	--	--
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
CURRENT TOTAL	**1,195**	**2,005**	**1,715**	**1,826**	**1,826**
1. OESP		106	119	127	132
2. RRRP		292	300	306	315
3. First Nations Delivery Rate		18	18	18	18
4. Fund ICI through Tax Base		900+100	900+100	900+	900+
5. Departure Tax		TBD	TBD	TBD	TBD
6. Conservation Amortisation	TBD	TBD	TBD	TBD	TBD
7. DRC Ended for Class B	110	450	--	--	--
8. Other		30	45	60	70
TOTAL	**1,305**	**3,901**	**3,197**	**3,237**	**3,261**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

- As shown above if various measures proposed in this deck were to be accepted, taxpayer funded contributions to electricity price mitigation would increase to about $3.4 – 3.9 billion by 2020-21. That is a 65-95% increase from the current forecast for 2017-18.
- These amounts were not considered in the 2016 Fiscal Plan and could put at risk the Province's fiscal objectives for 2017-18 and beyond.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

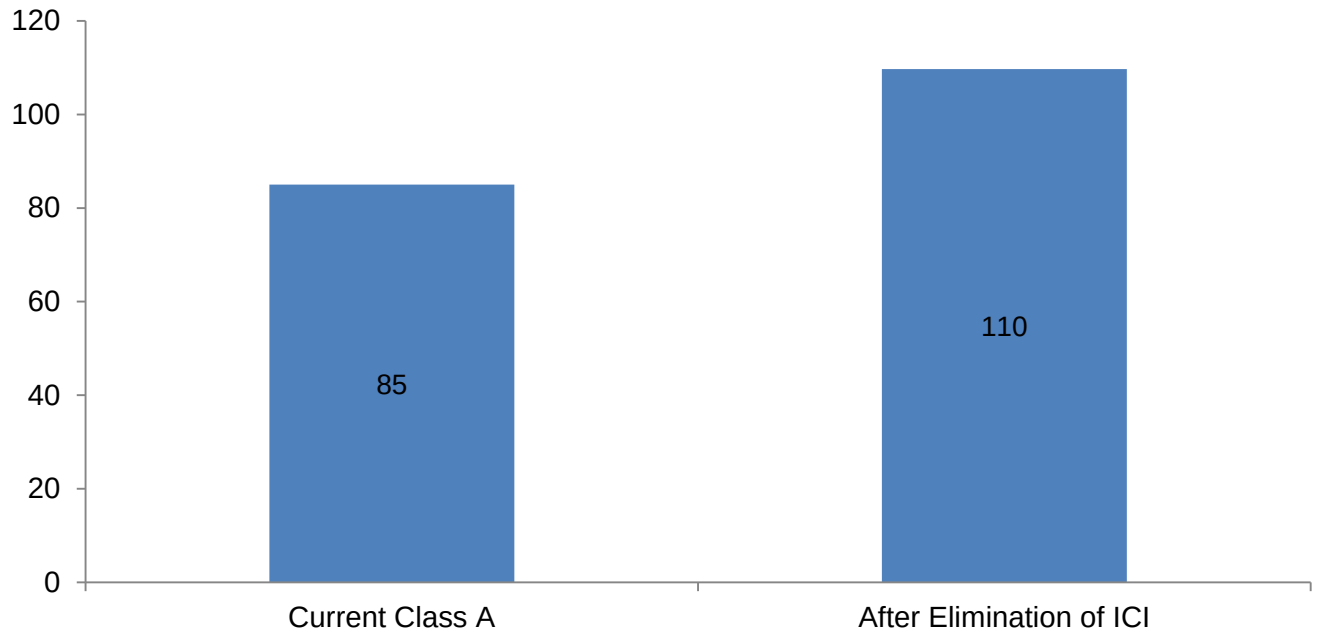
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

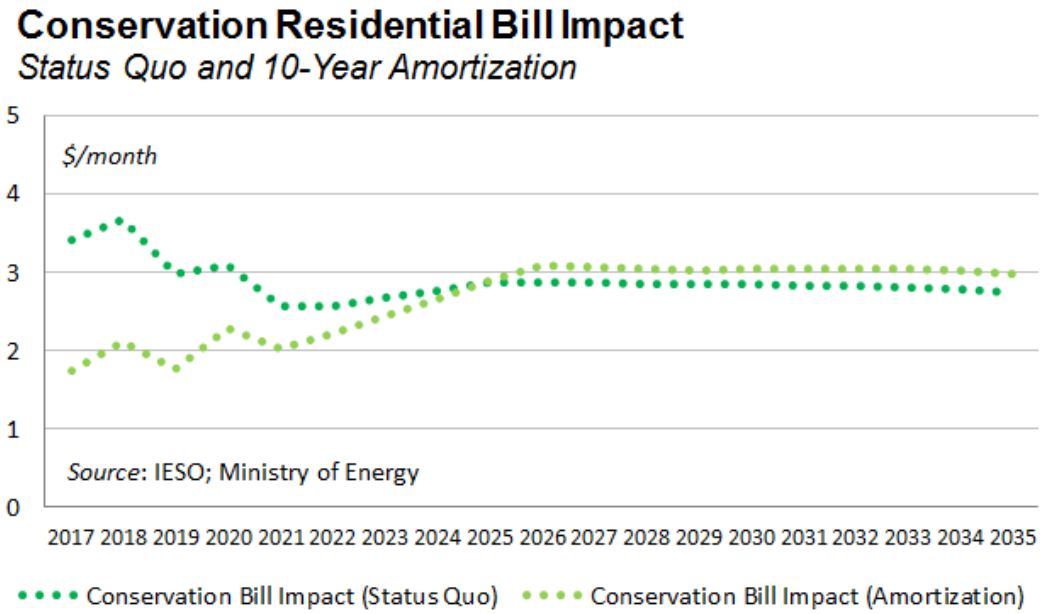
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.007/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), ~~to be~~ dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the pay down / defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

- As shown before the positive impact to residential ratepayers is very limited from the proposals with ratepayer impacts estimated by Energy (between $8 and $9 per month) while the impact to the Province's fiscal position would be material (about $1.2 to $1.5 billion a year). If additional proposals are also fiscally-funded, the fiscal cost could be substantially higher from, e.g., accounting treatment of conservation amortisation or a class B DRC exemption.

Appendix

Electricity Consumer Classes

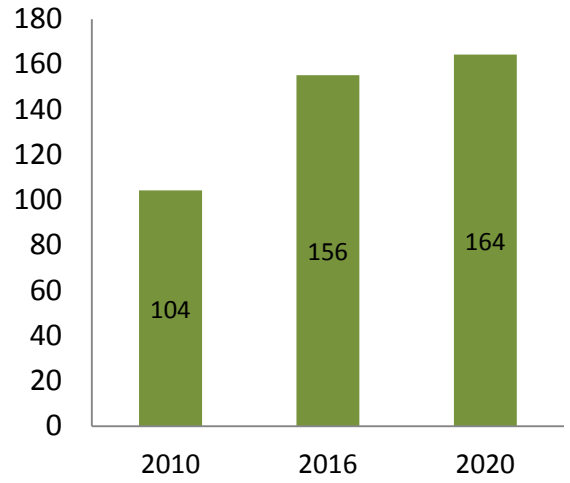
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

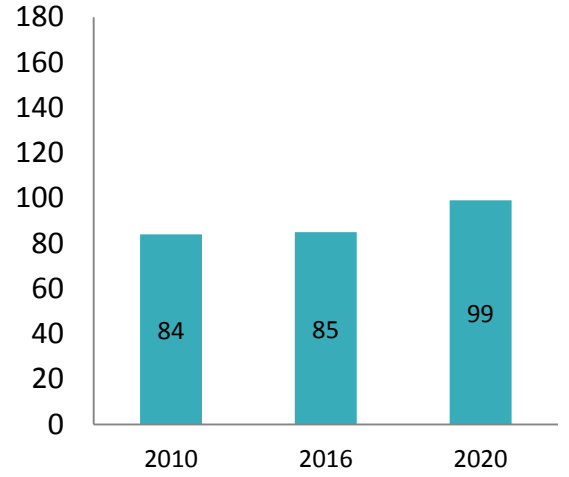
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

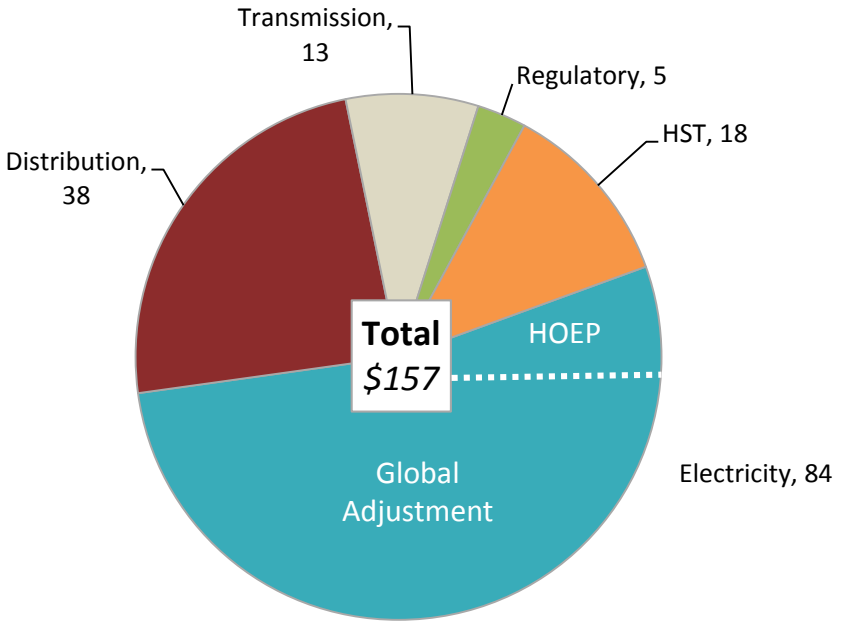
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



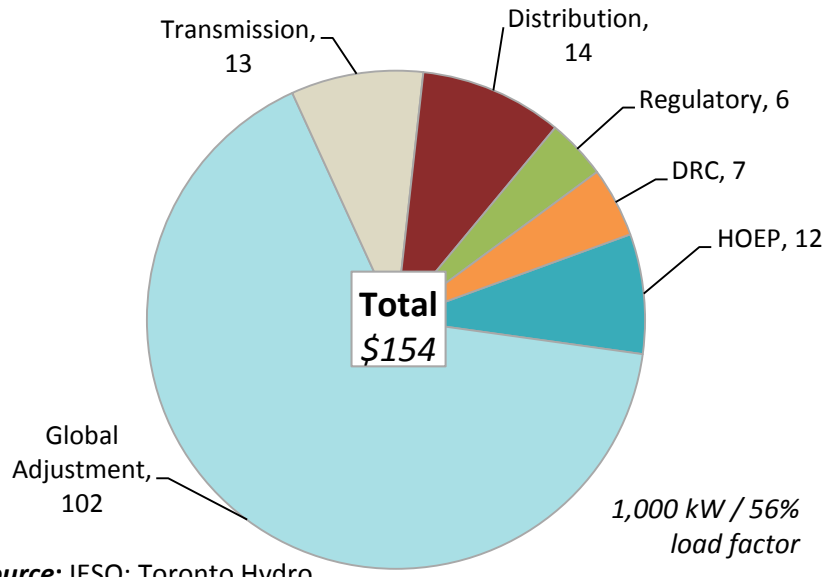
***Source*: OEB, Toronto Hydro**

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

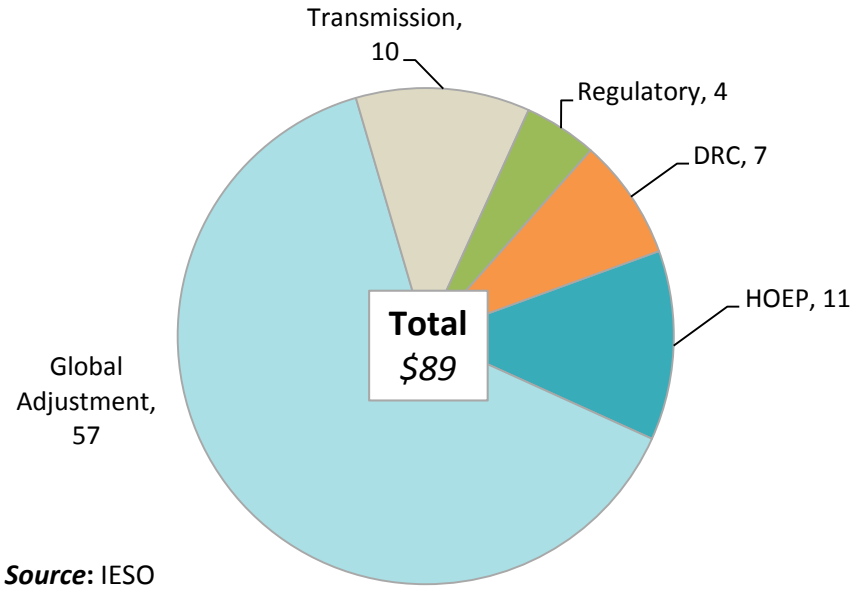
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



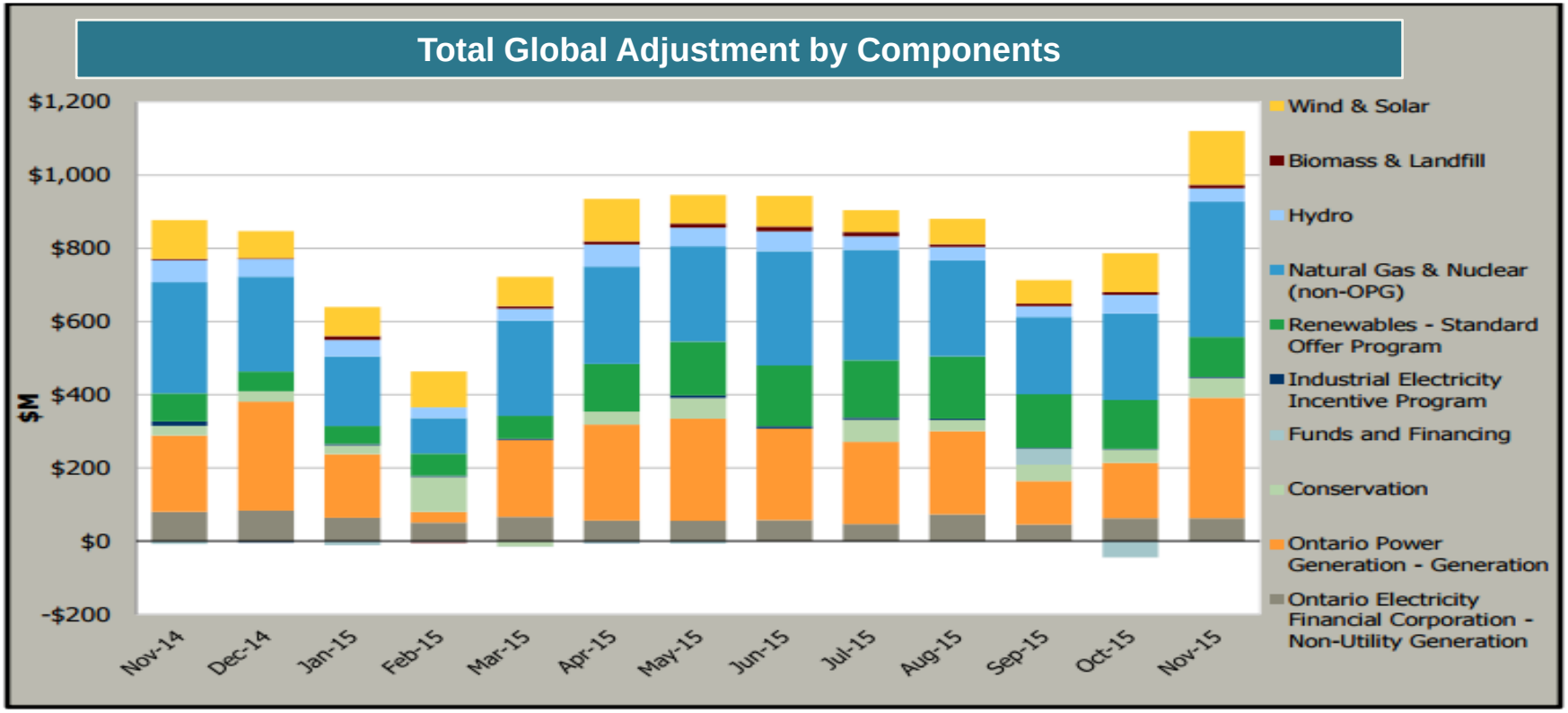
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

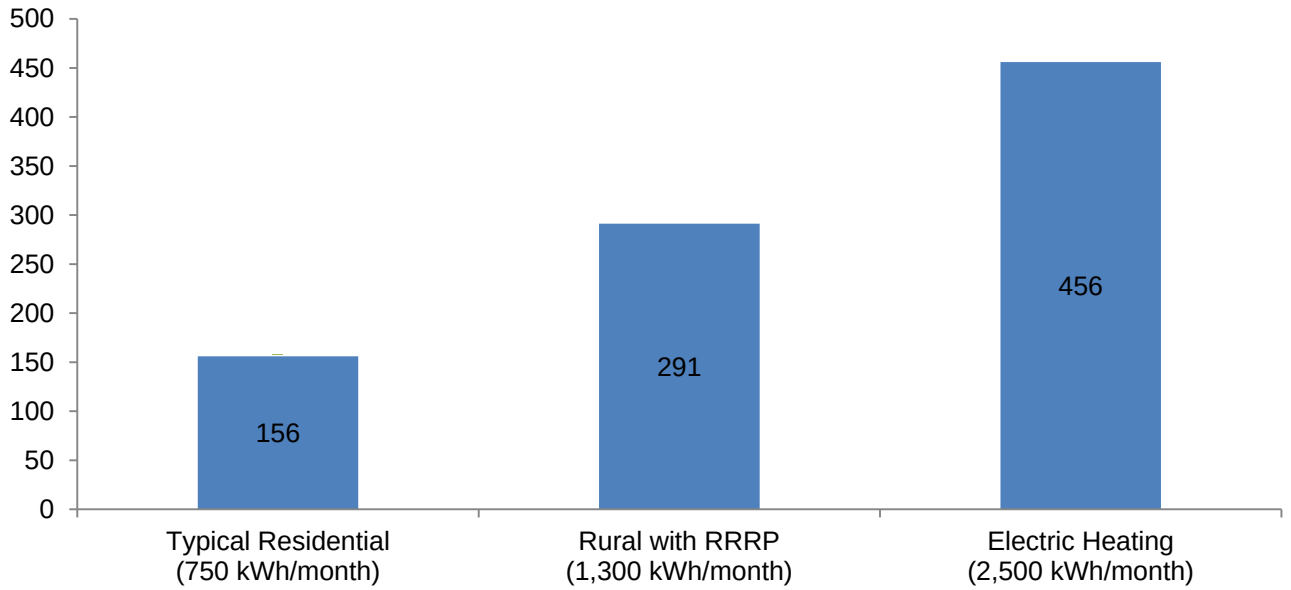
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 Long-Term Energy Plan (2013 LTEP) forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

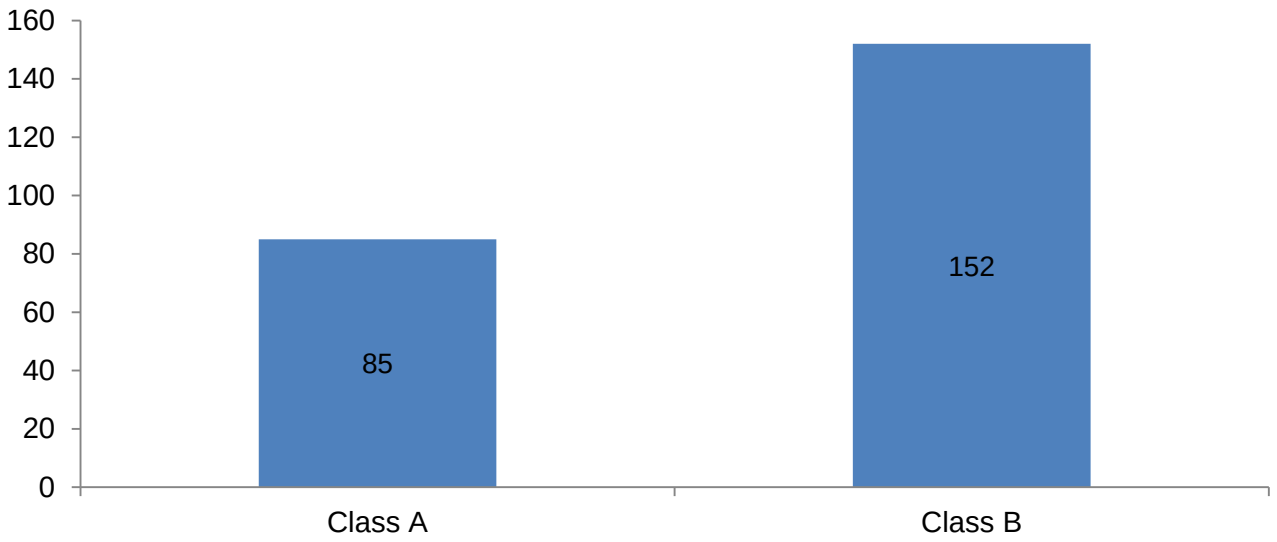


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Current Status on Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,100*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,005**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from Energy PRRT Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.5 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.0 billion and before considering any additional funding from the tax base.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how ~~government~~ electricity sector programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);¸(**NTD: If it provides system benefits, why not paid through the rate base)**
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total decrease on typical monthly bill	**8.38**	**8.23**	**7.75**	**9.26**	**8.52**	**8.17**	

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total increase on industrial bill	**19.96**	**18.97**	**18.34**	**17.14**	**14.45**	**13.7**	

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of about $450 million ~~[placeholder for OFA]~~ on the Province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan (before the planned ICI expansion).

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $30 ~~20 to $35~~ million annual fiscal pressure in 2017 to the province ~~[TBC by OPG / OFA]~~ based on new borrowing and increasing to about $70M by 2021.

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.
- A summary of the annual fiscal impacts of the proposed initiatives is presented in the next slide.

Proposed Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
OCEB	-	-	-	-	-
OREC	300	1,100*	1,100*	1,200*	1,200*
Ending DRC[2]	330	330	--	--	--
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
CURRENT TOTAL	**1,195**	**2,005**	**1,715**	**1,826**	**1,826**
1. OESP		106	119	127	132
2. RRRP		292	300	306	315
3. First Nations Delivery Rate		18	18	18	18
4. Fund ICI through Tax Base		900+100	900+100	900+	900+
5. Departure Tax		TBD	TBD	TBD	TBD
6. Conservation Amortisation	TBD	TBD	TBD	TBD	TBD
7. DRC Ended for Class B	110	450	--	--	--
8. Other		30	45	60	70
TOTAL	**1,305**	**3,901**	**3,197**	**3,237**	**3,261**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

- As shown above if various measures proposed in this deck were to be accepted, taxpayer funded contributions to electricity price mitigation would increase to about $3.4 – 3.9 billion in 2017-18. That is a 65-95% increase from the current forecast for 2017-18.
- These amounts were not considered in the 2016 Fiscal Plan and could put at risk the Province's fiscal objectives for 2017-18 and beyond.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

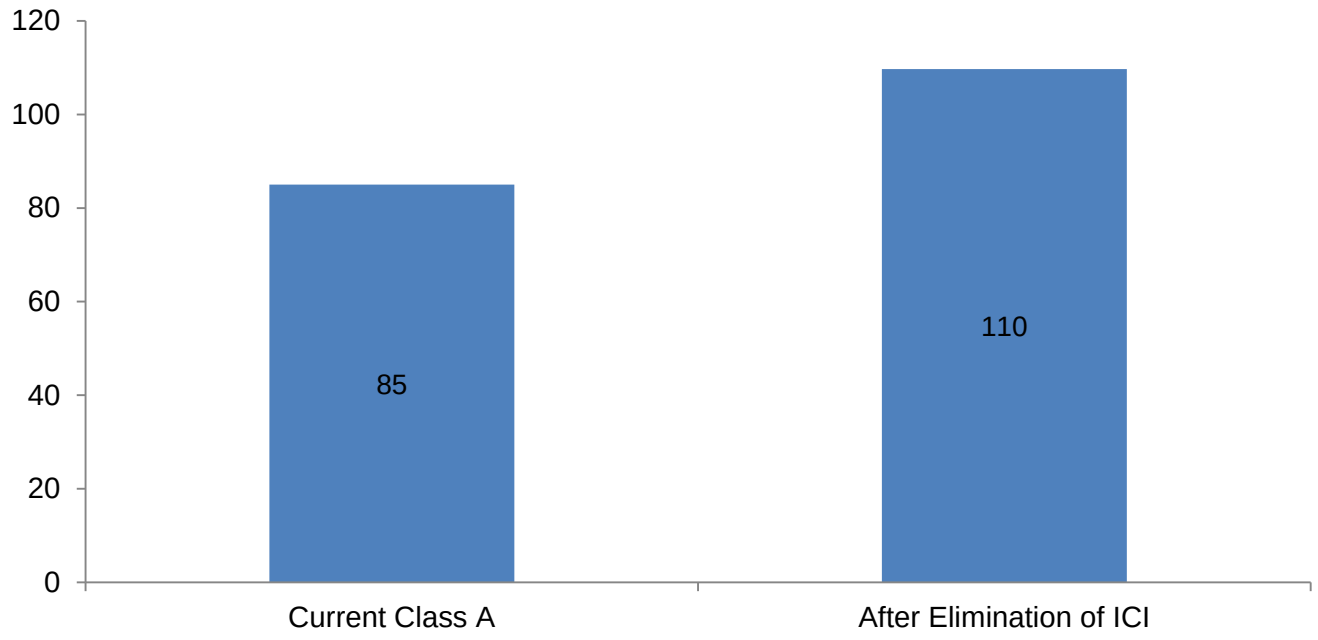
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

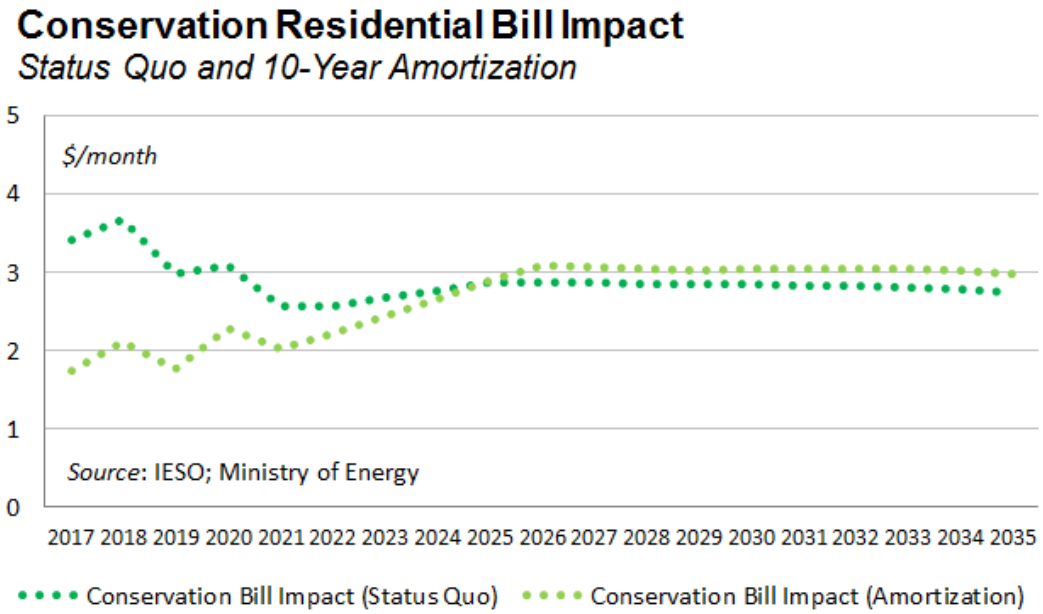
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.007/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), ~~to be~~ dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the pay down / defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

- As shown before the positive impact to residential ratepayers is very limited from the proposals with ratepayer impacts estimated by Energy (between $8 and $9 per month) while the impact to the Province's fiscal position would be material (about $1.2 to $1.5 billion a year). If additional proposals are also fiscally-funded, the fiscal cost could be substantially higher from, e.g., accounting treatment of conservation amortisation or a class B DRC exemption.

Appendix

Electricity Consumer Classes

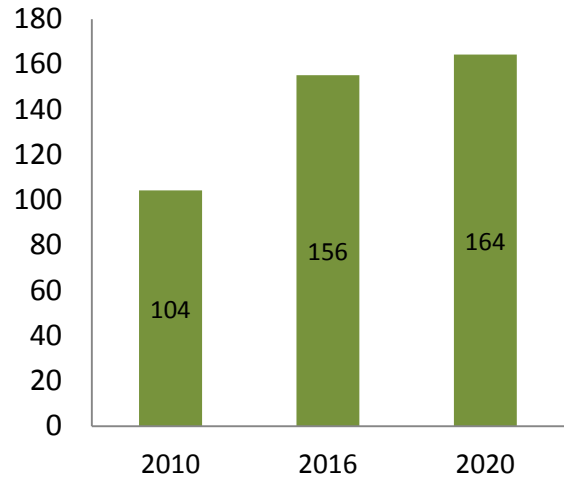
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

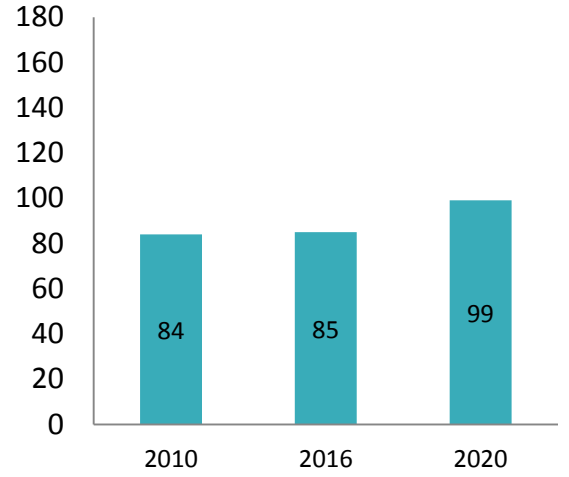
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

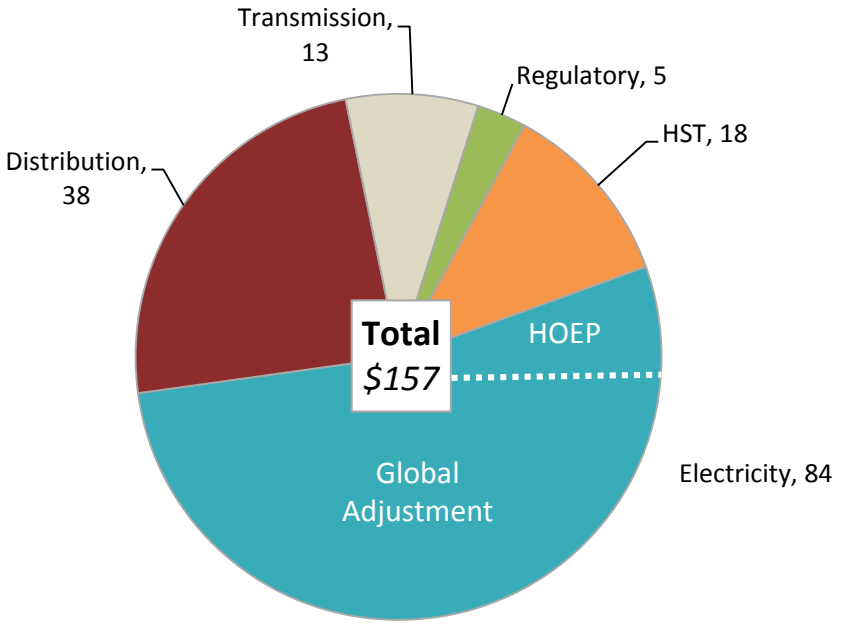
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



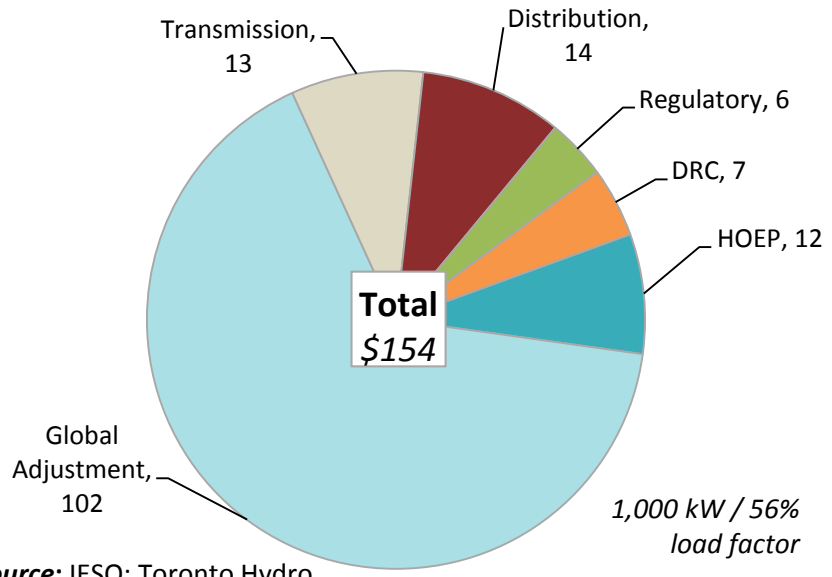
***Source*: OEB, Toronto Hydro**

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

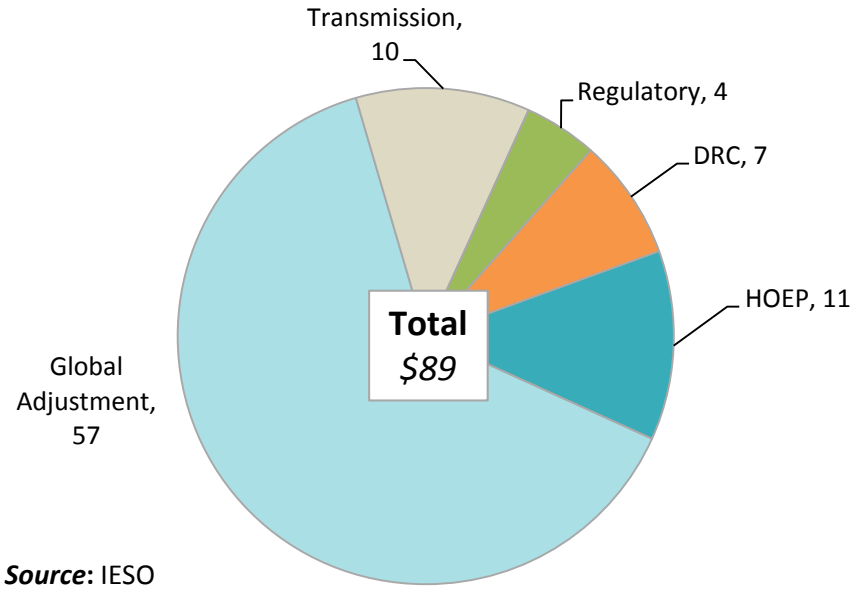
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



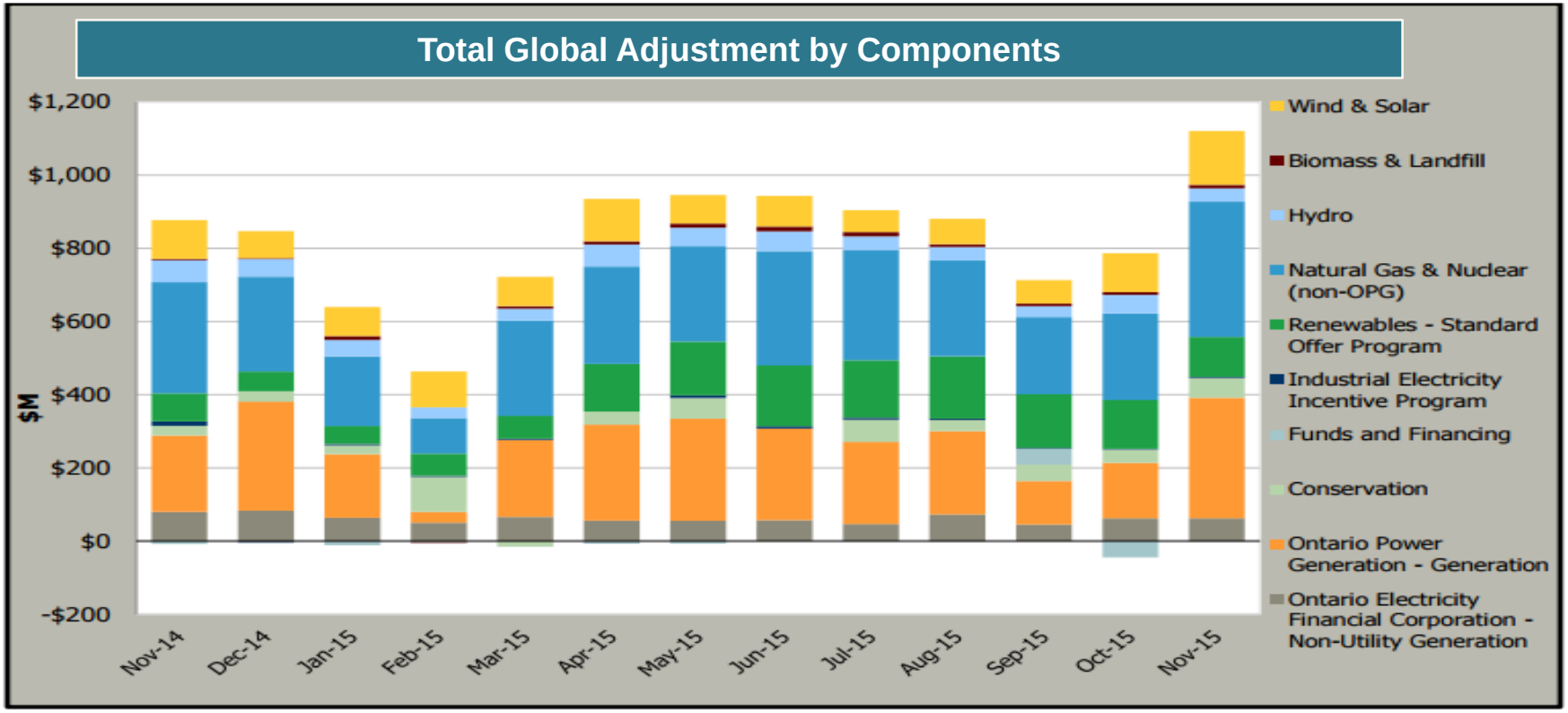
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.

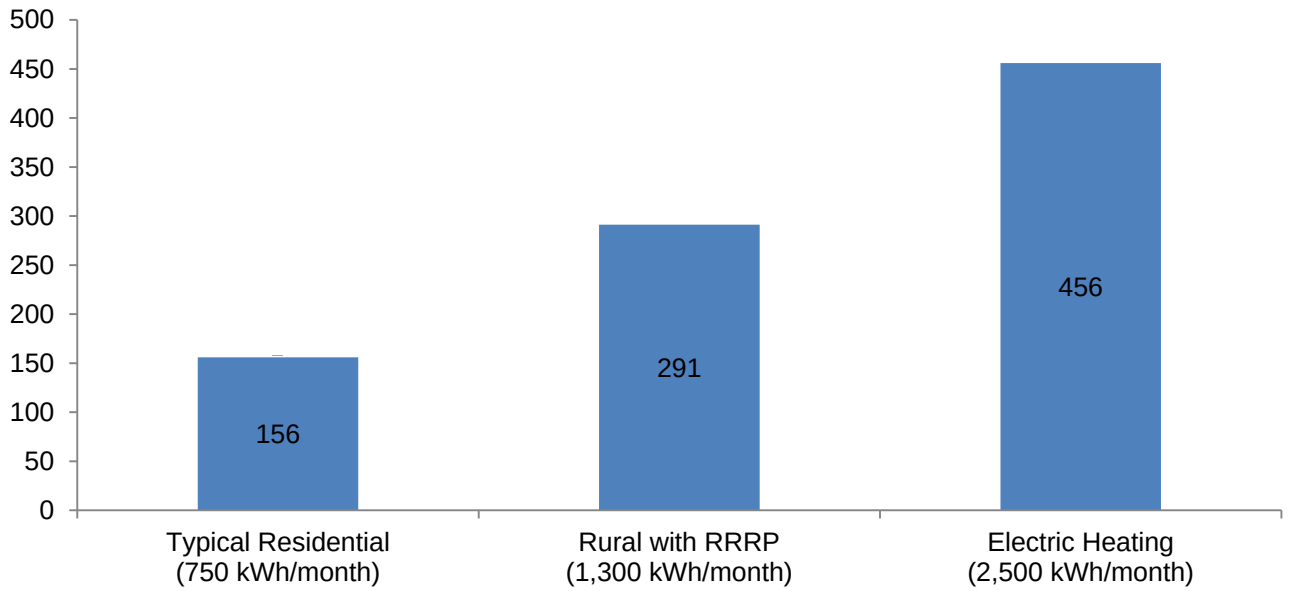
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

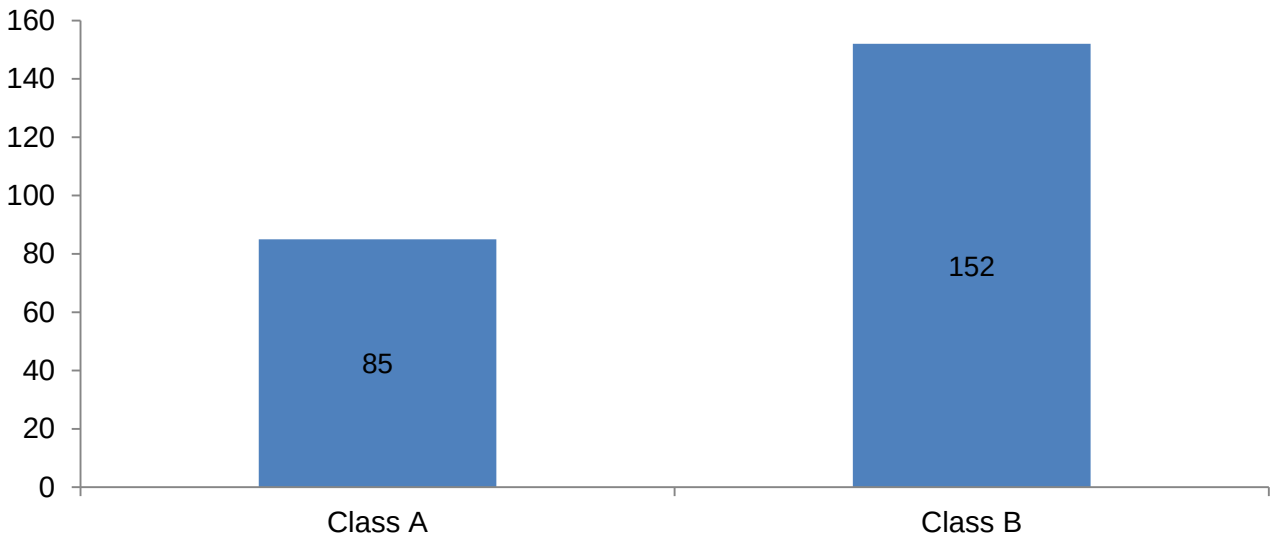


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of $xx [placeholder for OFA] on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $20 to $35 million annual fiscal pressure to the province [TBC by OPG / OFA].

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

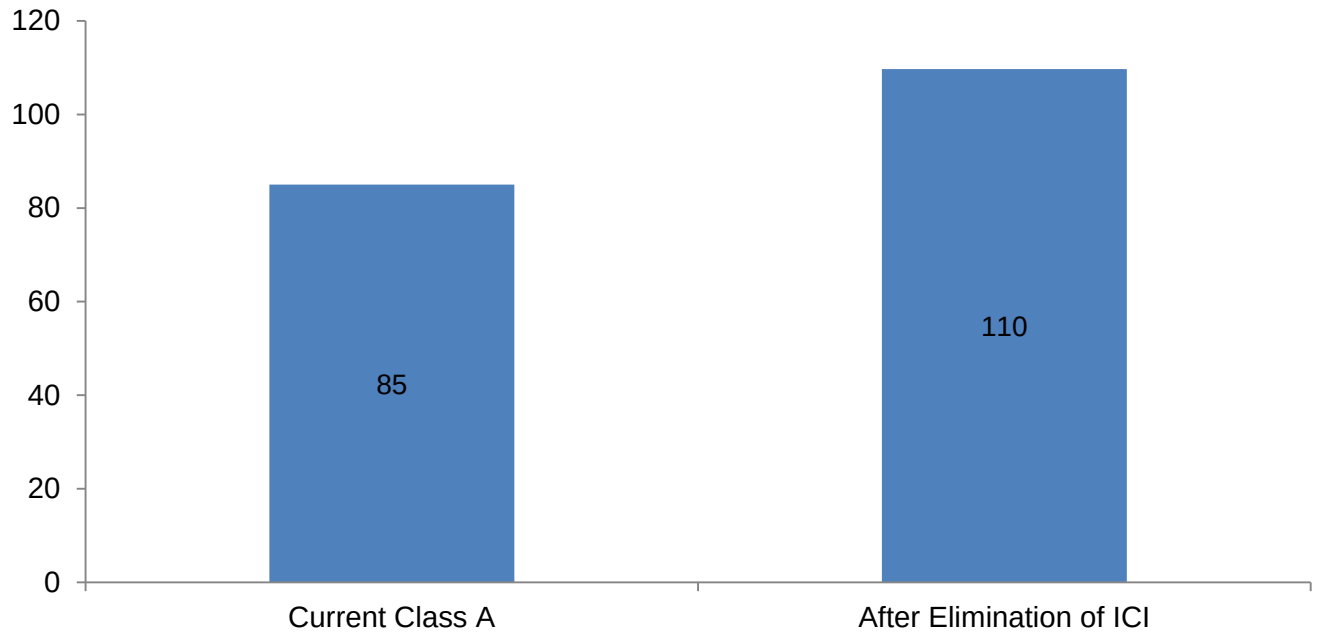
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

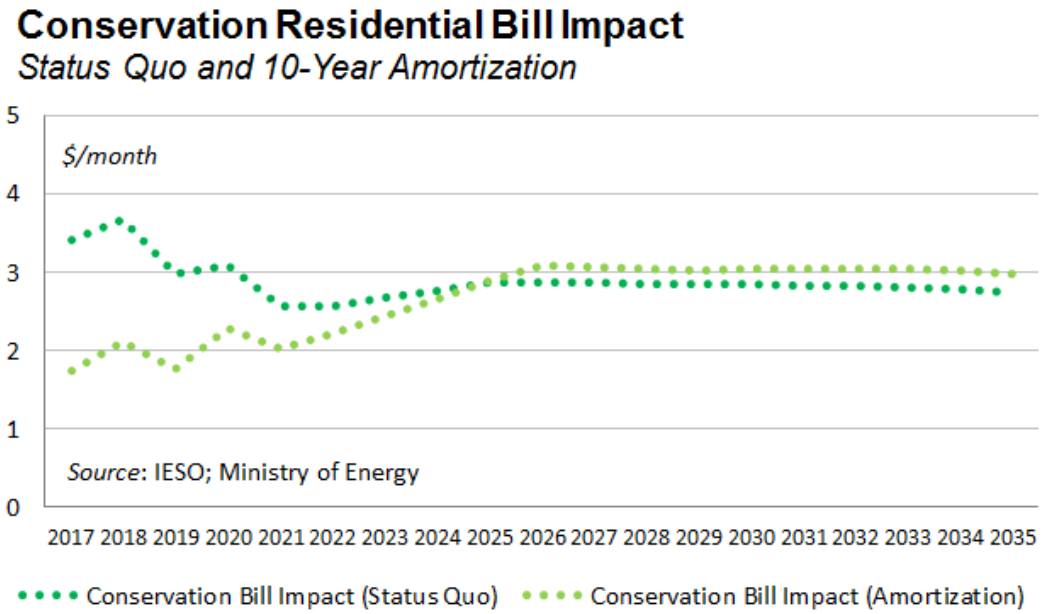
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.007/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

Appendix

Electricity Consumer Classes

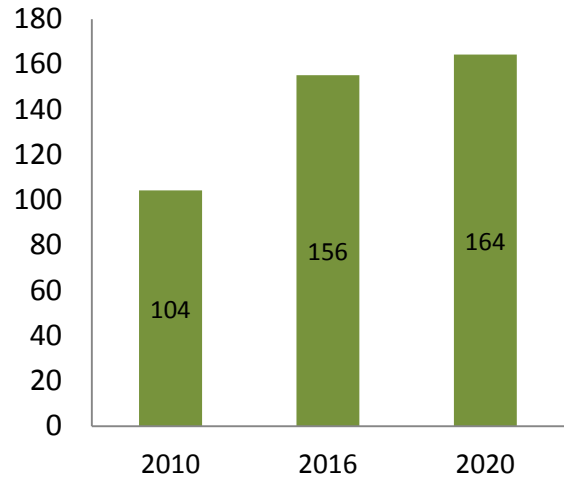
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

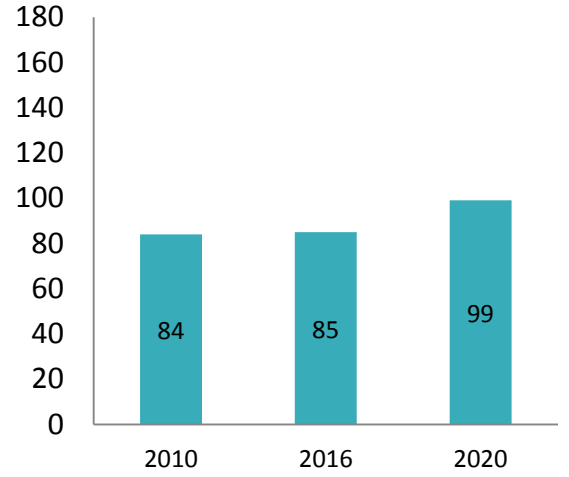
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

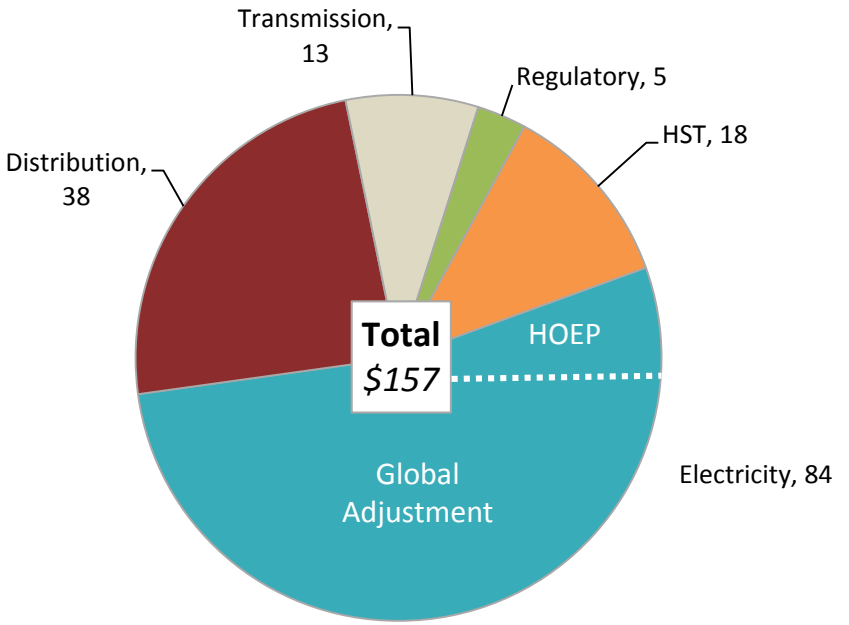
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



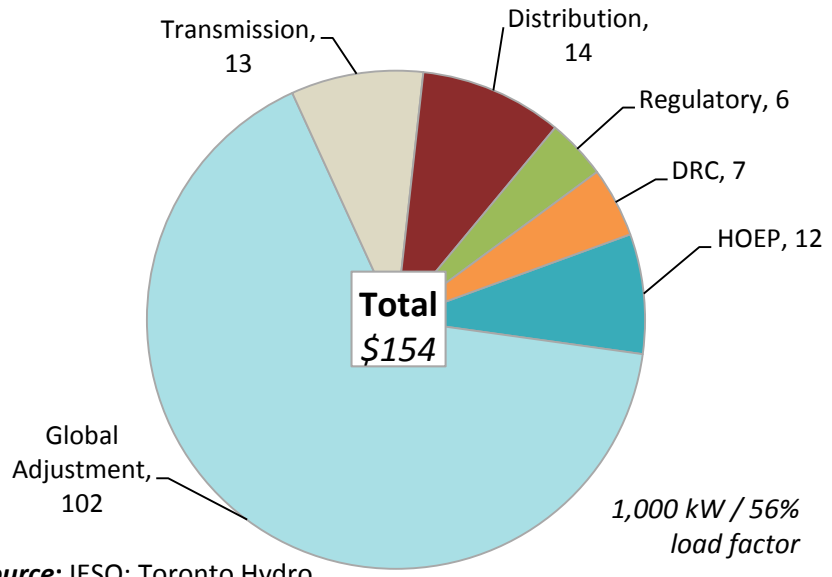
***Source*:** OEB, Toronto Hydro

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

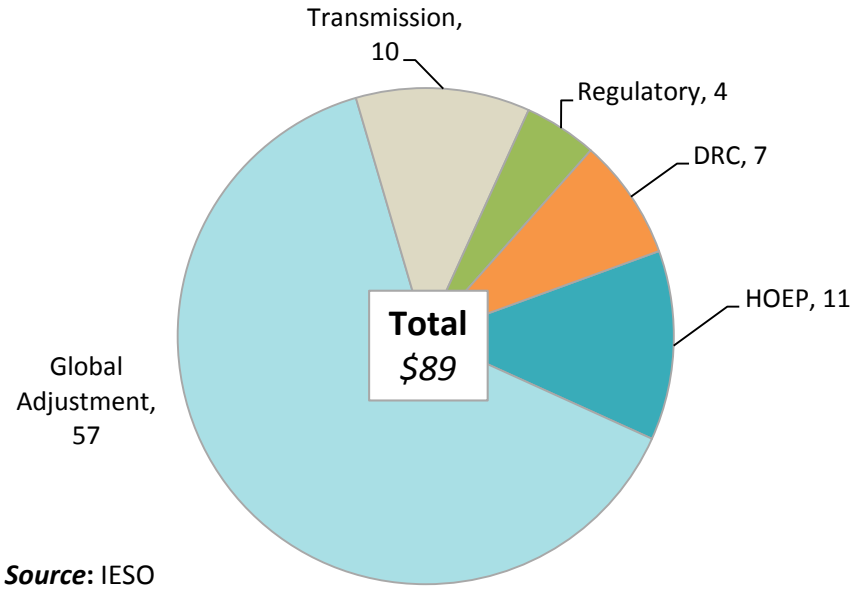
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



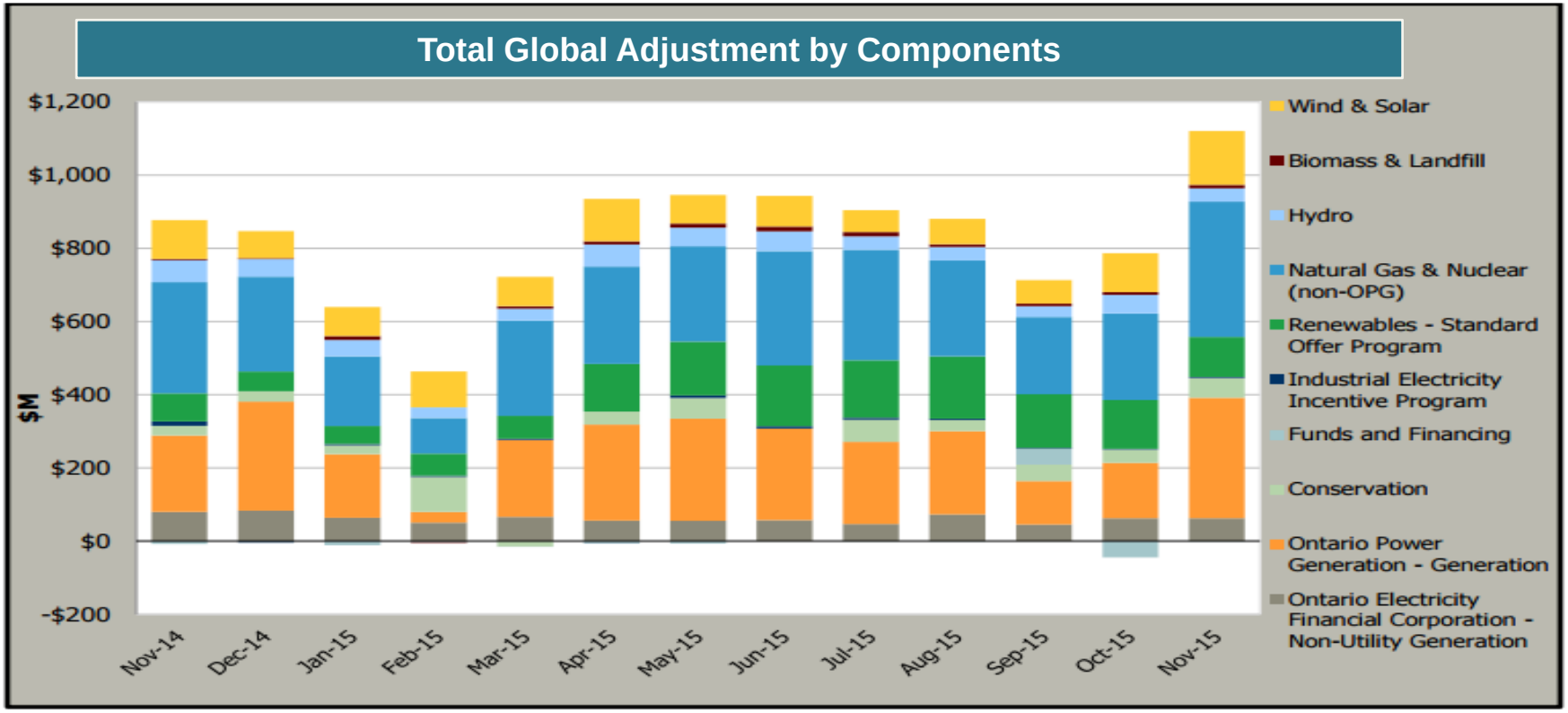
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

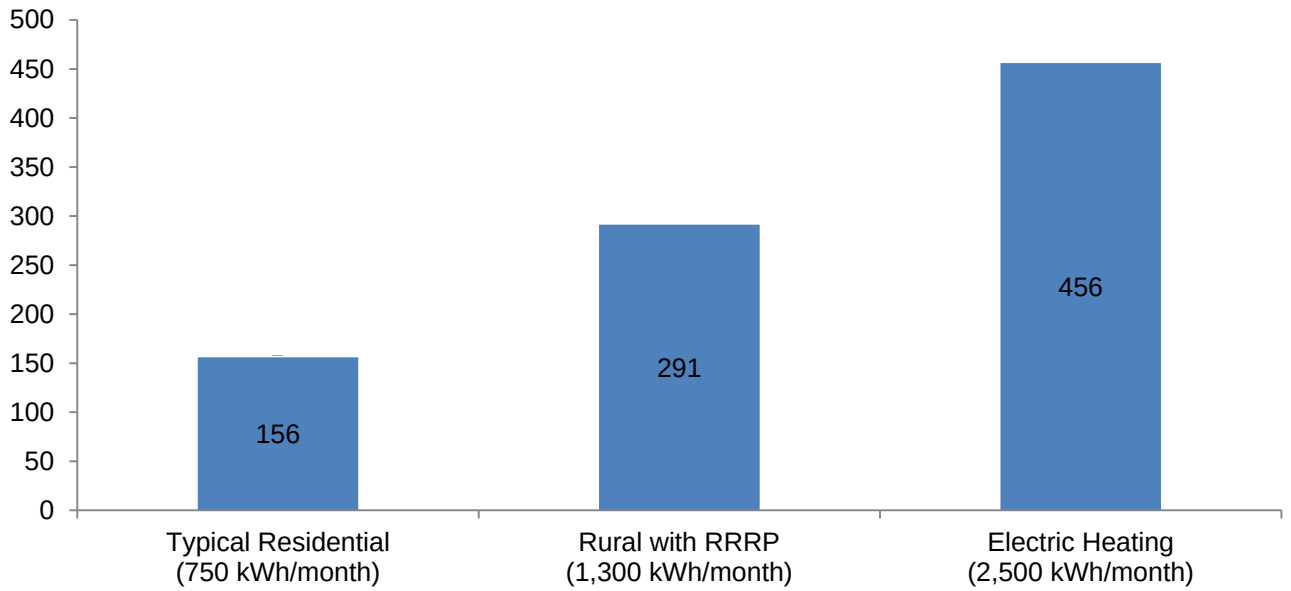
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

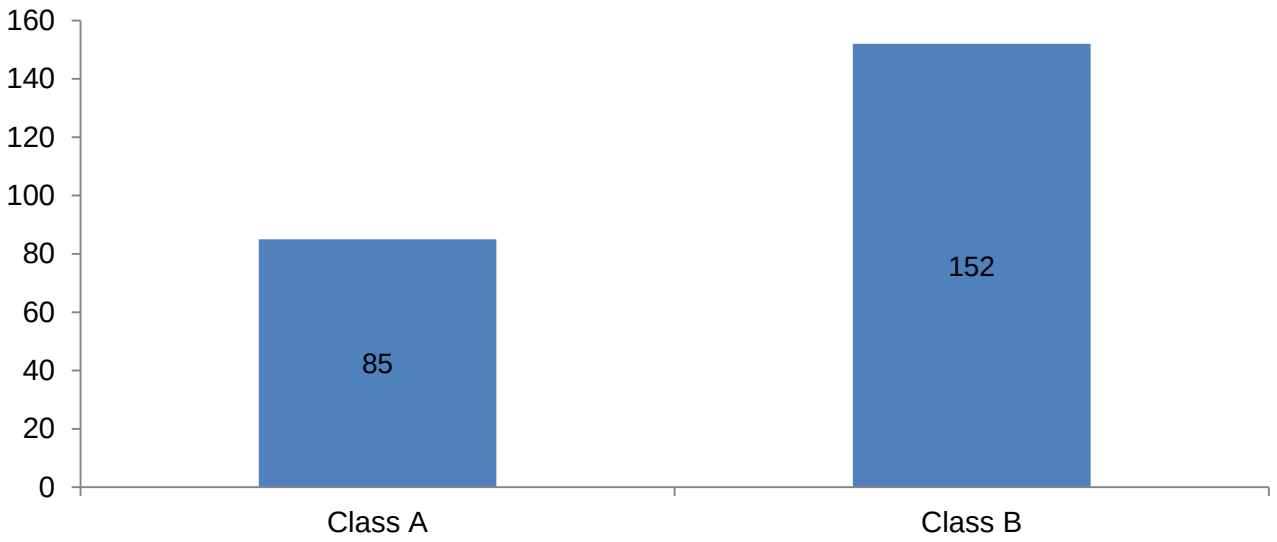


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Current Status on Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,200*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,105**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.1 billion and before considering any additional funding from the tax base.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total decrease on typical monthly bill	**8.38**	**8.23**	**7.75**	**9.26**	**8.52**	**8.17**	

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total increase on industrial bill	**19.96**	**18.97**	**18.34**	**17.14**	**14.45**	**13.7**	

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of about $450 ~~[placeholder for OFA]~~ on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $30 ~~20 to $35~~ million annual fiscal pressure in 2017 to the province ~~[TBC by OPG / OFA]~~ based on new borrowing and increasing based on cumulative borrowing.

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.
- A summary of the annual fiscal impacts of the proposed initiatives is presented in the next slide

Proposed Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
~~OCEB~~	–	–			
OREC	300	1,200*	1,200*	1,200*	1,200*
Ending DRC[2]	330	330	–	–	–
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
TOTAL	**1,195**	**2,105**	**2145**	**2156**	**2156**
1. Electricity Market Renewal Initiative		TBD	TBD	TBD	TBD
2. OESP		106	119	127	132
2. RRRP		292	300	306	315
2. First Nations Delivery Rate		18	18	18	18
3. Fund ICI through Tax Base		900	900	900	900
TOTAL	**1195**	**3,421**	**3,482**	**3,507**	**3,521**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

- As shown above if all measures proposed in this deck were to be accepted taxpayer funded contributions to electricity price mitigation would increase to about $3.5 billion by 2020-21. That is a 67% increase from the current forecast for 2017-18.
- These amounts were not considered in the 2016-17 Fiscal Plan and could put at risk the Province's fiscal objectives for 2017-18 and beyond.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

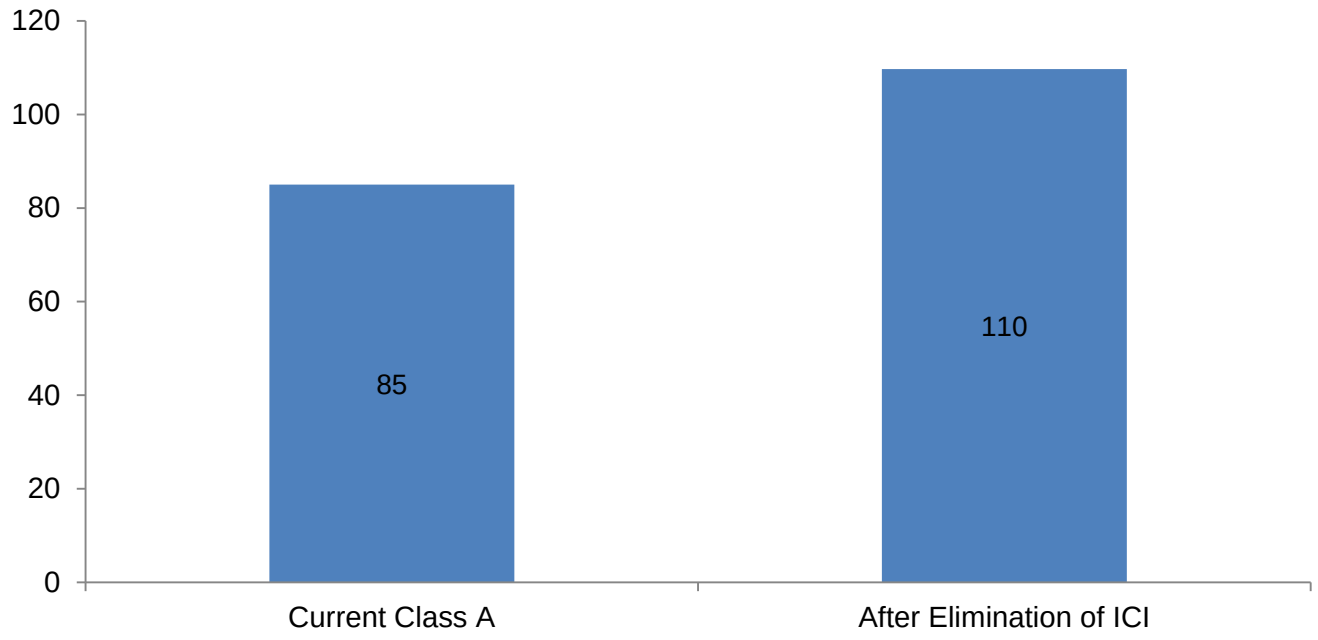
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

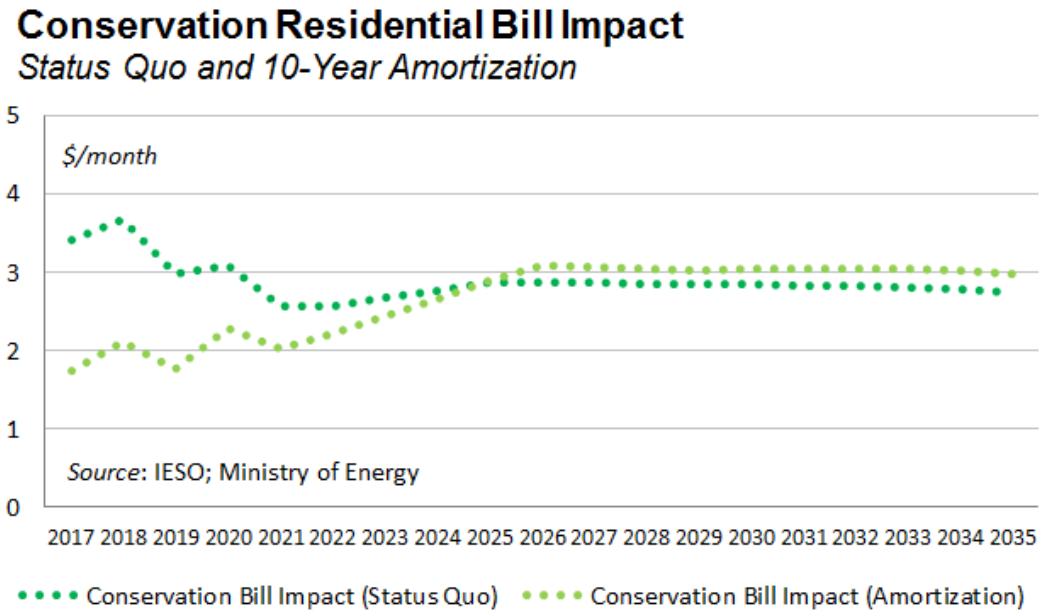
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

- As shown before the positive impact to residential ratepayers is very limited (between $8 and $9 per month) while the impact to the Province's fiscal position would be material (about $1.5 billion a year).

Appendix

Electricity Consumer Classes

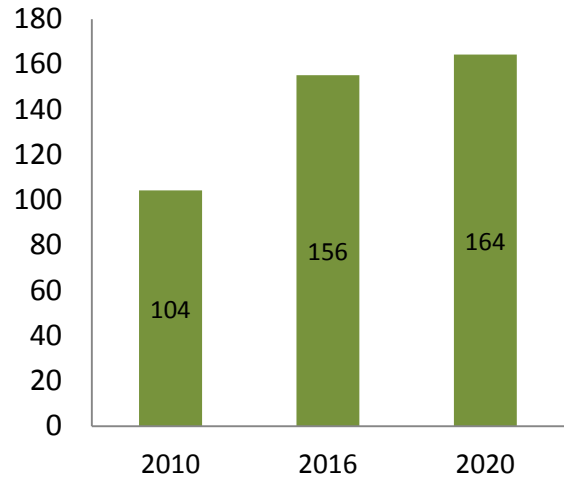
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

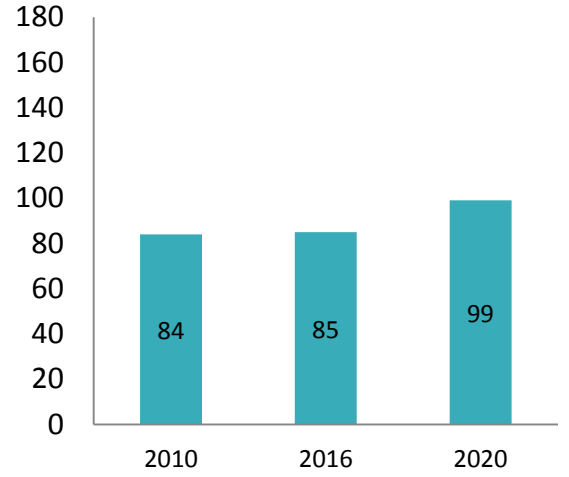
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

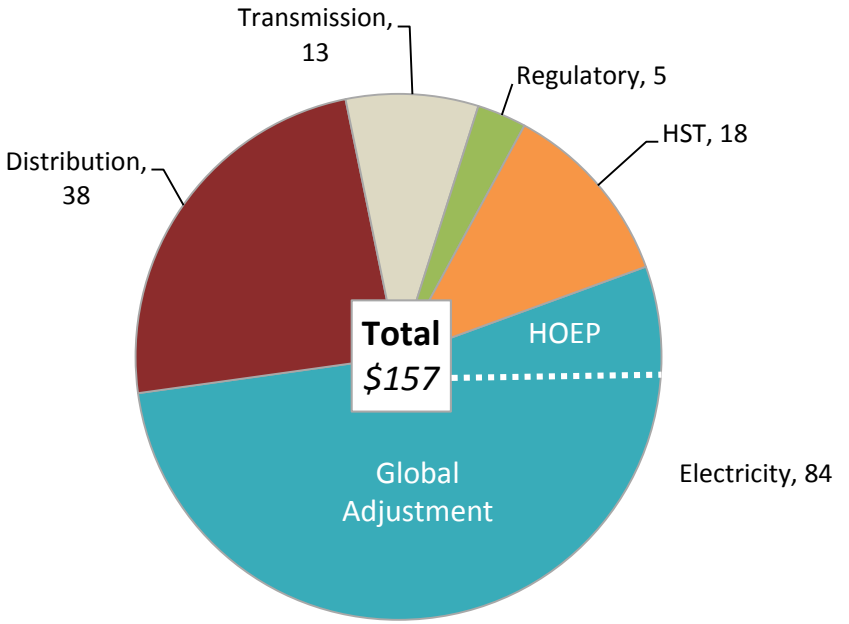
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



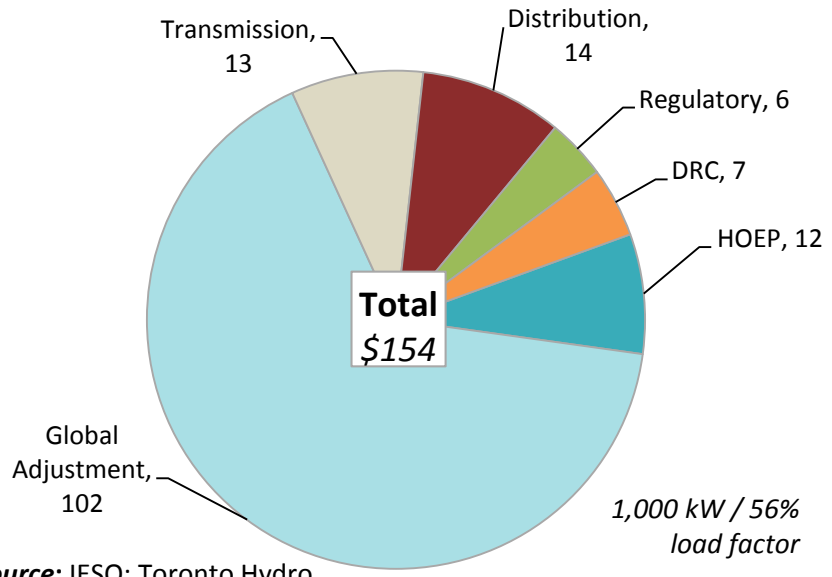
***Source*: OEB, Toronto Hydro**

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

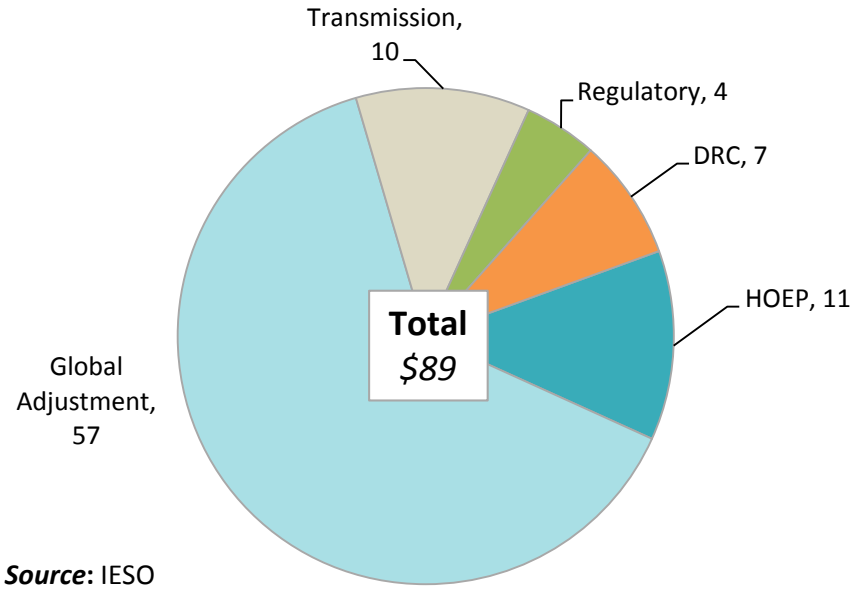
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



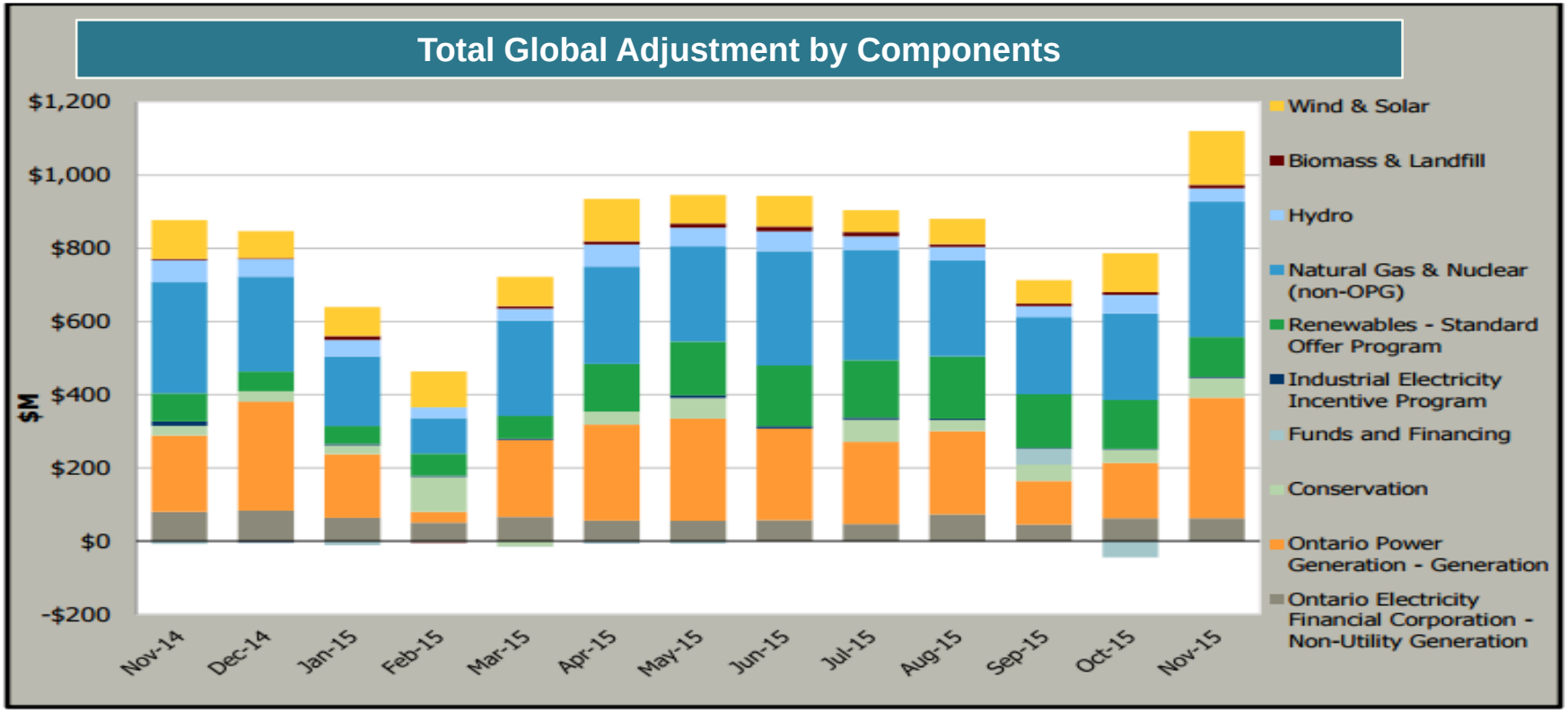
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

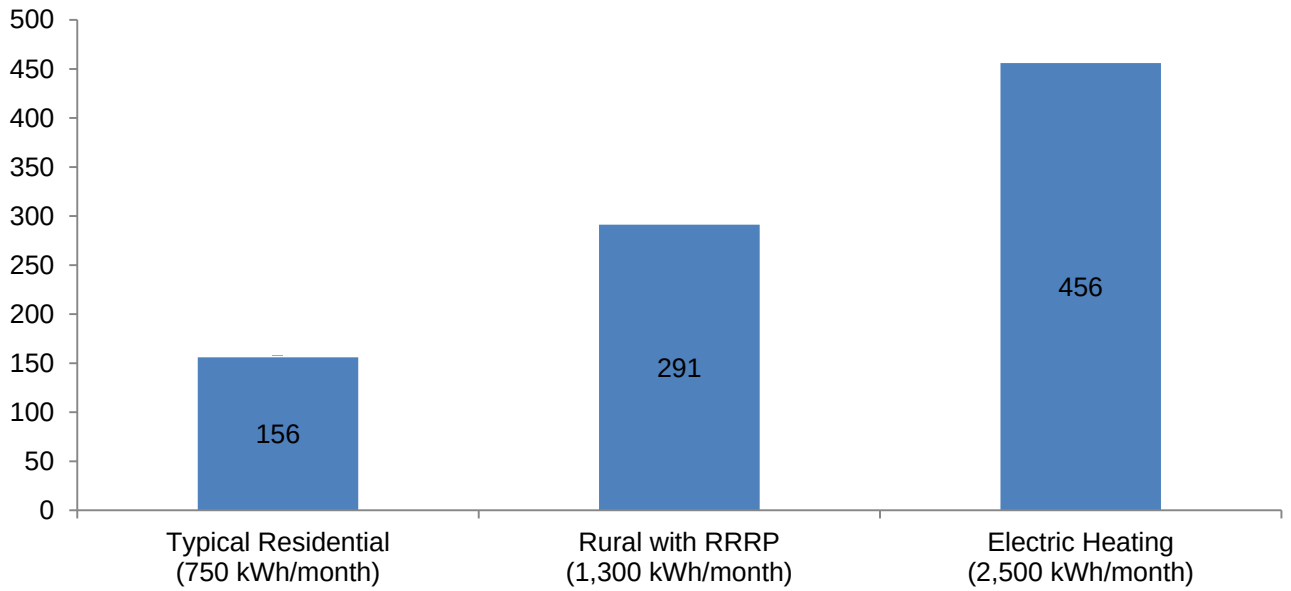
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

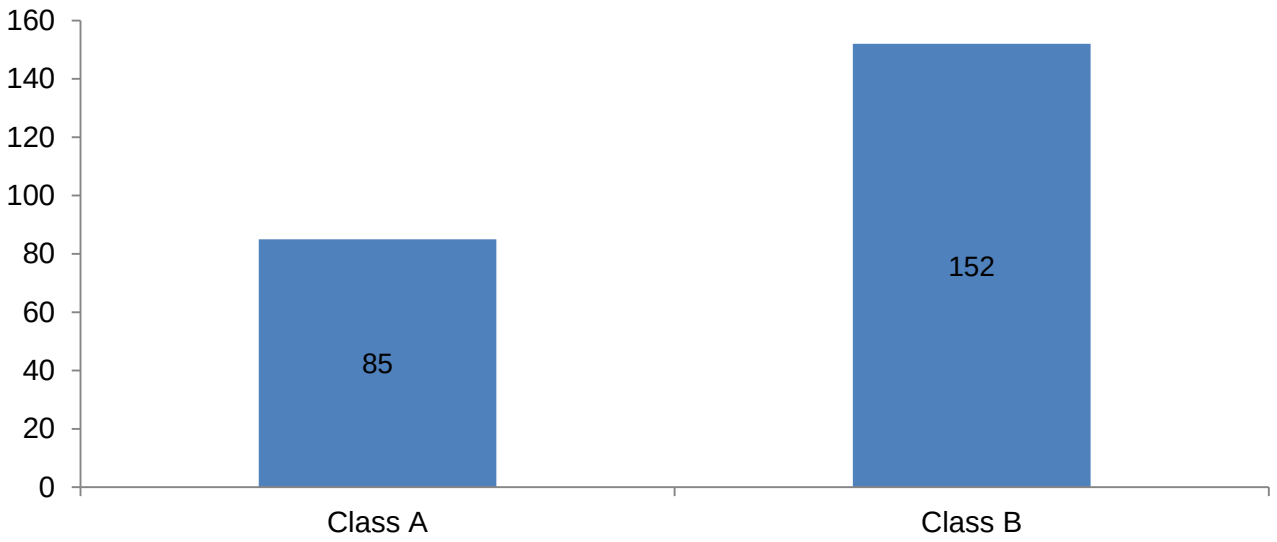


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Current Status on Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,200*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,105**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.1 billion and before considering any additional funding from the tax base.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total decrease on typical monthly bill	**8.38**	**8.23**	**7.75**	**9.26**	**8.52**	**8.17**	

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total increase on industrial bill	**19.96**	**18.97**	**18.34**	**17.14**	**14.45**	**13.7**	

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of about $450 ~~[placeholder for OFA]~~ on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $30 ~~20 to $35~~ million annual fiscal pressure in 2017 to the province ~~[TBC by OPG / OFA]~~ based on new borrowing and increasing based on cumulative borrowing.

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.
- A summary of the annual fiscal impacts of the proposed initiatives is presented in the next slide

Proposed Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
~~OCEB~~	–	–			
OREC	300	1,200*	1,200*	1,200*	1,200*
Ending DRC[2]	330	330	–	–	–
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
TOTAL	**1,195**	**2,105**	**2145**	**2156**	**2156**
1. Electricity Market Renewal Initiative		TBD	TBD	TBD	TBD
2. OESP		106	119	127	132
2. RRRP		292	300	306	315
2. First Nations Delivery Rate		18	18	18	18
3. Fund ICI through Tax Base		900	900	900	900
TOTAL	**1195**	**3,421**	**3,482**	**3,507**	**3,521**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

- As shown above if all measures proposed in this deck were to be accepted taxpayer funded contributions to electricity price mitigation would increase to about $3.5 billion by 2020-21. That is a 67% increase from the current forecast for 2017-18.
- These amounts were not considered in the 2016-17 Fiscal Plan and could put at risk the Province's fiscal objectives for 2017-18 and beyond.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

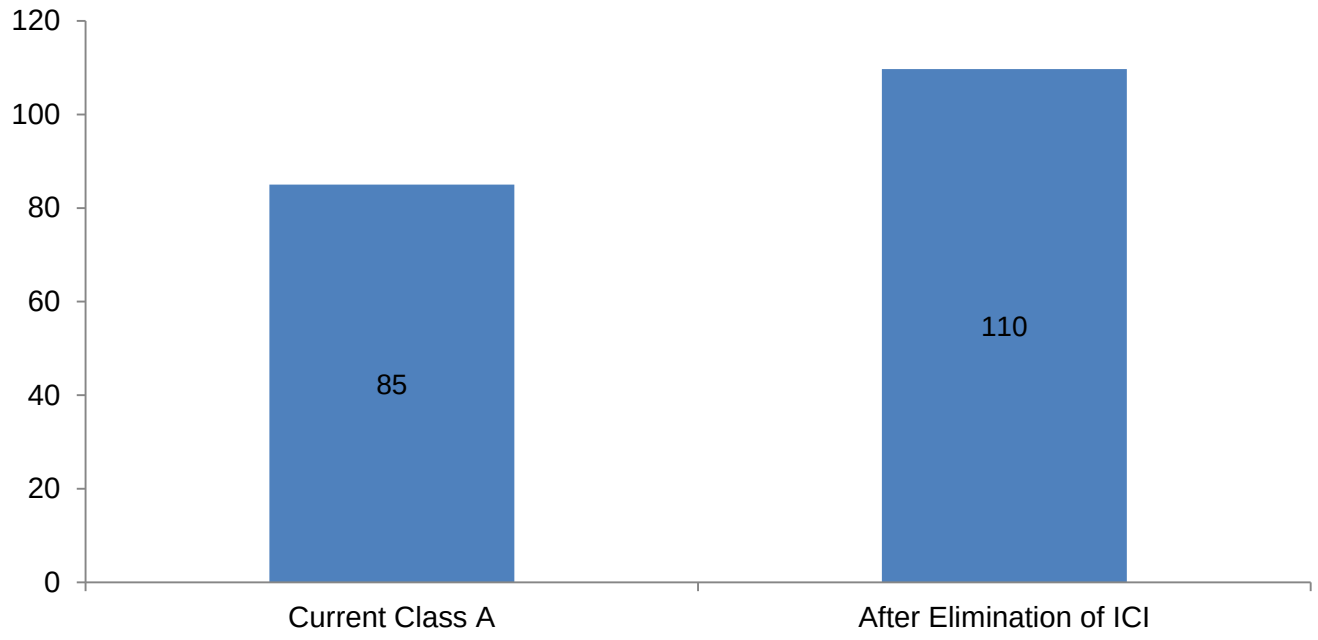
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

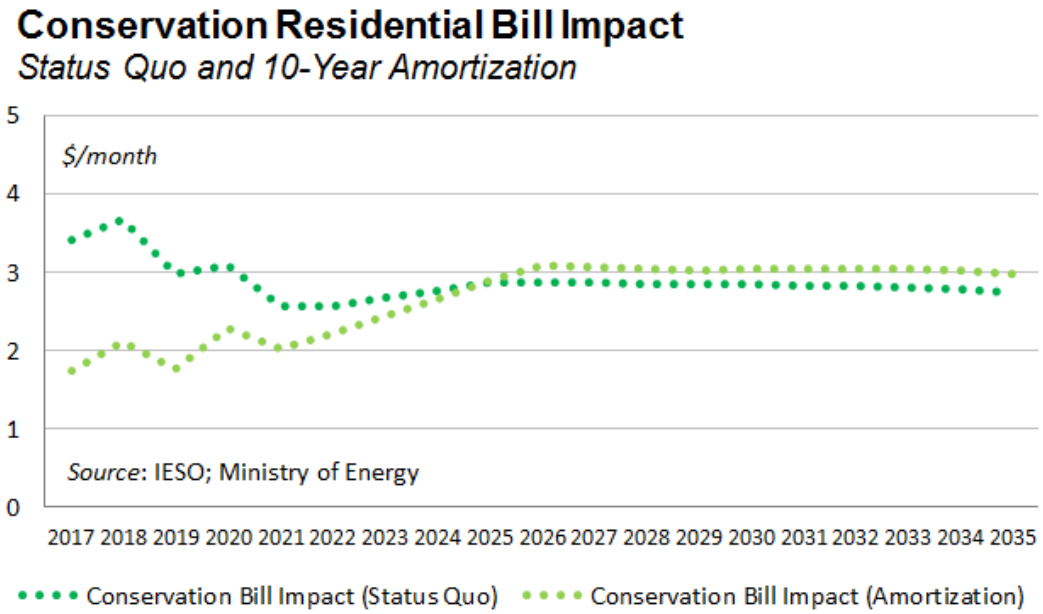
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

- As shown before the positive impact to residential ratepayers is very limited (between $8 and $9 per month) while the impact to the Province's fiscal position would be material (about $1.5 billion a year).

Appendix

Electricity Consumer Classes

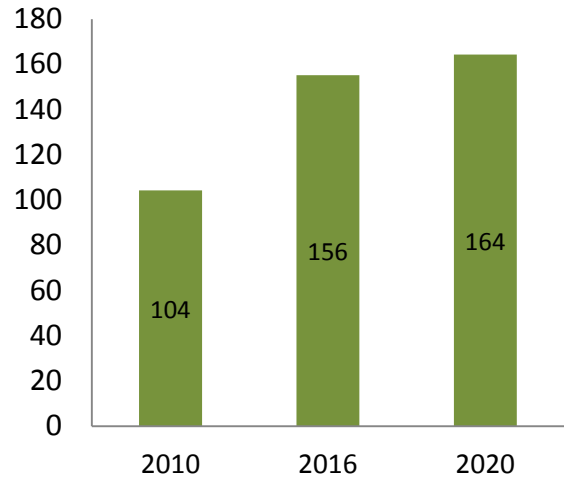
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

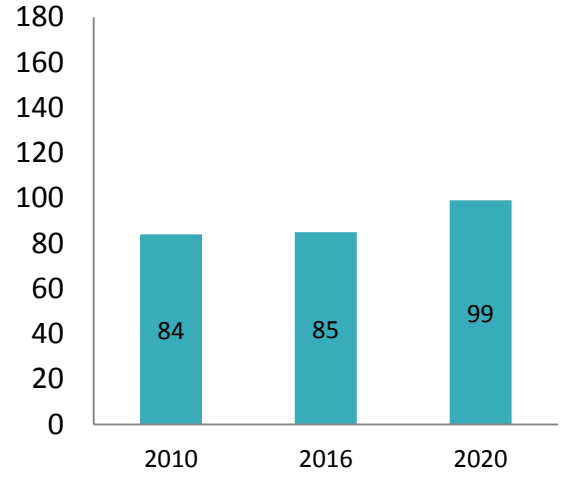
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

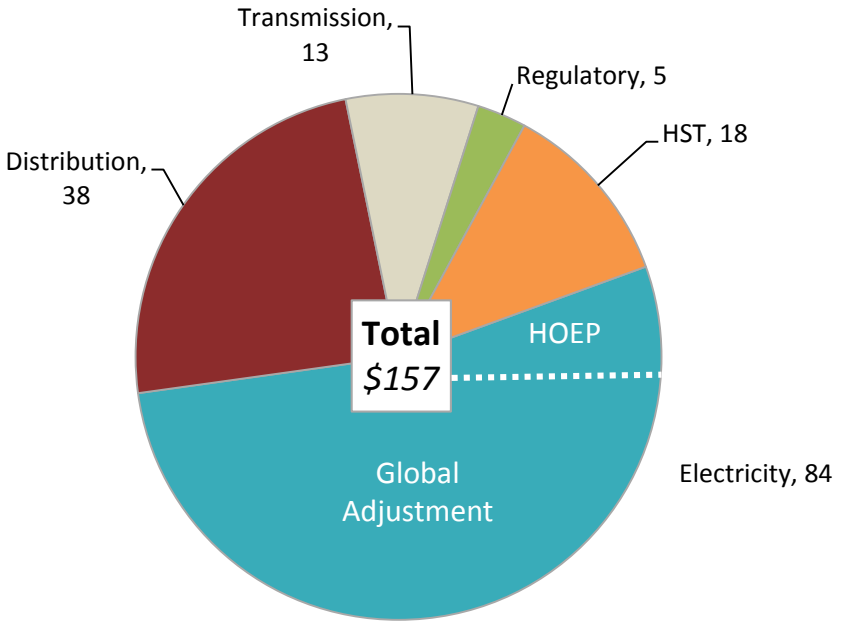
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



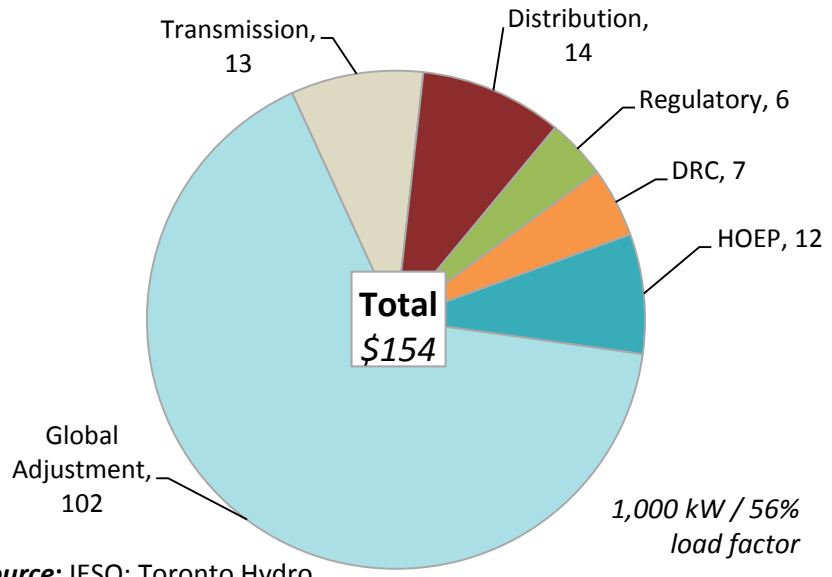
***Source*: OEB, Toronto Hydro**

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

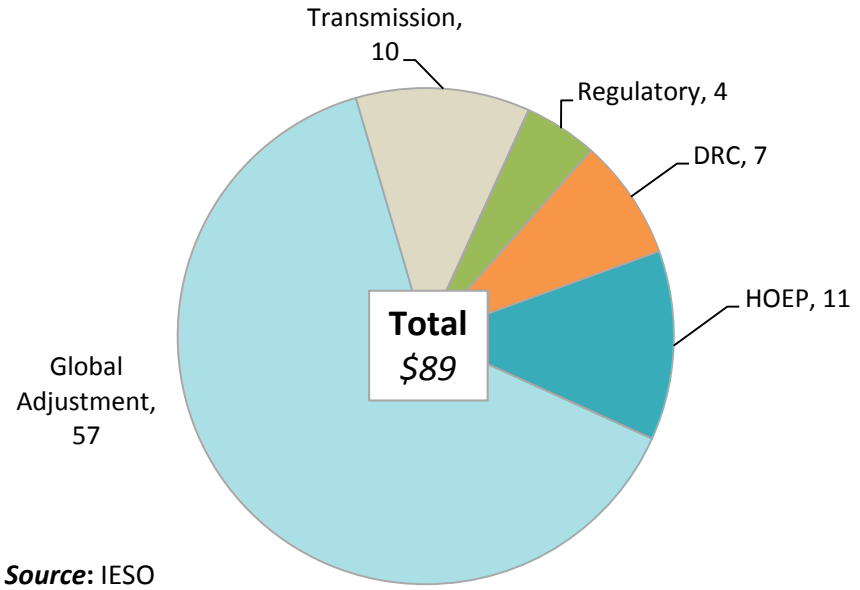
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



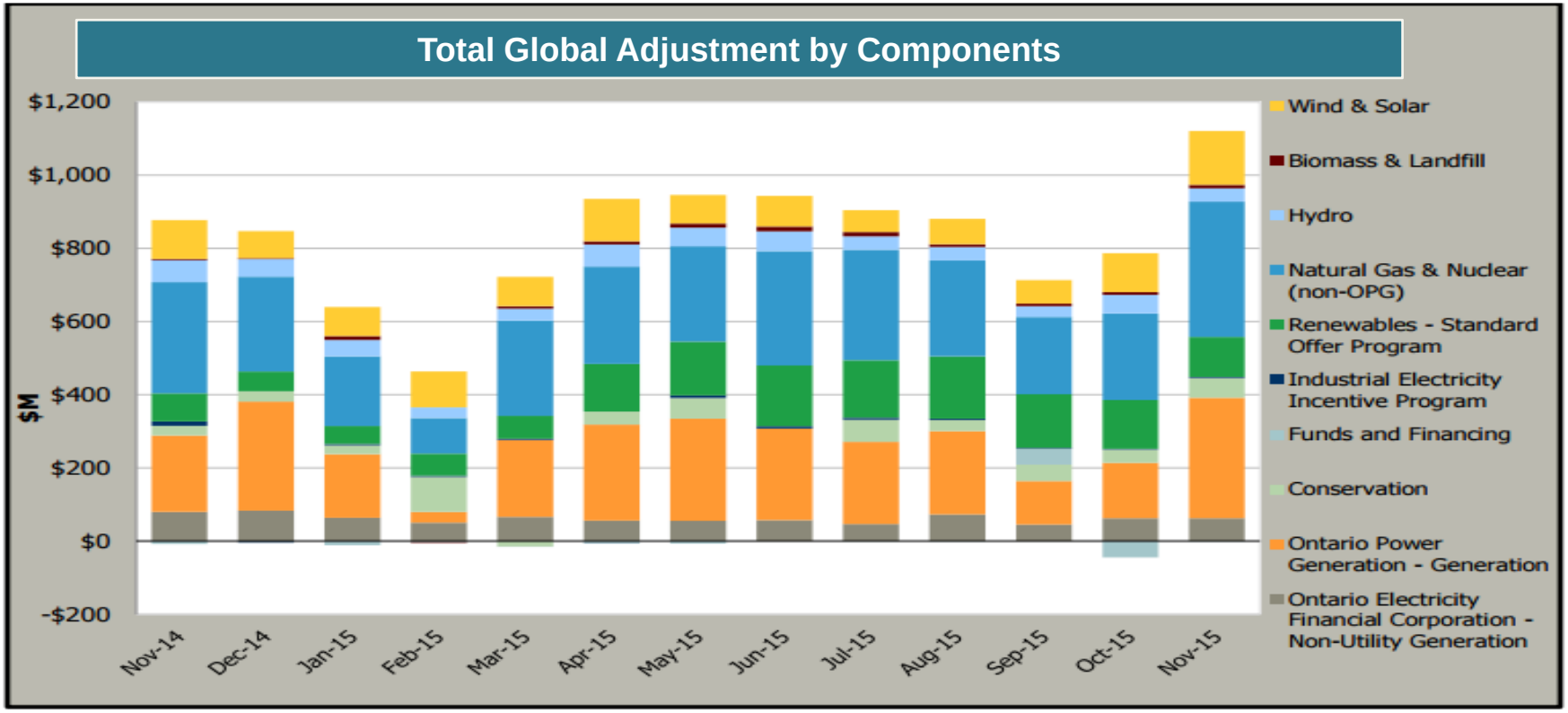
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

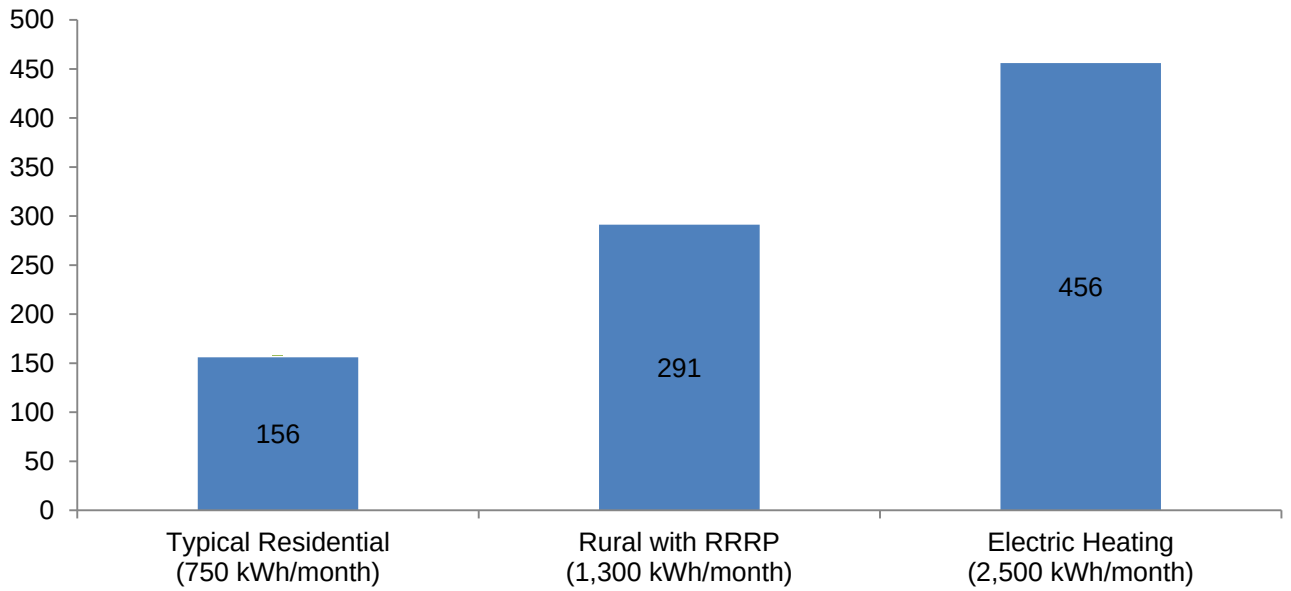
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

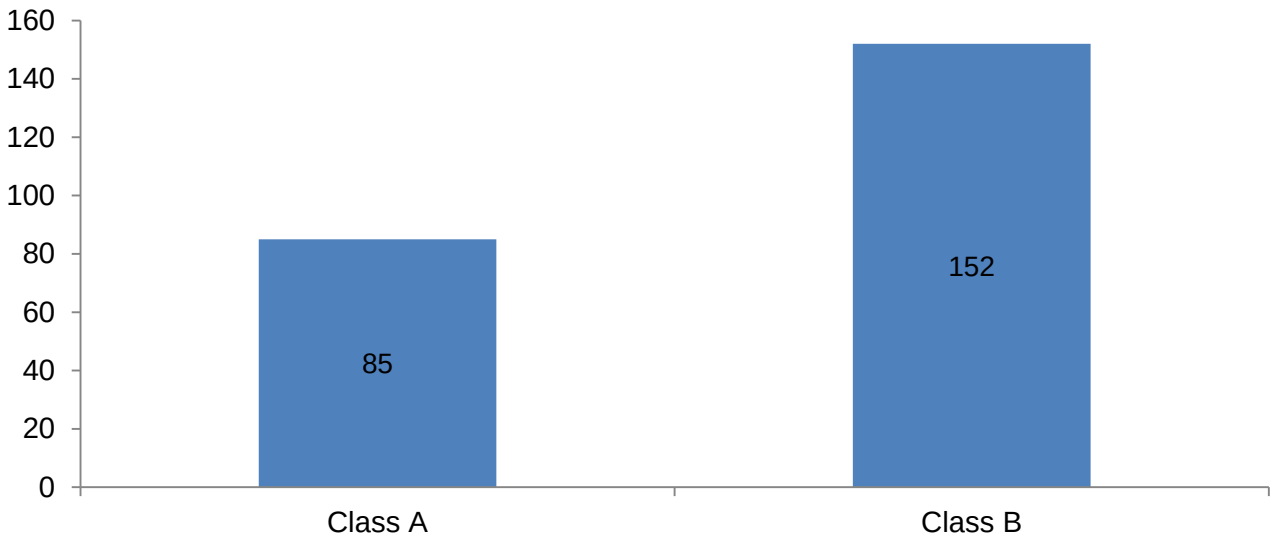


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Current Status on Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,100*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,005**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.0 billion and before considering any additional funding from the tax base.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total decrease on typical monthly bill	**8.38**	**8.23**	**7.75**	**9.26**	**8.52**	**8.17**	

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total increase on industrial bill	**19.96**	**18.97**	**18.34**	**17.14**	**14.45**	**13.7**	

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of about $450 ~~[placeholder for OFA]~~ on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $30 ~~20 to $35~~ million annual fiscal pressure in 2017 to the province ~~[TBC by OPG / OFA]~~ based on new borrowing and increasing to about $70M by 2021.

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.
- A summary of the annual fiscal impacts of the proposed initiatives is presented in the next slide.

Proposed Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
OCEB	-	-	-	-	-
OREC	300	1,100*	1,100*	1,200*	1,200*
Ending DRC[2]	330	330	--	--	--
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
CURRENT TOTAL	**1,195**	**2,005**	**1,715**	**1,826**	**1,826**
1. OESP		106	119	127	132
2. RRRP		292	300	306	315
3. First Nations Delivery Rate		18	18	18	18
4. Fund ICI through Tax Base		900+	900+	900+	900+
5. Departure Tax		TBD	TBD	TBD	TBD
6. Conservation Amortisation					
7. DRC Ended for Class B					
8. Other					
TOTAL	**1195**	**3,421**	**3,152**	**3,177**	**3,191**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

- As shown above if all measures proposed in this deck were to be accepted taxpayer funded contributions to electricity price mitigation would increase to about $3.2 billion by 2020-21. That is a 67% increase from the current forecast for 2016-17.
- These amounts were not considered in the 2016-17 Fiscal Plan and could put at risk the Province's fiscal objectives for 2017-18 and beyond.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

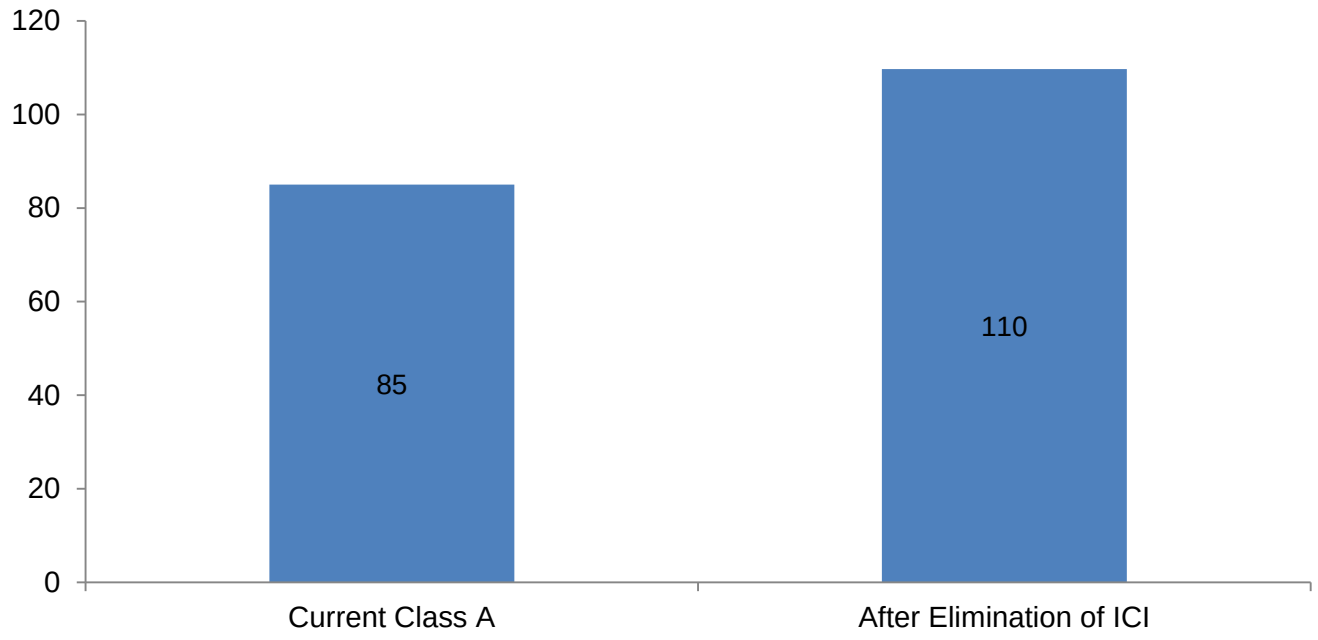
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

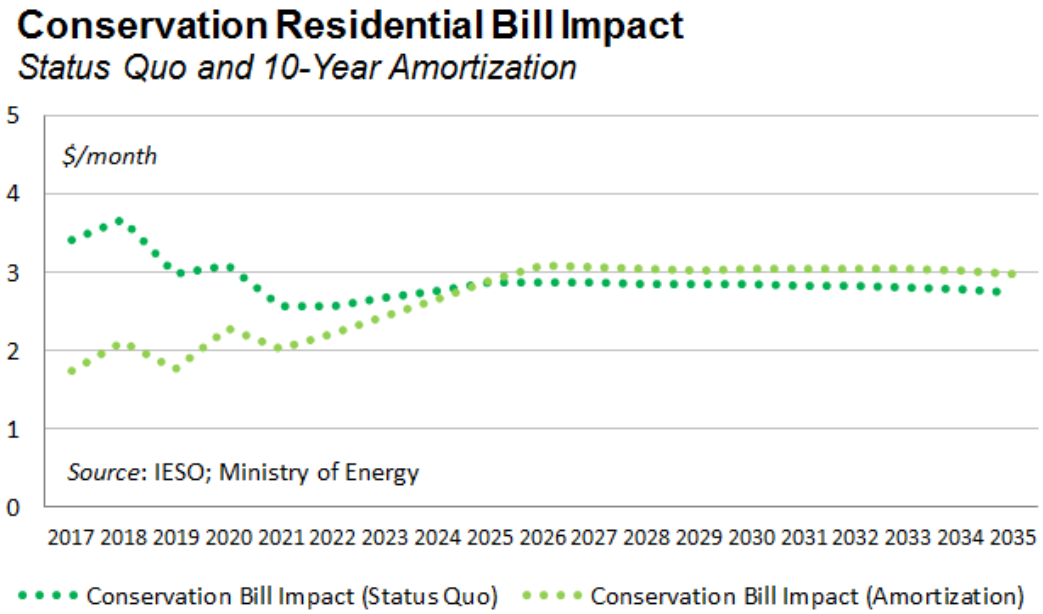
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

- As shown before the positive impact to residential ratepayers is very limited (between $8 and $9 per month) while the impact to the Province's fiscal position would be material (about $1.2 to $1.5 billion a year).

Appendix

Electricity Consumer Classes

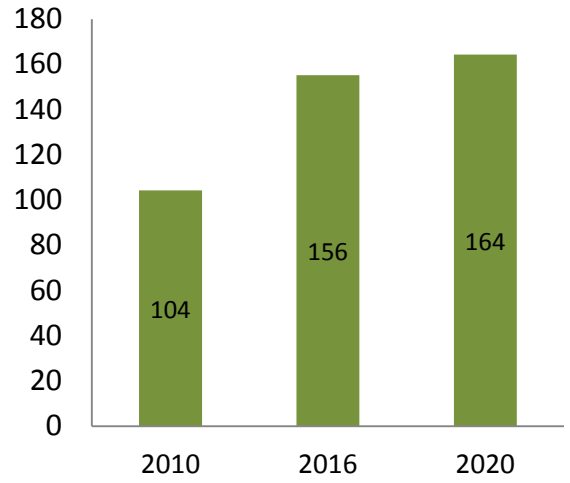
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

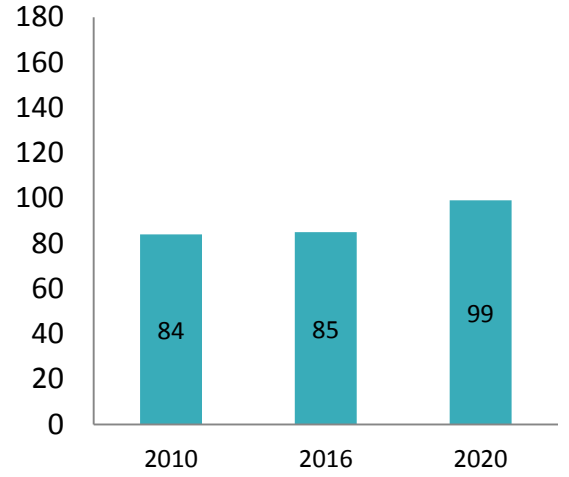
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

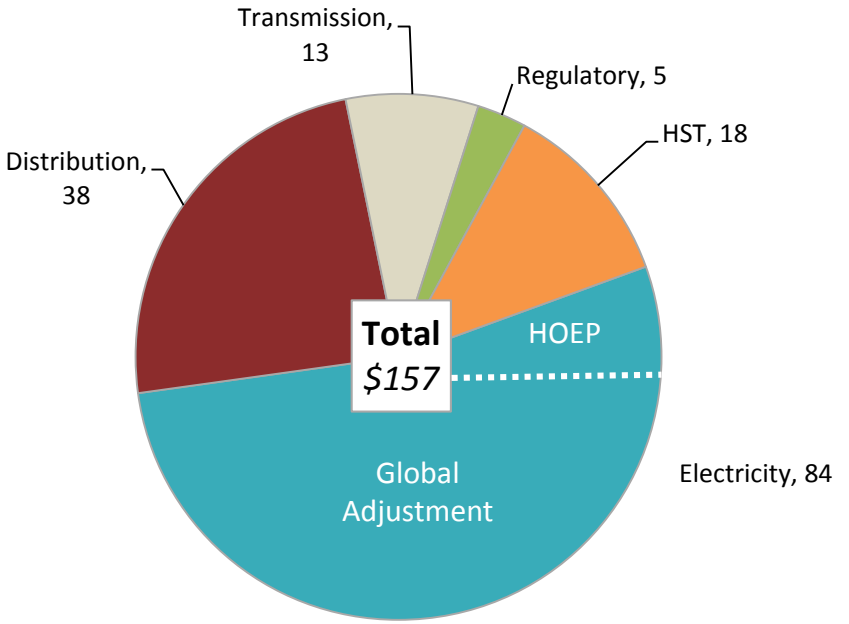
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



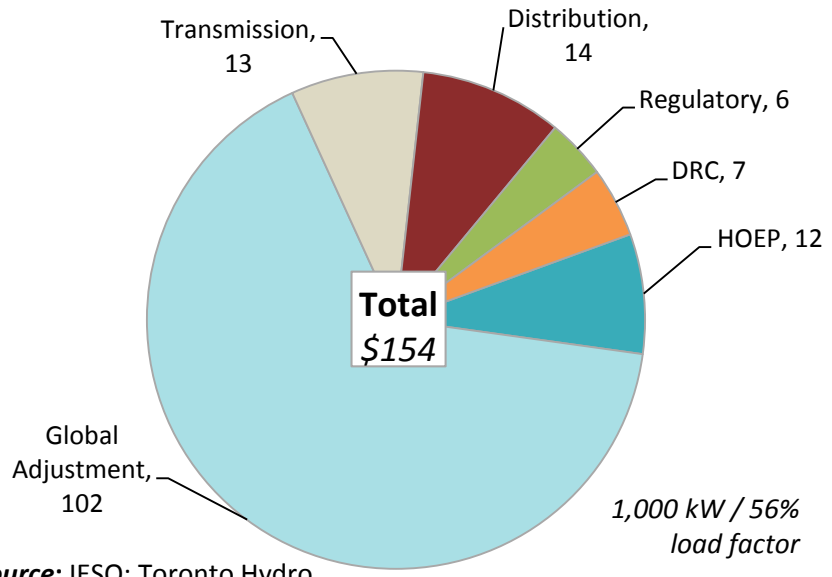
***Source*: OEB, Toronto Hydro**

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

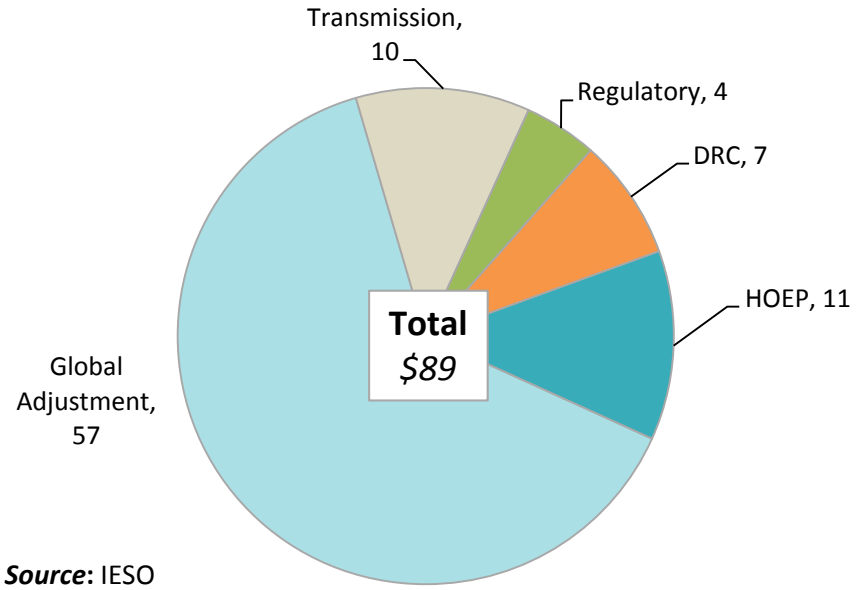
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



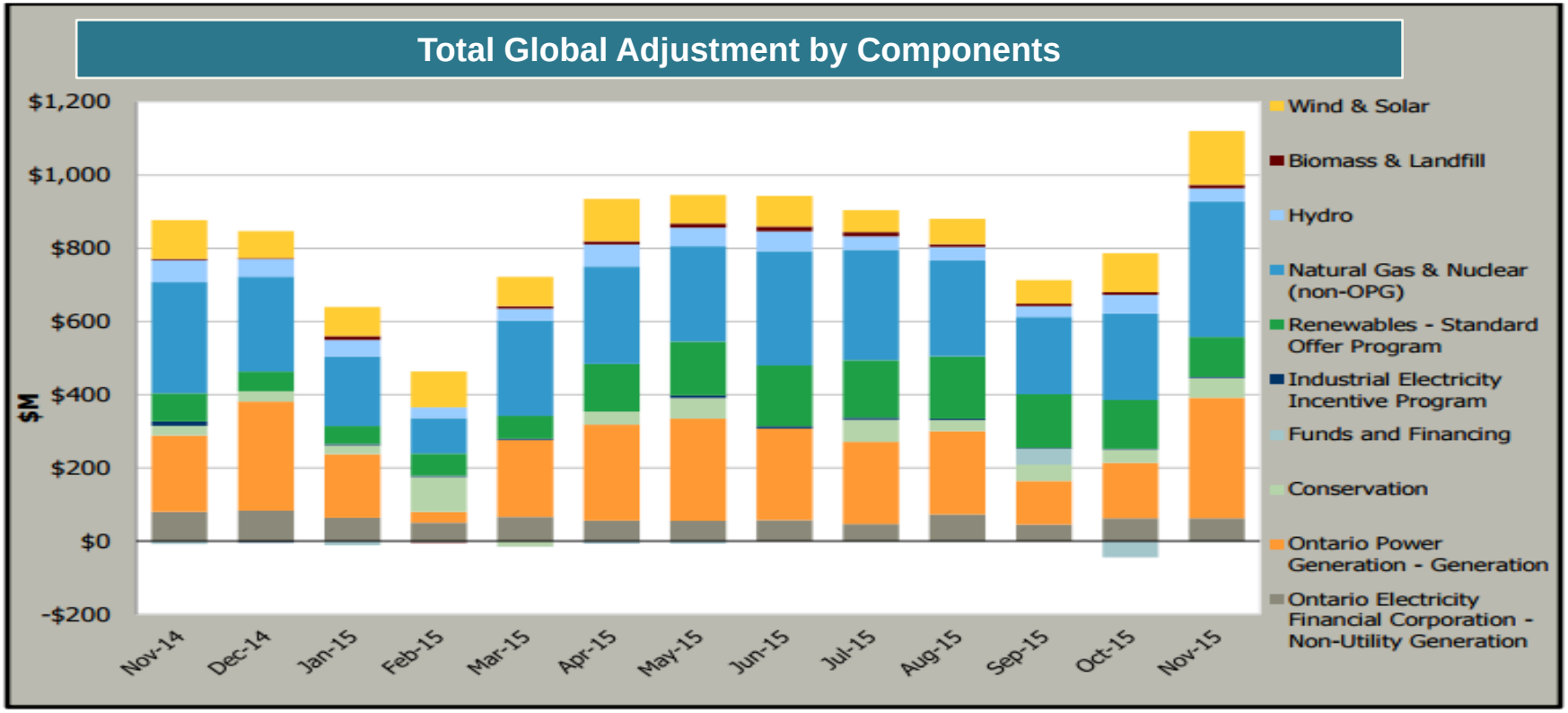
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

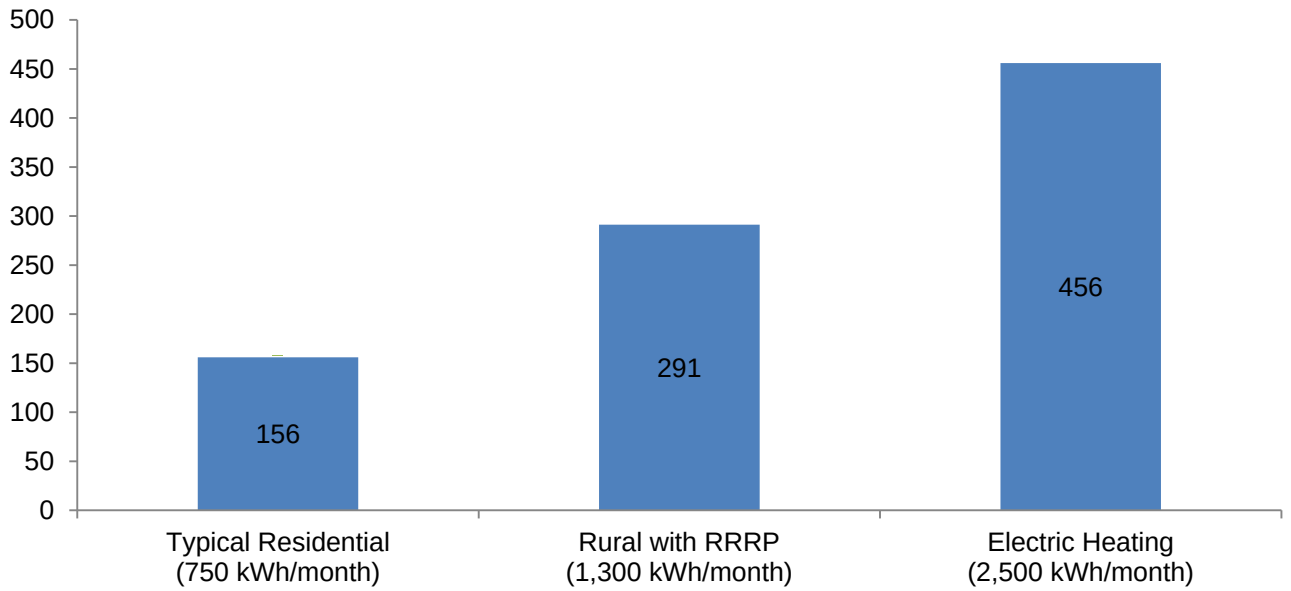
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

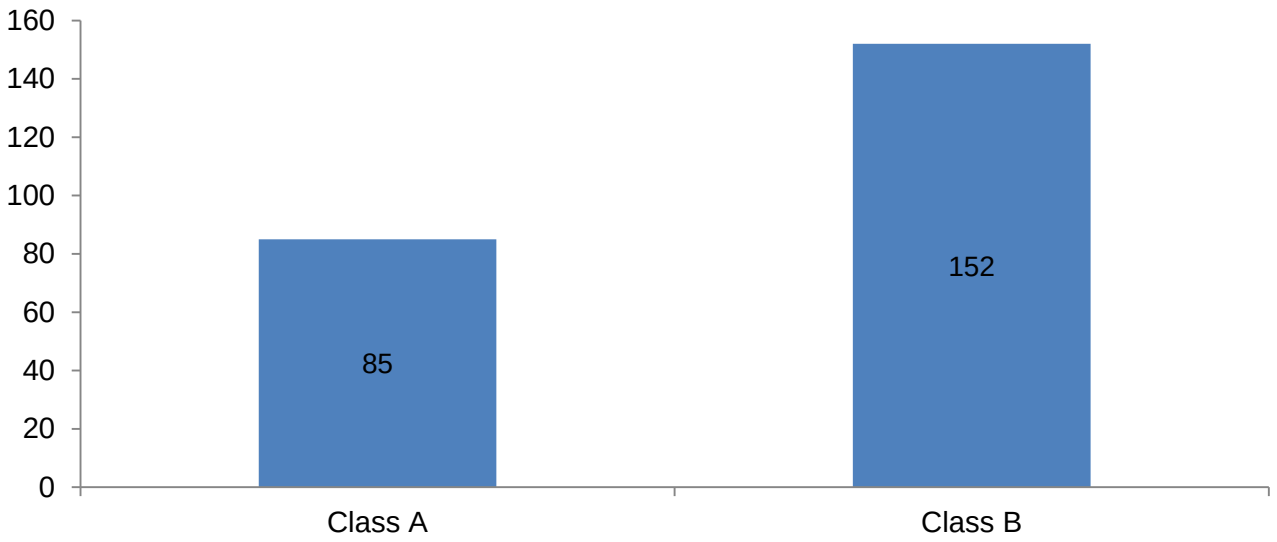


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,200*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,105**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.1 billion.

SLIDE ADDED BY CEFD

Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
OCEB	-	-			
OREC	300	1,200*	1,200*	1,200*	1,200*
Ending DRC[2]	330	330	330	330	330
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
TOTAL	**1,195**	**2,105**	**2145**	**2156**	**2156**
1. Electricity Market Renewal Initiative		TBD	TBD	TBD	TBD
2. OESP		106	119	127	132
2. RRRP		292	300	306	315
2. First Nations Delivery Rate		18	18	18	18
3. Fund ICI through Tax Base		900	900	900	900
TOTAL	**1195**	**3,421**	**3,482**	**3,507**	**3,521**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of $xx [placeholder for OFA] on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $20 to $35 million annual fiscal pressure to the province [TBC by OPG / OFA].

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

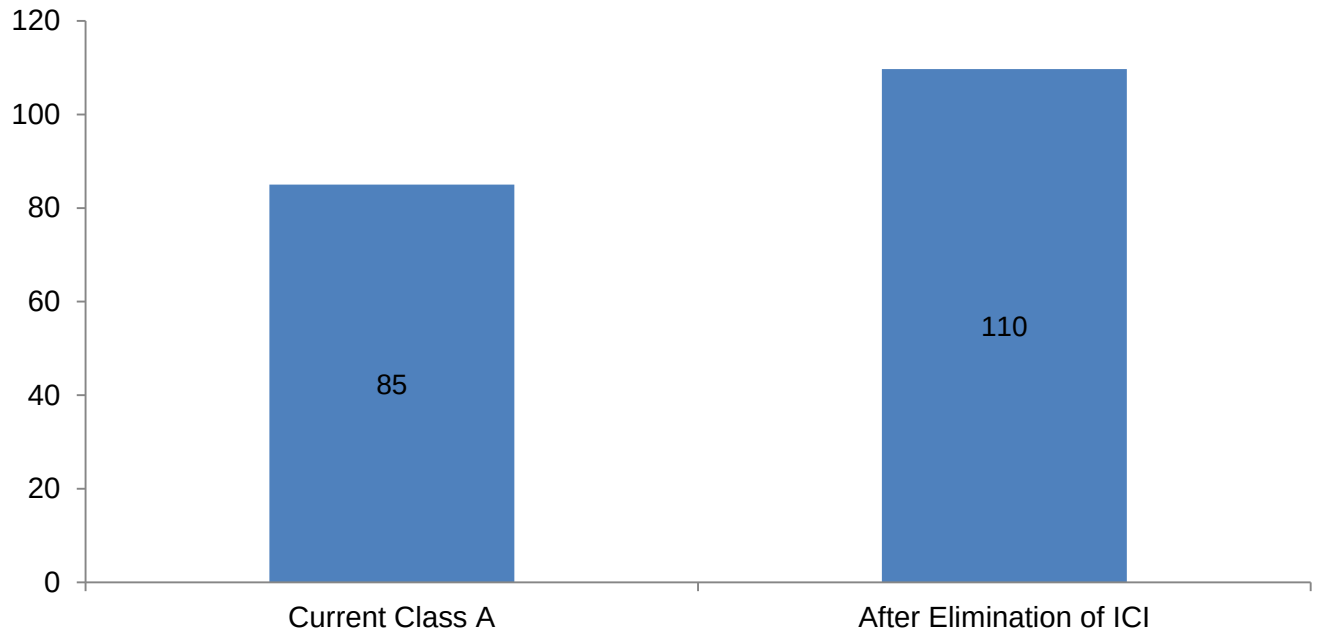
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

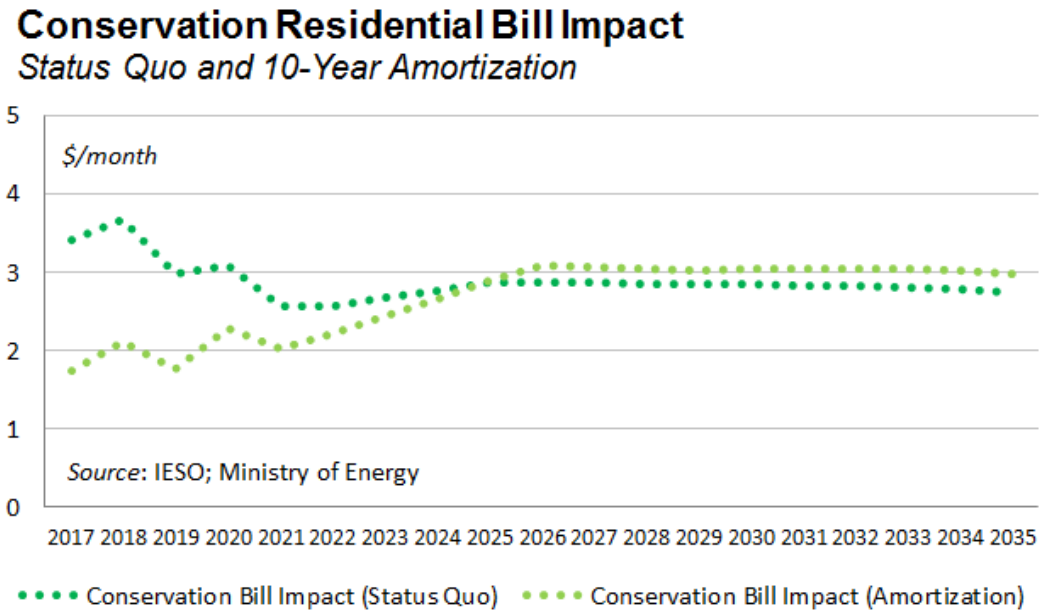
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

Appendix

Electricity Consumer Classes

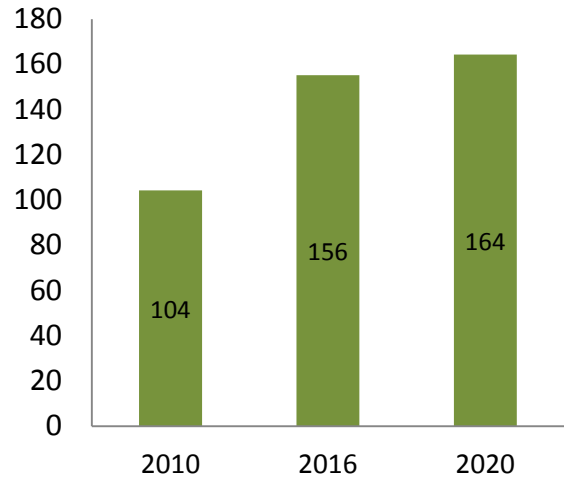
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

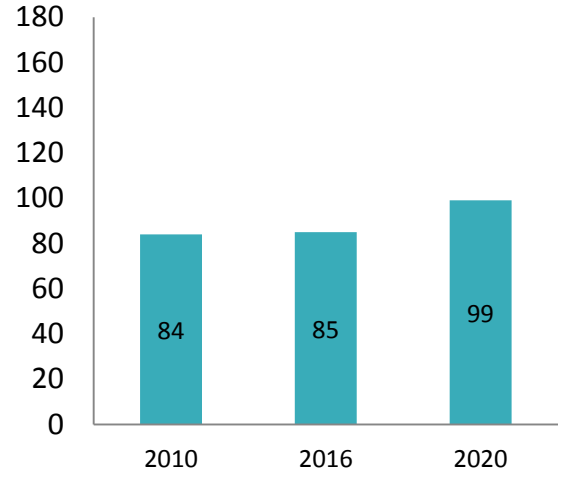
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

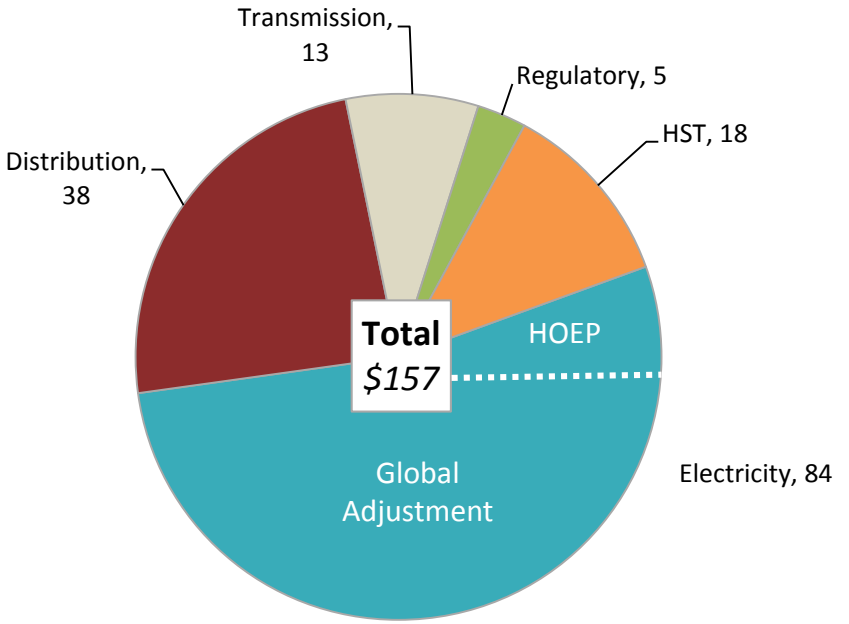
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



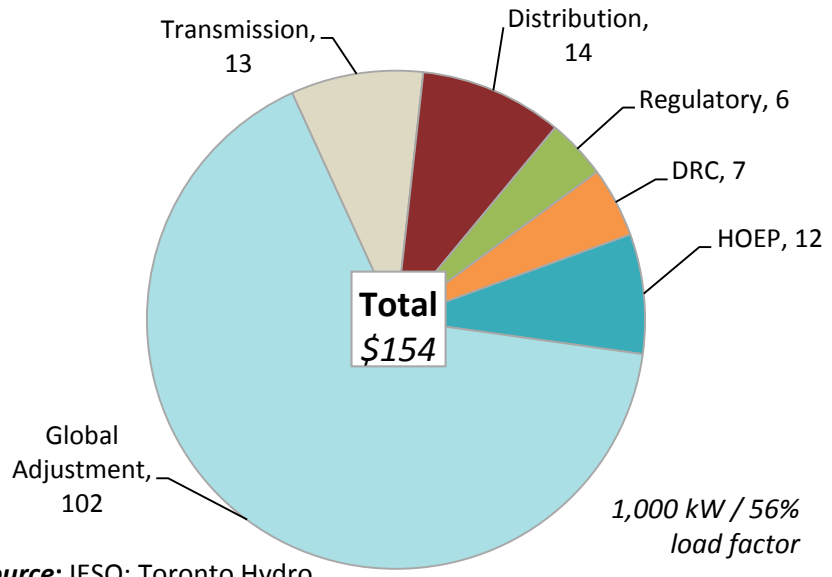
***Source*: OEB, Toronto Hydro**

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

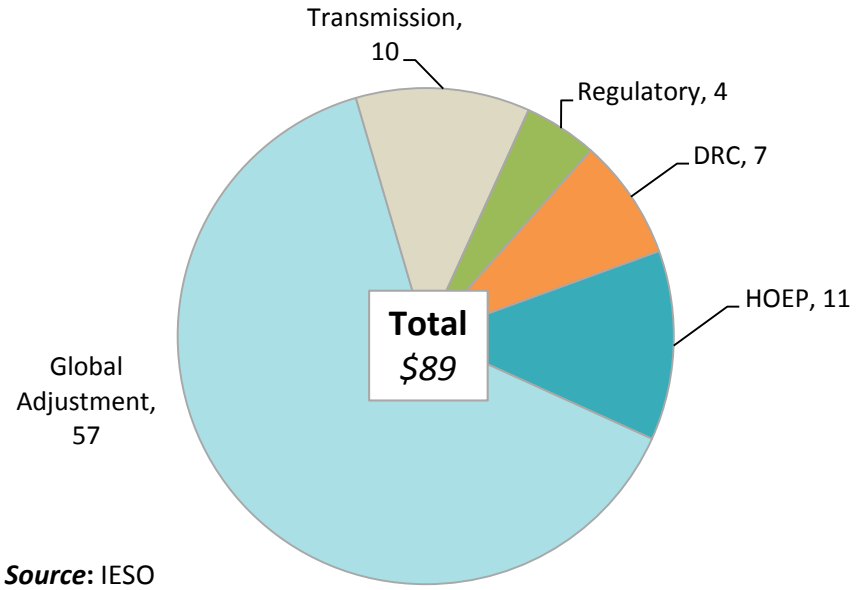
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



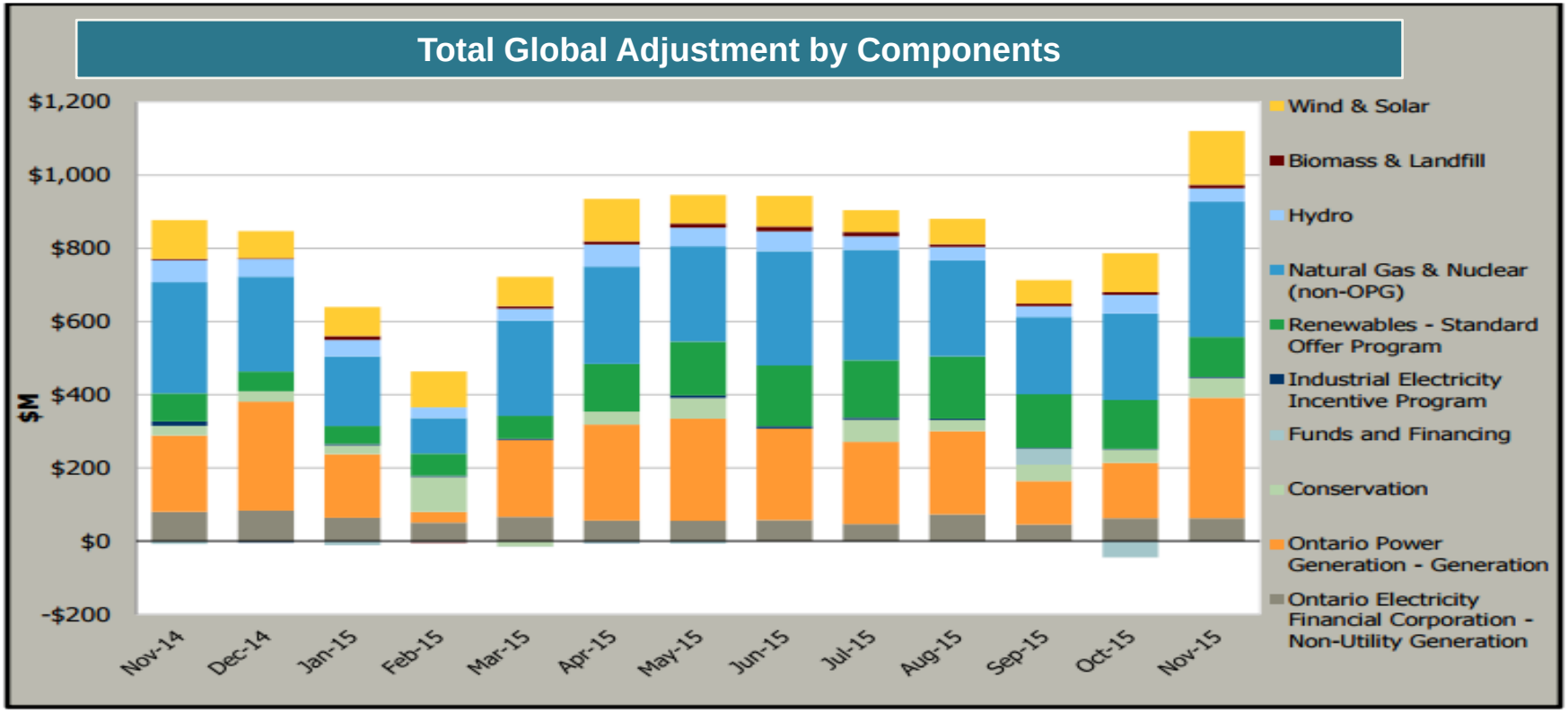
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

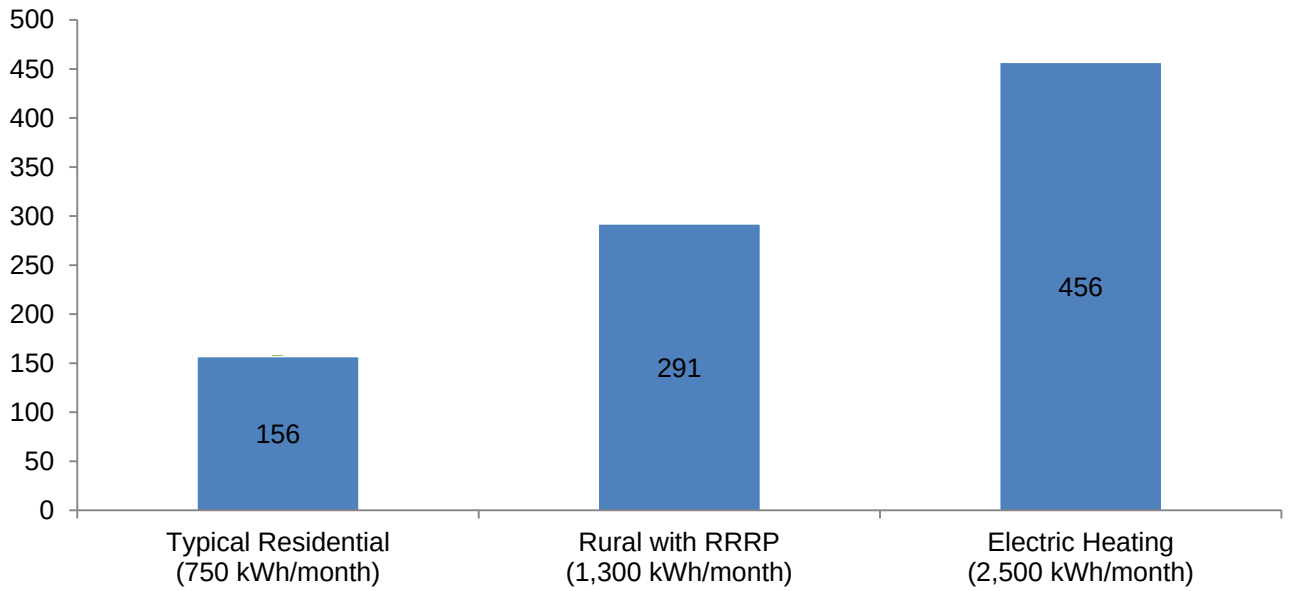
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

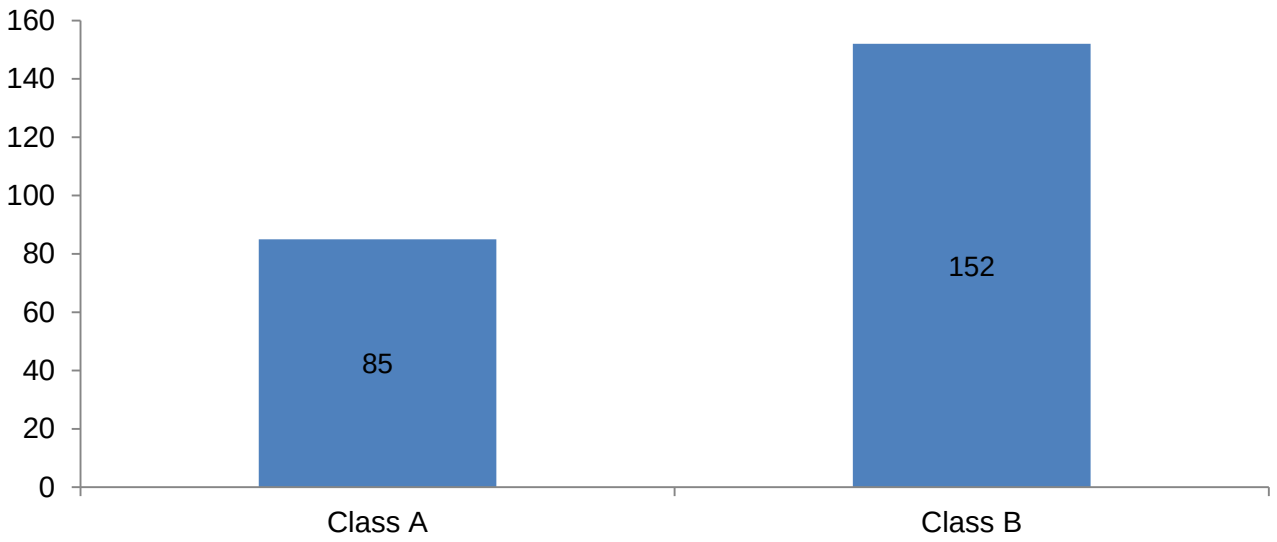


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,200*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,105**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.1 billion.

SLIDE ADDED BY CEFD

Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
OCEB	-	-			
OREC	300	1,200*	1,200*	1,200*	1,200*
Ending DRC[2]	330	330	330	330	330
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
TOTAL	**1,195**	**2,105**	**2145**	**2156**	**2156**
1. Electricity Market Renewal Initiative		TBD	TBD	TBD	TBD
2. OESP		106	119	127	132
2. RRRP		292	300	306	315
2. First Nations Delivery Rate		18	18	18	18
3. Fund ICI through Tax Base		900	900	900	900
TOTAL	**1195**	**3,421**	**3,482**	**3,507**	**3,521**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of $xx [placeholder for OFA] on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $20 to $35 million annual fiscal pressure to the province [TBC by OPG / OFA].

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

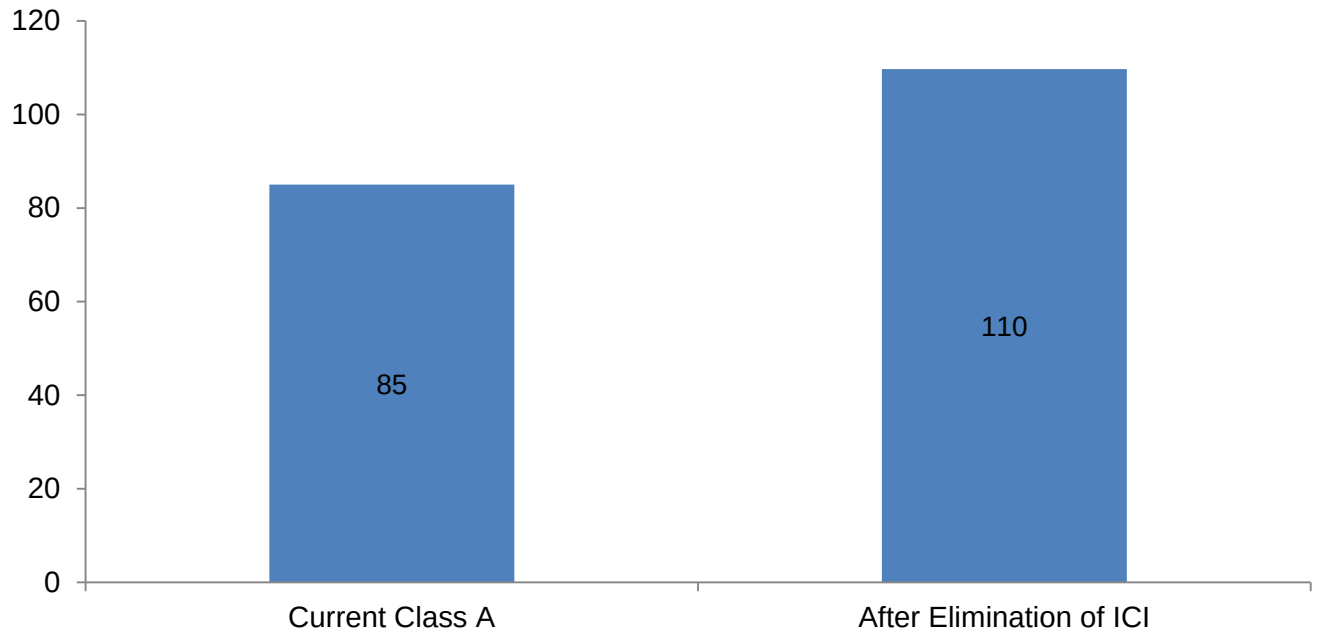
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

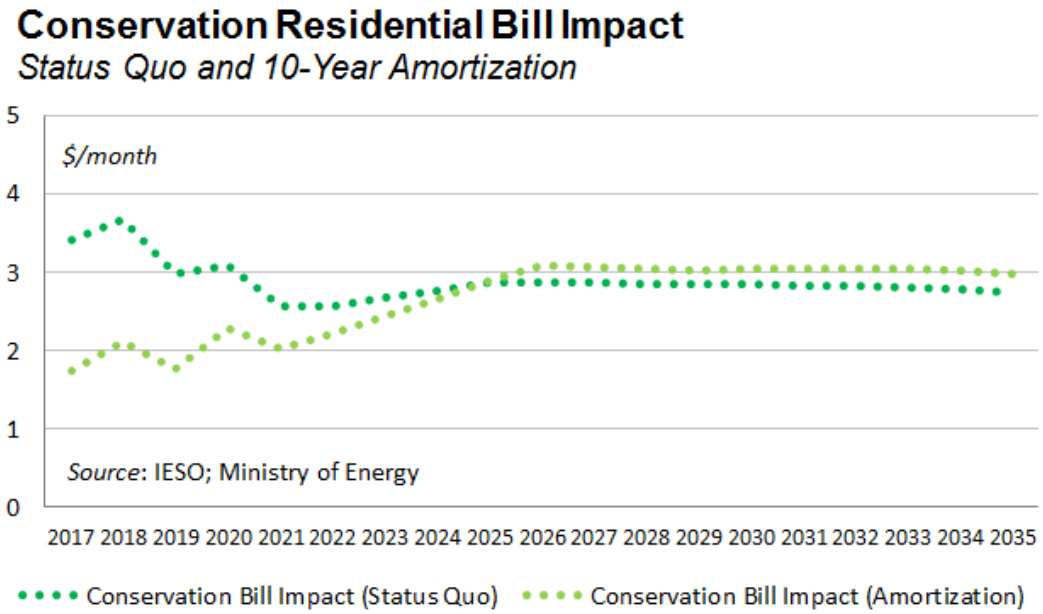
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

Appendix

Electricity Consumer Classes

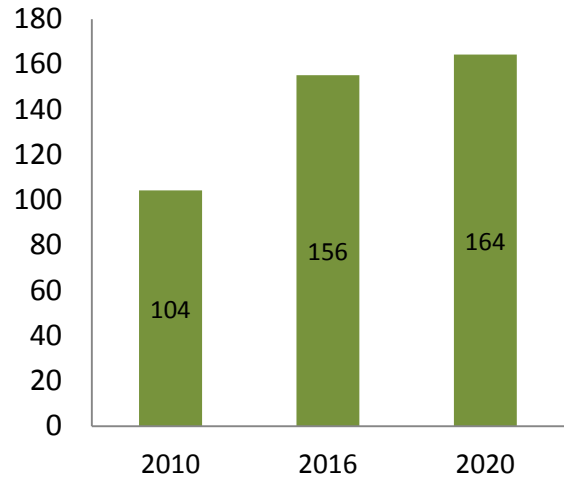
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

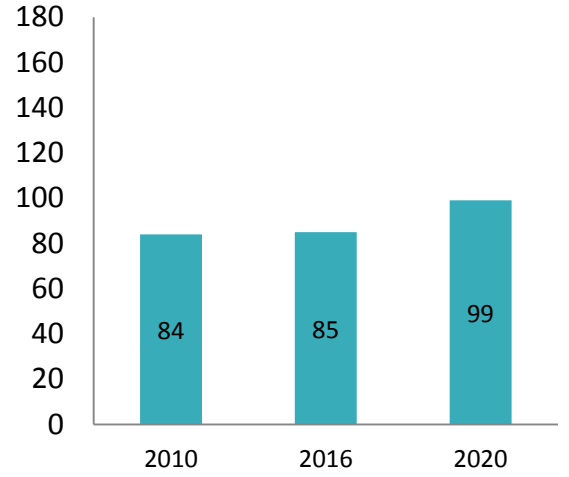
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

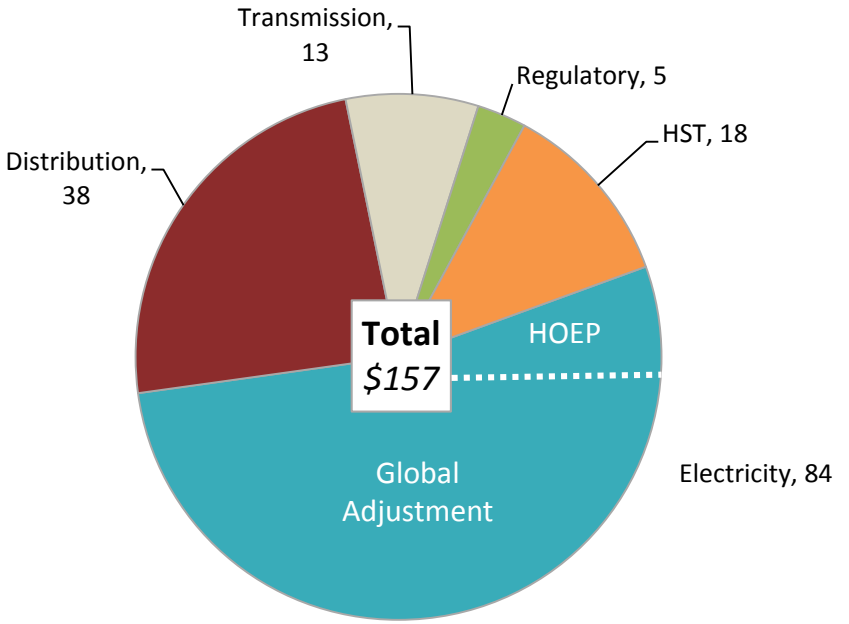
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



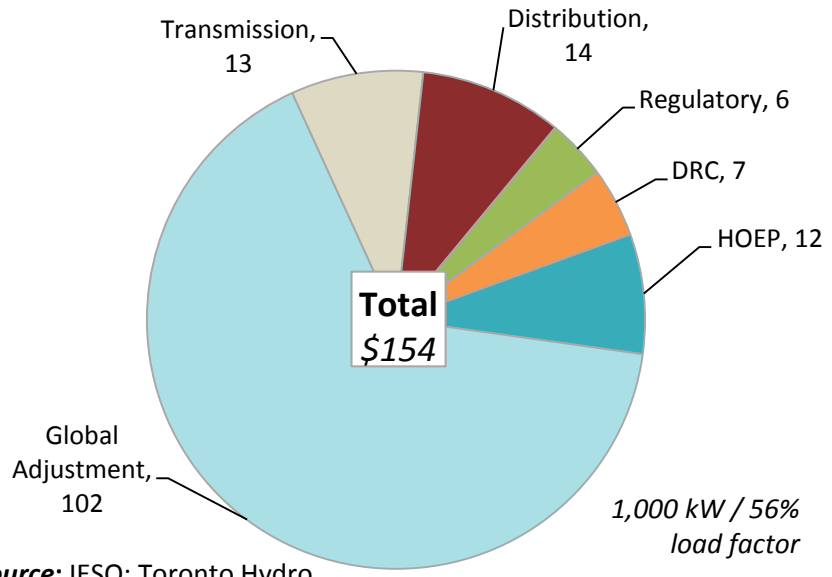
***Source*: OEB, Toronto Hydro**

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

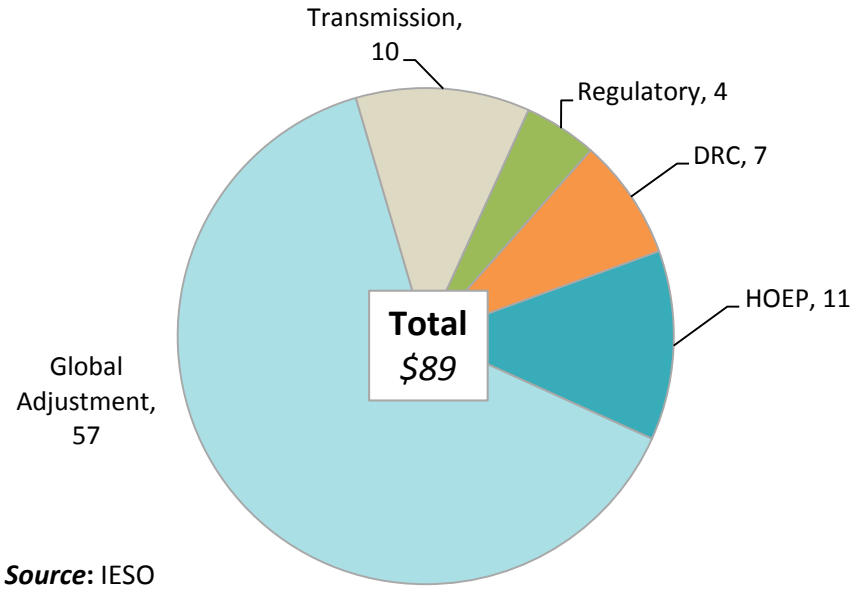
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



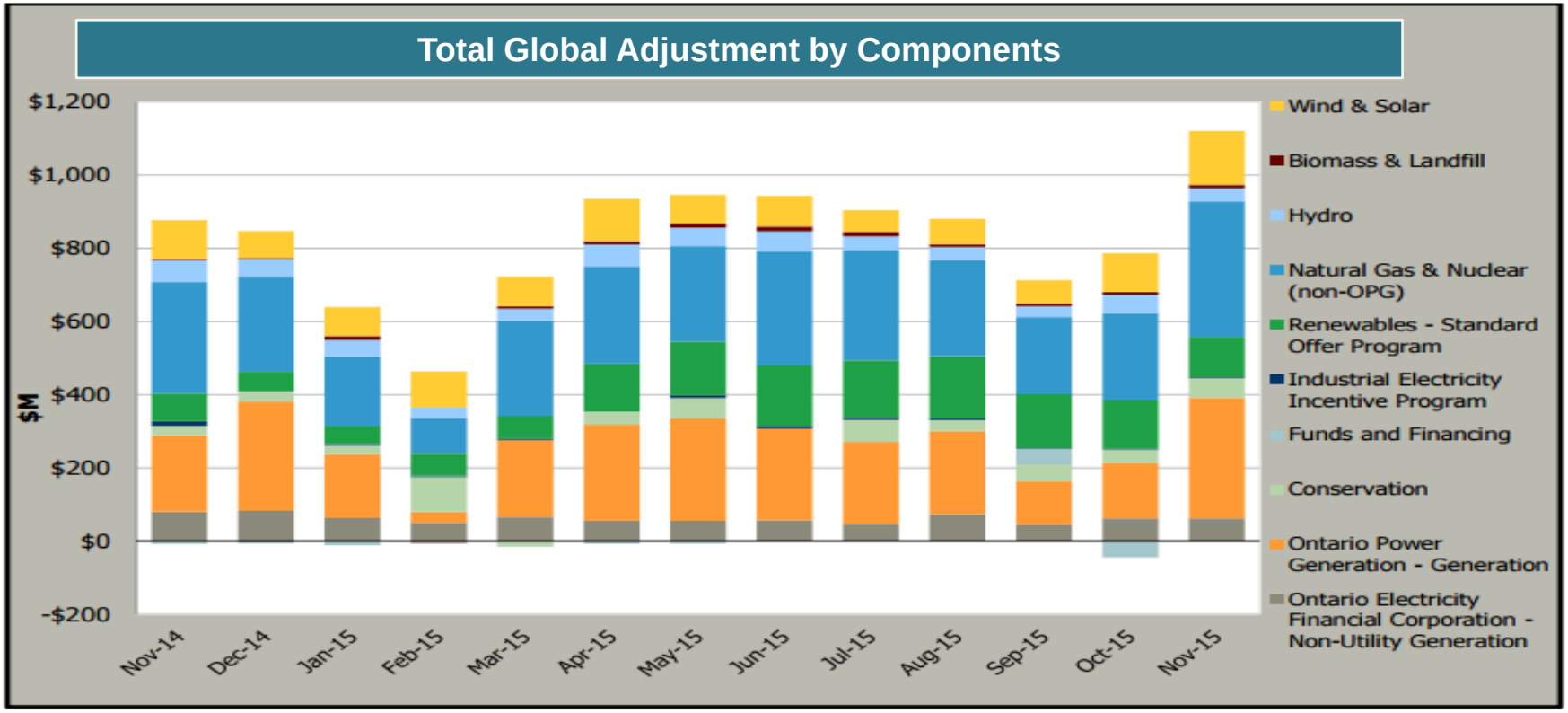
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

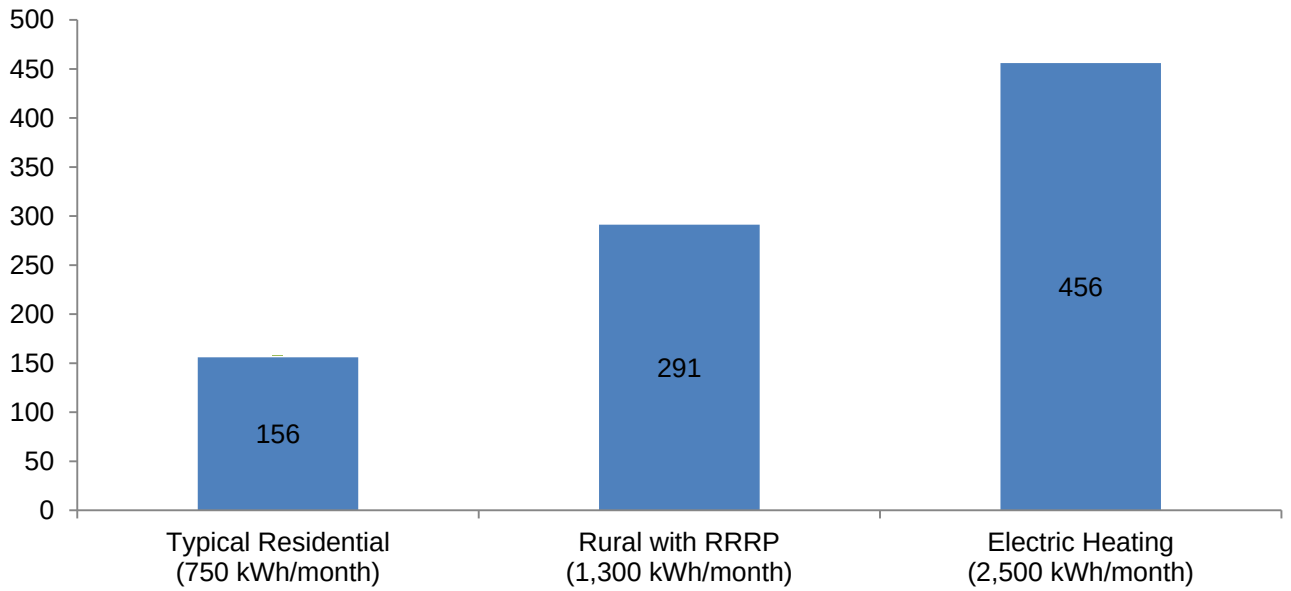
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

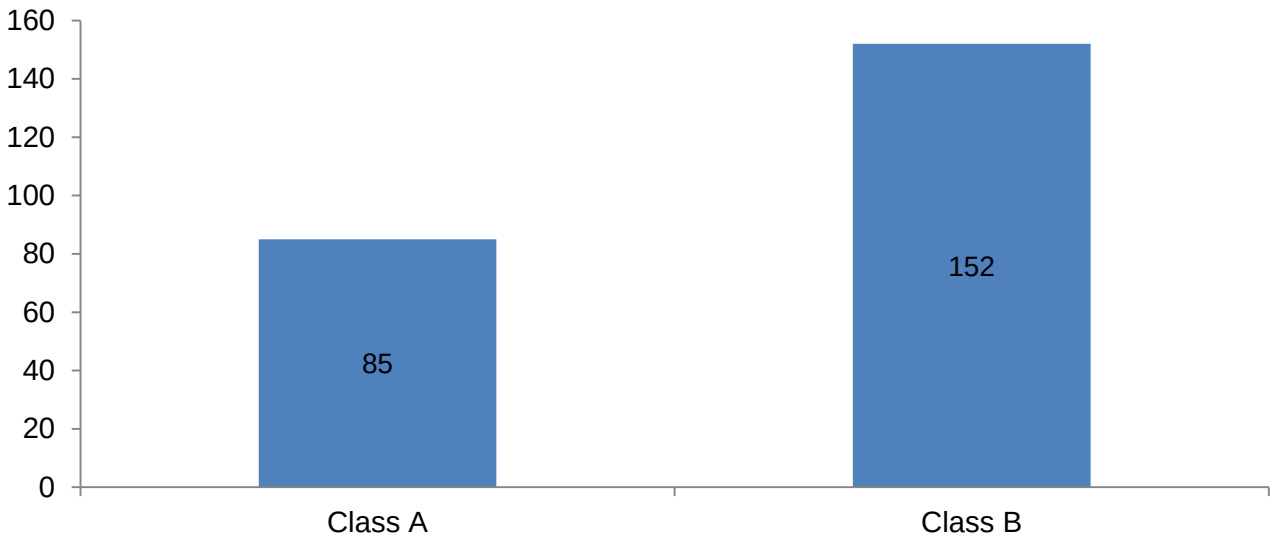


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,200*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,105**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.1 billion.

SLIDE ADDED BY CEFD

Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
OCEB	-	-			
OREC	300	1,200*	1,200*	1,200*	1,200*
Ending DRC[2]	330	330	330	330	330
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
TOTAL	**1,195**	**2,105**	**2145**	**2156**	**2156**
1. Electricity Market Renewal Initiative		TBD	TBD	TBD	TBD
2. OESP		106	119	127	132
2. RRRP		292	300	306	315
2. First Nations Delivery Rate		18	18	18	18
3. Fund ICI through Tax Base		900	900	900	900
TOTAL	**1195**	**3,421**	**3,482**	**3,507**	**3,521**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of about $450 million ~~[placeholder for OFA]~~ on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $20 to $35 million annual fiscal pressure to the province [TBC by OPG / OFA].

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

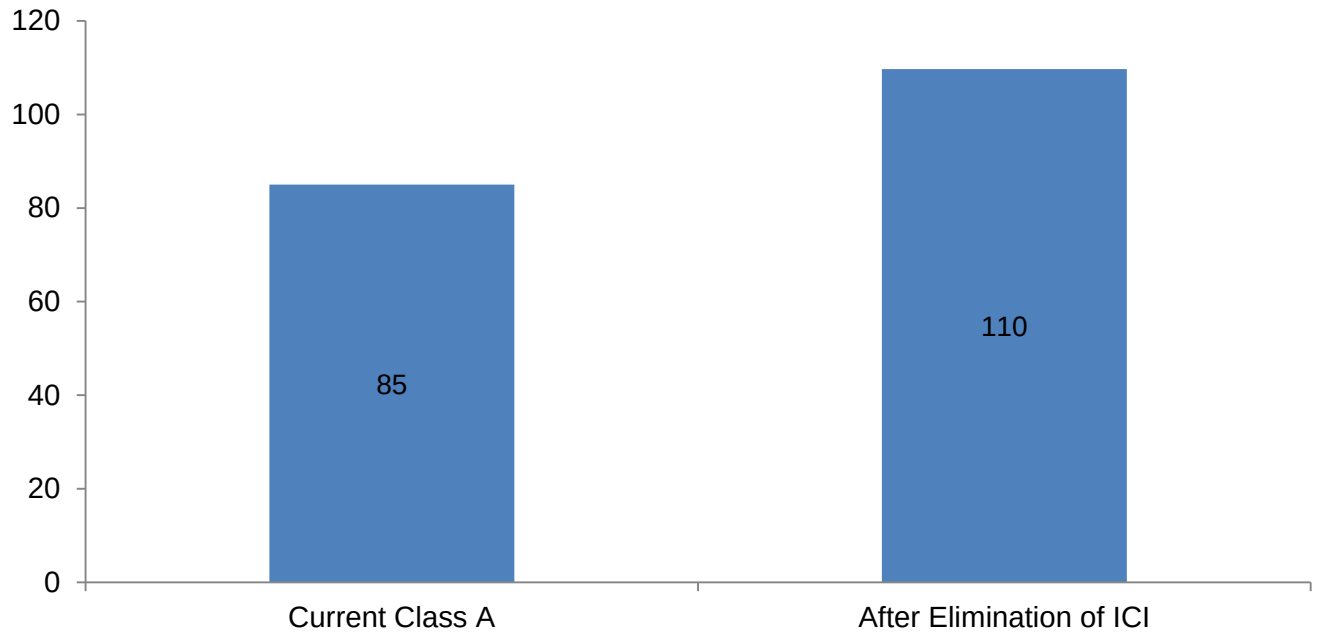
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

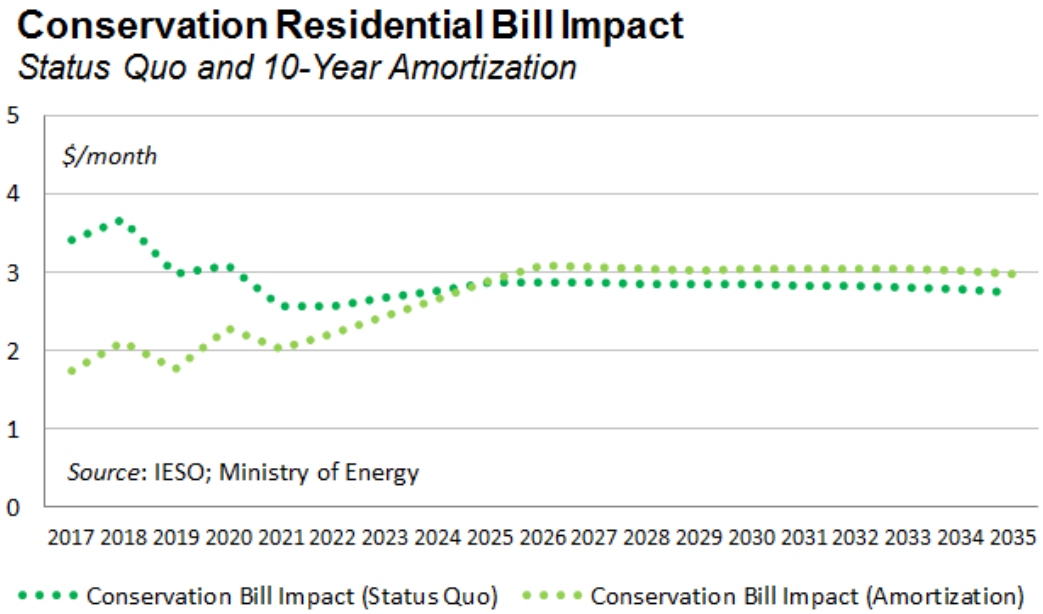
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

Appendix

Electricity Consumer Classes

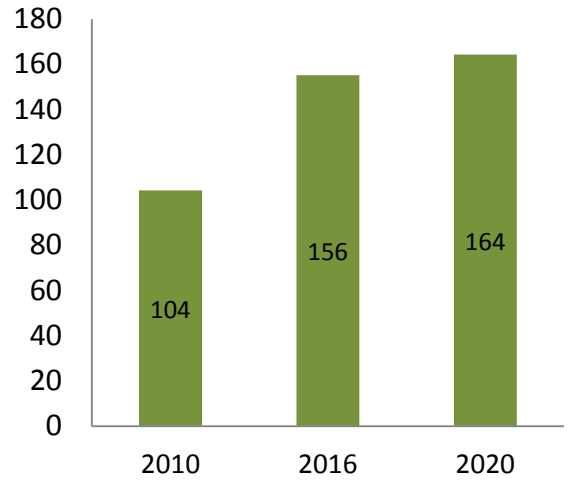
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

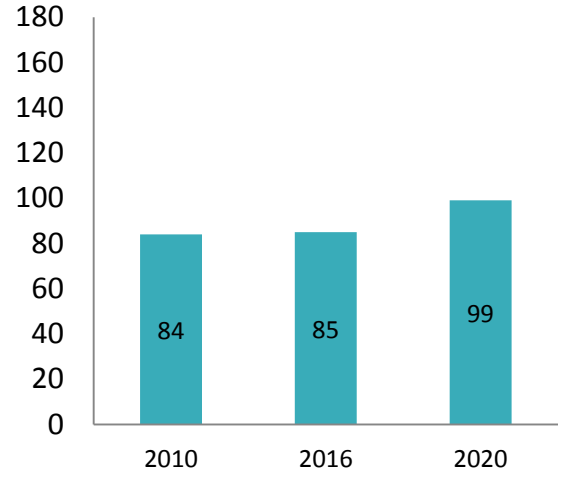
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

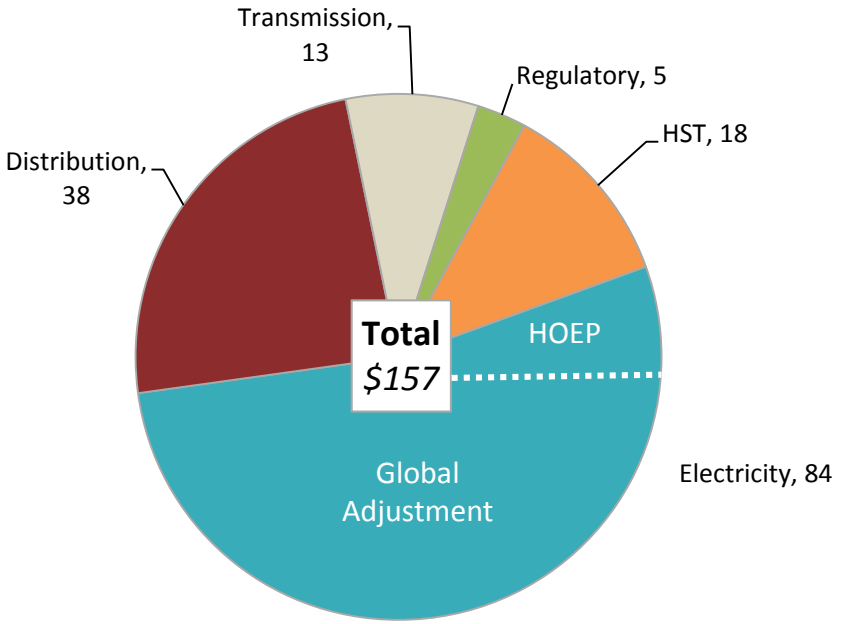
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



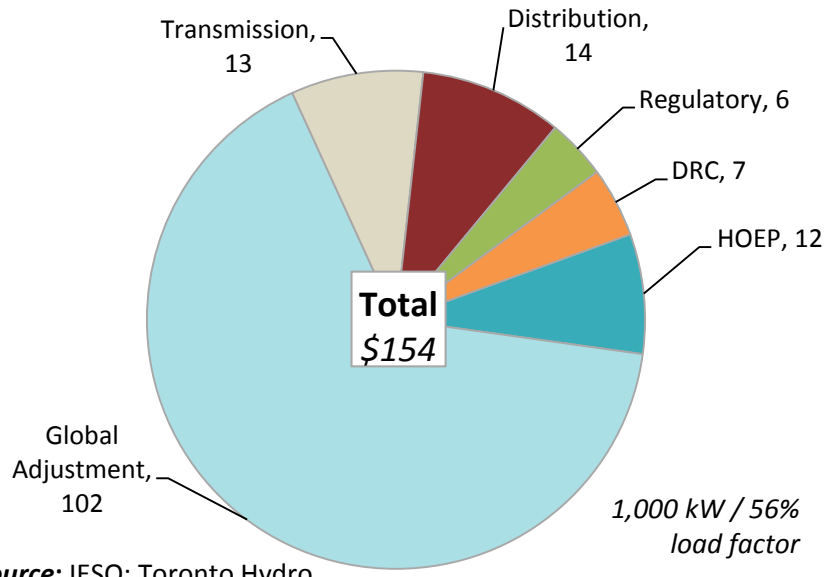
***Source*: OEB, Toronto Hydro**

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

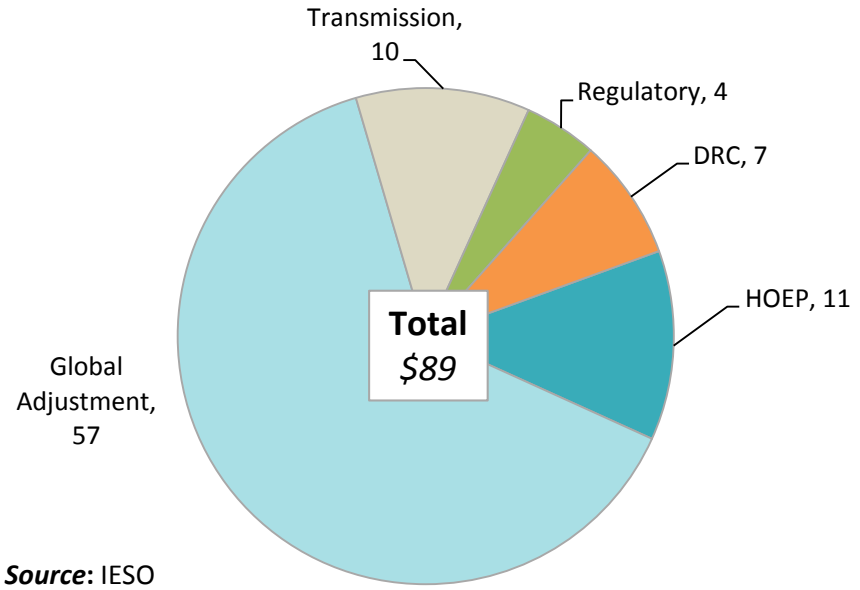
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



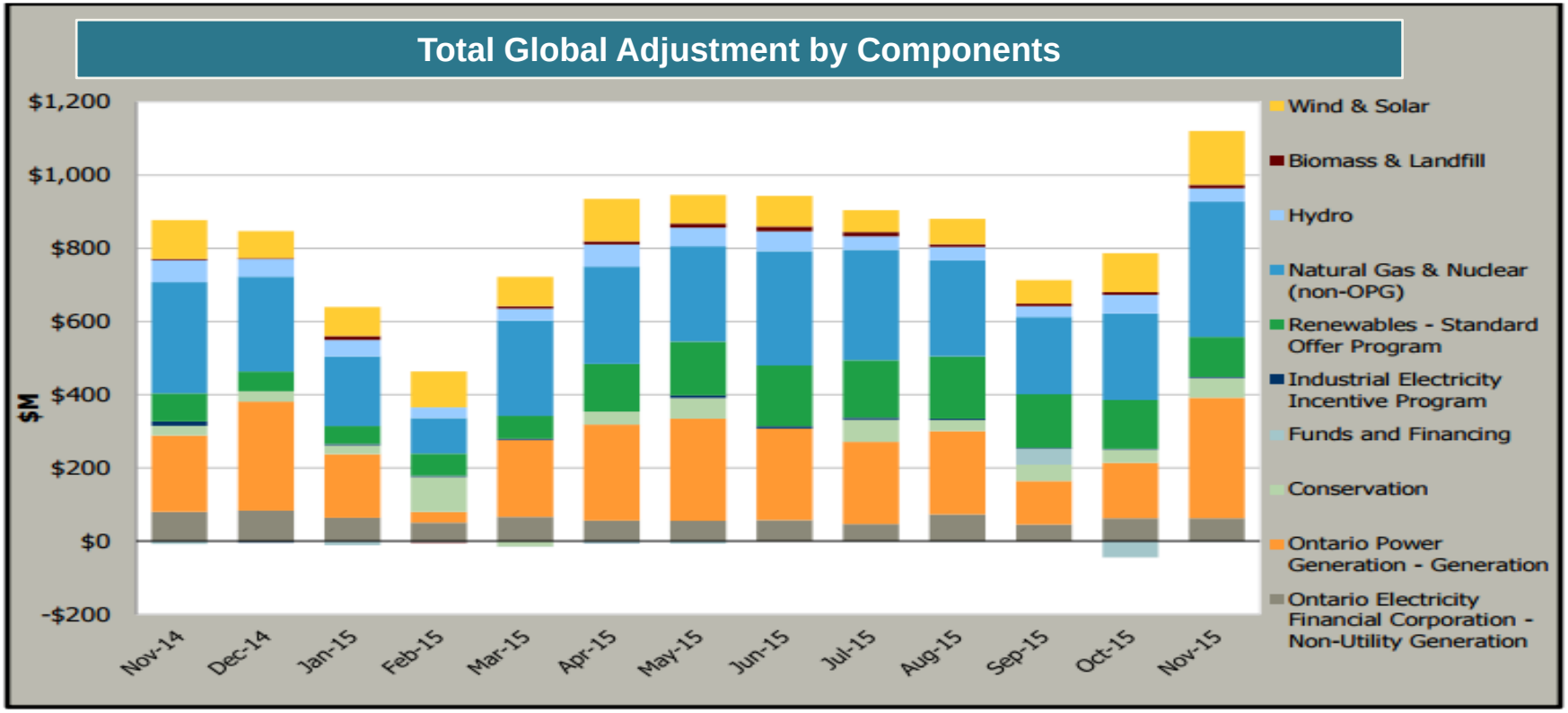
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

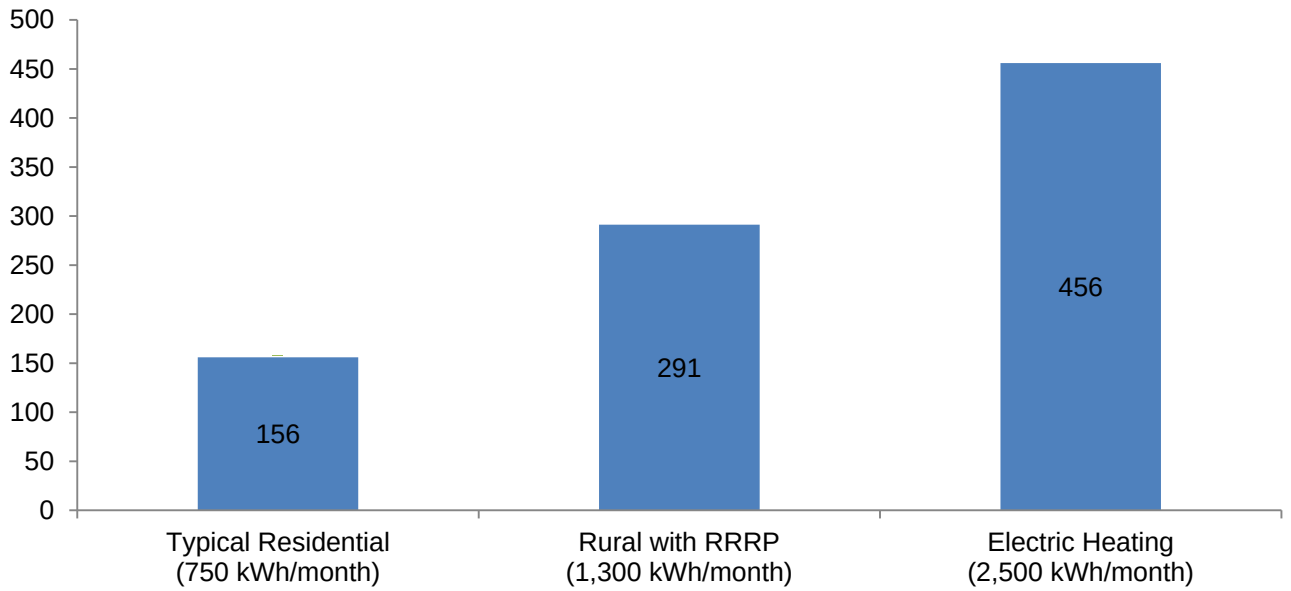
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

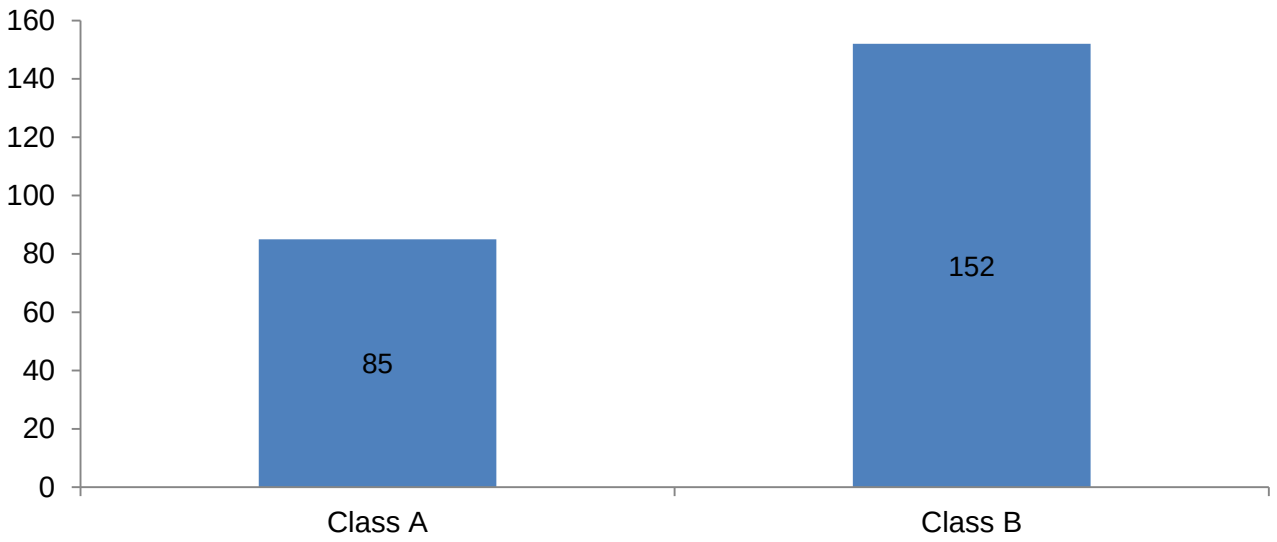


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Current Status on Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,200*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,105**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.1 billion and before considering any additional funding from the tax base.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total decrease on typical monthly bill	**8.38**	**8.23**	**7.75**	**9.26**	**8.52**	**8.17**	

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total increase on industrial bill	**19.96**	**18.97**	**18.34**	**17.14**	**14.45**	**13.7**	

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.
- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of $xx [placeholder for OFA] on the province.
- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.
- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $20 to $35 million annual fiscal pressure to the province [TBC by OPG / OFA].
- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.
- A summary of the annual fiscal impacts of the proposed initiatives is presented in the next slide

SLIDE ADDED BY CEFD

Proposed Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
~~OCEB~~	–	–			
OREC	300	1,200*	1,200*	1,200*	1,200*
Ending DRC[2]	330	330	330	330	330
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
TOTAL	**1,195**	**2,105**	**2145**	**2156**	**2156**
1. Electricity Market Renewal Initiative		TBD	TBD	TBD	TBD
2. OESP		106	119	127	132
2. RRRP		292	300	306	315
2. First Nations Delivery Rate		18	18	18	18
3. Fund ICI through Tax Base		900	900	900	900
TOTAL	**1195**	**3,421**	**3,482**	**3,507**	**3,521**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

- As shown above if all measures proposed in this deck were to be accepted taxpayer funded contributions to electricity price mitigation would increase to about $3.5 billion by 2020-21. That is a 67% increase from the current forecast for 2017-18.
- These amounts were not considered in the 2016-17 Fiscal Plan and could put at risk the Province's fiscal objectives for 2017-18 and beyond.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

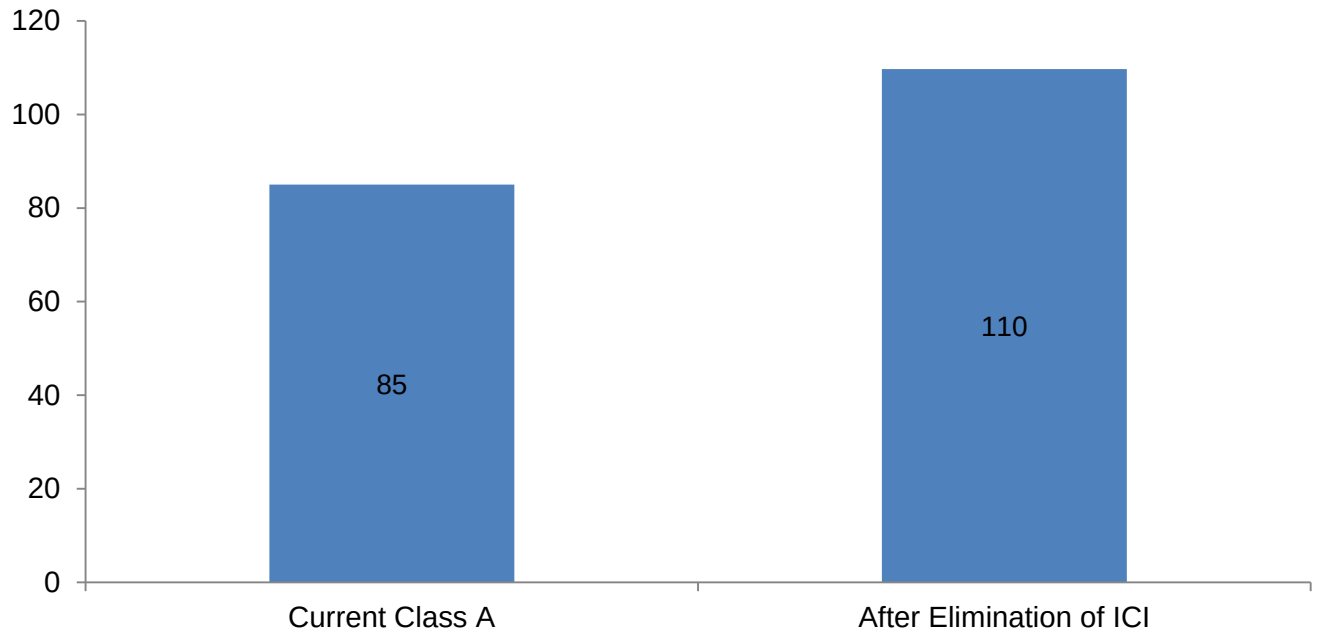
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

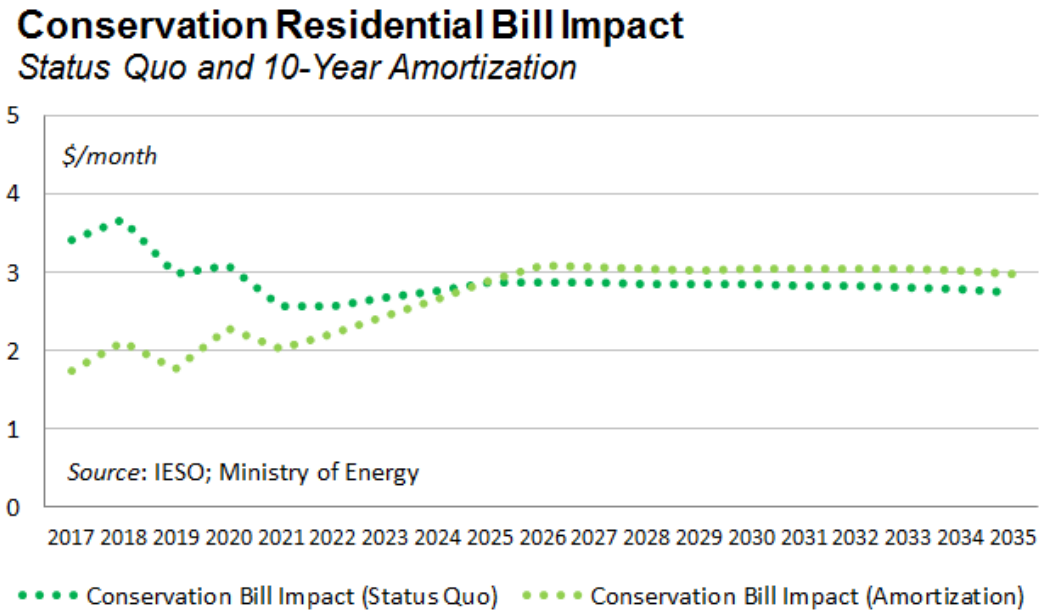
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

- As shown before the positive impact to residential ratepayers is very limited (between $8 and $9 per month) while the impact to the Province's fiscal position would be material (about $1.5 billion a year).

Appendix

Electricity Consumer Classes

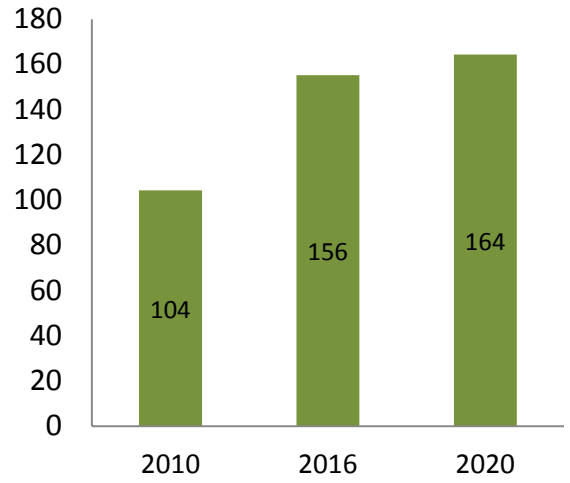
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

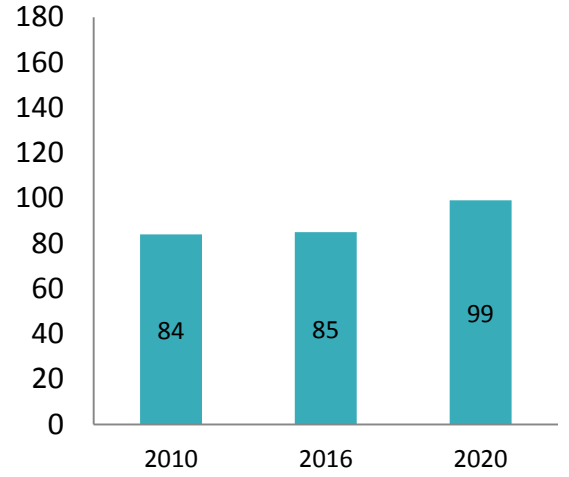
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

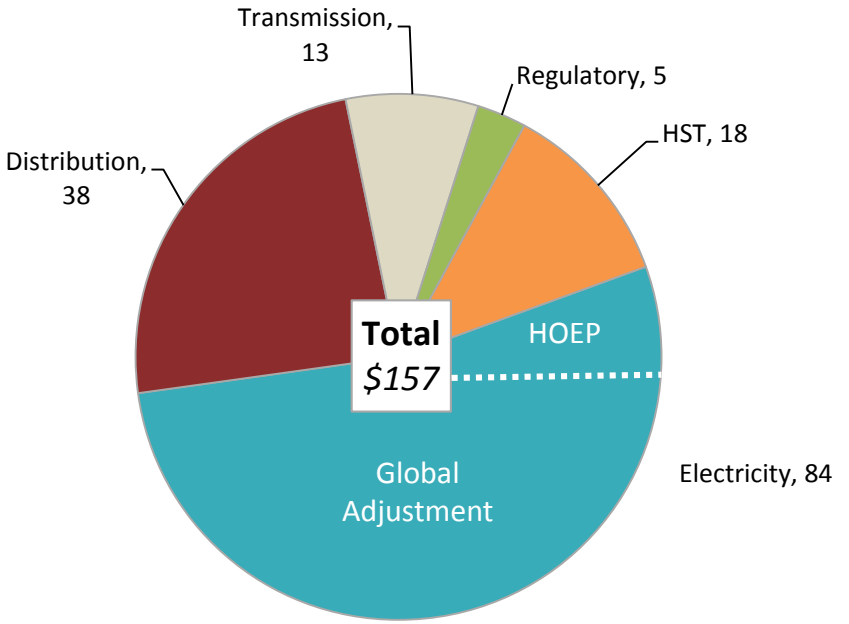
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



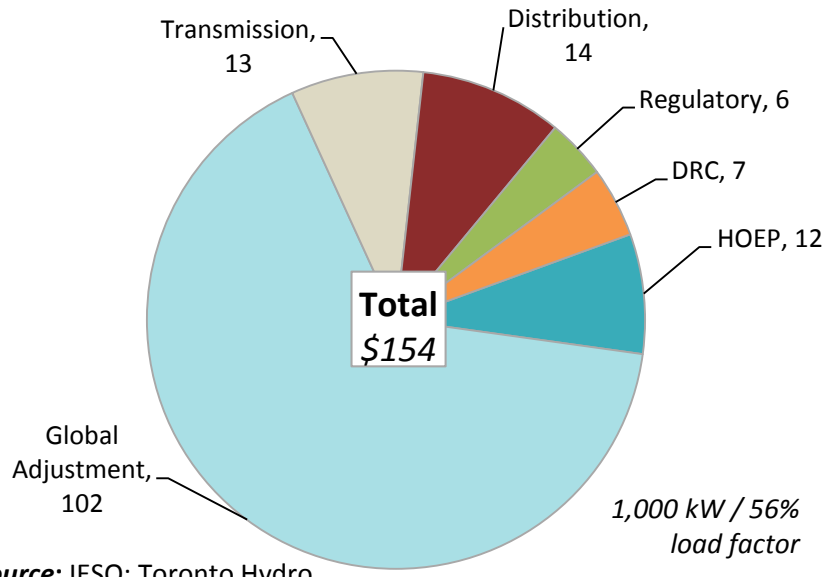
***Source*: OEB, Toronto Hydro**

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

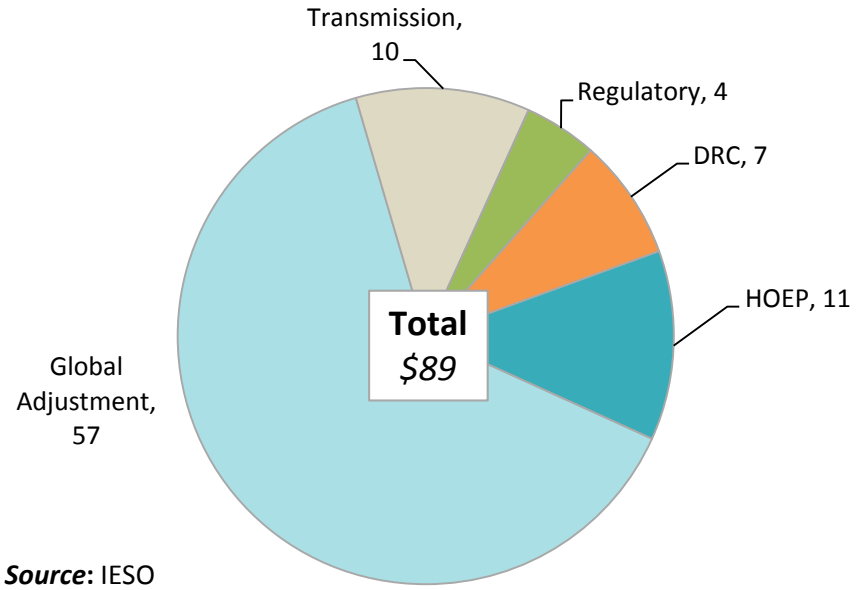
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



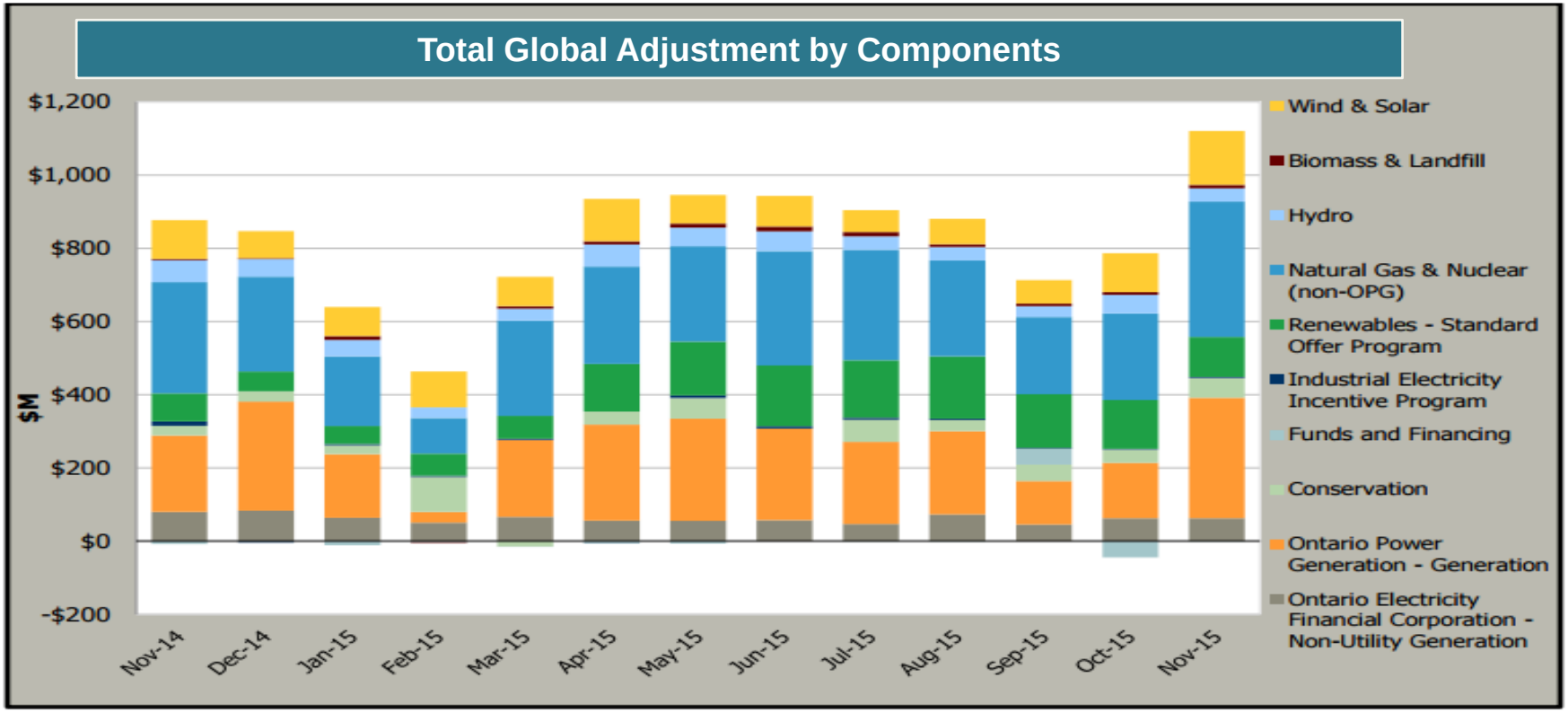
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

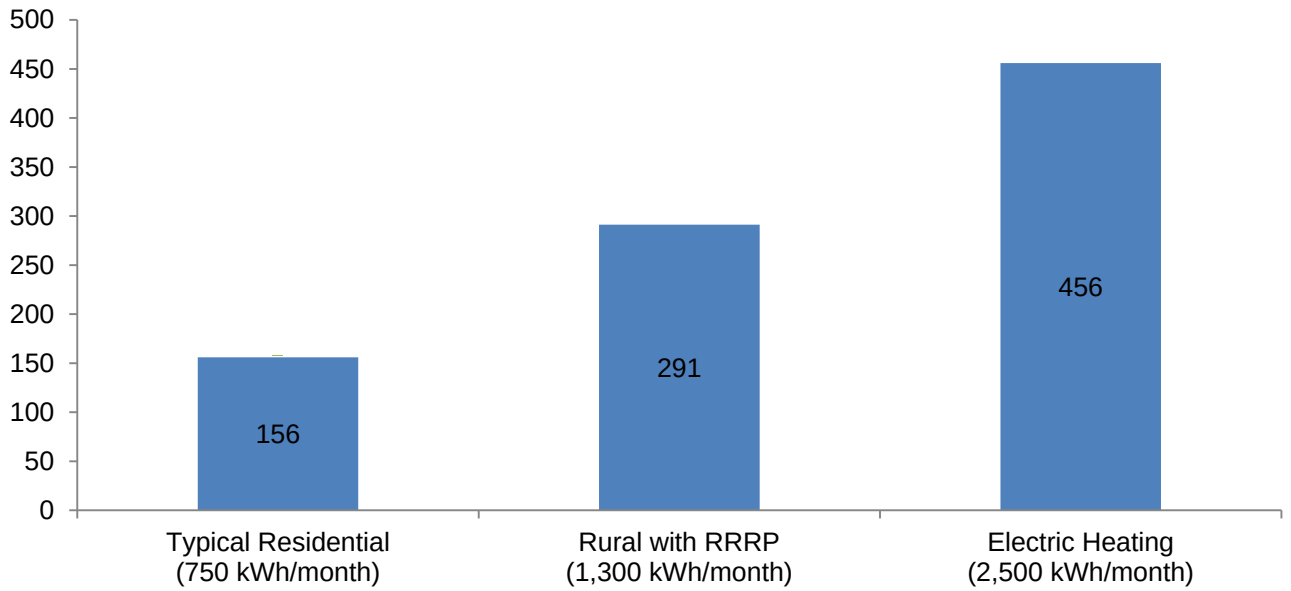
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

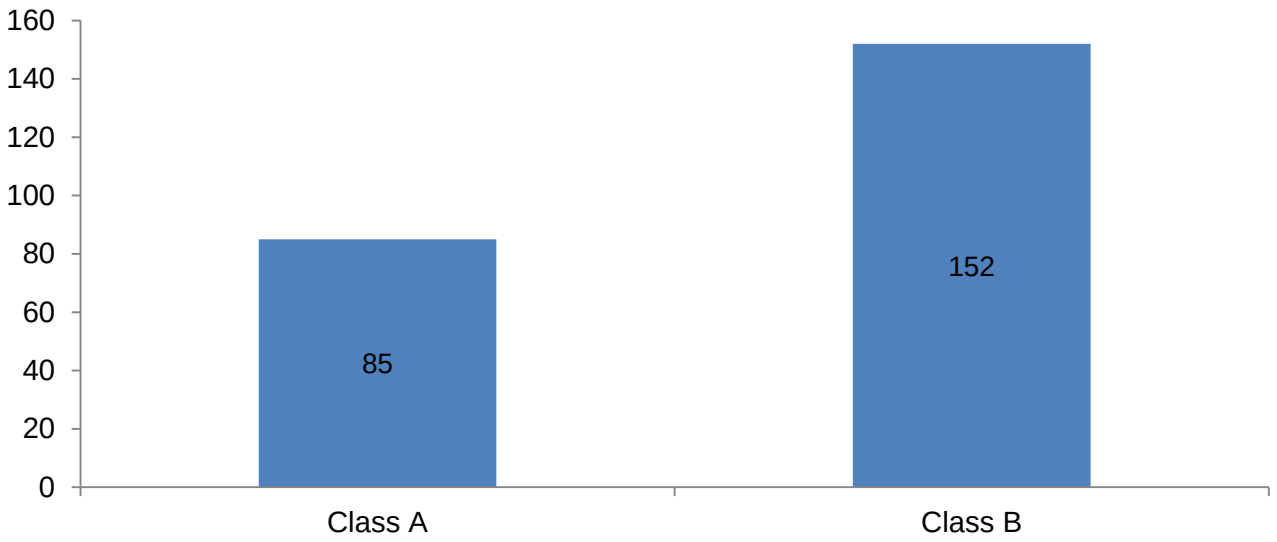


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Current Status on Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,200*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,105**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.1 billion and before considering any additional funding from the tax base.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total decrease on typical monthly bill	**8.38**	**8.23**	**7.75**	**9.26**	**8.52**	**8.17**	

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total increase on industrial bill	**19.96**	**18.97**	**18.34**	**17.14**	**14.45**	**13.7**	

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of about $450 ~~[placeholder for OFA]~~ on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $30 ~~20 to $35~~ million annual fiscal pressure in 2017 to the province ~~[TBC by OPG / OFA]~~ based on new borrowing and increasing based on cumulative borrowing.

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.
- A summary of the annual fiscal impacts of the proposed initiatives is presented in the next slide

SLIDE ADDED BY CEFD

Proposed Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
~~OCEB~~	–	–			
OREC	300	1,200*	1,200*	1,200*	1,200*
Ending DRC[2]	330	330	330	330	330
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
TOTAL	**1,195**	**2,105**	**2145**	**2156**	**2156**
1. Electricity Market Renewal Initiative		TBD	TBD	TBD	TBD
2. OESP		106	119	127	132
2. RRRP		292	300	306	315
2. First Nations Delivery Rate		18	18	18	18
3. Fund ICI through Tax Base		900	900	900	900
TOTAL	**1195**	**3,421**	**3,482**	**3,507**	**3,521**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

- As shown above if all measures proposed in this deck were to be accepted taxpayer funded contributions to electricity price mitigation would increase to about $3.5 billion by 2020-21. That is a 67% increase from the current forecast for 2017-18.
- These amounts were not considered in the 2016-17 Fiscal Plan and could put at risk the Province's fiscal objectives for 2017-18 and beyond.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

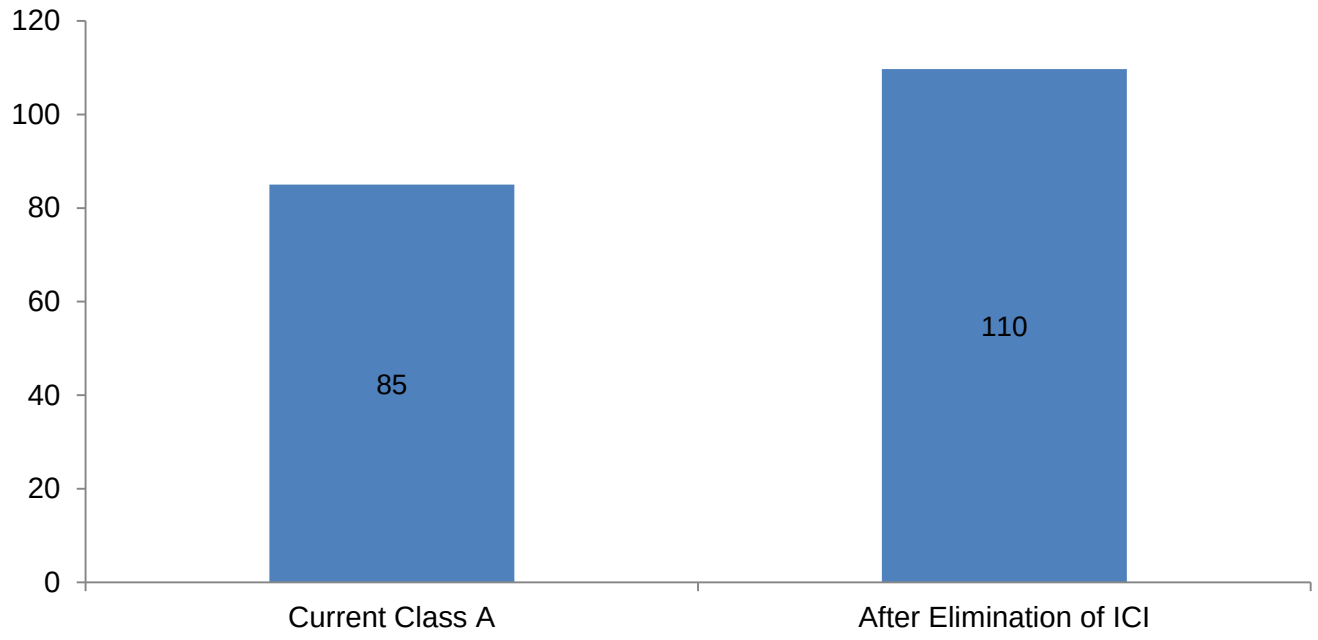
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

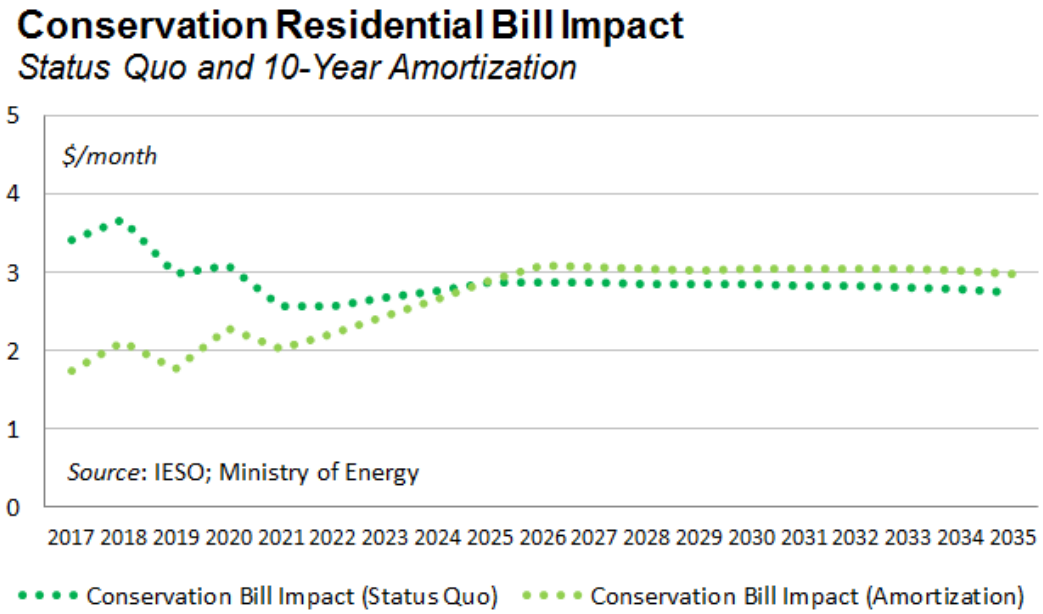
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

- As shown before the positive impact to residential ratepayers is very limited (between $8 and $9 per month) while the impact to the Province's fiscal position would be material (about $1.5 billion a year).

Appendix

Electricity Consumer Classes

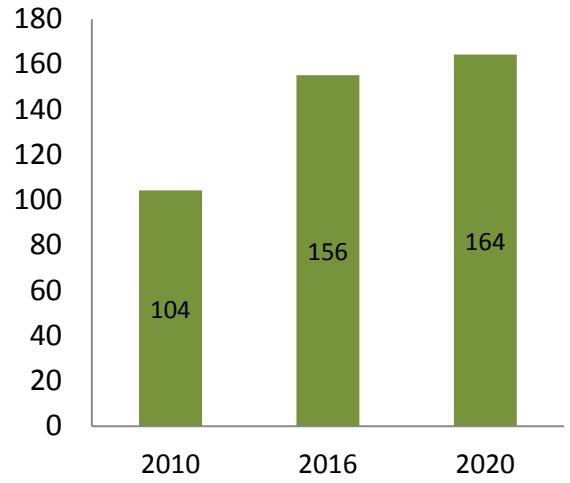
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

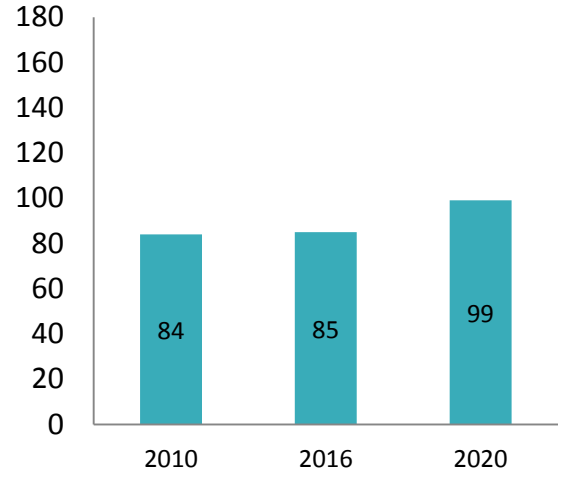
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

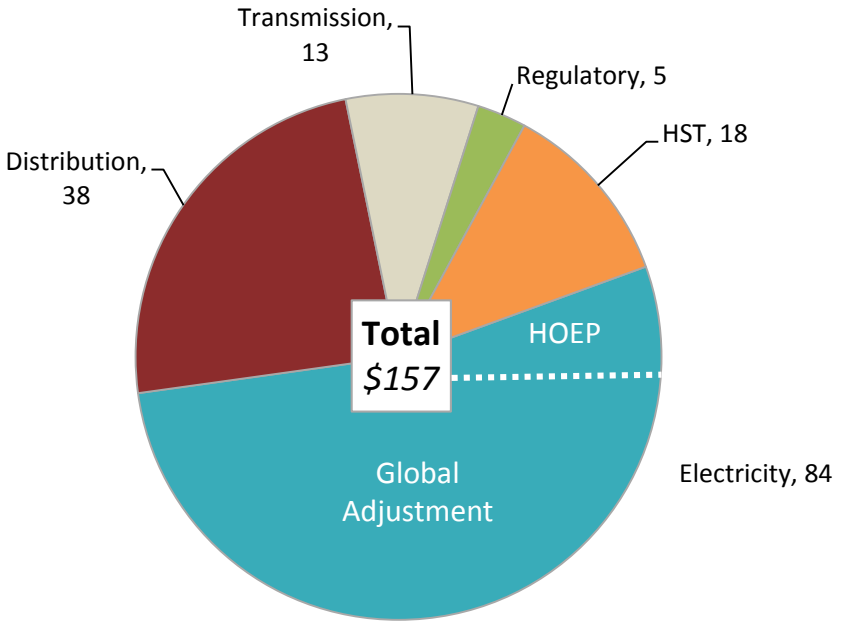
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



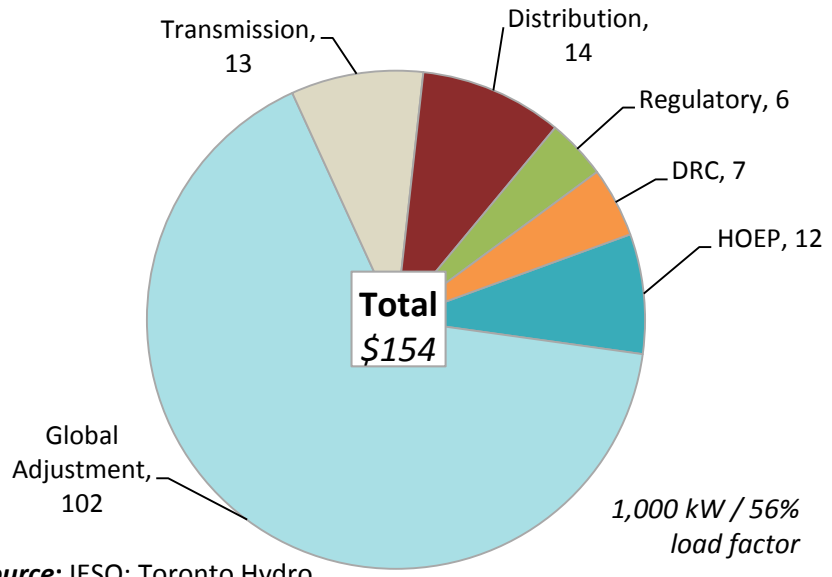
***Source*: OEB, Toronto Hydro**

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

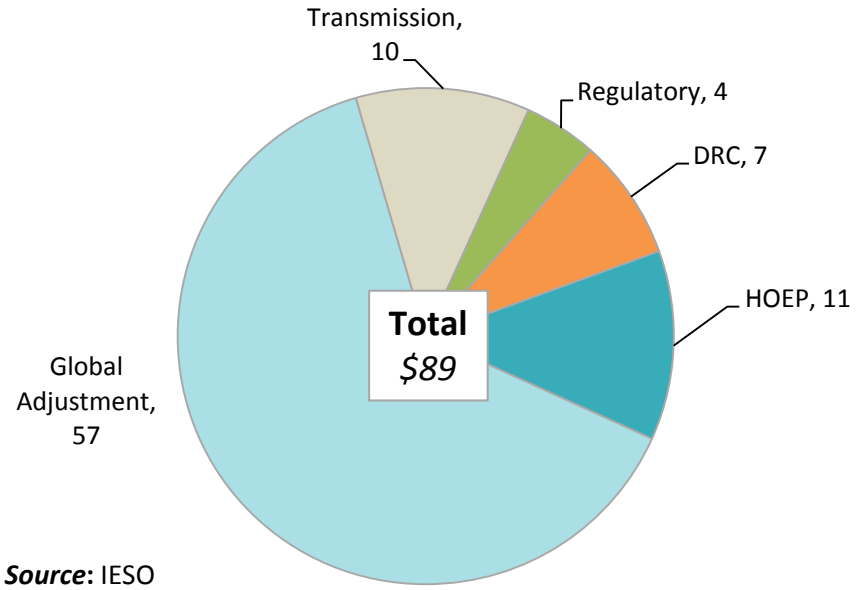
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



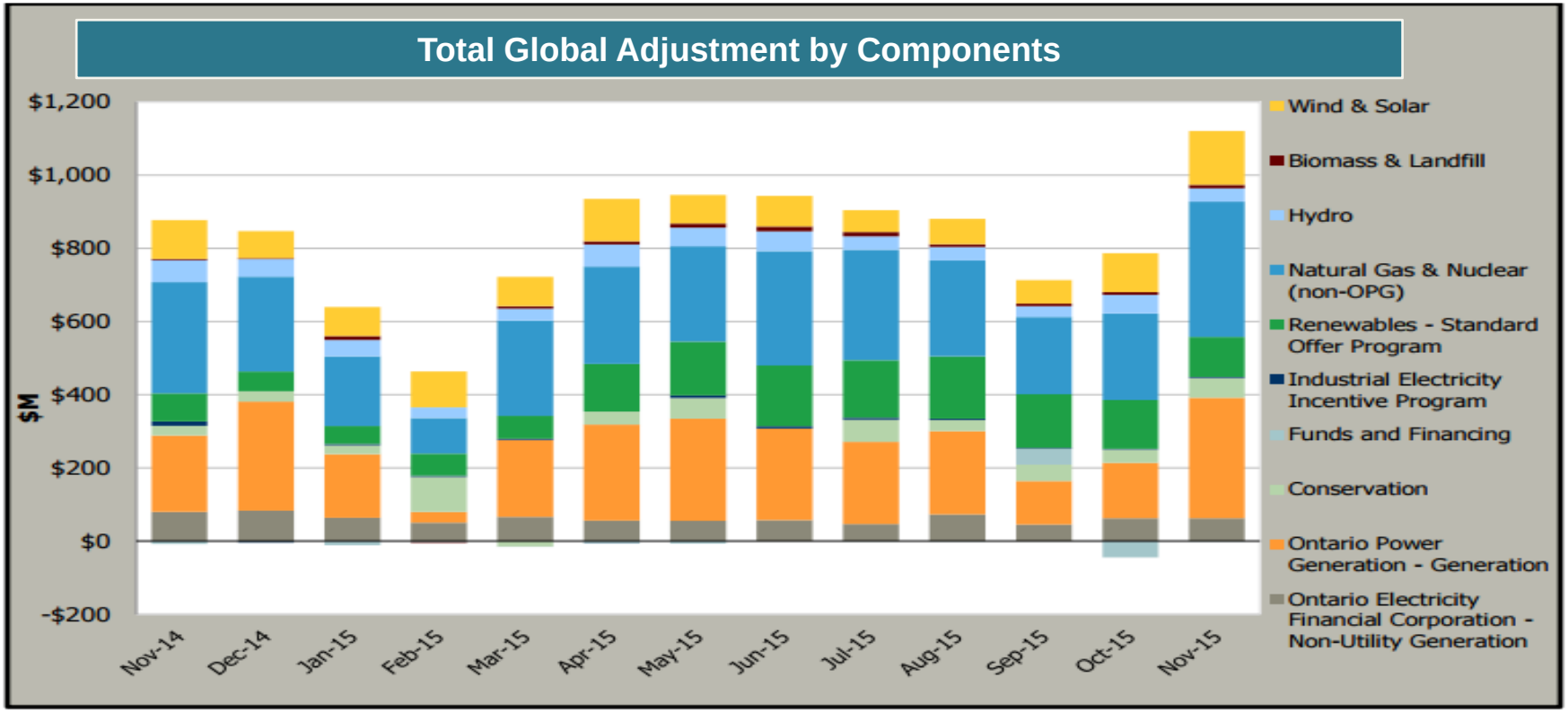
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

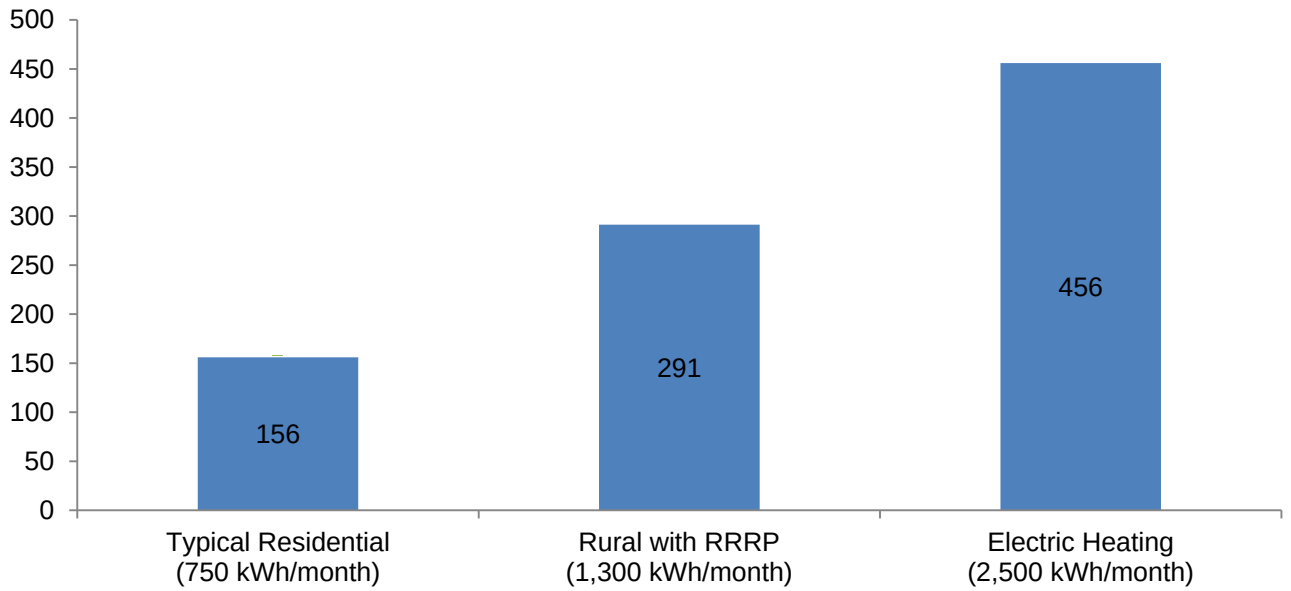
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

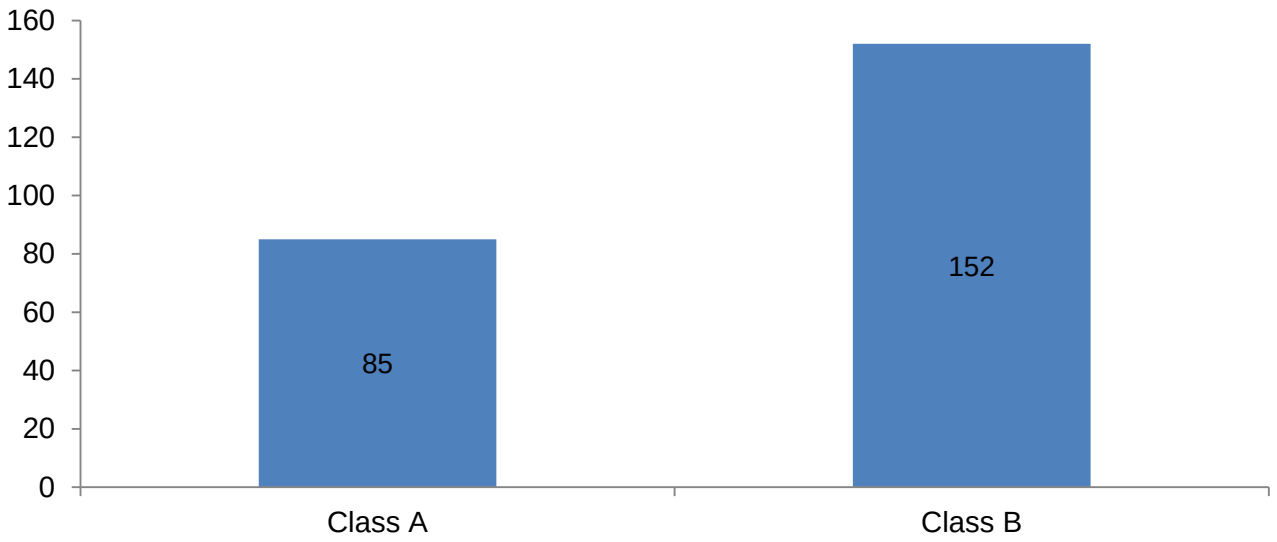


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Current Status on Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,200*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,105**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.1 billion and before considering any additional funding from the tax base.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total decrease on typical monthly bill	**8.38**	**8.23**	**7.75**	**9.26**	**8.52**	**8.17**	

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total increase on industrial bill	**19.96**	**18.97**	**18.34**	**17.14**	**14.45**	**13.7**	

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of about $450 ~~[placeholder for OFA]~~ on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $30 ~~20 to $35~~ million annual fiscal pressure in 2017 to the province ~~[TBC by OPG / OFA]~~ based on new borrowing and increasing based on cumulative borrowing.

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.
- A summary of the annual fiscal impacts of the proposed initiatives is presented in the next slide

DRAFT

Effect of Additional Proposed Taxpayer funded Electricity Price Mitigation

Proposal	Fiscal Costs ($M)	Residential Ratepayer Savings
EXISTING MEASURES		
OREC	1,100	$11/month
NIERP	120	n/a*
NOEC	25	n/a*
OEPTC[3]	460	n/a*
TOTAL Costs from Existing Measures	**1,705**	**11**
PROPOSED MEASURES		
Proposal 2: Fund Electricity Support Programs Through the Tax-Base (OESP, RRRP, First Nations Delivery Rate)	420 (yr 2017-18)**	$2.45/month
Proposal 3: Eliminate the Industrial Conservation Initiative funding from ratebase, and shift to tax base	900	$4/month
Proposal 7: Reduced cost of OPG Borrowing	30-35	$0.18/month
Proposal 8: Reduce DRC to $3.50/MWh or end DRC early for Commercial/Small Industrial Class B Electricity Users	190-380 (yr 2017-18)***	n/a*
TOTAL Costs/Savings from Proposed Measures	**1,584 – 1,778**	**$6.63/month**
TOTAL Costs/Savings from All Taxpayer funded Measures	**3,289 – 3,483**	**$17.63/month**

* Costs were not borne by the ratebase.
** Assumes 75%/25% split between 2017 and 2018 costs
*** DRC is removed from all electricity bill by April 1, 2018

SLIDE ADDED BY CEFD

Proposed Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
~~OCEB~~	–	–			
OREC	300	1,200*	1,200*	1,200*	1,200*
Ending DRC[2]	330	330	~~330~~	~~330~~	~~330~~
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
TOTAL	1,195	2,105	2145	2156	2156
1. Electric [illegible]		[illegible]	[illegible]	[illegible]	[illegible]
2. OESP		[illegible]	[illegible]	[illegible]	[illegible]
2. RRRP		292	300	306	315
2. First Nations Delivery Rate		18	18	18	18
3. Fur[illegible]CI thr[illegible]gh [illegible]		90	900	900	900
TOTAL	1195	3,421	3,482	3,507	3,521

Suggest using slide From previous page instead

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy [illegible] the [illegible]

- As shown above if all measures proposed in this deck were to be accepted taxpayer funded contributions to electricity price mitigation would increase to about $3.5 billion by 2020-21. That is a 67% increase from the current forecast for 2017-18.
- These amounts were not considered in the 2016-17 Fiscal Plan and could put at risk the Province's fiscal objectives for 2017-18 and beyond.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

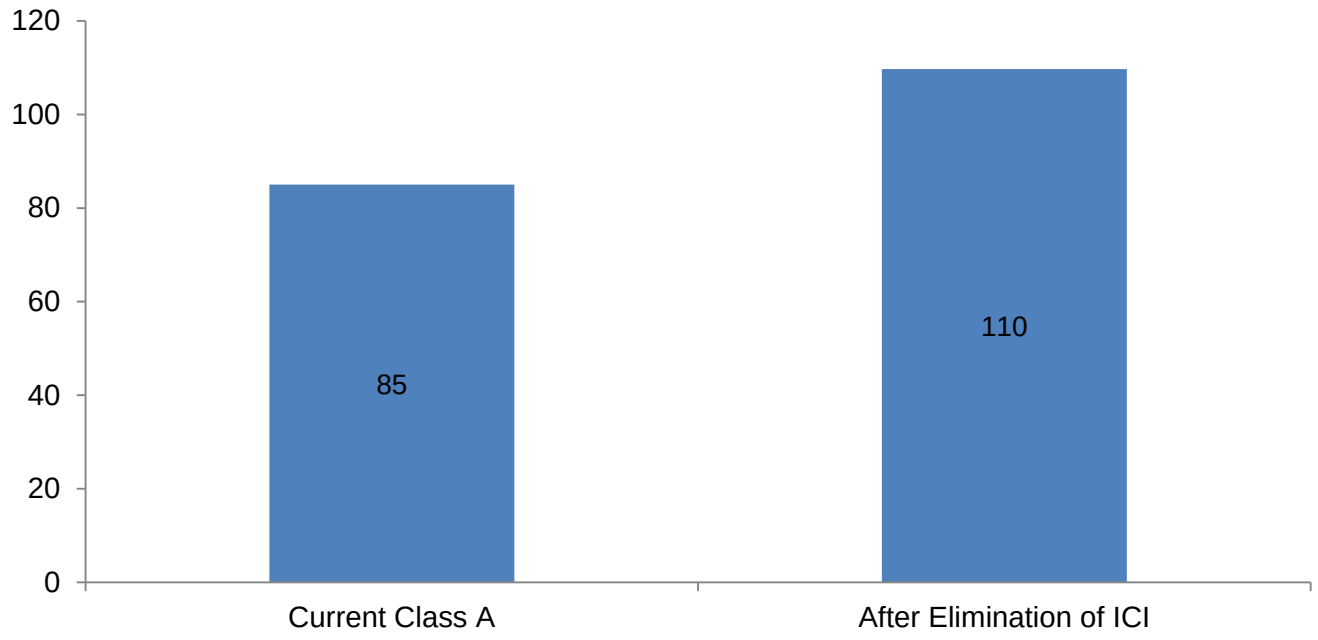
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

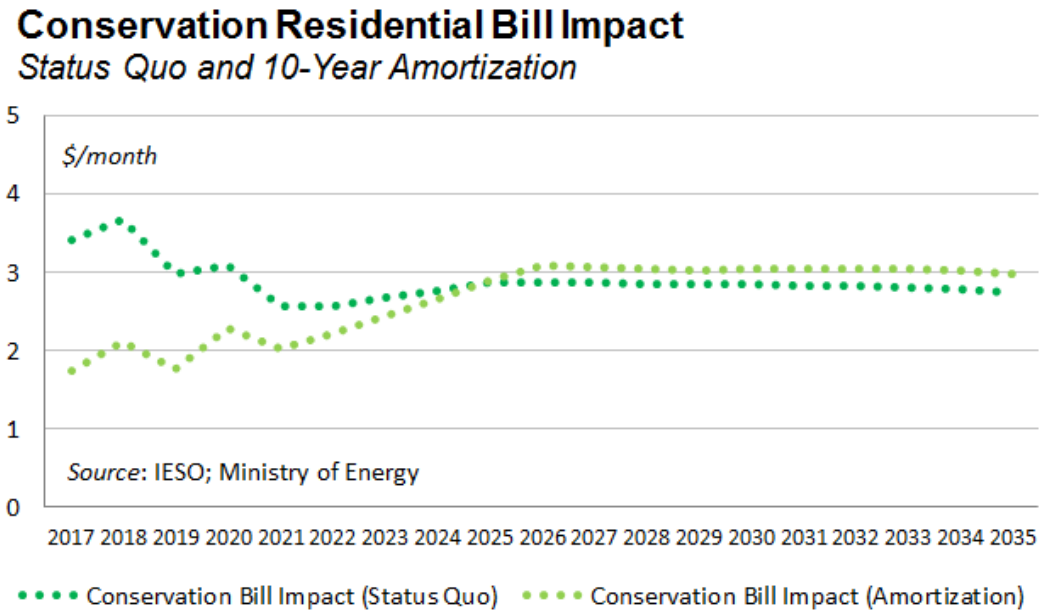
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro- November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

- As shown before the positive impact to residential ratepayers is very limited (between $8 and $9 per month) while the impact to the Province's fiscal position would be material (about $1.5 billion a year).

Appendix

Electricity Consumer Classes

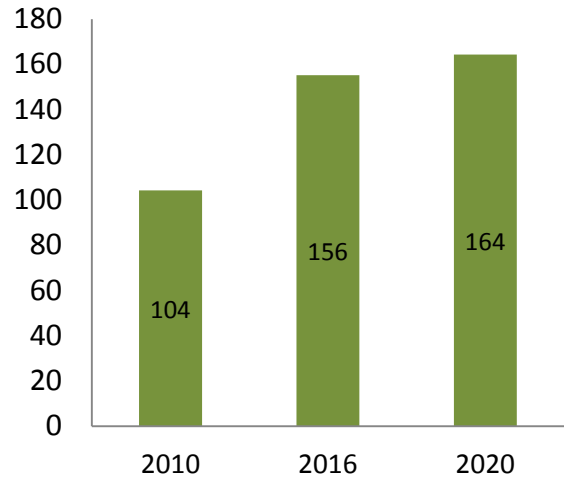
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

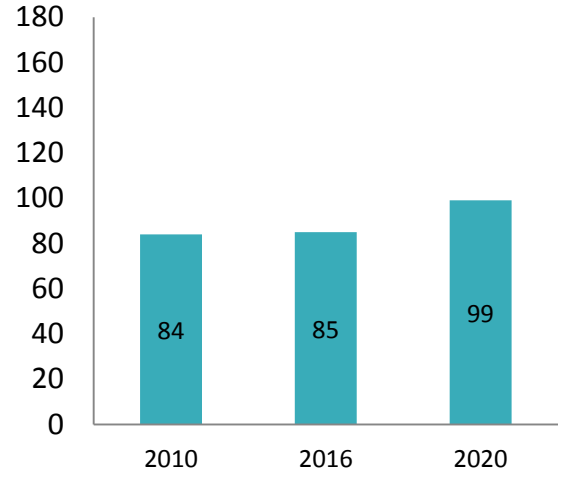
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

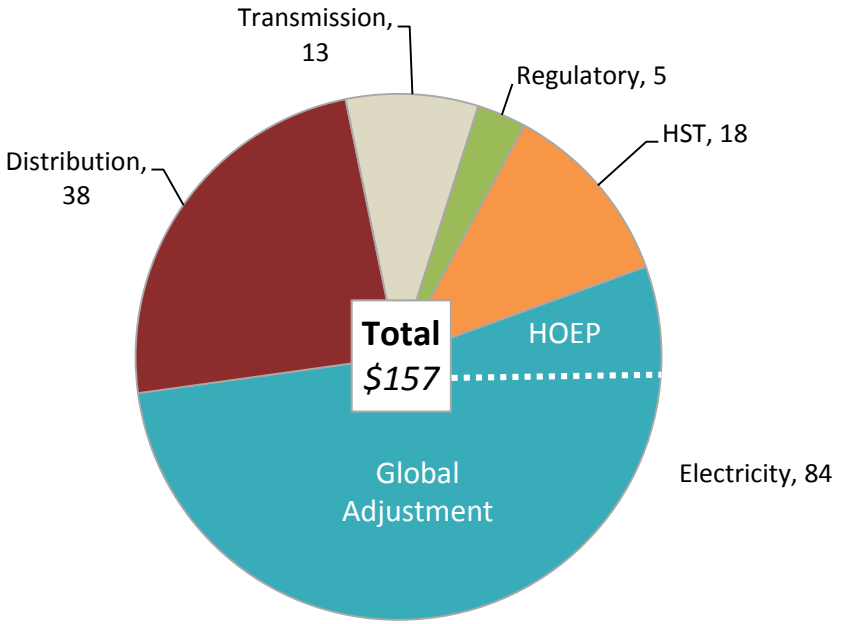
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



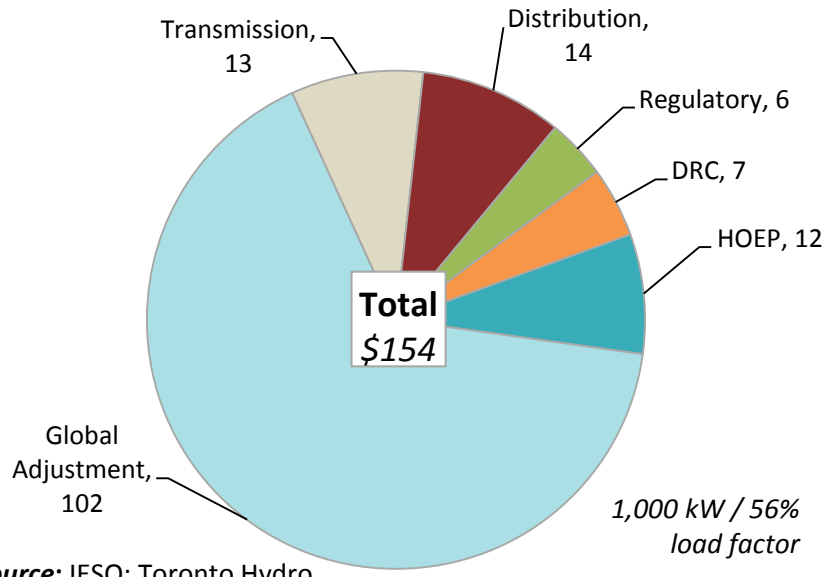
***Source*:** OEB, Toronto Hydro

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

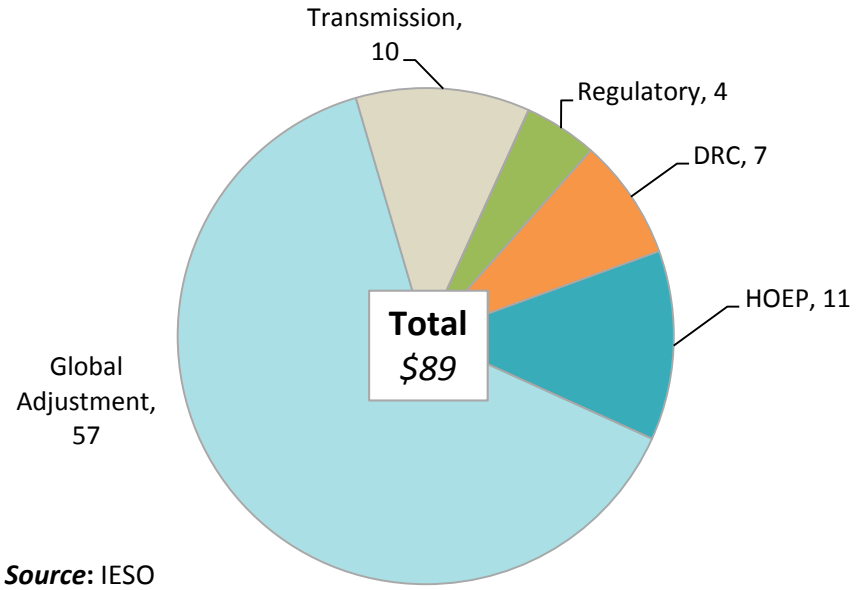
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



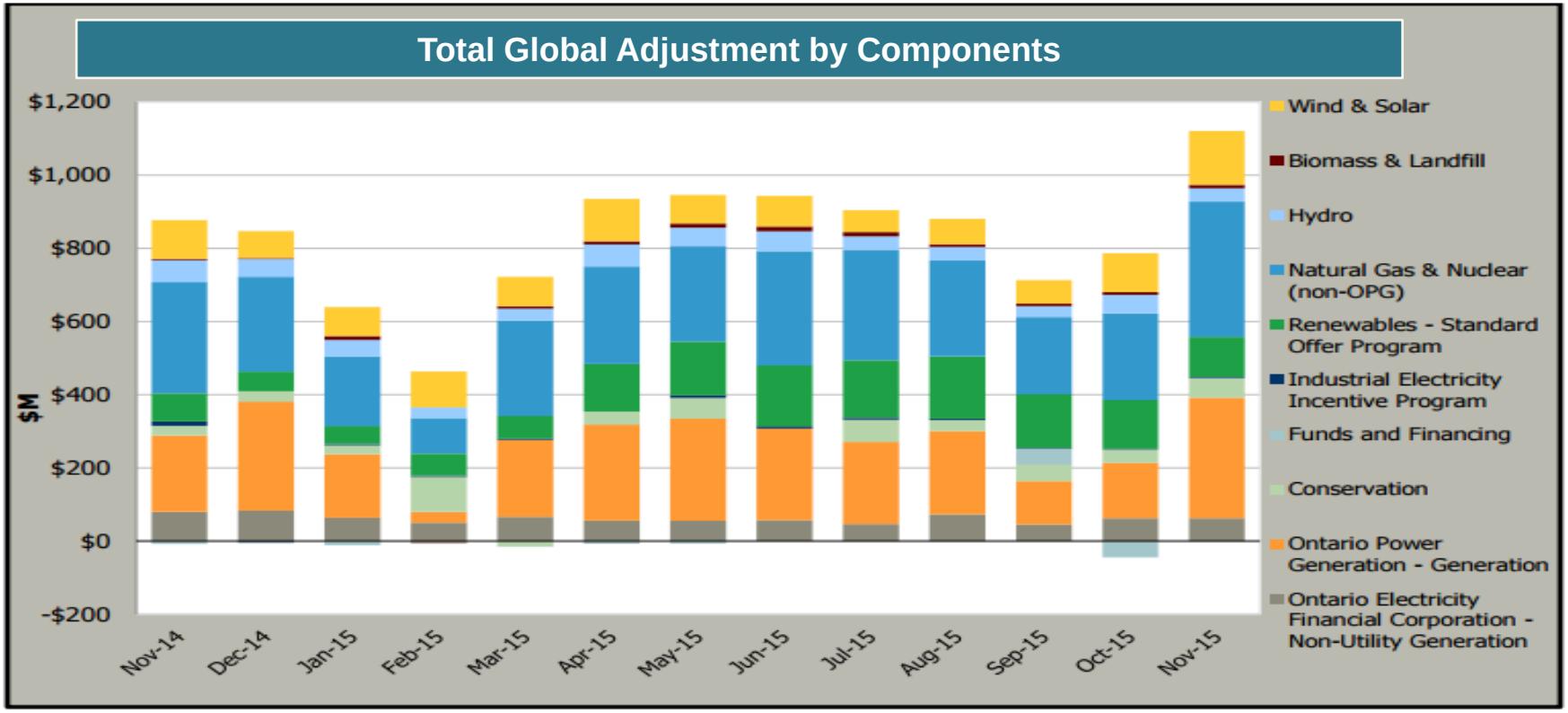
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

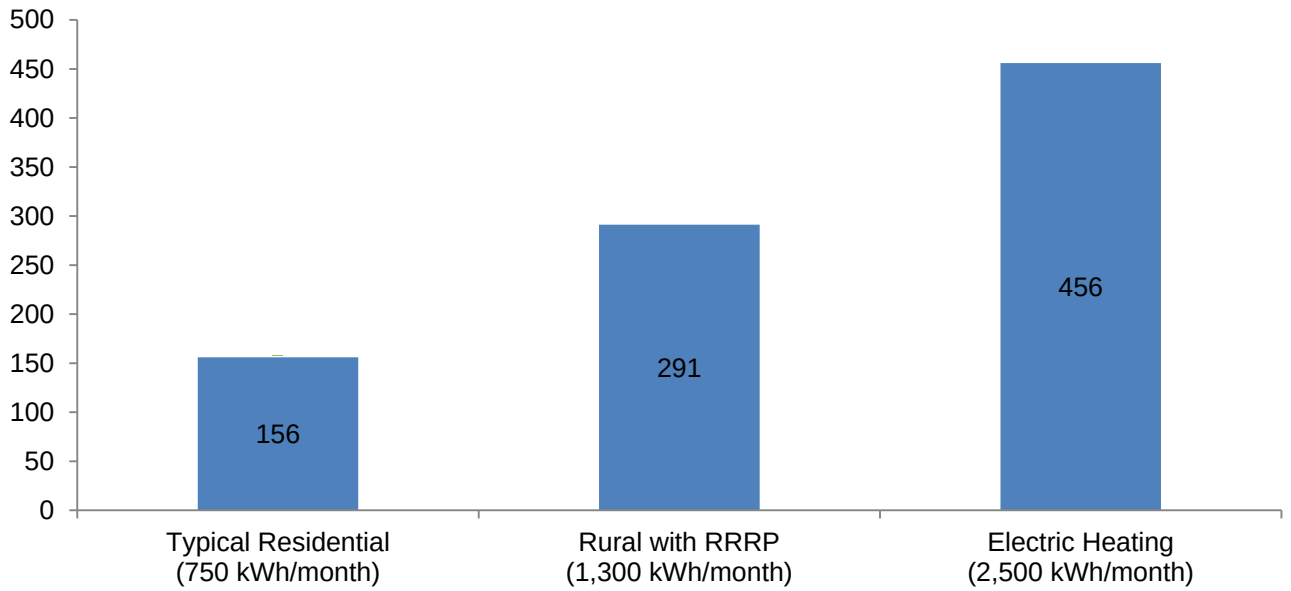
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

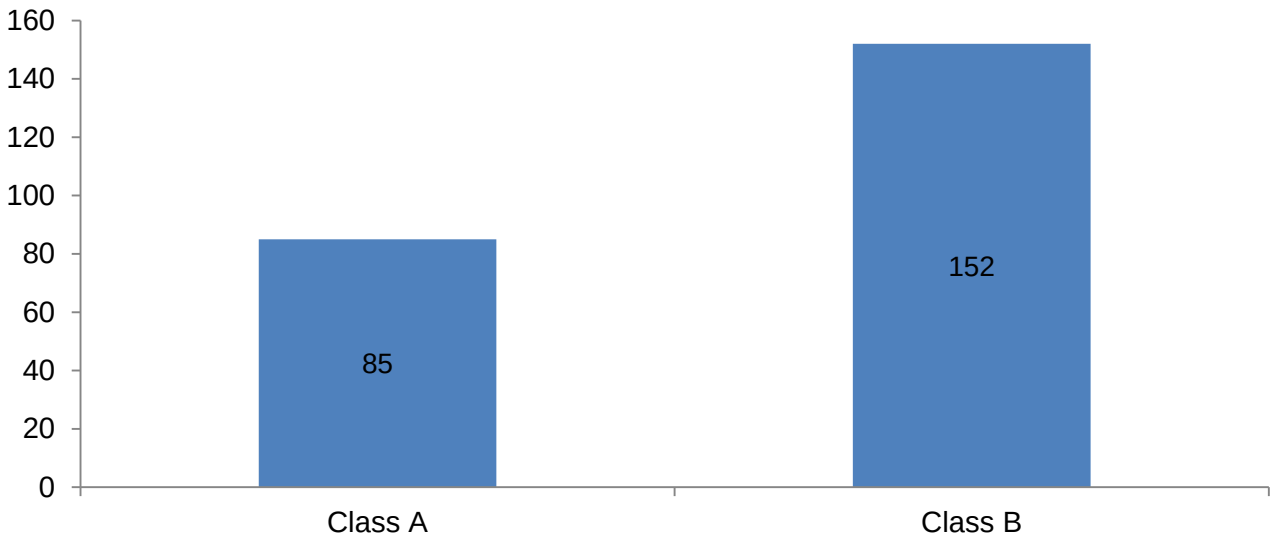


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,200*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,105**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from November LRC Submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.1 billion.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of $xx [placeholder for OFA] on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $20 to $35 million annual fiscal pressure to the province [TBC by OPG / OFA].

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

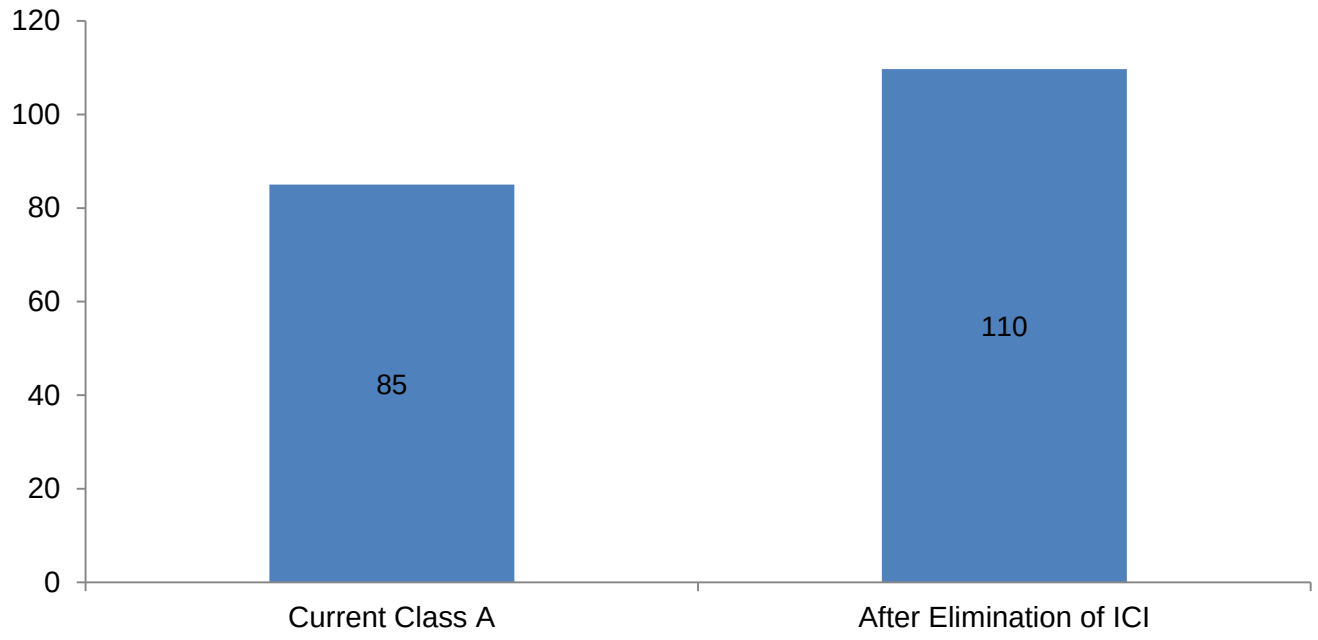
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

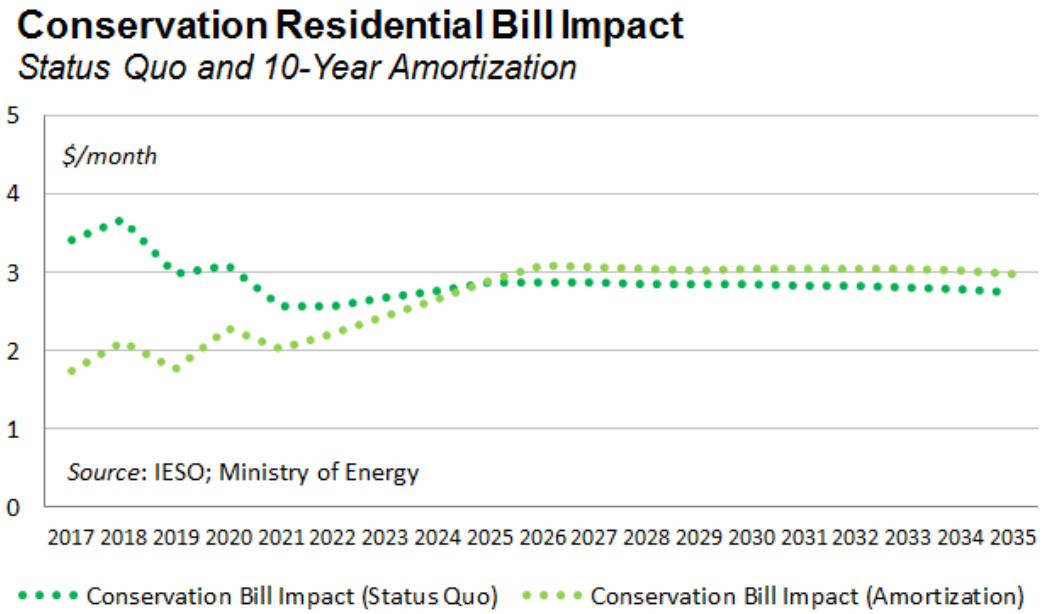
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro- November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

Appendix

Electricity Consumer Classes

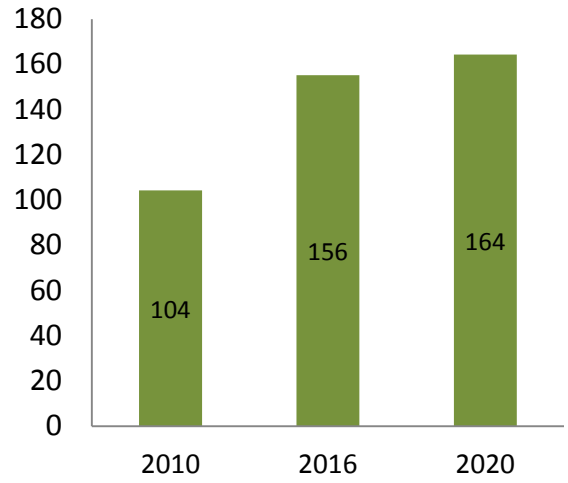
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

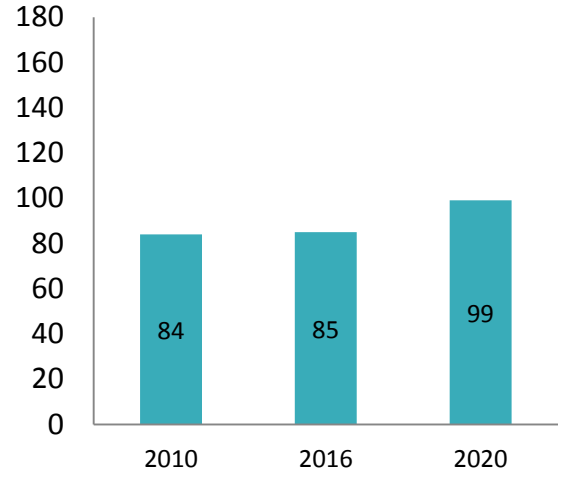
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

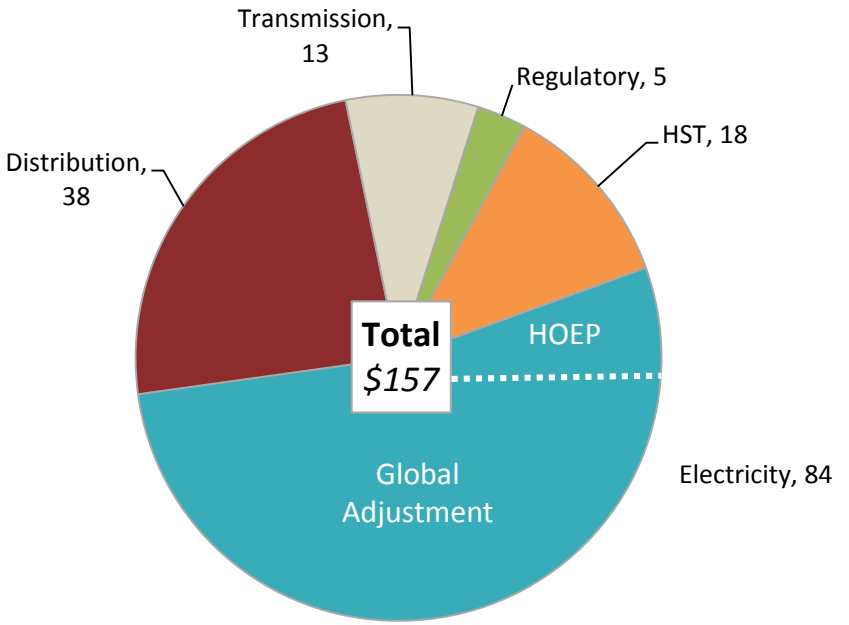
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



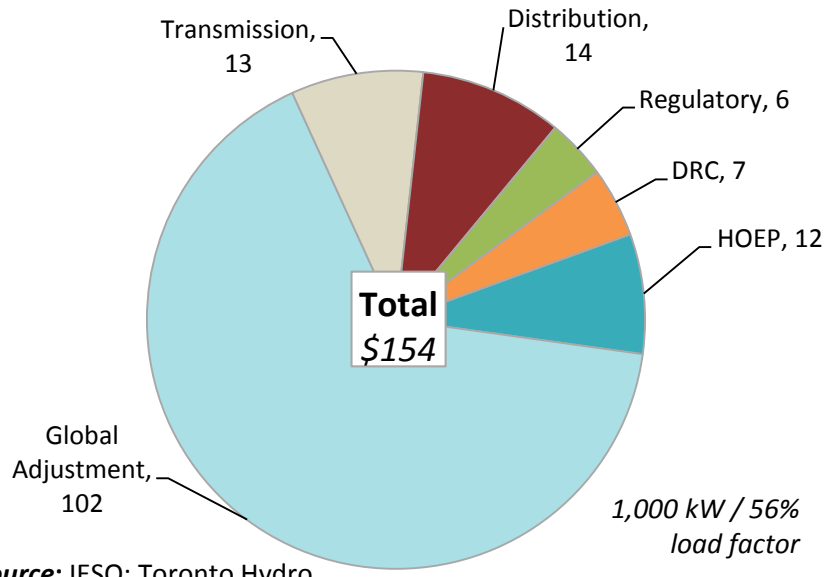
***Source*:** OEB, Toronto Hydro

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

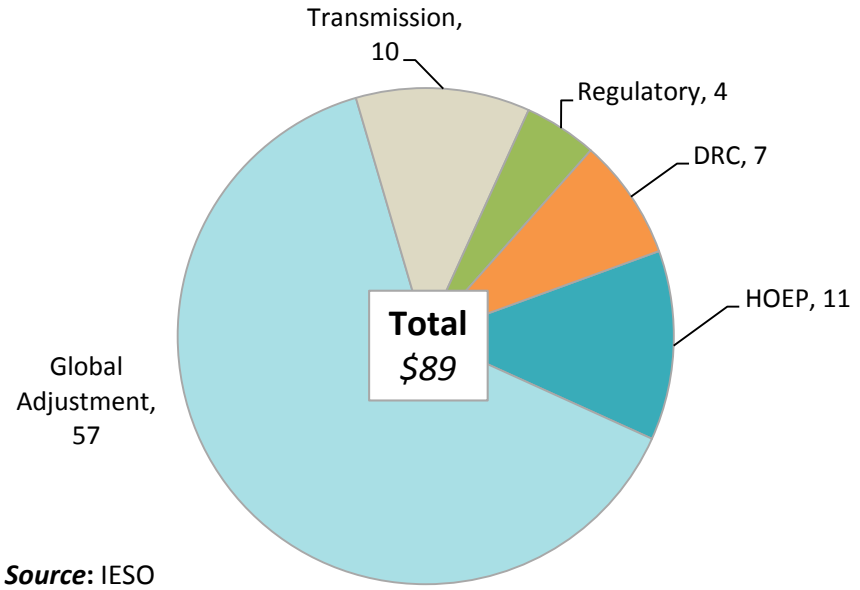
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



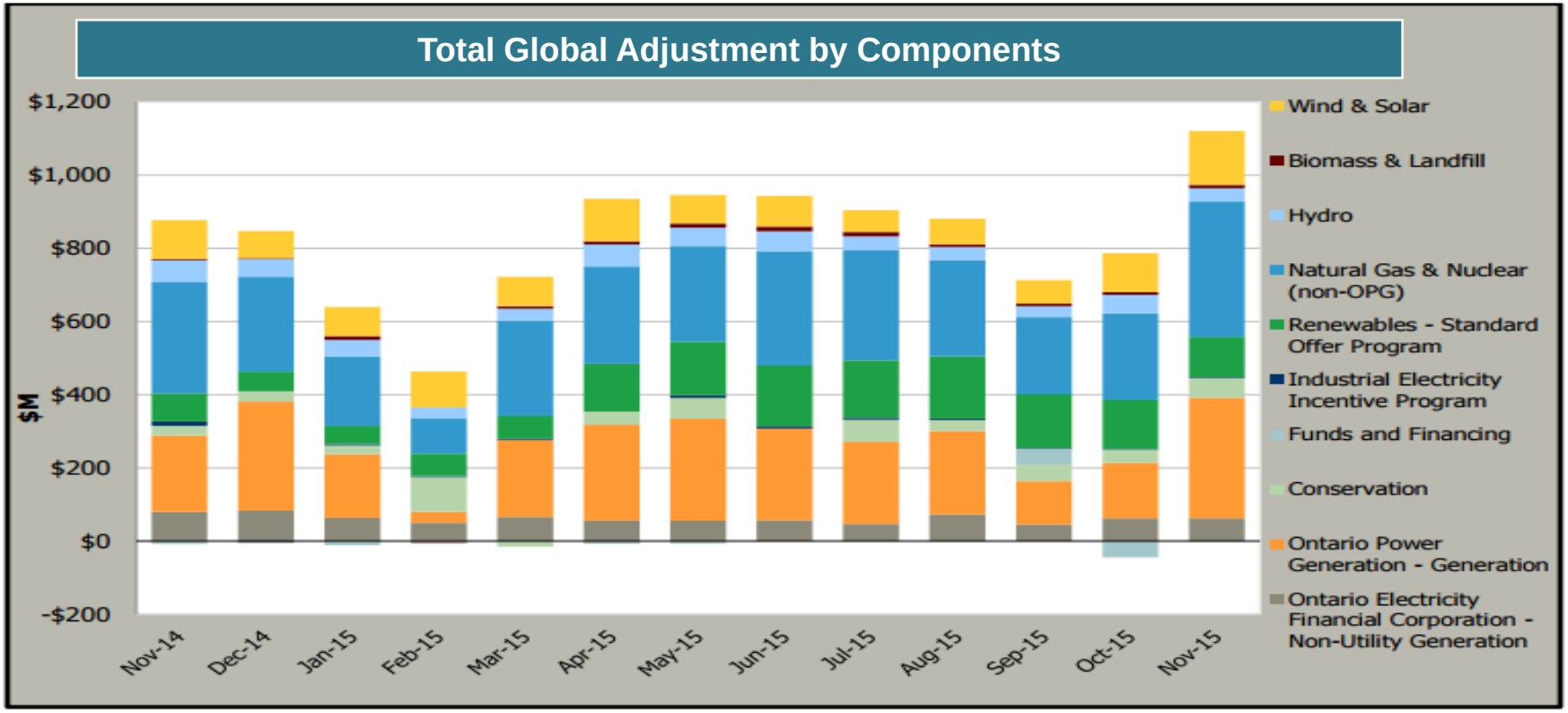
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., GEIA renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II); and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.

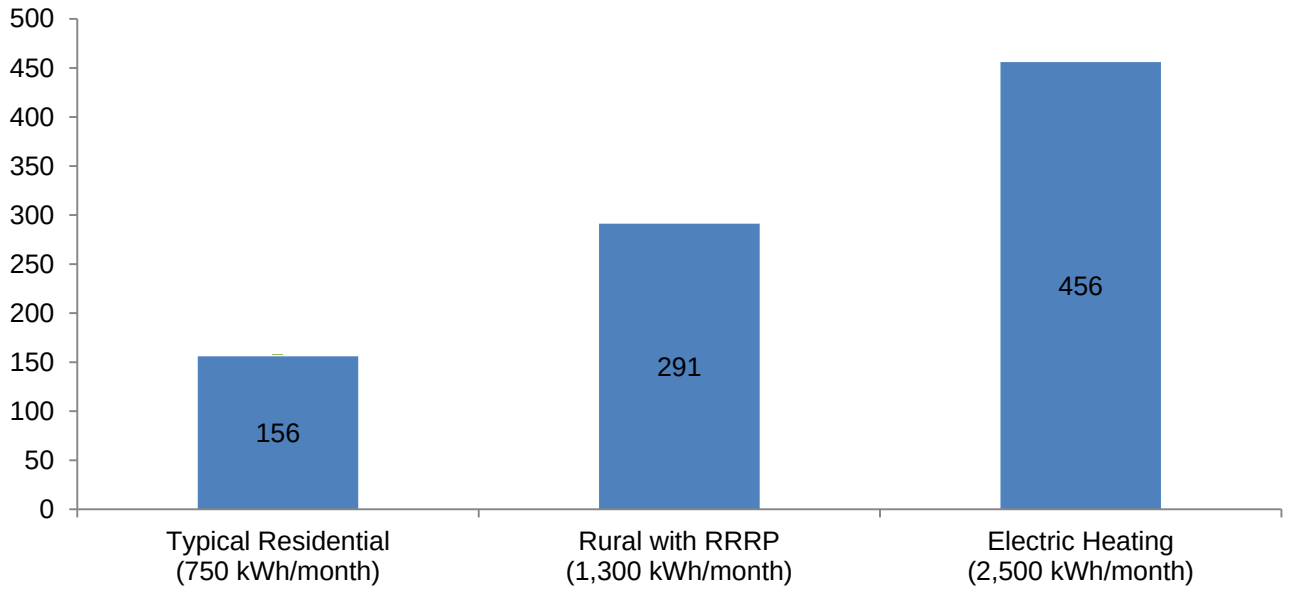
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 Long-Term Energy Plan (2013 LTEP) forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

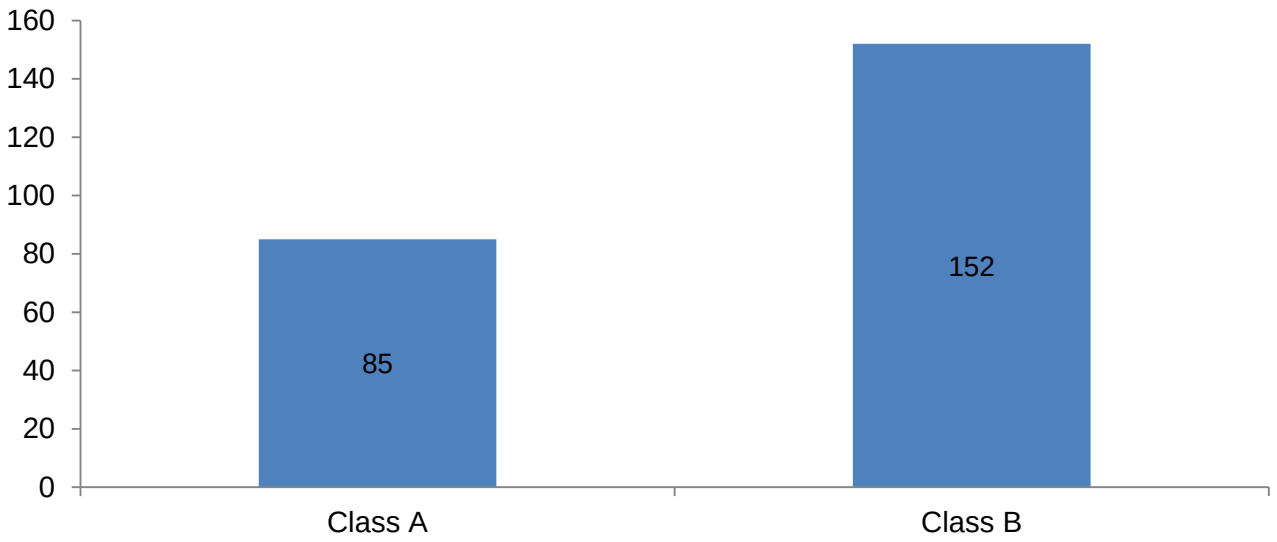


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of $xx [placeholder for OFA] on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $20 to $35 million annual fiscal pressure to the province [TBC by OPG / OFA].

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESB) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.
- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.
- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.
- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

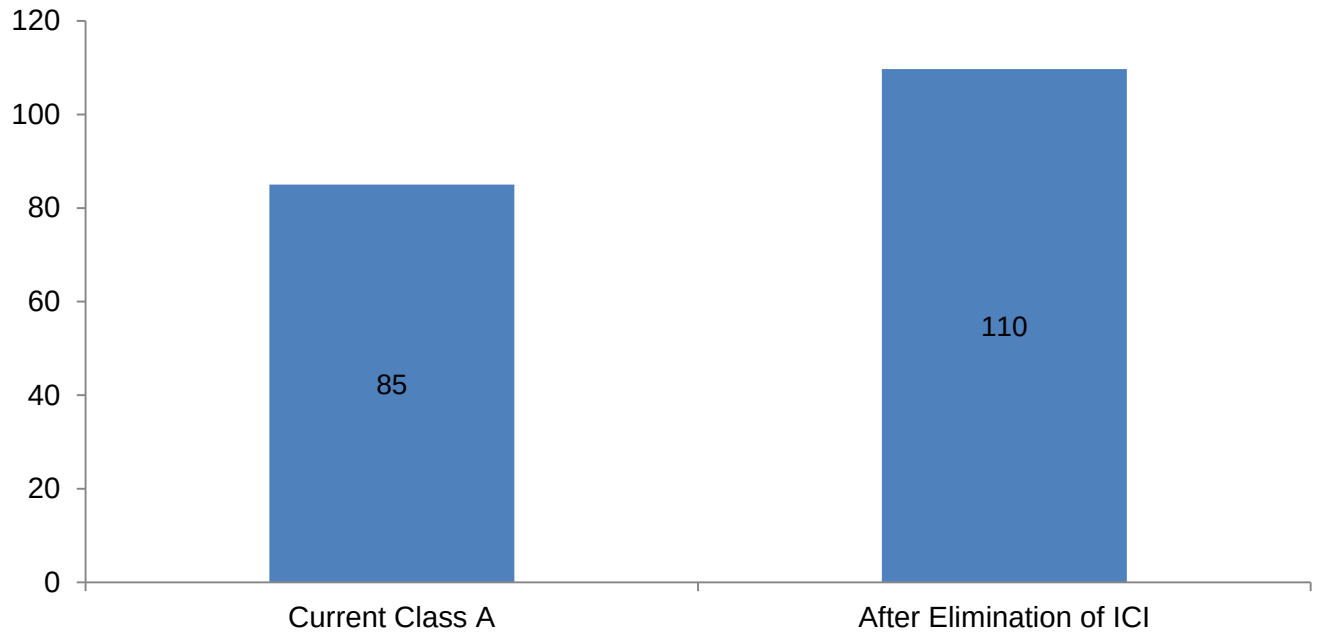
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

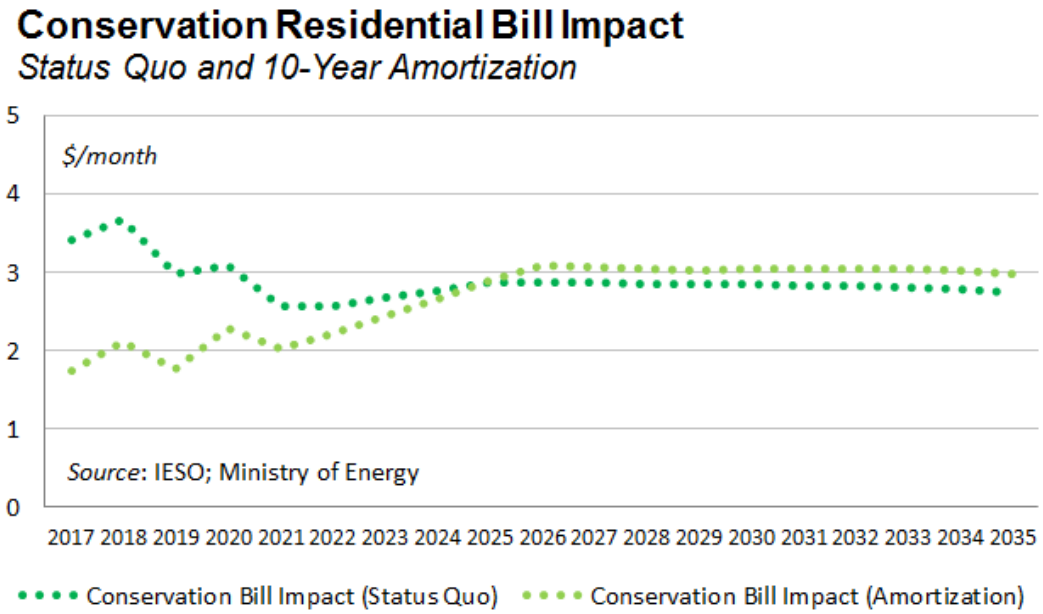
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.007/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

Appendix

Electricity Consumer Classes

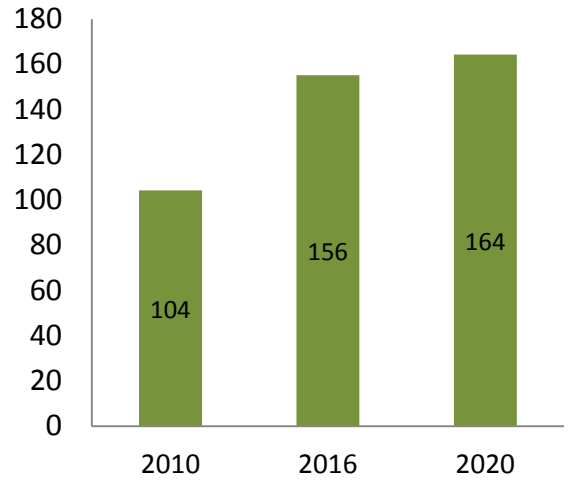
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

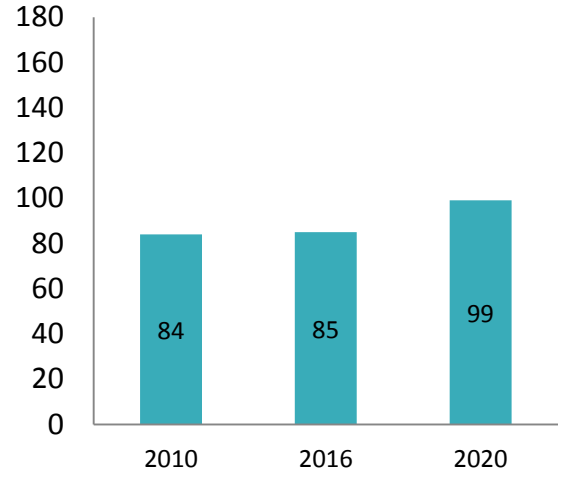
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

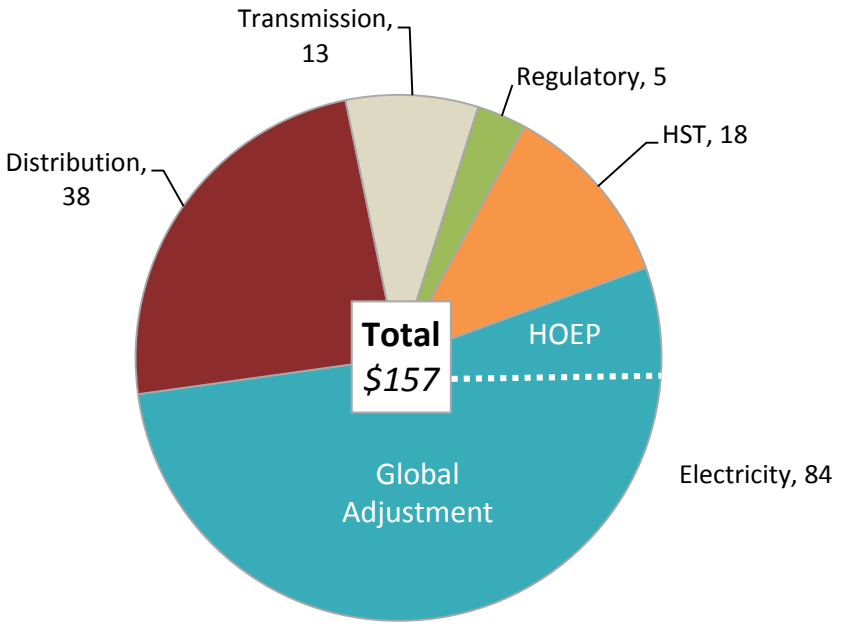
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



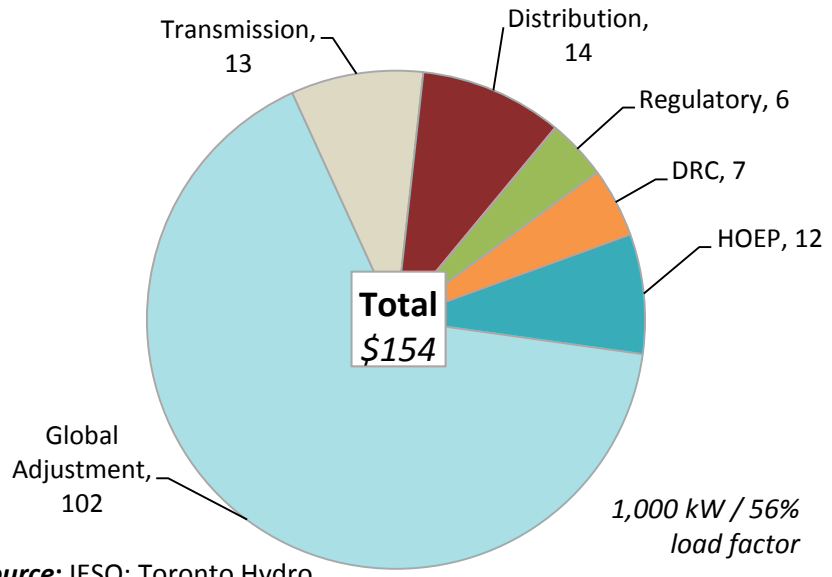
***Source*:** OEB, Toronto Hydro

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

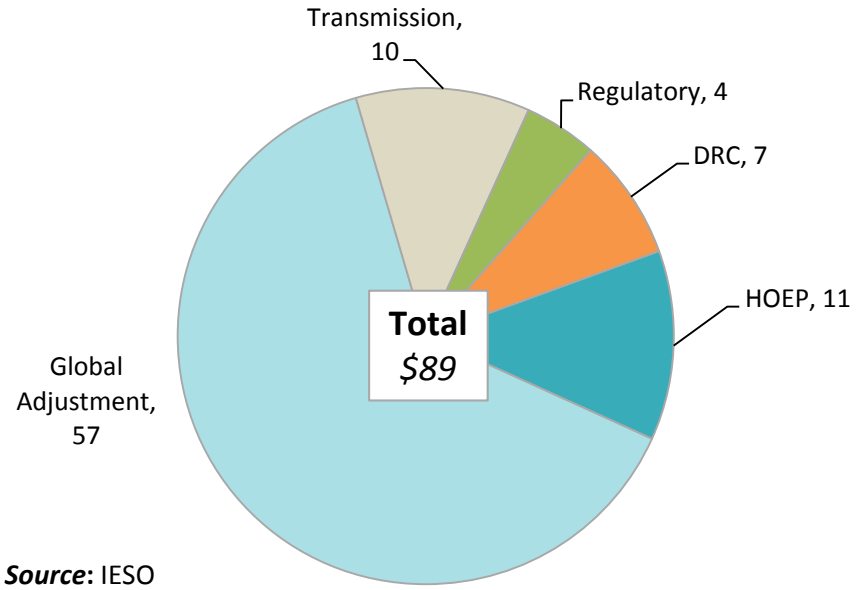
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



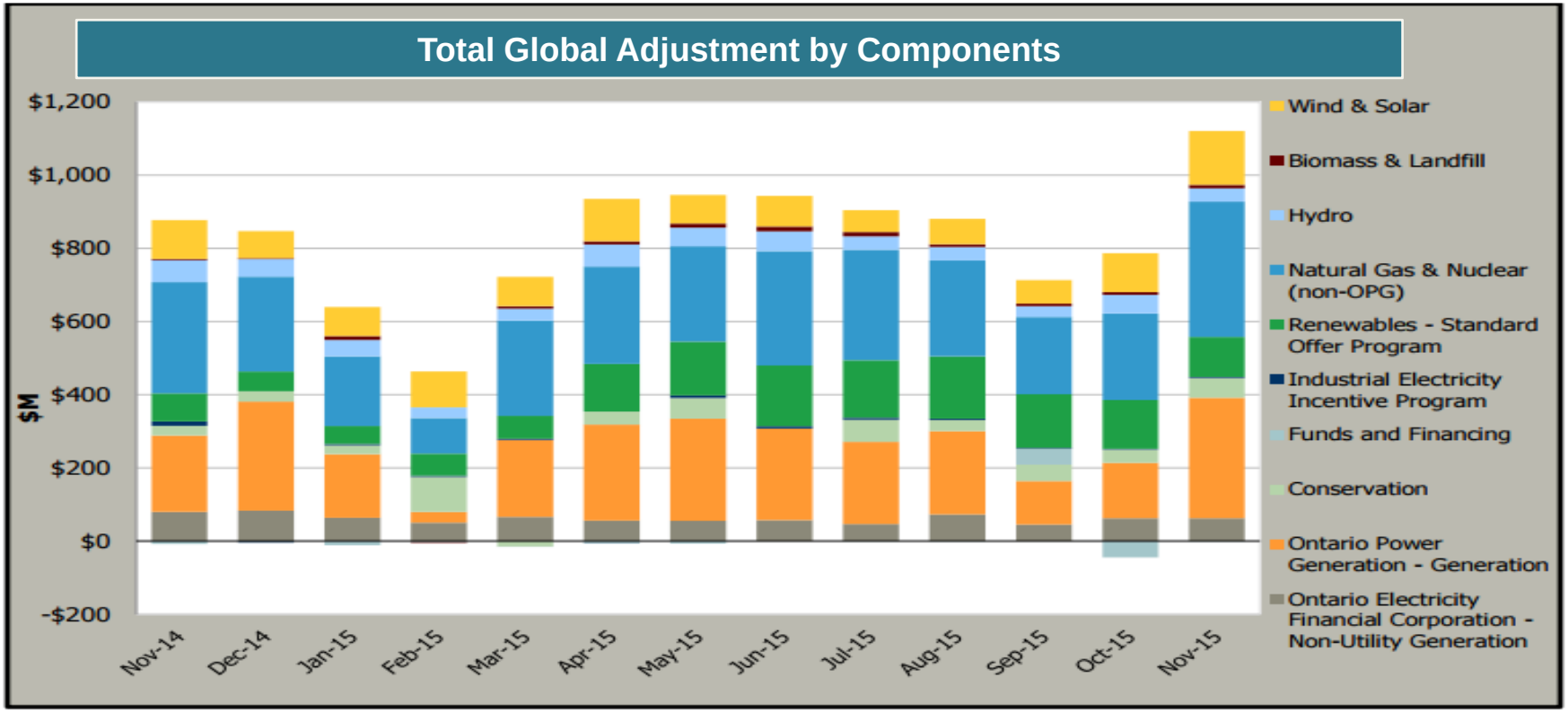
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., GEIA renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II); and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.

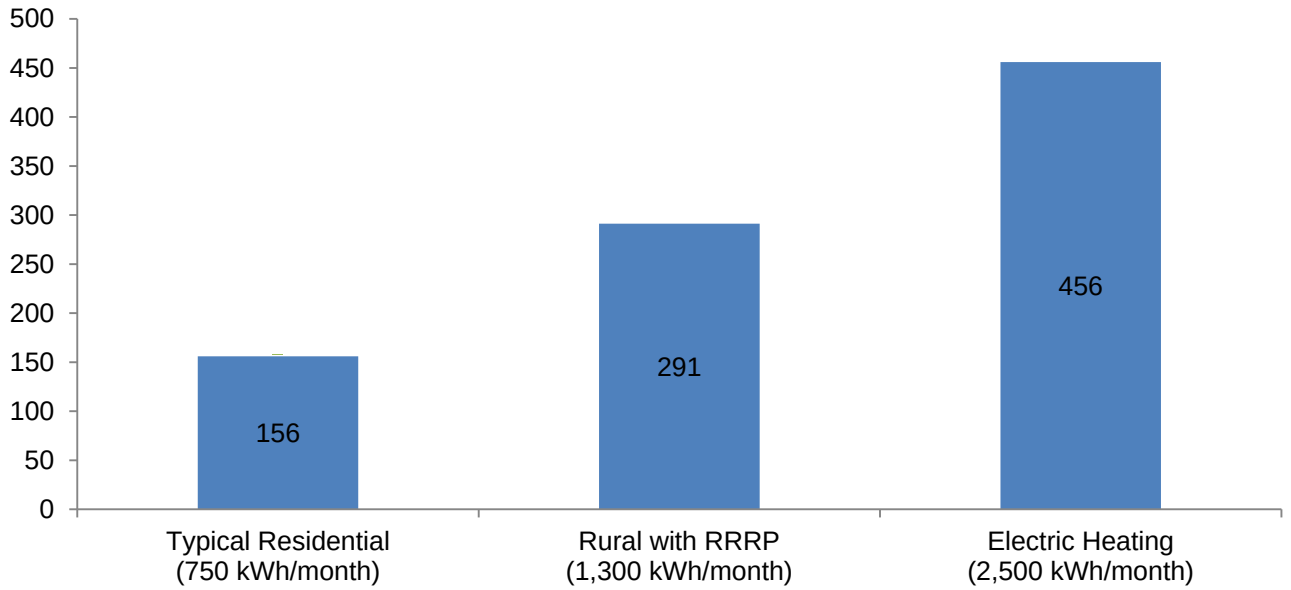
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 Long-Term Energy Plan (2013 LTEP) forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

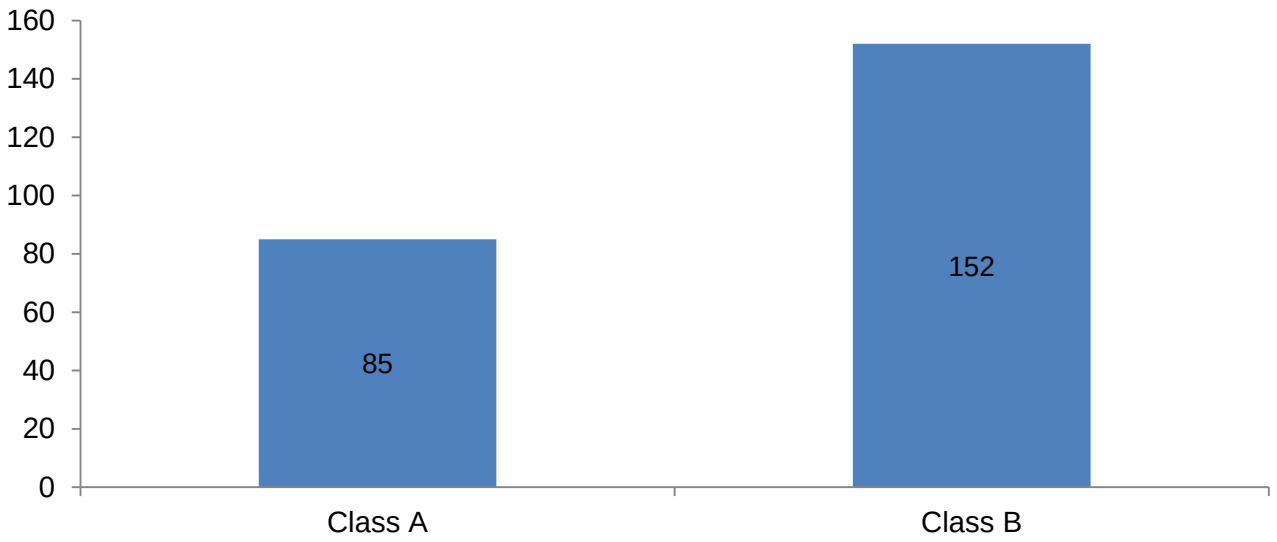


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of $xx [placeholder for OFA] on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $20 to $35 million annual fiscal pressure to the province [TBC by OPG / OFA].

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESB) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.
- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.
- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.
- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

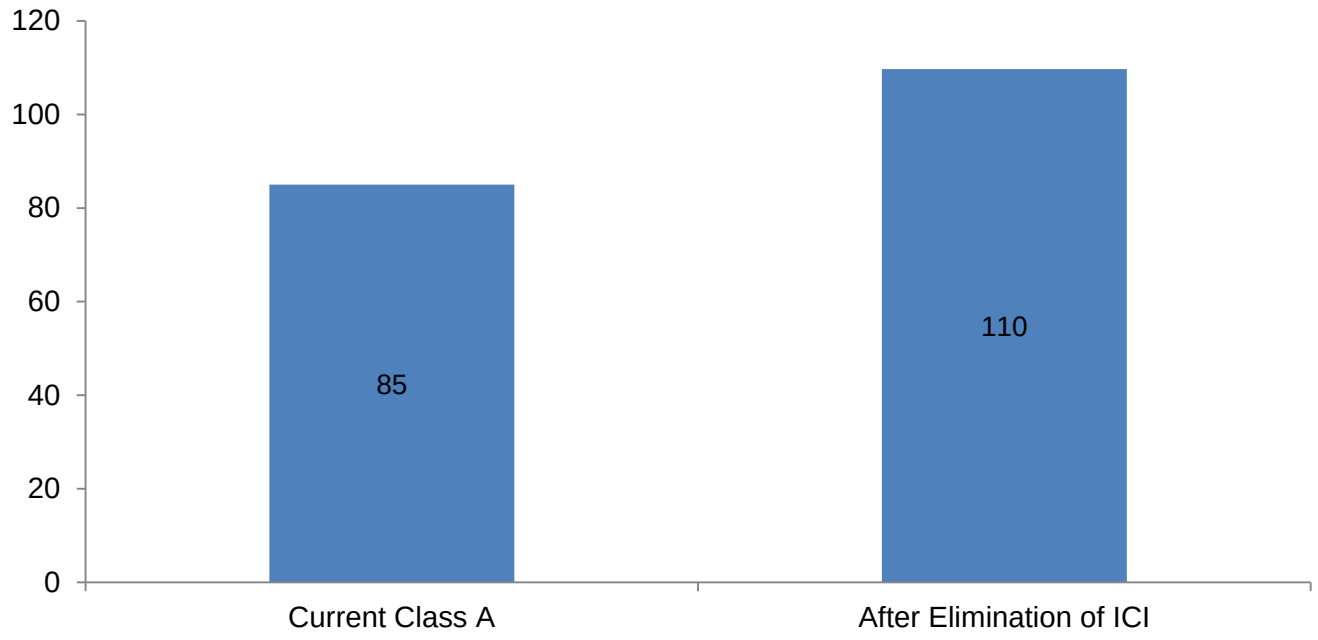
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

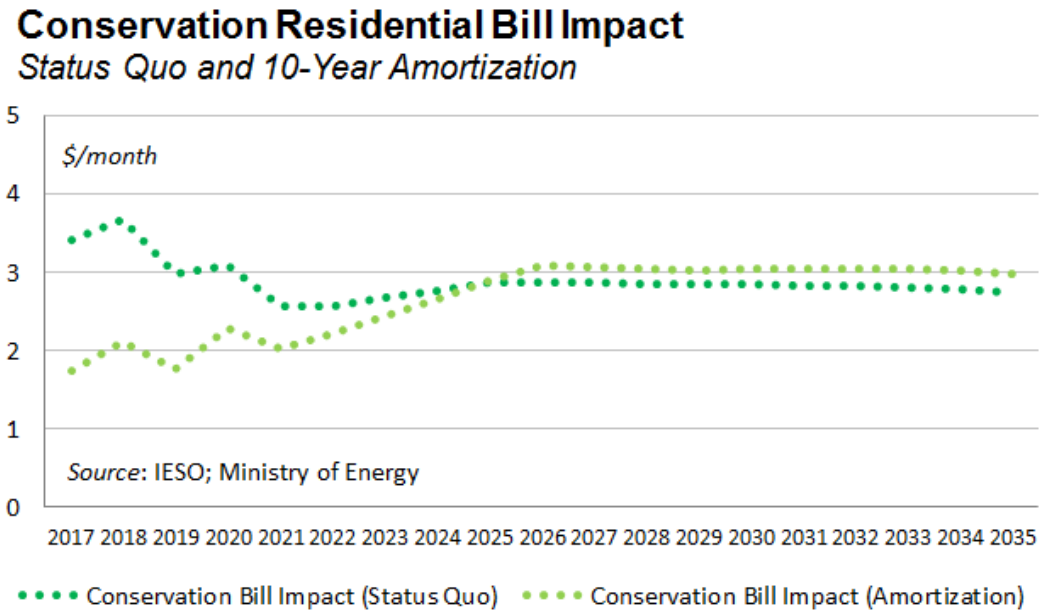
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

Appendix

Electricity Consumer Classes

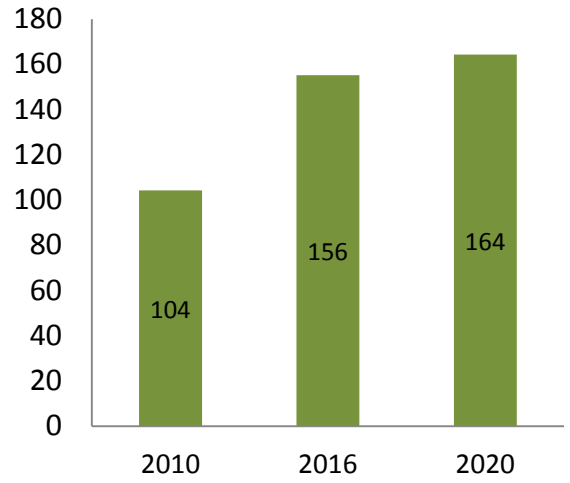
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

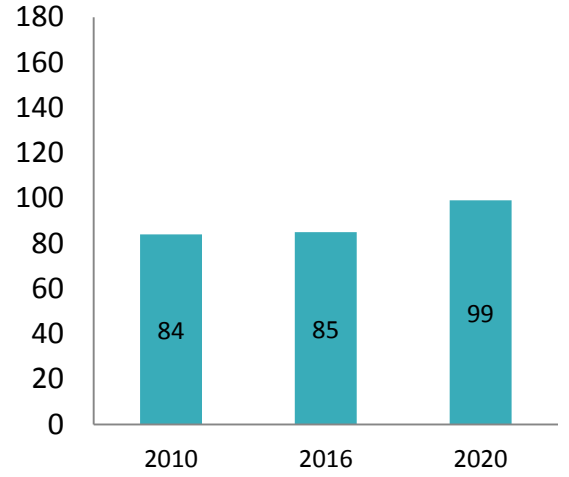
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

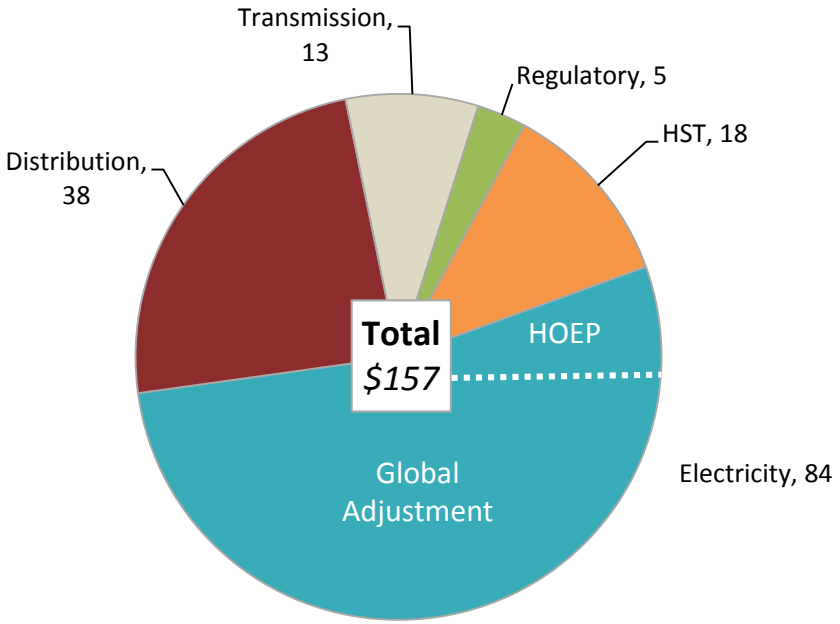
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



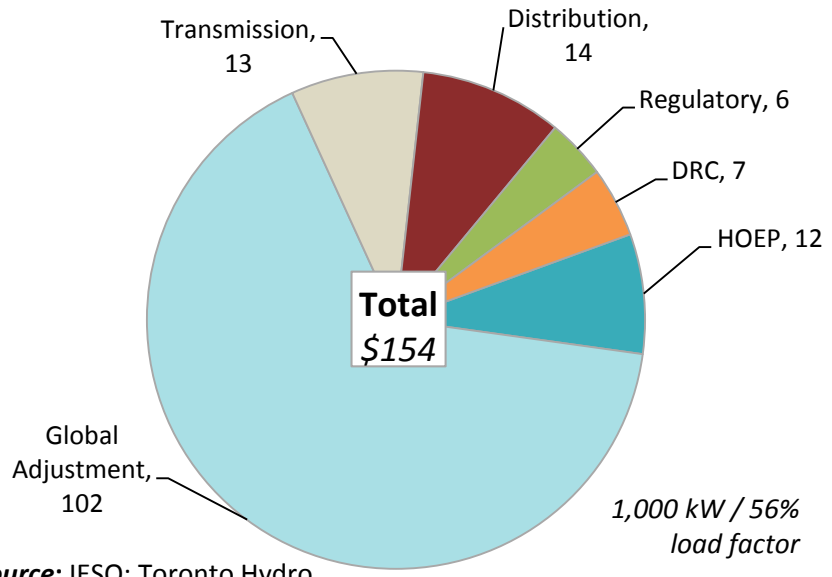
***Source*:** OEB, Toronto Hydro

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

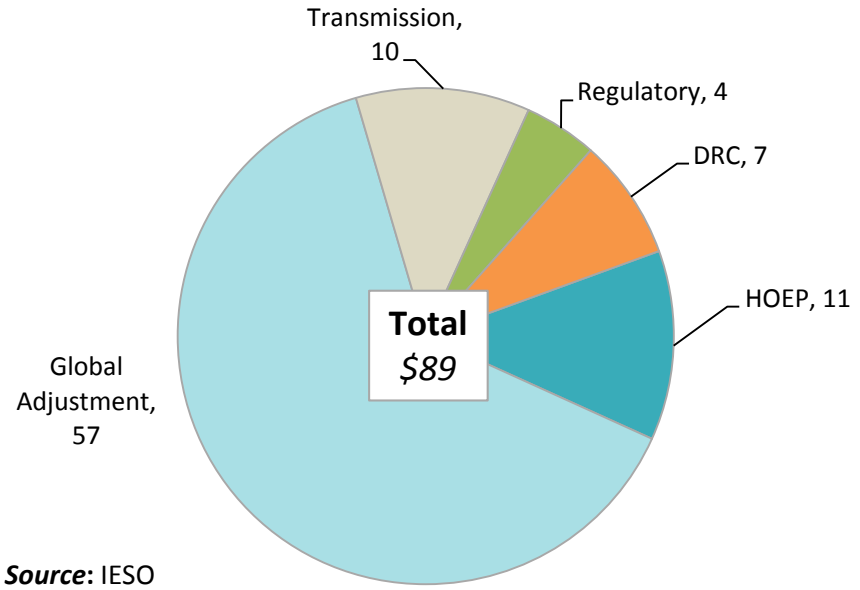
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



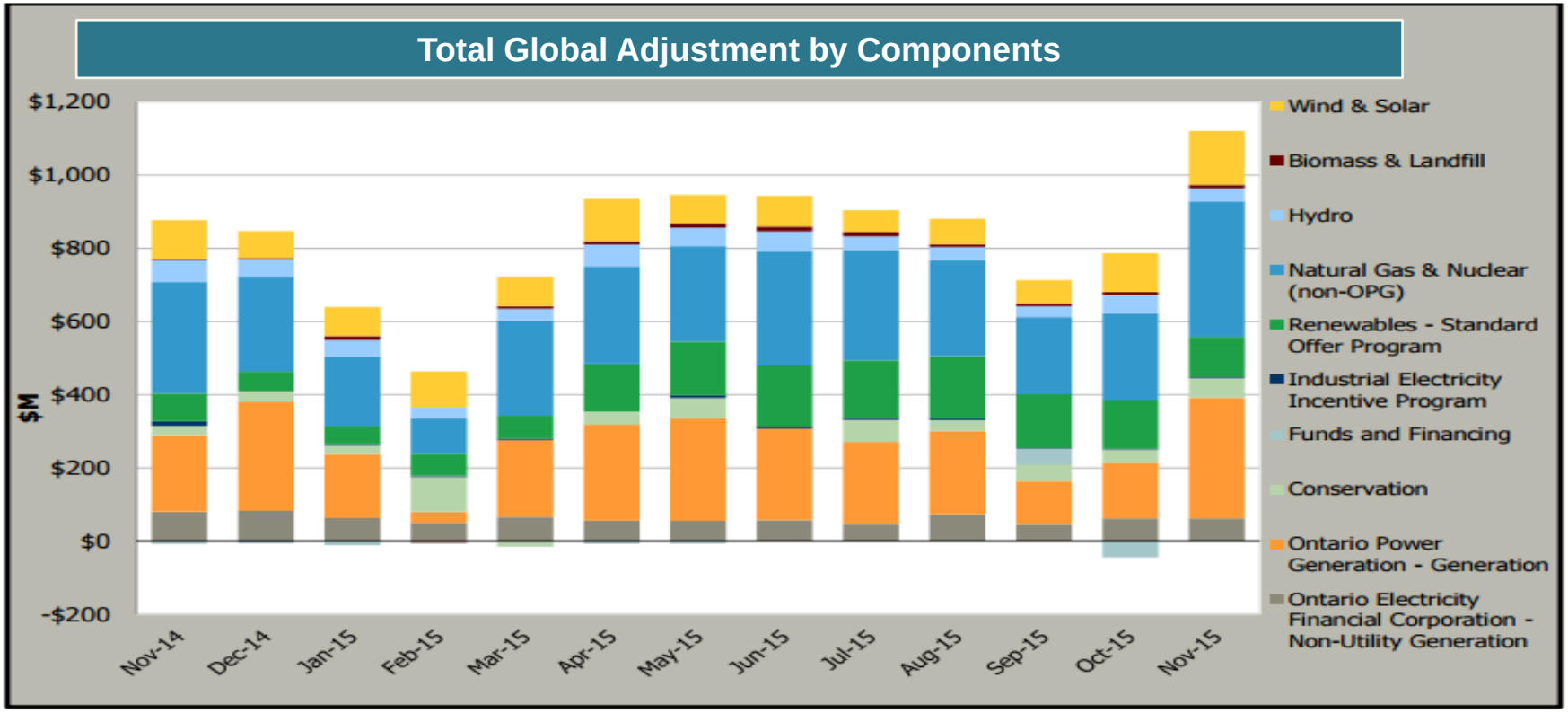
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement ~~GEIA~~ renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

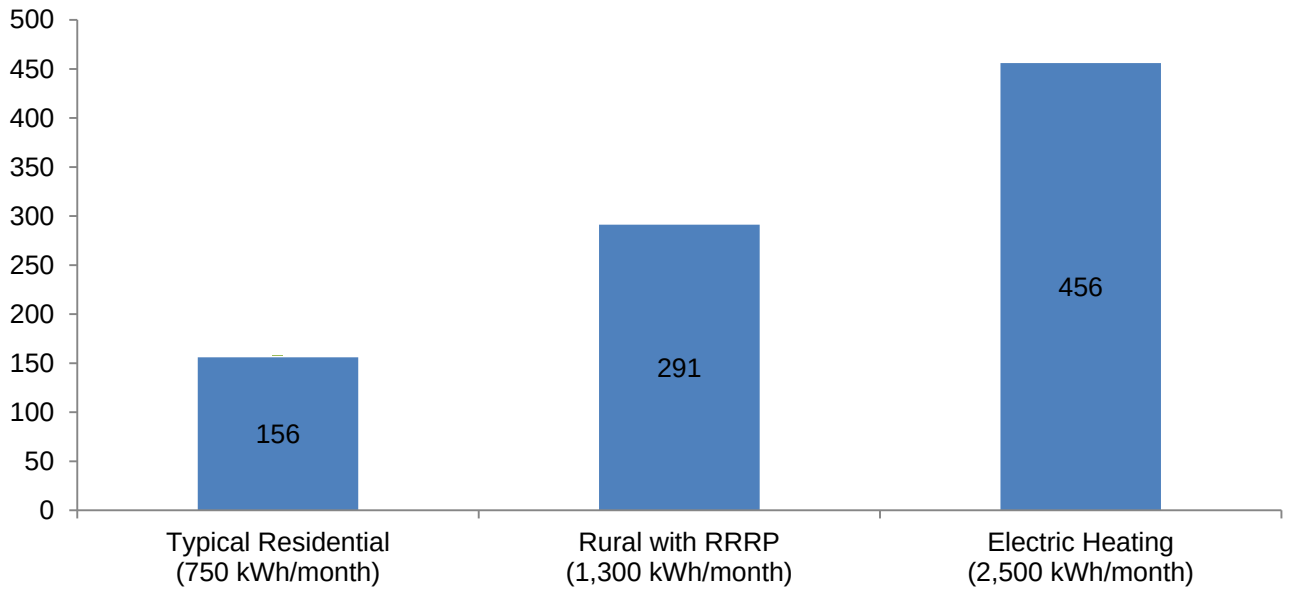
- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate before tax, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II) and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in costs; and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 ~~Long-Term Energy Plan (2013~~ LTEP~~)~~ forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

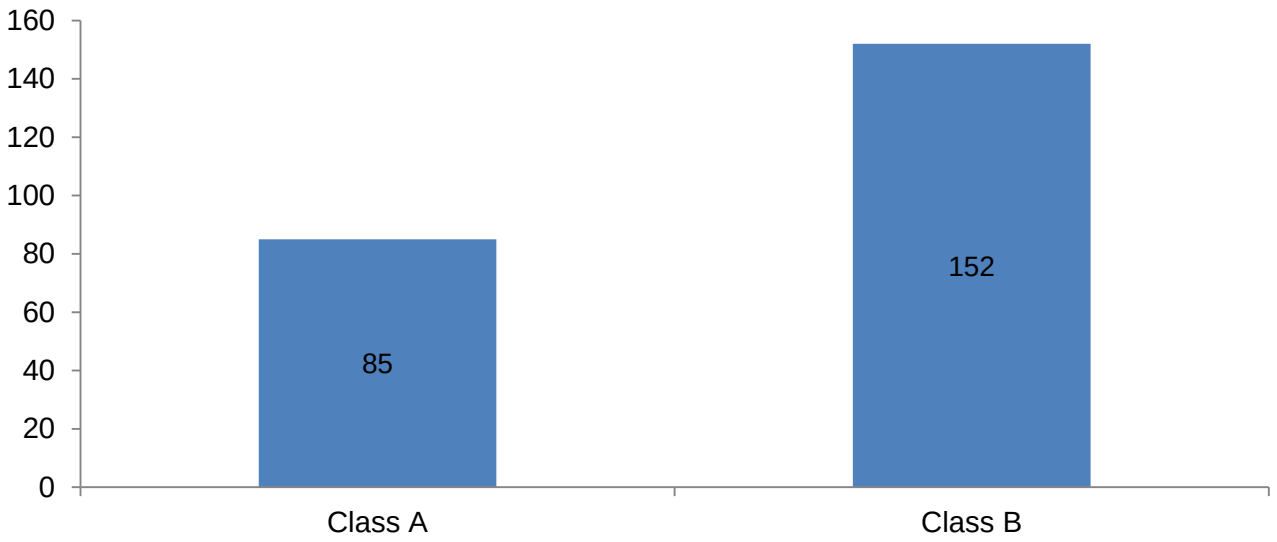


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of $xx [placeholder for OFA] on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $20 to $35 million annual fiscal pressure to the province [TBC by OPG / OFA].

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESBP) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.

- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.

- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.

- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

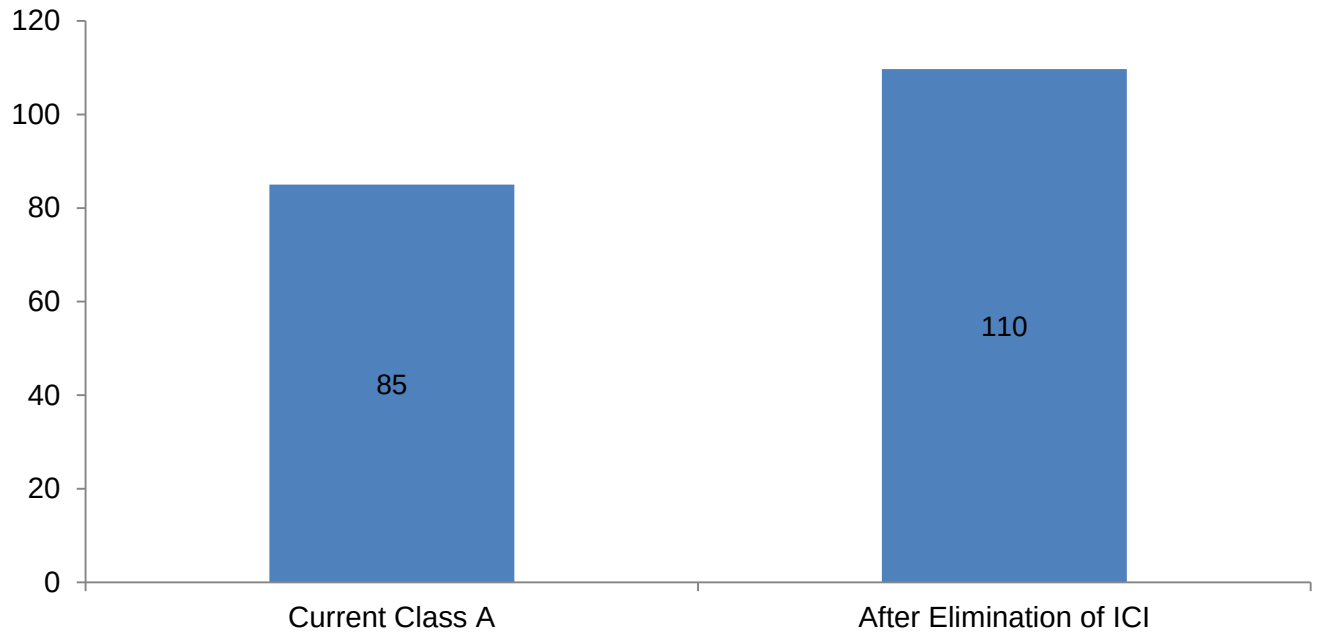
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

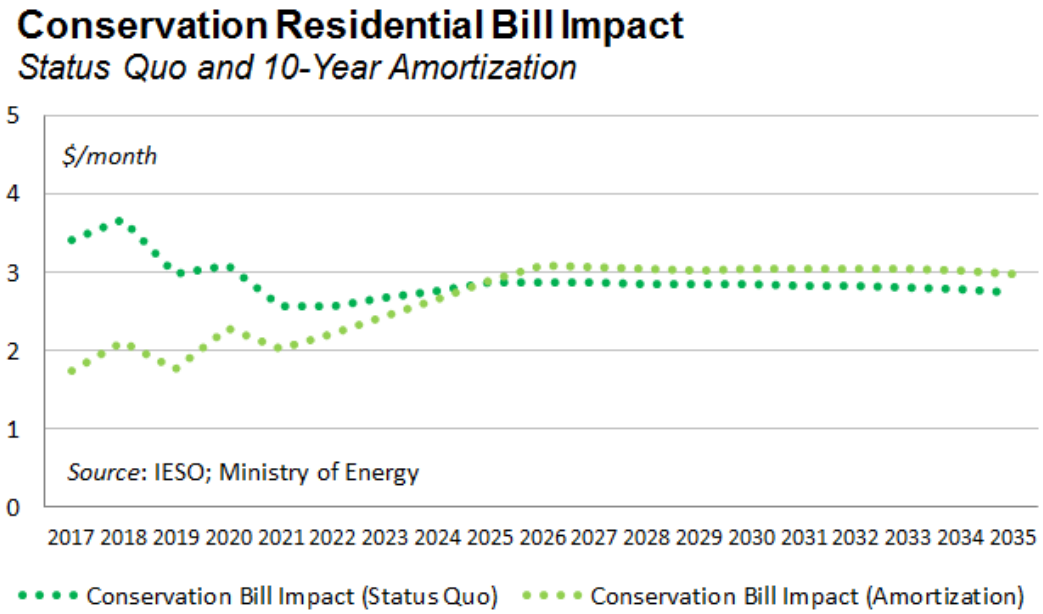
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

Appendix

Electricity Consumer Classes

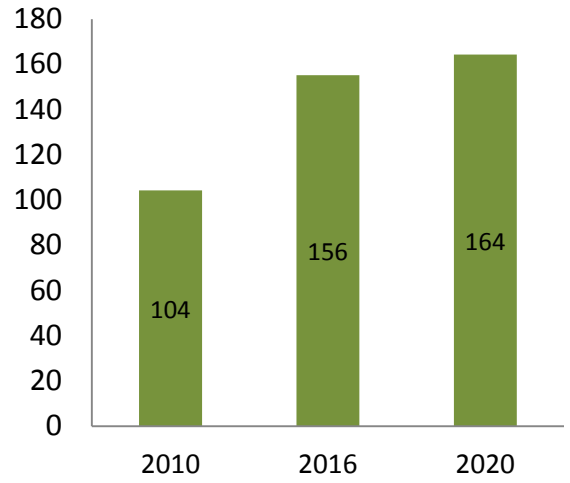
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

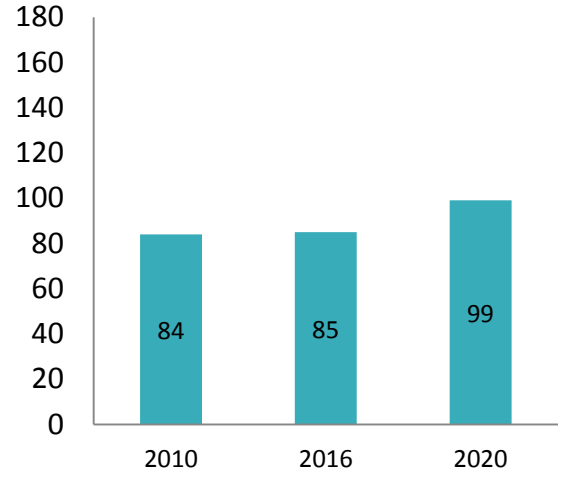
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

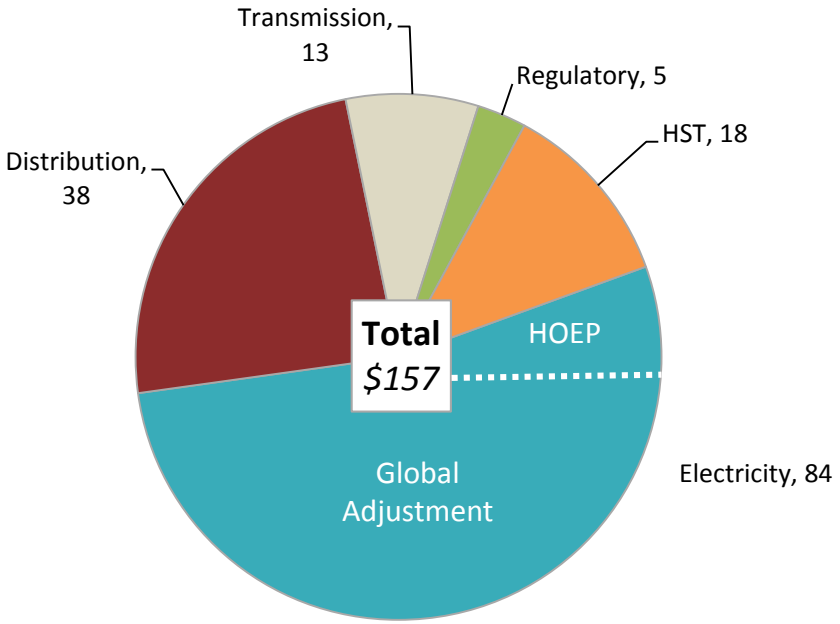
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



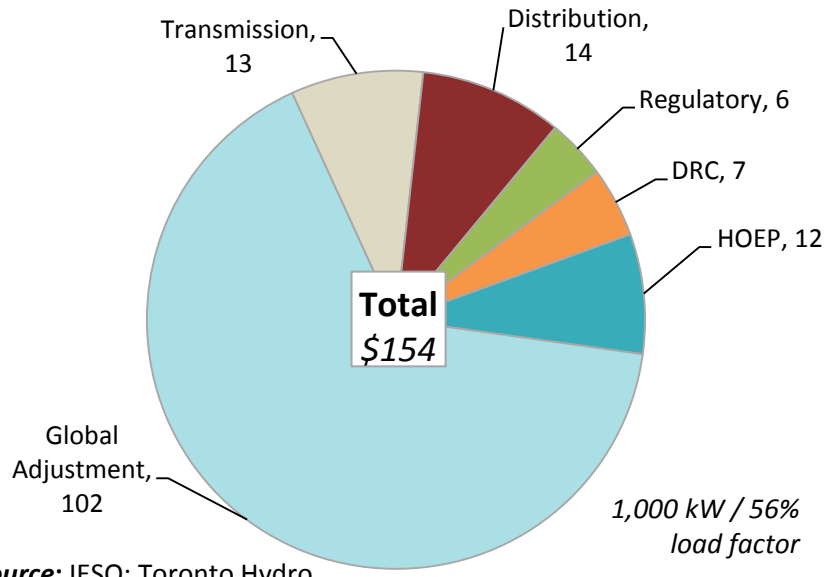
***Source*:** OEB, Toronto Hydro

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

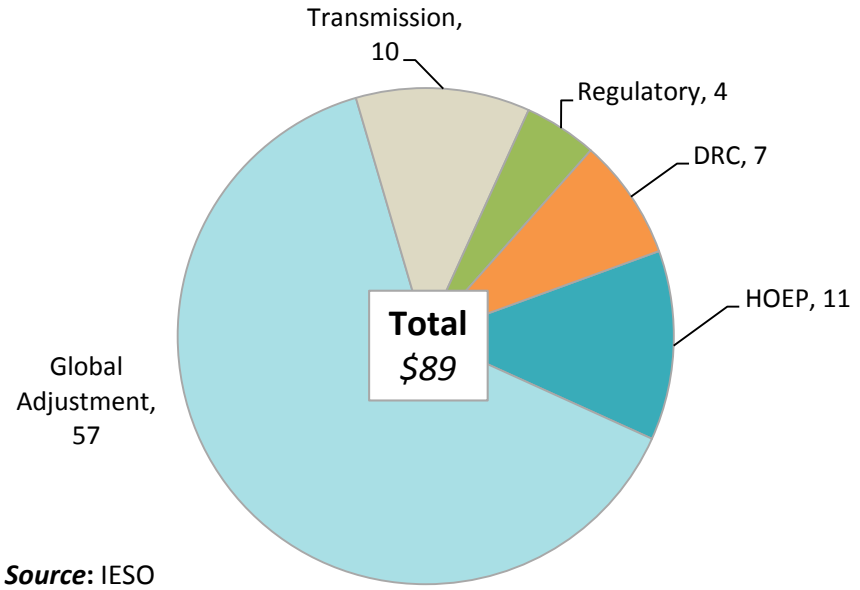
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



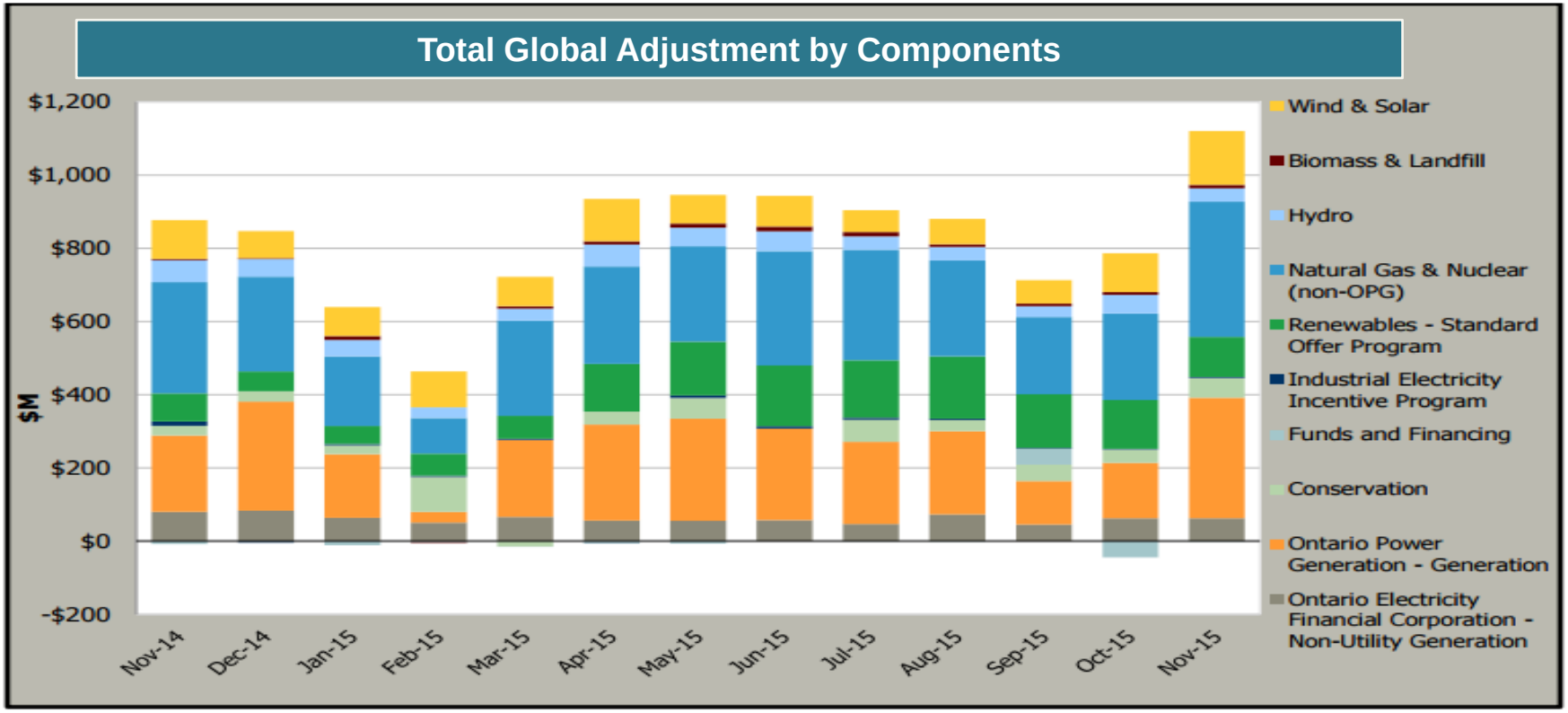
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., GEIA renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II); and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.

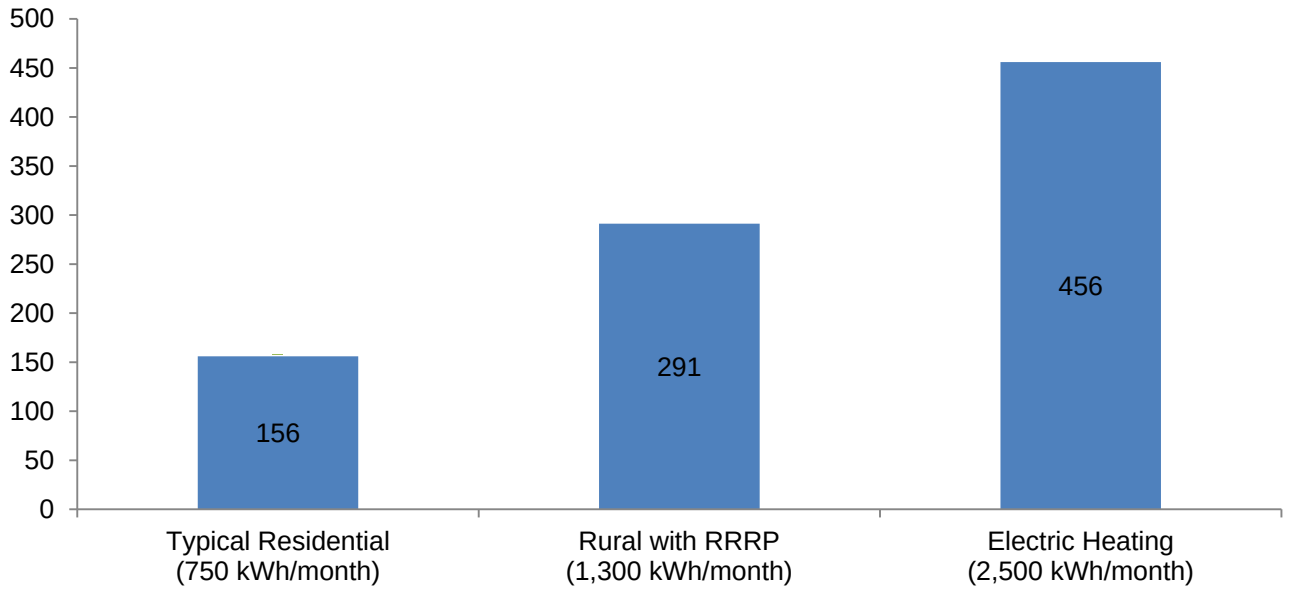
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 Long-Term Energy Plan (2013 LTEP) forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

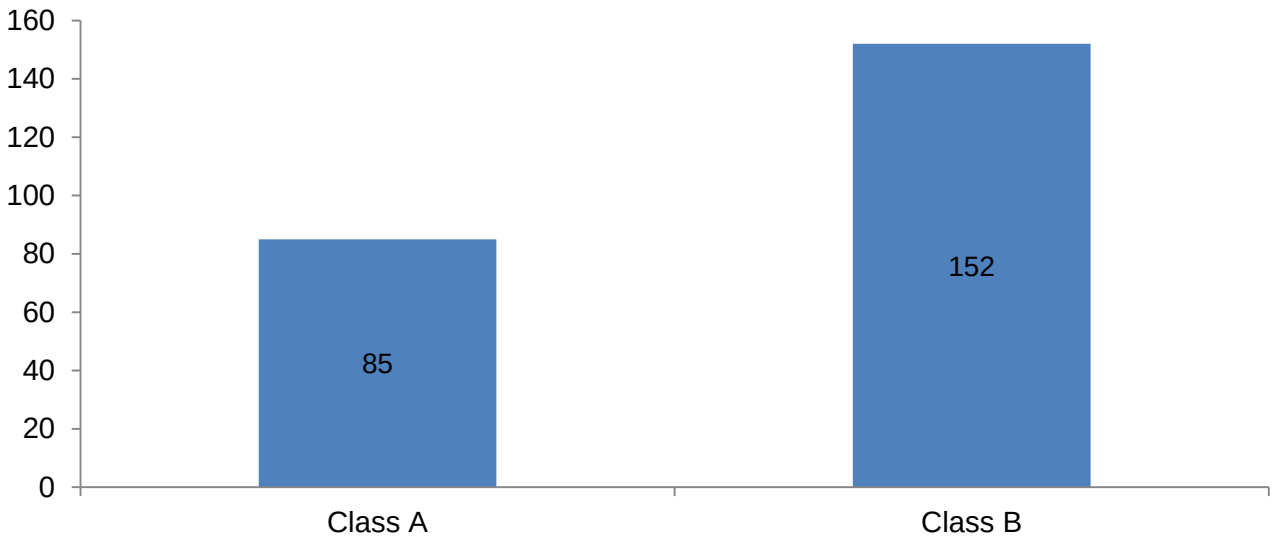


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of $xx [placeholder for OFA] on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $20 to $35 million annual fiscal pressure to the province [TBC by OPG / OFA].

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESB) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.
- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.
- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.
- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

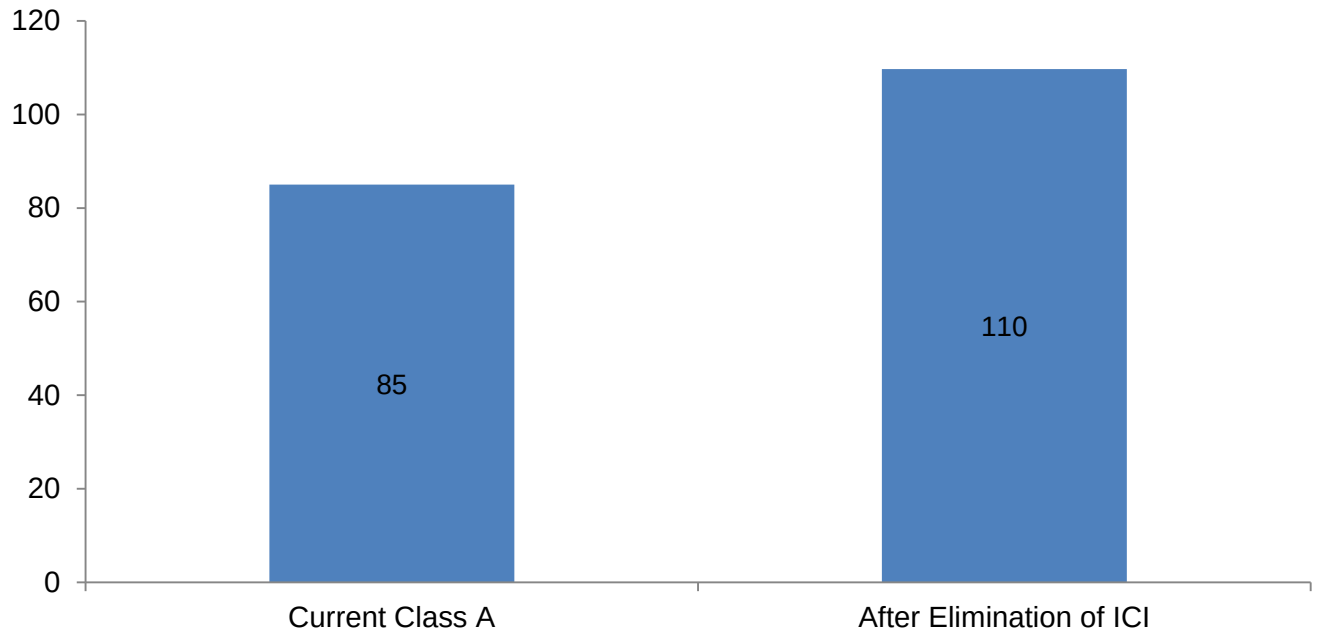
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

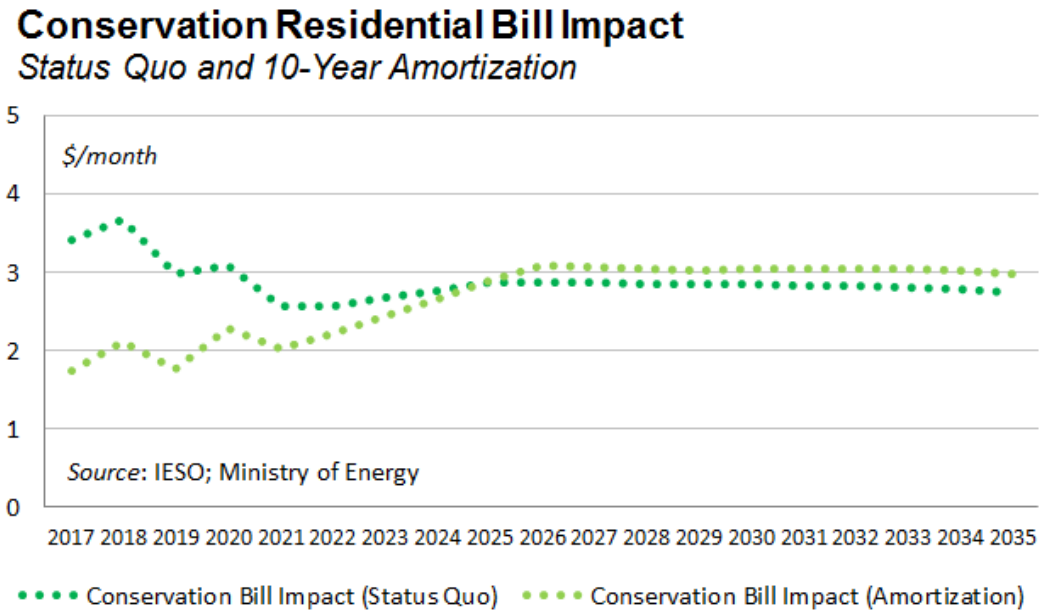
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

Appendix

Electricity Consumer Classes

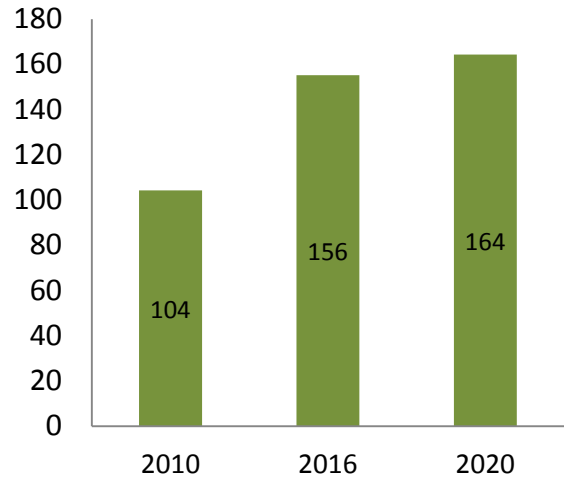
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

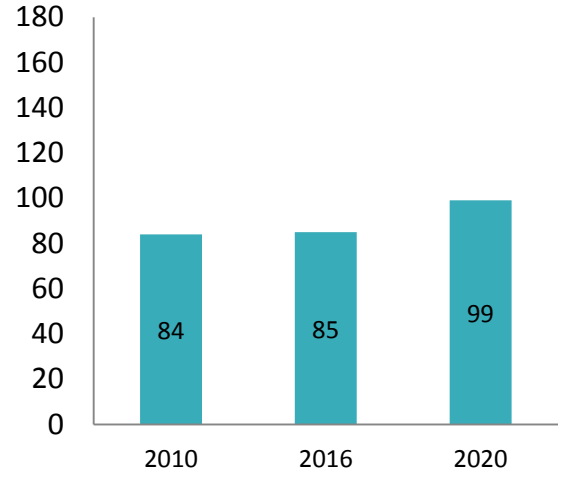
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

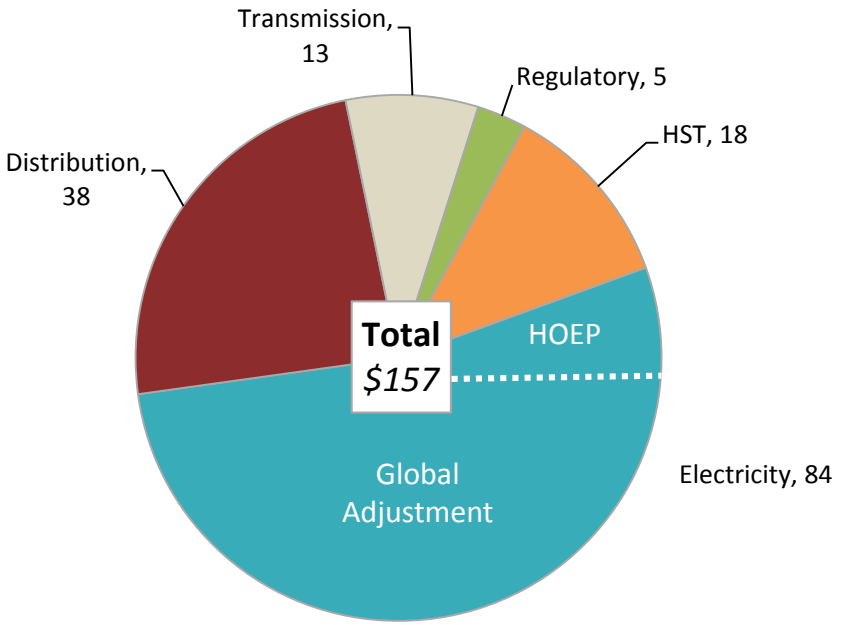
Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



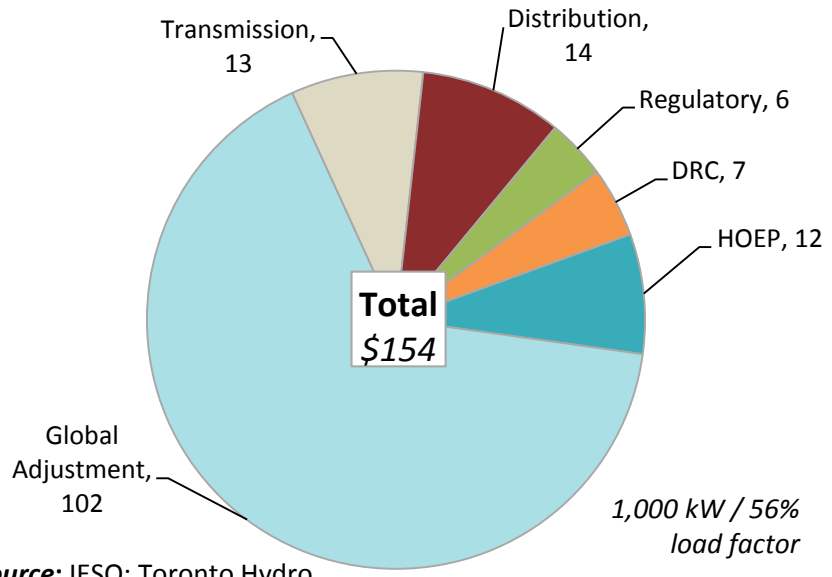
***Source*:** OEB, Toronto Hydro

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

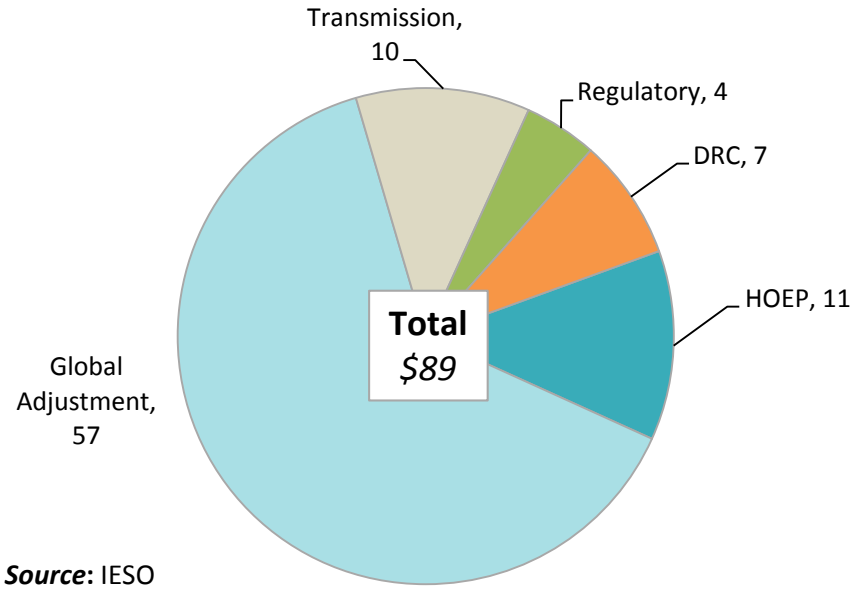
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



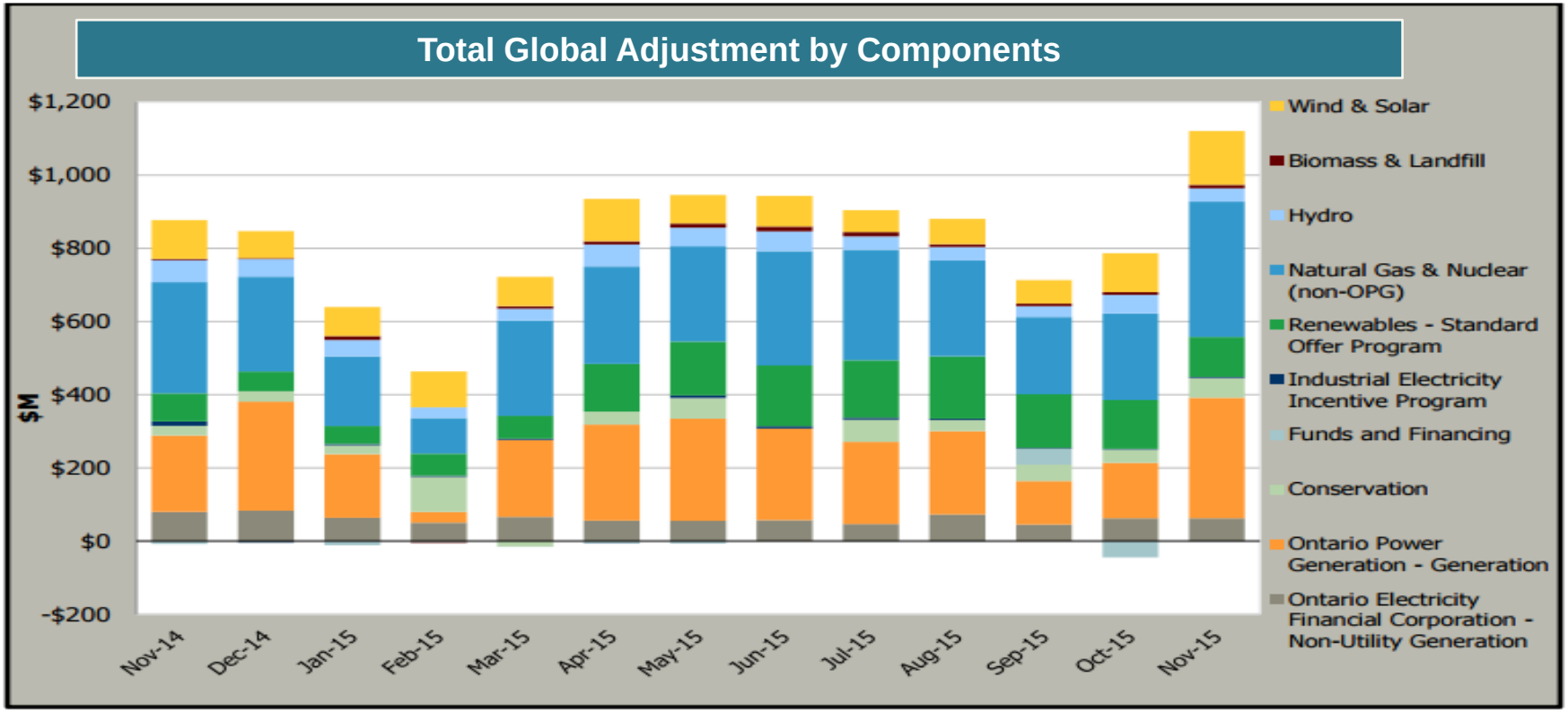
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector

Working Draft

December 5, 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure.
  - Since 2003, the Province has invested more than $35 billion in over 16,000 megawatts (MW) of new and refurbished cleaner generation, including nuclear, natural gas and renewables.
  - Over the same period, Hydro One has invested $15.5 billion to enhance and renew its transmission and distribution systems.
  - As additional electricity generation comes online, nuclear units are refurbished and distribution and transmission investments are made, prices are forecast to continue to increase.

- Actions have been taken to drive down electricity costs, including deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., introduction of wind dispatch) and decreasing the cost of renewable procurements (e.g., GEIA renegotiation, decreasing FIT prices).

- Additional steps have been taken to increase cost effectiveness and improve efficiency by adopting new electricity market approaches, such as:
  - Enhancing competition between developers of large renewable projects through the Large Renewable Procurement (LRP) process to drive down price and secure clean, reliable generation for the province;
  - Directing IESO to end the process of negotiating new NUG contracts pending the development of a Capacity Auction (i.e., Market Renewal); and
  - Launching the first IESO Demand Response Auction (i.e., a competitive process through which demand-side resources are selected to be available to reduce their electricity consumption as needed).

Context (Cont'd)

- Following the 2016 Throne Speech, a number of actions were announced to further reduce electricity costs, such as:
  - Providing an 8 per cent rebate, equivalent to the provincial portion of HST, for approximately 5 million eligible electricity consumers including residences, small businesses and farms;
  - Increasing the amount of rate protection available to approximately 330,000 eligible rural customers living in low-density areas by updating the Rural or Remote Rate Protection (RRRP) program;
  - Lowering the Industrial Conservation Initiative (ICI) threshold to 1 MW and removing sector restrictions so that more consumers can benefit;
  - Suspending the second round of the Large Renewable Procurement (LRP II); and
  - Recycling a portion of cap and trade auction proceeds to keep rates affordable for industrial and commercial electricity consumers.

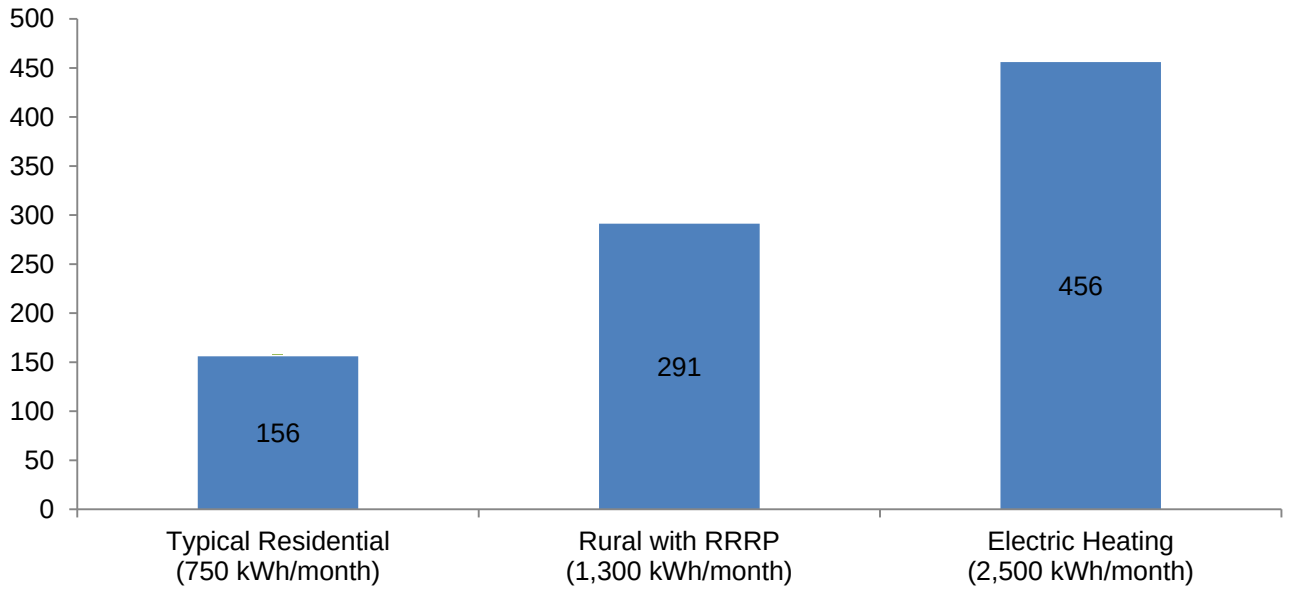
- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured and the need for wholesale market renewal.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Current Electricity Prices – Residential

- Residential consumers electricity prices continue to be a concern for many Ontarians, particularly those that rely on electric heat.
  - **Note:** The typical residential bills are currently below the 2013 Long-Term Energy Plan (2013 LTEP) forecasts ($159 / 750kWh)

Residential Electricity Bills
in $/month

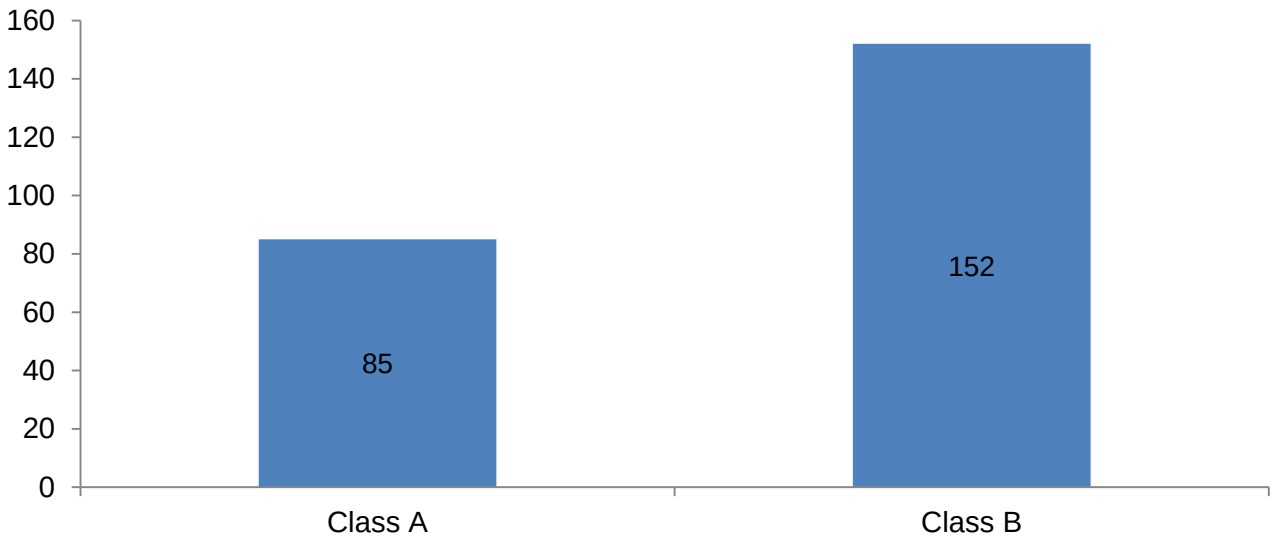


Note: Typical residential and electric heating shown above are based on Toronto Hydro; rural is based on connection to Hydro One as a R2 customer eligible to receive the Rural or Remote Rate Protection (RRRP) credit of $31.50.

Current Electricity Prices – Industrial and Commercial

- While large industrial electricity consumers (i.e., Class A) rates are competitive with other jurisdictions, rates for commercial/small industrial consumers (i.e., Class B) are higher by comparison.
  - **Note:** Current industrial and commercial prices are below 2013 LTEP forecasts ($96 / MWh)

Current All-In electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer. Class B reflects a 1 MW load operating at 56% load factor and connected to Toronto Hydro.

Proposed Initiatives – Overview

- The suite of proposed initiatives are intended to:
  - Transform how the electricity market operates in Ontario;
  - Re-set how government programs are funded (i.e., rate-base vs tax-base);
  - Provide system benefits (e.g., industrial load retention);
  - Lower the cost of electricity for residential and industrial consumers; and
  - Increase cost effectiveness and improve efficiency.

- The proposed initiatives include:
  1. Implement Market Renewal Initiatives
  2. Fund Electricity Support Programs Through The Tax-base
  3. Eliminate the Industrial Conservation Initiative (ICI)
  4. Amortize Conservation Program Costs
  5. LDC Efficiencies
  6. Rate Design Initiatives
  7. Reduced Cost of OPG Borrowing
  8. End Debt Retirement Charge (DRC) Early for Commercial/Small Industrial Class B Electricity Consumers
  9. Dedicate Departure Tax
  10. Cancel/Adjust Renewable Energy Procurements

- The proposed initiatives provide opportunities to reduce electricity costs for residential and industrial consumers while at the same time transforming the province's electricity market and yielding benefits for the electricity system.

Proposed Initiatives – Impacts

- Each of the proposed initiatives under consideration target different government programs and different parts of the electricity bill. The proposals impact different classes of electricity consumers to varying degrees.

Proposal	Program / Initiative	Line on Bills	Who Benefits
1. Implement Market Renewal Initiatives	Market Renewal	Electricity, Global Adjustment, Regulatory	Market Renewal: All electricity consumers
2. Fund Electricity Support Programs Through The Tax-base	OESP, RRRP	Regulatory	All electricity consumers evenly
3. Eliminate the Industrial Conservation Initiative (ICI)	ICI	Electricity, Global Adjustment	Only Class B electricity consumers (i.e., residential) **Note:** Will have a negative impact on Industrial consumers.
4. Amortize Conservation Program Costs	Amortization	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
5. LDC Efficiencies	Distribution efficiencies	Delivery	All embedded consumers
6. Rate Design Initiatives	Rate structures	Electricity, Global Adjustment	Rate Design Initiatives: Participating electricity consumers
7. Reduced Cost of OPG Borrowing	n/a	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers
8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers	Debt Retirement Charge (DRC)	DRC	Class B consumers (i.e., small business and commercial consumers, etc)
9. Dedicate Departure Tax	Departure Tax	TBD	TBD
10. Cancel/Adjust Renewable Energy Procurements	FIT, LRP	Electricity, Global Adjustment	Class B electricity consumers and to a lesser extent Class A consumers

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	1.58	1.59	1.60	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.18	2.30	2.31	2.45	2.48	2.51	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
4. Amortize Conservation Program Costs	1.67	1.56	1.21	0.81	0.54	0.3	Immediate
5. LDC Efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.13	0.13	0.13	0.18	0.18	0.18	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 2 assumes OESP participation of 50% and 5-year maturity. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
1. Implement Market Renewal Initiatives	-	-	-	2.11	2.12	2.13	Longer-Term
2. Fund Electricity Support Programs through the Tax-base	2.91	3.06	3.17	3.27	3.33	3.38	Immediate
3. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
4. Amortize Conservation Program Costs	1.15	1.08	0.84	0.56	0.37	0.25	Immediate
5. LDC Efficiencies	n/a	n/a	n/a	n/a	n/a	n/a	Near-Term
6. Rate Design Initiatives*	-	-	-	-	-	-	Immediate
7. Reduced Cost of OPG Borrowing	0.10	0.10	0.10	0.15	0.15	0.15	Immediate
8. End DRC Early for Class B Electricity Consumers**	-	-	-	-	-	-	n/a
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
10. Cancel / Adjust Renewable Energy Procurements	-	-	TBD	TBD	TBD	TBD	Longer-Term
Total							

Note: Proposal 2 assumes OESP participation of 50% and 5-year maturity. Proposal 3 reflects the elimination of ICI, as opposed to moving ICI cost shift to the taxbase. The $1.75/MWh savings associated with Proposal 7 in 2018 accounts for the fact that under the status quo, DRC will be removed from bills in April 2018. *Savings estimates do not include changes related to rate design. ** Class B includes small-medium enterprises (SMEs).

Fiscal Considerations

- Funding electricity support programs (i.e., OESP, RRRP, First Nations Delivery Rate) from the tax-base represents approximately $440 million on average annually.

- Ending the Debt Retirement Charge (DRC) for commercial and small industrial electricity consumers (i.e., Class B) early would represent an additional fiscal pressure of $xx [placeholder for OFA] on the province.

- If the Industrial Conservation Initiative were funded though the tax-base instead of being eliminated, this would represent a $900 million annual cost to the fiscal plan.

- Reducing OPG borrowing costs to the Province's cost of funds is expected to result in a $20 to $35 million annual fiscal pressure to the province [TBC by OPG / OFA].

- Fiscal impacts of allocating a portion of the departure tax to ratepayers will depend on the size of the allocation, as well as timing for the flow of value. The maximum, direct one-time impact is $2.6 billion, with potential ancillary impacts on residual stranded debt defeasance.

1. Electricity Market Renewal Initiatives

- Continue to move forward with IESO's Market Renewal initiatives:
  - Market Renewal encompasses projects such as a single-schedule system (from the current two-schedule system), more frequent intertie scheduling to better align with other jurisdictions and a day-ahead market. There will be up front capital costs to enable the initiative. IESO is currently assessing these costs.
  - Moving to "technology-agnostic" procurements will provide new opportunities for innovation and modernization and ensure ratepayers receive the best prices possible.

Considerations

- Changes related to IESO's Market Renewal initiatives, reflected in HOEP and uplifts, are estimated to save up to $300 million per year, starting in 2020, leading to a reduction of:
  - About $1.60/month or about 1% at current retail prices for a typical residential bill; and
  - About $2/MWh or more than 2% at current all-in prices for industrial and SME electricity consumers.
- The IESO's Market Renewal is a broad initiative that will impact all aspects of Ontario's electricity market. Ontario has had a uniform price since market opening.
- Adopting a technology-agnostic stance will lower the overall cost of providing electricity service by selecting the most cost-effective resources to fulfill various system needs.

2. Fund Electricity Support Programs Through the Tax-Base

- Propose to fund electricity support programs, including Ontario Electricity Support Program (OESB) and Rural or Remote Electricity Rate Protection (RRRP), through the tax-base instead of a regulated charge. This would allow the OESP and the RRRP charges to be removed from the Regulatory line on electricity bills.

Considerations

Consumer Impacts and implementation

- Transitioning OESP and RRRP to the tax-base would reduce a typical residential bill by about $2.35/month by 2020, and delivering the First Nation rate reduction through tax base would avoid about $0.10/month for a potential total savings of $2.45/month by 2020). As all programs provide strong social benefits, there is precedent for funding these programs through the tax-base.
- To address concerns from low income electricity consumers improvements to OESP could be implemented by increasing credits (could be up to double the current credits)
  - Single low income consumer would see a change from $30 to $45/ month ($540/year):
  - Family of four with electric heat could see a credit of $82.50/month ($990/year); and
  - Would mean no impact on consumer bills and no change to current OESP charge.
- RRRP and OESP are included in the “Regulatory” line on bills. If RRRP and OESP were eliminated from bills, the Regulatory line would decrease; however, as the Regulatory line is the smallest line item component of invoices, there is risk the decrease may not be perceived by customers.
- The RRRP regulation provides a funding mechanism for transmission infrastructure required to grid connect remote First Nation communities. Considerations for how that funding will be supported by the tax base will need to be determined.
- The non-rate mechanism to remove delivery charges from on-reserve First Nation customer monthly bills needs to be further explored.Funding RRRP and/or OESP with tax revenue would require amendments to existing legislation and regulations.

2. Fund Electricity Support Programs Through the Tax-Base (cont'd)

- Table below shows estimates of program costs up to 2020:

Year	OESP	RRRP	First Nations Delivery Rate	TOTAL
2017	$106M	$292M	$18M	**$416M**
2018	$119M	$300M	$18M	**$437M**
2019	$127M	$306M	$18M	**$451M**
2020	$132M	$315M	$18M	**$465M**

1) Ontario Electricity Support Program (OESP)
   - After almost a year in market, close to 30% of potentially eligible customers are signed up.
   - The cost projections below assume the program grows to 50% of eligible consumers by 2020 (also assumes 10% administration costs).

2) Rural and Remote Rate Protection (RRRP)
   - Provides benefits to R2 Hydro One consumers, Algoma, and remote communities.
   - Includes the expanded coverage that will begin on January 1, 2017.

3) First Nation rate reduction (currently under development)
   - On November 14, 2016, OEB presented options to the Ministry on reducing costs for on-reserve First Nation customers.
   - OEB's recommended option to provide 100% delivery rate credit, which is estimated at $18.4 million per year.
     - Other options includes a seasonal fixed credit to account for demand changes over the year ($13 million) or a 50% total bill reduction ($23 million).

3. Eliminate the Industrial Conservation Initiative (ICI)

- The cost shift from the Industrial Conservation Initiative (ICI) could be removed from electricity bills by eliminating ICI.
  - The ICI allows large electricity consumers to lower their electricity costs by reducing their demand during peak hours.

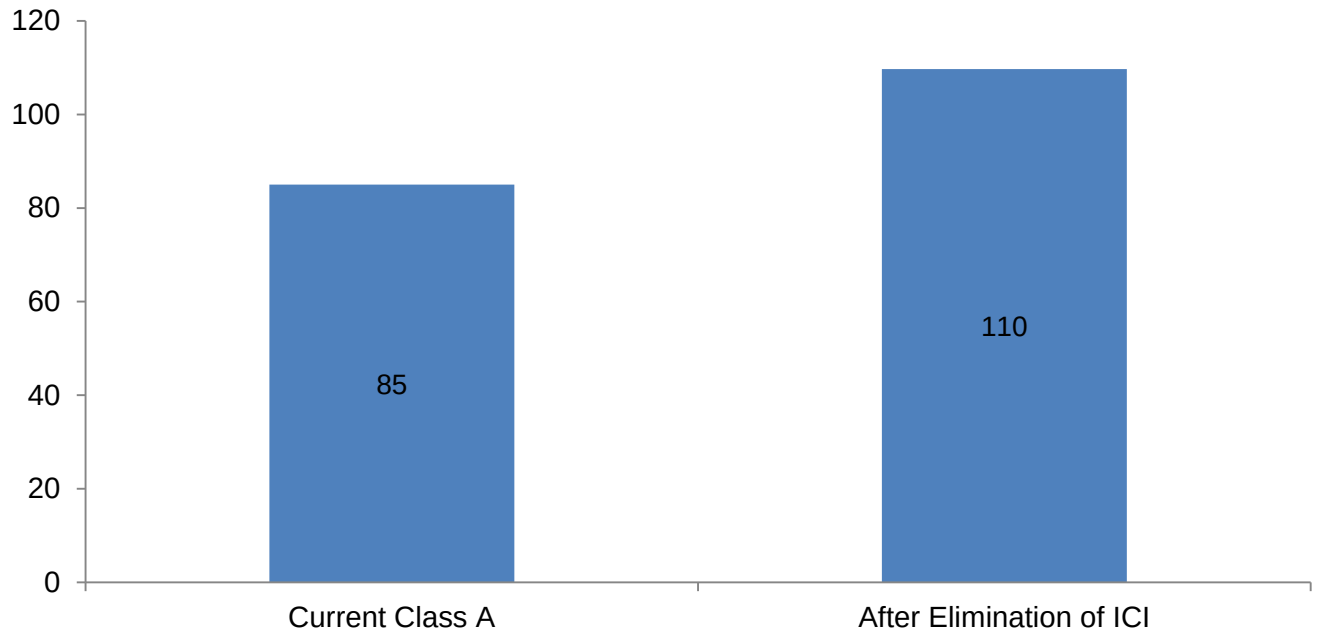
Considerations

- Eliminating ICI would result in a benefit of more than $4/month for residential electricity consumers in 2017.
  - However, unless government took action to mitigate the associated cost shift back to industrial consumers, typical industrial prices would increase by about one-third. Such a price increase would pose significant challenges for energy-intensive consumers.
- Industrial stakeholders have indicated that ICI as an integral factor in maintaining competitiveness and retaining industry in the province.
  - Eliminating ICI would limit the “cost shift” onto residential consumers, but it would also lead to a reduction in industrial demand. The large industrial contribution to the fixed costs of running the electricity system would then need to be covered by remaining consumers.
- If ICI is retained, current IESO projections indicate that the cost shift will decrease each year going forward as Global Adjustment (GA) decreases (due to an expected increase in HOEP).
- Alternatively, ICI could be funded through the tax-base at a cost of $900 million annually. There is precedent to use the tax-base for industrial support programs, including the Northern Industrial Electricity Rate Program (NIERP) and the Jobs and Prosperity Fund.

3. Eliminate the Industrial Conservation Initiative (cont'd)

- ICI currently provides a benefit of about $25/MWh to Class A electricity consumers.

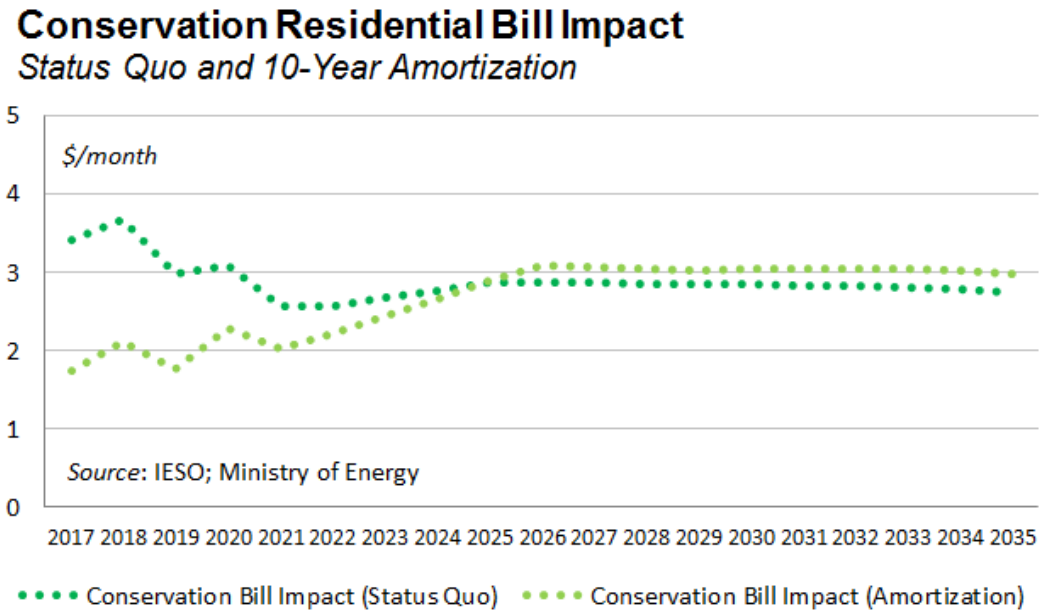
All-In Electricity Price
in $/MWh



Note: Based on year-to-date (YTD) September 2016 prices. Class A reflects a transmission-connected consumer.

4. Amortize Conservation Program Costs

- ~$3 billion from the electricity ratepayer base will be spent on conservation programs delivered under the Conservation First Framework and the Industrial Accelerator Program (IAP) between 2015 and 2020.
- Currently, Conservation and Demand Management (CDM) program costs are recovered from the Global Adjustment (GA) mechanism about one month after expenses are incurred.
- As a potential rate mitigation measure, certain CDM costs could be amortized.
- Amortizing a portion of conservation spending would produce a benefit for electricity ratepayers in excess of $1/month at the outset. Over time, the benefit would decrease and turn into a cost, as interest charges begin to grow.



Note: Chart assumes that conservation incentive costs are available for amortization while administration cost are not. Although there is variable from year to year, incentives represent about two-thirds of conservation spending in Ontario. Chart assumes conservation spending continues at a similar rate beyond 2020. Chart assumes a 10-year borrowing rate of 3.0%.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- Under **Public Sector Accounting Board (PSAB) accounting standards**, used by both the Province and IESO, only certain assets can be amortized: 1) pensions and 2) tangible capital assets. Under PSAB an asset must meet several criteria to be considered a capital asset, including:
  - A tangible capital asset must be tangible and substantive and the Ontario government must have title and operate the asset.
  - A tangible capital asset must bring a tangible benefit to the government or to Ontario.

- CDM costs, on their own, do not meet the criteria of a tangible capital asset because customers would have ownership and control of installed CDM measures, not the Province or IESO.

- **Rate-regulated accounting** was developed to recognize the unique nature of regulated entities (e.g., electricity generators, LDCs). Under rate-regulated accounting certain costs can be treated as amortizable assets that would not normally be considered assets under accounting principles.
  - Over the past several years, the Auditor General (AG) has expressed concerns about the appropriateness of recognizing rate-regulated assets in the Province's consolidated financial statements.
  - Rate-regulated accounting is currently under review by international accounting standard setting bodies and is currently permitted only on an interim basis, so its future is unclear at present.

4. Amortize Conservation Program Costs (cont'd)

Considerations

- If some of Ontario's CDM costs could be amortized, analysis shows that ratepayer impacts would be reduced in the short-term but interest charges on the loan would result in increased overall ratepayer costs in the longer-term.

- Legislative amendments would be needed to allow recovery of loan interest charges from GA.

- If there is a desire to proceed:
  - Formal accounting advice will need to be sought from IESO's external auditor as well as the Ontario Provincial Controller (OPC) to determine whether CDM costs could be amortized according to rate-regulated accounting standards.
  - Further legal analysis would also be required to confirm legal viability and possible approaches to implementation.

5. LDC Efficiencies

- Consider opportunities for future LDC cost reductions and efficiencies through the regulatory framework.

Considerations

- The Ontario Energy Board has a mandate to regulate the electricity distribution sector in the public interest, ensuring the financial viability of the sector while promoting reliable service to customers at just and reasonable rates.
- Since 2012, the OEB has taken action – through the Renewed Regulatory Framework for Energy – to more closely link rate regulation with performance measures and outcomes.
- There maybe opportunities to promote further cost reductions and performance improvements within the distribution sector as there is continued evolution of the regulatory framework in Ontario.
  - Tightening LDC requirements may also indirectly incent other desired policy outcomes, such as LDC consolidation and grid modernization to realize further cost reductions.
- ENERGY could help promote or accelerate these efforts by asking the OEB through the LTEP Implementation Directive, s. 35 of the *Ontario Energy Board Act, 1998*, and the 2017 Mandate Letter and other agency business planning processes.
- In addition, further changes to the departure and transfer tax regimes could be considered to provide a further incentive for LDC mergers and acquisitions.

6. Rate Design Initiatives

- OEB continues to move forward with its Regulated Price Plan (RPP) Roadmap:
  - The OEB is undertaking a comprehensive review of the RPP, including exploring the introduction of offering different pricing plan options for customers following the completion of pilot programs in 2018. The plan is expected to be implemented over a 3-5 year period.

- Until new pricing plans are available, the OEB could provide an "opt-in flat rate RPP" structure that could be made available to residential, farm and small business consumers on an interim basis (2-3 years) until a wider range of price plans are available.
- Time-of-Use (TOU) pricing could also be introduced for non-RPP Class B consumers to reduce Global Adjustment (GA) volatility and reduce system costs.

Current TOU	New Flat Rate
On: 18.0 ¢/kWh	11.1 ¢/kWh
Mid: 13.2 ¢/kWh	
Off: 8.7 ¢/kWh	

Considerations

- The OEB has indicated that the option would lead to no overall change in system costs. Consumers with higher peak and mid-peak usage patterns would see a decrease in their electricity bills, while those with higher off-peak usage patterns would see an increase.
  - While the current strong supply conditions may allow for such an RPP structure (i.e., peak demand requirements can be easily met), administrative costs could be high (distributors would need to design/implement an opt-in process and associated billing system on an interim basis).

	Current TOU	New Flat Rate
1) Monthly electricity bill- higher peak and mid-peak usage patterns	$172	$163
2) Monthly electricity bill- higher off-peak usage patterns	$152	$163

***Note:** 1) assumes a consumer consumption pattern of 45%:30%:25% (Off-peak: Mid-peak: On-peak), while 2) assumes consumer consumption pattern of 80%:10%:10% (Off-peak: Mid-peak: On-peak). Estimates are based on OEB's online electricity bill calculator (for Toronto Hydro-November 2016 rates)

6. Rate Design Initiatives (cont'd)

Considerations

- The decision to undertake smart meter investments was partly justified on the basis of TOU pricing. If TOU pricing were to be made optional, some stakeholders could question the rationale for smart meter investments.
  - Rationale for offering a flat rate option could focus on providing customers with choice until new pricing plans are rolled out under the RPP roadmap.

- If a flat rate design is introduced, there could be significant consumer opposition to any return to a mandatory TOU.

- After the interim flat rate period, the OEB could offer a wider range of pricing plans to consumers.
  - As part of its RPP review, the OEB will be running pilots with LDCs to assess customer response to alternative time periods and pricing structures.
  - Learnings from these pilots will help inform potential changes to the RPP. Pilots are expected to be in market May 2017 and run for one year.

- Non-RPP Class B electricity consumers currently pay Global Adjustment (GA) on a volumetric basis. Moving them to TOU would provide an incentive to shift consumption to off-peak periods.
  - Consumers, including manufacturers, who are unwilling to shift would face higher costs and likely not be supportive of the changes.
  - The decision to pursue TOU pricing for non-RPP class B consumers will impact proceeds recycling as there is interplay between the two initiatives.

7. Reduced Cost of OPG Borrowing

- OPG currently borrows for corporate purposes from the OEFC
- Seek to reduce OPG's borrowing costs and pass on savings to ratepayers by:
  - Reducing or removing the spread that OEFC applies to OPG for any new corporate debt; or
  - Allowing OPG to refinance its existing debt at longer maturities through the OEFC in order to take advantage of the current, favourable interest rate environment.
- Assuming the full spread is removed from all OEFC debt, OPG borrowing costs could be reduced by 50-100 basis points, representing annual savings of about $20-$25 million, increasing to $30-$35 million, as OPG's outstanding OEFC debt rises from ~$3.3 billion in 2016 to ~$4.7 billion in 2020.
- OPG could apply to the OEB as part of its current rate application to flow this benefit to ratepayers.

Considerations

- Further work is required to determine potential OPG savings from these initiatives.
- Allowing OPG to refinance would have a negative fiscal impact on the Province.
- Spreads are expected to decline, reducing the relative impact of this change, given lower overall interest rates and reduced volatility.
- Providing OPG with greater access to longer term (20-30 year) debt may also reduce costs:
  - OPG's average term to maturity for OEFC debt is 5.7 years, as compared to 22.2 years for privately financed project debt. This contrasts with most corporations and government which have been working to extend average debt terms in order to take advantage of the low interest rate environment.
  - Longer terms would also better match to the life of OPG's assets.
  - Recently, OEFC has allowed OPG to apply for 50% of its financing requirements in the form of longer term (25-30 year debt). Moving closer to 100% would accelerate this transition.

8. End DRC Early for Commercial/Small Industrial Class B Electricity Consumers

- Propose to remove the $0.07/kWh Debt Retirement Charge (DRC) from the bills of commercial/small industrial Class B consumers beginning in 2017, instead of April 1, 2018.
  - **Note:** Class A consumers (e.g., large industrial) would continue to pay DRC until at least April 1, 2018.

Considerations

- For a Class B consumer currently paying about $152/MWh, removing the DRC would represent a savings of about 5%.
  - A 50% reduction in the DRC charge would represent a savings of about 2%.

- Alternatively, the reduction of the DRC could be to $0.035/kWh starting in 2017, to provide relief for cap and trade until proceeds recycling is fully operational.

- Residential consumers have had the DRC removed from bills since January 1, 2016. Taking DRC off commercial and small industrial bills would result in equal treatment for these groups of consumers.

- The savings for commercial and small industrial consumers associated with this proposal would drop to zero in April 2018, since this is the current planned date for removing the DRC from non-residential bills.

- Prior to moving forward with this proposal, additional analysis from Legal Services and the MOF would be needed.

9. Dedicate Departure Tax

- In connection with the IPO, as a result of leaving the PILs regime and entering the corporate tax regime, Hydro One was deemed to dispose of its assets for proceeds equal to its fair market value, triggering a PILs liability of $2.6 billion (Departure Tax).
- This was paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt.
- The Province could explore repurposing some of those funds to the benefit of ratepayers.
- This may reduce the risk that the Ontario Energy Board (OEB) assigns to ratepayers the benefit from an associated tax asset, resulting in lower earnings and decreased share value for Hydro One. This decision is currently before the OEB, as part of Hydro One's Transmission rate application.

Considerations

- Cost savings to ratepayers would depend on timing and which ratepayers (e.g., Hydro One customers, or all Ontario customers) will benefit from some or all of the $2.6 billion value.
- While this is a shift from messaging that value from the broadening of ownership of Hydro One is being used pay down debt and fund transit and transportation, the Province could link to electricity infrastructure investments (e.g., as an offset to infrastructure investments already made in the sector, or to specific initiatives such as conservation).
- These funds were paid to the Ontario Electricity Financial Corporation (OEFC), to be dedicated towards repayment of electricity sector stranded debt. Repurposing may have an impact on the defeasance of this debt.

10. Cancel/Adjust Renewable Energy Procurements

- The Ministry could consider the following actions to further mitigate future impacts to electricity bills:

Unallocated/Terminated Capacity	Announced Procurements	Executed Contracts
A. Do not procure unallocated or terminated capacity	B. Revise FIT 5 target	D. Cancel LRP I contracts
	C. Cancel FIT 6	

Overarching Considerations

- Cost savings associated with reducing or cancelling renewable energy procurements and programs will not reduce current electricity bills, but would result in future cost reductions relative to Ontario Planning Outlook forecasts.
- The IESO estimates implementing options A to C will reduce system costs by approximately $592 million ($2016) between 2019 and 2028, resulting in an average of approximately $0.50/month in savings to a typical residential electricity bill over the same period. [cost reductions from LRP I contract cancellations TBC]
- The microFIT program is winding down end of 2017. Annual microFIT procurement targets have been undersubscribed.
- With a few exceptions (e.g., rollover of unallocated microFIT capacity; addition of terminated microFIT and small FIT capacity to FIT 5), plans for unallocated or terminated capacity are not defined in announcements or existing directions.

Cancel/Adjust Announced Procurements

- Amendments to existing directions to the IESO would be required to reduce FIT 5 and cancel FIT 6.
- The FIT 5 procurement is underway with a base target of 150 MW and inclusion of any capacity available from contract terminations under prior small FIT and microFIT procurements. The application window closed on November 25, 2016.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts

Cancel Existing LRP I Contracts

- 16 LRP I contracts (approx. 455 MW) have been executed and projects are under development.
- None have met Key Development Milestones. Total value of LRP I estimated at approx. $1 billion (NPV to 2016).

[Placeholder for IESO: Cost calculation relative to OPO and associated bill impact]

Considerations

- To help inform a decision, IESO or OEB could be asked to evaluate and provide guidance to the Ministry on the system need for LRP I projects and potential ratepayer impacts/benefits.
- 13 of 16 LRP I contracts have Indigenous participation. Cancelling LRP I contracts would remove this economic development opportunity and likely damage relationships between Indigenous communities and the government.
- LRP I Contract includes an “Optional Termination” provision allowing IESO to terminate any contract prior to the “Commercial Operation Date” with 6 months written notice.
- The IESO obligations under the Optional Termination provision depend on whether the project has met all “Key Development Milestones”.
  - As no projects have met their Key Development Milestones, the estimated total cost payable to contract holders is about $8 million.

10. Cancel/Adjust Renewable Energy Procurements – Existing Contracts (cont'd)

Legal Analysis

- Under the *Electricity Act, 1998*, the Minister has the authority to amend previous directions without approval from Cabinet. Although an amendment to an existing direction would not require Cabinet approval, it is unlikely that a direction to cancel LRP I contracts could be considered as amending an existing direction. The previous LRP directions set out the broad policy framework that was reflected in the procurement, but the contracts themselves, once executed, are stand alone documents which the IESO had legal authority to execute. Revoking previous LRP directions does not affect that authority or have the effect of cancelling the procurement.
- As a result, any new directive to cancel LRP I contracts would need to be approved by Cabinet, either as part of an LTEP implementation directive to IESO, or pursuant to the overall power to direct IESO with respect to procurements outside the LTEP process. However, there is a risk that such a directive could be subject to challenge.
- ENERGY has previously received advice that there is a high risk that a court would conclude that the Minister has no authority under the *Electricity Act , 1998* to issue a direction requiring IESO to terminate microFIT Conditional Offers and FIT Offer Notices that have already been issued to applicants, because these offers create vested contractual rights and the Minister would require clear legislative authority to interfere with those rights. This reasoning would likely apply equally to any direction or directive to IESO to cancel LRP I contracts.
- Previous advice has also flagged a moderately high risk that the Province could be liable for damages in tort for inducing a breach of contract if it issues a direction to IESO that interferes with vested contractual rights without clear statutory authority to do so. LRP I contract holders could also assert other claims, such as misfeasance in public office.
- The risk and costs associated with potential law suits resulting from the cancellation of contracts requires further analysis, including analysis of whether any statutory amendments would be required to provide clear authority to cancel the contracts. LSB recommends ENERGY seek an opinion from Crown Law Office Civil before proceeding.

Summary

- Reductions in electricity rates could be achieved by eliminating existing, planned or directed initiatives from the rate-base or shifting these costs to the tax-base.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

Appendix

Electricity Consumer Classes

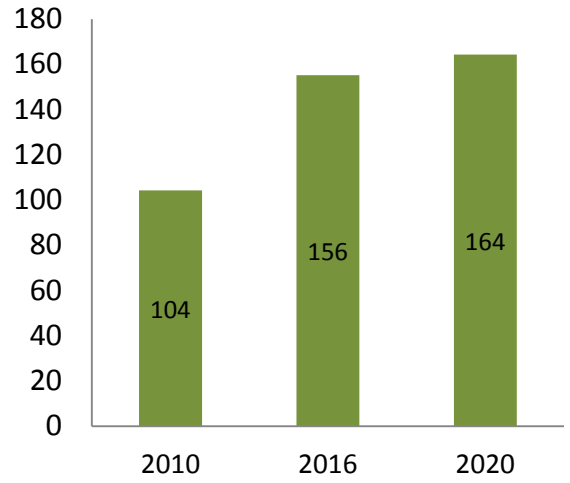
- In Ontario, there are three classes of electricity consumers:

	Regulated Price Plan	Class B	Class A
Consumer Types	• Residential • Small Business • Farms	• Commercial • Institutional • Small industrial	• Large commercial • Large industrial
Load Size	Below 0.05 MW	Between 0.05 MW and 1 MW	Above 1 MW
Total Consumption	58 TWh	57 TWh	26 TWh
Share of Consumption	41.1%	40.4%	18.4%

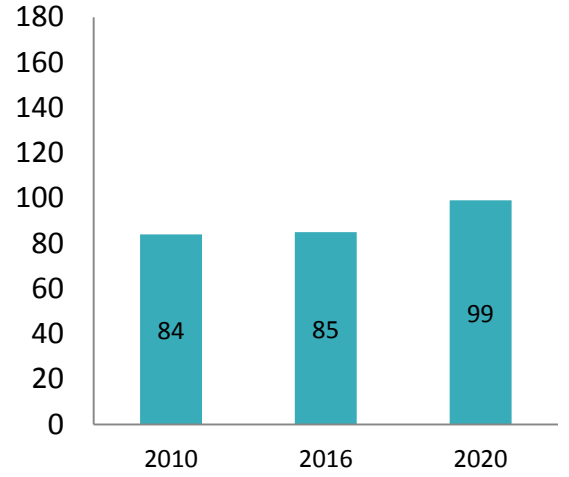
Prices by Electricity Consumer Class

- Since 2010, average bills for residential consumers (i.e., using 750 kWh/month) have increased by over 50%. Rates are forecast to continue to increase, with residential consumers paying an estimated 6% by 2020.
- Industrial electricity rates have remained relatively flat over the same time period, due primarily to the Industrial Conservation Initiative (ICI). ICI represents a cost shift of about $5/month for residential electricity consumers. Industrial electricity consumers are forecast to see an increase of 16% by and 2020.

Typical Residential Bill (750/kWh per month)



Typical Class A (Industrial) Price ($/MWh)



Note: 2016 represents year-to-date September 2016 for industrial. Cap and trade proceeds recycling is included for the industrial consumer for 2020.

Rate Mitigation Levers

- To provide further rate relief to Ontario electricity consumers, the government can use one or more of the levers outlined below:
  - **Tax-based Lever:**
    - Provide rebates funded from the tax-base or transfer items currently paid through the rate-base to the tax-base.
  - **Rate-based Lever:**
    - Shifts costs within the rate-base from one customer group to another to achieve electricity system benefits and/or policy goals.
  - **Cap and Trade Proceeds Lever:**
    - Use cap and trade proceeds on initiatives that help reduce greenhouse gas (GHG) emissions from the electricity sector (e.g., recycling proceeds during off-peak periods) while providing benefits to some or all electricity consumers.

Traditional Rate Mitigation Programs

- Ontario has implemented a number of rate-based programs to help residential and industrial electricity consumers:
  - The Ontario Electricity Support Program (OESP) provides ongoing assistance directly on the bills of eligible low-income electricity consumers
  - The Rural or Remote Rate Protection (RRRP) program is provided to rural and remote residential and farm customers because the cost of distributing power to remote areas is much higher than for urban areas.
  - The Industrial Conservation Initiative (ICI) encourages Ontario's largest consumers to reduce consumption during peak periods while reducing system costs.
- There are also tax-base programs to help manage electricity prices:
  - Rebate the provincial portion of the HST from the electricity bills of residential, small business and farms as of January 1, 2017.
  - Northern Industrial Electricity Rate Program (NIERP), in which participants receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 20%.
- While rate-based programs provide relief to certain electricity consumers, they shift other costs to remaining ratepayers (See Appendix for additional details).

Driving Down Prices for Consumers

- Since 2013, a number of actions have been taken to drive down prices for consumers wherever possible:
  - Renegotiating the Green Energy Investment Agreement, reducing contract costs by $3.7 billion;
  - Deferring the construction of two new nuclear reactors at Ontario Power Generation's Darlington facility, avoiding an estimated $15 billion in new construction costs;
  - Approving Ontario Power Generation's plans to enable the ongoing operation of Pickering up to 2024, which is expected to save ratepayers as much as $600 million;
  - Reducing Feed-In-Tariff (FIT) prices through annual price reviews, saving ratepayers at least $1.9 billion relative to the 2013 Long-Term Energy Plan (2013 LTEP) forecast; and
  - Suspending the second round of the Large Renewable Procurement (LRP II) process and the Energy-from-Waste Standard Offer Program to save up to $3.8 billion in electricity system costs relative to 2013 LTEP.

Cost Shifts in the Electricity Sector – Current Programs

- Several programs in the electricity sector “shift costs” from one group of electricity consumers to another:
  - **Rural or Remote Rate Protect** (**RRRP)** is a longstanding program that reduces the delivery charge for rural electricity consumers and is paid for by all consumers in Ontario through a regulatory charge on bills.
  - **Ontario Electricity Support Program (OESP)** is funded via a regulatory charge on consumer bills and provides support for qualifying low income electricity consumers.
  - **Industrial Conservation Initiative (ICI)** empowers large consumers to lower their costs by reducing their demand during peak hours. In the process, ICI shifts costs from large electricity consumers to all other consumers in Ontario.
  - **Industrial Electricity Incentive** (**IEI**) program, offers reduced electricity prices for companies starting or expanding operations in Ontario. All electricity consumers in Ontario pay for the price reduction that IEI participants receive.

Cost Shifts in the Electricity Sector (Cont'd)

- The tables on the right show the estimated cost shifts that result from existing government programs.
- ICI has had the largest cost shift of all the programs, due to the large size of Global Adjustment (GA) and the way that it is recovered from consumer classes.
- RRRP and OESP impact the regulatory line on consumer bills, while ICI, IEI and conservation affect GA (i.e., Electricity line on bills of Regulated Price Plan consumers).

Cost Shift Impacts - Residential Bill

Typical 750 kWh/month Toronto Hydro consumer

$/month	2011	2012	2013	2014	2015	2016
ICI	2.65	3.25	3.88	3.53	4.75	4.77
RRRP	0.90	0.82	0.84	0.92	0.93	0.94
OESP	-	-	-	-	-	0.84
Conservation	1.85	1.92	2.00	1.58	2.43	2.45
IEI	-	-	0.08	0.09	0.11	0.12
Total	**5.41**	**5.99**	**6.81**	**6.13**	**8.21**	**9.12**

Cost Shift Impacts - Industrial Bill

Typical Class A consumer

$/MWh	2011	2012	2013	2014	2015	2016
ICI	-22.17	-26.36	-30.29	-25.91	-33.79	-33.92
RRRP	1.20	1.10	1.12	1.23	1.24	1.25
OESP	-	-	-	-	-	1.13
Conservation	1.53	1.59	1.66	1.31	2.01	2.02
IEI	-	-	0.07	0.08	0.09	0.10
Total	**-19.43**	**-23.67**	**-27.44**	**-23.29**	**-30.45**	**-29.43**

Note: OESP did not come into effect until 2016. The 2016 values represent forecasts and are subject to change.

Cost Shifts in the Electricity Sector (Cont'd)

- The table on the right shows the total cost for various government electricity programs. These programs are currently funded through the electricity system ratebase.

- Funding of these programs through the fiscal plan would remove these costs from the electricity system (i.e., Placing these costs on the taxbase).

Cost of Programs

By government program

$M	2011	2012	2013	2014	2015	2016
ICI	506	615	736	670	890	893
RRRP	172	156	159	176	174	176
OESP	-	-	-	-	-	158
Conservation	329	339	354	280	425	428
IEI	-	-	15	16	18	19

- For example, removing the roughly $900 million of program cost from the Industrial Conservation Initiative (ICI) program would save the typical residential electricity consumer $4.77 per month in 2016.

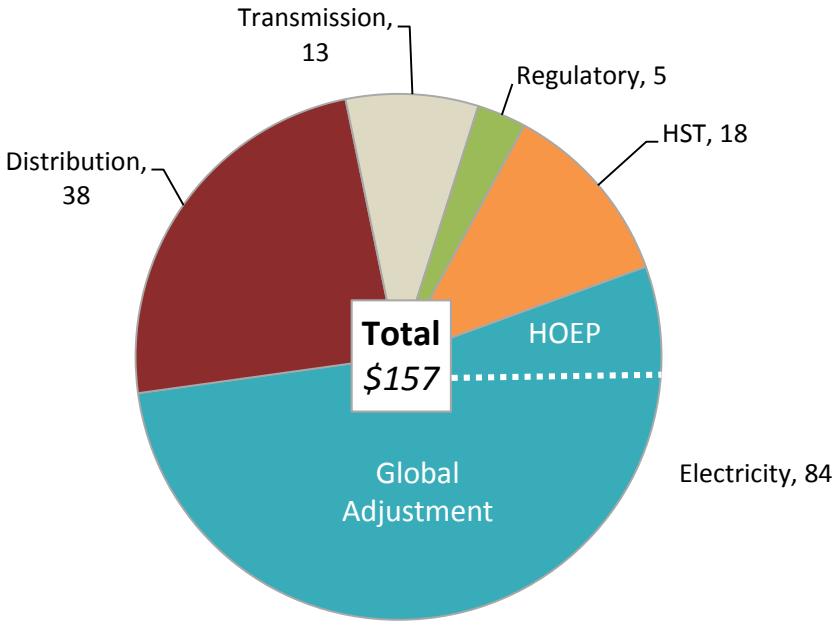
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Residential Electricity Prices

- There are approximately 4.5 million residential consumers in Ontario.
- The Regulated Price Plan includes nearly all residential consumers, as well as small businesses. Regulated Price Plan consumers pay a blended commodity rate regulated by the OEB, which is set every six months.
- For households, the Debt Retirement Charge (DRC) was removed from residential electricity bills as of January 1, 2016.
- In addition, the Ontario Electricity Support Program (OESP) provides an ongoing rate reduction directly on the bills of low-income electricity consumers who have applied and meet the eligibility requirements. The program is funded through the rate base.
- Rural customers, in particular those with electrical heating, pay higher monthly bills.

Typical Residential Monthly Bills ($)

As of November 1, 2016 (750 kWh/month)



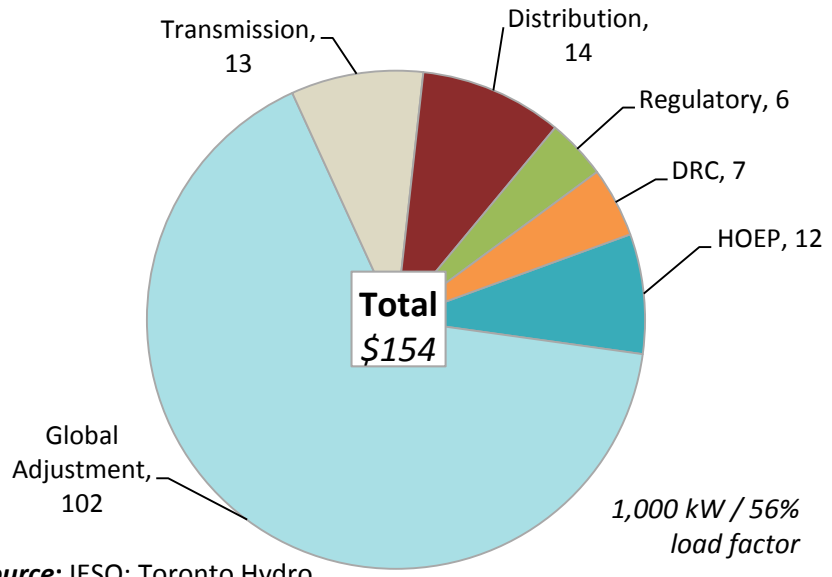
***Source*:** OEB, Toronto Hydro

Commercial Electricity Prices

- There are approximately 55,000 commercial and institutional consumers in the province. These consumers are Class B consumers, and have separate line items on the electricity bill for HOEP and GA.
- There is a high degree of differentiation amongst consumers within the commercial sector in terms of size and consumption patterns. For example, an elementary school has a much different hourly load profile compared to a full service restaurant. This is an important consideration when looking at the bill impacts of policy options.

Typical Commercial Price ($/MWh)

YTD June 2016 (Non-RPP Class B)



***Source*:** IESO; Toronto Hydro

- Consumers in the commercial sector do not pay time-of-use prices and have little incentive to shift demand away from high demand hours.
- Targeted pricing programs are currently not available for Class B consumers.

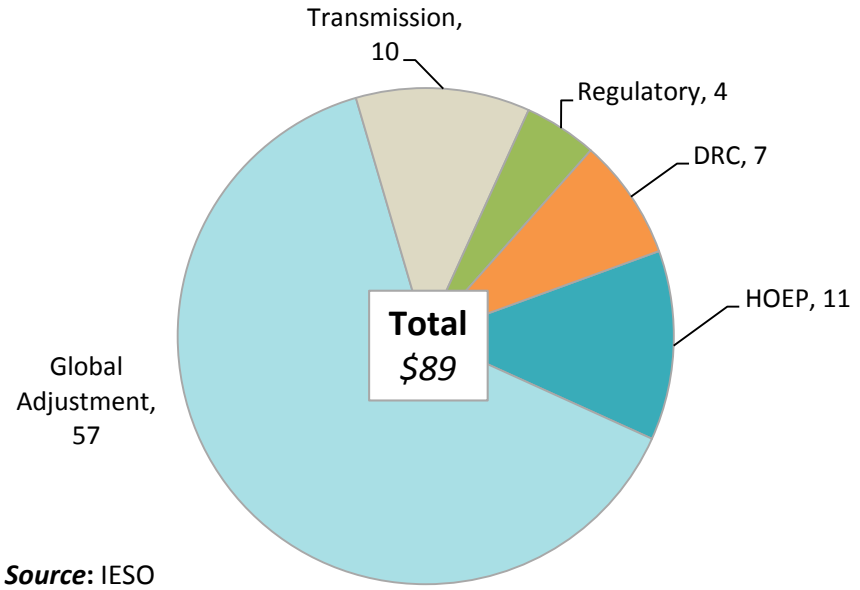
*** Note**: Most commercial consumers receive input tax credits for their HST.

Industrial Electricity Prices

- There are about 300 large industrial consumers in Ontario.
- Measures in place to mitigate industrial electricity prices include ICI and NIERP.
- ICI lowers costs for eligible large electricity consumers (i.e., those with monthly peak demand exceeding 3 MW) that reduce consumption during peak periods.
  - ICI consumers reduce their electricity rates by 25% on average.

Typical Large Industrial Price ($/MWh)

YTD June 2016



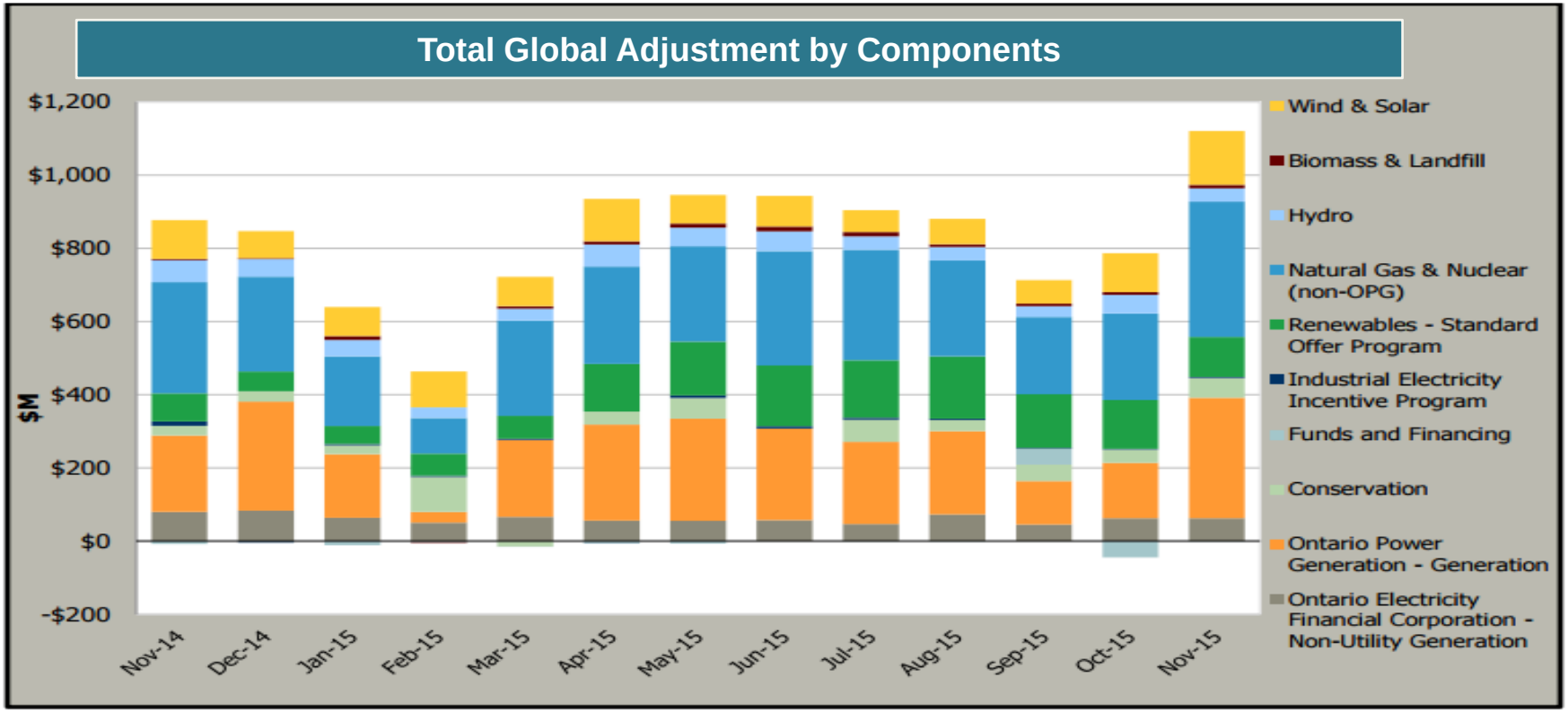
***Source*: IESO**

- Participants in NIERP receive a rebate of $20/MWh. On average, industrial electricity prices are reduced by about 20% through the program, reducing all-in prices to $69/MWh for these consumers. The program is funded through the tax base.

*** Note:** Industrial consumers receive input tax credits for their HST.

Total Components of Global Adjustment

- Global Adjustment (GA) is a market mechanism that recovers costs from electricity consumers, including the cost of almost all conservation programs in the province (i.e., approximately half a billion dollars in 2016).



Source: IESO Monthly Market Report (November 2015)

Cancel/Adjust Renewable Energy Procurements

LRP I Pre-Construction Liability Limits

- All 16 successful LRP I developers accepted Optional Termination Provisions when the LRP I Contracts were executed in April 2016.
- If IESO chooses to enact the Optional Termination provision before a project has met all Key Development Milestones, IESO is required to pay pre-construction development costs up to the Pre Construction Liability Limit.
- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred.
- The Pre Construction Liability Limits are:
  - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity
  - Waterpower: $500,000 plus $20.00/kW of Contract Capacity
  - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity
- According to the LRP I Optional Termination provision, the developer has a duty to take reasonable steps to mitigate losses, liabilities, costs and damages incurred as a result of the Optional Termination.
  - The IESO will not provide compensation for amounts which are attributable to a developer's failure to take reasonable steps to mitigate.

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Electricity Price Mitigation

Corporate and Electricity Finance Division
December 7, 2016

General Comments on Energy's Deck

- The Energy proposals may be seen as having a fairly limited impact, e.g., a little over $8/month for residential, or a little over 5% of the monthly bill.
  - The proposals would have a significant fiscal cost.
- There is already significant amounts of existing electricity price mitigation that has a fiscal impact (averaging over $1.5 billion per year over the past five years, and estimated to increase to about $2 bn in 17-18 (see following slide for estimated costs over time, and likely increasing over time).
  - That is not presented in Energy's deck.
  - Also not included is any "hidden" price mitigation through constrained financial performance of, e.g., OPG.
- Energy is proposing additional electricity price mitigation programs, currently funded through the electricity system, be fiscally-funded, with an estimated impact of about $0.4 billion initially, and rising over time.
  - This includes shifting the cost of the Ontario Electricity Support Program (OESP) and the Rural or Remote Electricity Rate Program (RRRP) to the tax base.
  - Note that the fiscal exposure is larger if the OESP take up rate is larger, faster than assumed.

General Comments on Energy's Deck (cont.)

- Industrial Conservation Initiative (ICI): Energy also presents as a residential mitigation measure the cancellation of the ICI.
  - Energy is not initially proposing it continue as taxpayer funded, but notes the about 30% price increase for the large Class A customers benefiting from ICI currently (at a cost shift of about $900 million per year).
  - This cost is for 2016, prior to the planned expansion of the ICI, which could further increase the fiscal exposure.
- Departure Tax:
- Other fiscal cost risks include amortisation of conservation costs also poses a fiscal risk (about $0.4 bn/yr), and a lowering of the debt interest paid by OPG.

Electricity Price Mitigation

General Decision Points on Program Features:

- Funding: Rate base vs Tax base
  - Tax base programs have a direct fiscal impact on the Province's finances, and shift costs based on taxpayer incidence and impact on expenditure room for other, non-electricity, programs.
  - Rate base programs shift costs from one group of ratepayers to another.
- On-bill vs Not On-bill
  - Recent focus has been on on-bill programs, such as OESP and OREC.
  - Older tax-base funded programs that are not visible on the bill are still in place, such as NOEC and OEPTC.
  - As OESP enrollment increases, could consider phasing out the non-bill benefits of NOEC and OEPTC.
- Targeted vs General
  - Recent new programs include both general (OREC) and targeted (OESP) programs.
  - Consideration could be made to make OREC more conservation-friendly (e.g., a monthly eligible consumption cap brought in, as with the former Ontario Clean Energy Benefit), and maybe a higher cap in the winter to allow for space heating costs.
  - A targeted industrial program recently extended and made on-going is the Northern Industrial Electricity Rate (NIER) program.

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Context: Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,100*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,005**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* * Sourced from Energy PRRT submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.1 billion.

Fiscal Mitigation Options

- With the addition of recent and new price mitigation measures, a review should be initiated on fiscally-funded programs. There could be a phase down / out transition period considered. Examples include the following:

- Ontario Energy and Property Tax Credit (OEPTC) and Northern Ontario Energy Credit (NOEC):
  - Phase down and/or out the non-on-bill benefits of. (Save up to about $460 M/yr)
- Ontario Rebate for Electricity Consumers (OREC):
  - Introduce over time a monthly eligible consumption cap, with perhaps a higher cap in the winter to allow for space heating costs.
- Greenhouse Gas Reduction Account:
  - If ICI is put on the tax-base, make it eligible for GGRA funding.
  - Positioned as, e.g., providing annual benefits from participants conserving and shifting off-peak to reduce reliance on GHG-emitting peaking plants

Appendix

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Background on Taxpayer-funded Electricity Price Mitigation

Program	Annual Fiscal Impacts ($M)	Date	Details
Ontario Clean Energy Benefit (OCEB)	~1,000	Jan 1 2011 to Dec 31, 2015	OCEB provided over four million residential customers, and over 400,000 farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax. Effective September 1, 2012, 10 per cent benefit was capped for the first 3,000 kWh of electricity consumed per month. OCEB expired December 31, 2015, as legislated.
Removed Debt Retirement Charge (DRC) from Residential Bills	~330	Jan 1, 2016 to Mar 31, 2018	The government removed the DRC from residential electricity users' bills as of January 1, 2016. This is saving a typical residential user about $70 each year and meant ending the DRC earlier for these users than otherwise provided for in the *Electricity Act, 1998*.
Ontario Rebate for Electricity Consumers (OREC)	~1,200	Jan 1, 2017 onward	This ongoing program will rebate -- directly on consumers' residential electricity bills -- an amount equal to the provincial portion of the Harmonized Sales Tax (HST).
Northern Industrial Electricity Rate (NIER) Program	120	March 2010	As announced in Budget 2015, the government committed to ongoing support for northern industrials with $120 million allocated annually. NIER was previously extended in 2012 for an additional three-year term, effective April 1, 2013 and also for a year effective April 1, 2016, with an allocation up to $120 million per year. Qualifying participants receive a rebate of two cents per kilowatt-hour (kWh) up to a maximum of $20 million per year per company. NIER initially established as a three-year program in Budget 2010, effective April 1, 2010.
Northern Ontario Energy Credit	~25	Budget 2010	Delivered as part of the Ontario Trillium Benefit, provides individuals living in northern Ontario with a credit of up to $146 per year for the 2016 benefit year, and families up to $224.[1]
Ontario Energy Property Tax Credit	~445[1]	Budget 2010	Delivered as part of the Ontario Trillium Benefit, energy portion provides up to $224 per year (inflation adjusted) for low-to moderate-income individuals and families, and for qualifying seniors.[1]

1. Energy portion cost only. Both the energy portion of the Ontario Energy and Property Tax Credit (OEPTC) and NOEC were introduced/enhanced following the introduction of the HST and have a significant annual fiscal cost (totalling about $500 million annually).

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Timeline: Taxpayer-funded Electricity Price Mitigation

Budget 2010: OEPTC, NOEC Proposed as part of the Ontario Trillium Benefit

In the 2011 Budget, the government combined the payments of three existing tax credits — the Ontario Sales Tax Credit, the Ontario Energy and Property Tax Credit, and the Northern Ontario Energy Credit — to create the OTB. The OTB is paid in monthly instalments throughout the year, which helps people meet their expenses as bills arrive.

Ontario Clean Energy Benefit (Jan 1 2011 to Dec 31 2015)

The OCEB was introduced in the 2010 Ontario Economic Outlook and Fiscal Review to help consumers transition to a cleaner electricity system. As set out in legislation, the OCEB ended on December 31, 2015. The Province has introduced rate mitigation measures to be implemented after December 31, 2015.

OCEB provided over four million residential customers, and over 400,000 farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax, for the first 3,000 kilowatt-hours (kWh) of monthly electricity consumption.

Removing DRC from Residential Bills (Jan 1 2016 to Mar 31 2018)

The government removed the DRC from residential electricity users' bills beginning on January 1, 2016. This saves a typical residential user about $70 each year and ends the DRC earlier for these users than otherwise provided for in the Electricity Act, 1998.

Ontario Rebate for Electricity Consumers

As of January 1, 2017, OREC will reduce electricity costs by an amount equal to the provincial portion of the HST for about five million residential consumers, farms and small businesses.

2010 2011 2012 2013 2014 2015 2016 2017

History of Northern Industrial Electricity Price Relief

November 2006

The Ontario government announced the Northern Pulp and Paper Electricity Transition Program (NPPETP), a three-year $140 million, to be effective retroactively to October 1, 2006

Budget 2009

The government announced extension of the NPPETP by one year providing about $58 million with electricity price rebates of 1.8 cents/kWh.

Budget 2010

NIER program announced, with a projected fiscal cost of $150 M per year, to provide electricity price rebates for qualifying large industrial facilities in northern Ontario. An additional $21.8 million allocated for existing NPPETP in 2010-11 to be integrated with NIER.

September 2010

Transition from NPPETP to NIER: pulp and paper mills participating in NPPETP continued to receive the NPPETP rebate of 1.8 cents/kWh until September 30, 2010, with those qualifying for NIER receiving a top-up rebate of 0.2 cents/kWh.

December 2012

The government announced the extension of the NIER for three years, capping the rebates to a maximum of 2011-12 consumptions levels or $20 million, whichever is lower.

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Potential Fiscal Impact to the Electricity Sector

- The electricity sector has a significant impact on the Province's fiscal position; through both the revenue and expense sides of the Province's fiscal position.
  - Electricity Rate mitigation programs funded through the tax base have a direct fiscal impact on the Province's finances.
  - Alternatively, electricity rate mitigation programs funded by the rate base shift costs from one group of ratepayers to another.
- The Province's electricity sector agencies and corporations are each consolidated into the government's financial statements, and directly affect the Province's surplus/deficit position.
  - Ontario Power Generation (OPG) financial results have a dollar-for-dollar impact on the Province.
    - Electricity price mitigation strategies involving OPG would lead to a direct fiscal impact.
  - Hydro One financial results have a direct impact on the Province, based on the Province's proportionate ownership.
    - The Province currently holds about 70 per cent of Hydro One.

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Effect of Additional Proposed Taxpayer Funded Electricity Price Mitigation

Proposal	Fiscal Costs ($M)	*Residential* Ratepayer Savings
EXISTING MEASURES		
OREC	1,100	$11/month
NIERP	120	n/a*
NOEC	25	n/a*
OEPTC[3]	460	n/a*
TOTAL Costs from Existing Measures	**1,705**	**11**
PROPOSED MEASURES		
Proposal 2: Fund Electricity Support Programs Through the Tax-Base (OESP, RRRP, First Nations Delivery Rate)	421 (yr 2017-18)**	$2.45/month
Proposal 3: Eliminate the Industrial Conservation Initiative funding from ratebase, and shift to tax base	900	$4/month
Proposal 7: Reduced cost of OPG Borrowing	30-35	$0.18/month
Proposal 8: End DRC Early for Commercial/Small Industrial Class B Electricity Consumers, or DRC reduced to $3.5/MWh	189-378 (yr 2017-18)***	n/a*
TOTAL Costs/Savings from Proposed Measures	1,584 – 1,778	$6.63/month
TOTAL Costs/Savings from All Taxpayer funded Measures	**3,289 – 3,483**	**$17.63/month**

* Costs were not borne by the ratebase.
** Assumes 75%/25% split between 2017 and 2018 costs
*** DRC is removed from all electricity bill by April 1, 2018

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Electricity Price Mitigation

Corporate and Electricity Finance Division
December 7, 2016

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Northern Ontario Energy Credit	~25	Budget 2010	Delivered as part of the Ontario Trillium Benefit, provides individuals living in northern Ontario with a credit of up to $146 per year for the 2016 benefit year, and families up to $224.[1]
Ontario Energy Property Tax Credit	~445[1]	Budget 2010	Delivered as part of the Ontario Trillium Benefit, energy portion provides up to $224 per year (inflation adjusted) for low-to moderate-income individuals and families, and for qualifying seniors.[1]

1. Energy portion cost only. Both the energy portion of the Ontario Energy and Property Tax Credit (OEPTC) and NOEC were introduced/enhanced following the introduction of the HST and have a significant annual fiscal cost (totalling about $500 million annually).

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Timeline: Taxpayer-funded Electricity Price Mitigation

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In the 2011 Budget, the government combined the payments of three existing tax credits — the Ontario Sales Tax Credit, the Ontario Energy and Property Tax Credit, and the Northern Ontario Energy Credit — to create the OTB. The OTB is paid in monthly instalments throughout the year, which helps people meet their expenses as bills arrive.

Ontario Clean Energy Benefit (Jan 1 2011 to Dec 31 2015)

The OCEB was introduced in the 2010 Ontario Economic Outlook and Fiscal Review to help consumers transition to a cleaner electricity system. As set out in legislation, the OCEB ended on December 31, 2015. The Province has introduced rate mitigation measures to be implemented after December 31, 2015.

OCEB provided over four million residential customers, and over 400,000 farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax, for the first 3,000 kilowatt-hours (kWh) of monthly electricity consumption.

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As of January 1, 2017, OREC will reduce electricity costs by an amount equal to the provincial portion of the HST for about five million residential consumers, farms and small businesses.

2010 2011 2012 2013 2014 2015 2016 2017

History of Northern Industrial Electricity Price Relief

November 2006

The Ontario government announced the Northern Pulp and Paper Electricity Transition Program (NPPETP), a three-year $140 million, to be effective retroactively to October 1, 2006

Budget 2009

The government announced extension of the NPPETP by one year providing about $58 million with electricity price rebates of 1.8 cents/kWh.

Budget 2010

NIER program announced, with a projected fiscal cost of $150 M per year, to provide electricity price rebates for qualifying large industrial facilities in northern Ontario. An additional $21.8 million allocated for existing NPPETP in 2010-11 to be integrated with NIER.

September 2010

Transition from NPPETP to NIER: pulp and paper mills participating in NPPETP continued to receive the NPPETP rebate of 1.8 cents/kWh until September 30, 2010, with those qualifying for NIER receiving a top-up rebate of 0.2 cents/kWh.

December 2012

The government announced the extension of the NIER for three years, capping the rebates to a maximum of 2011-12 consumptions levels or $20 million, whichever is lower.

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Potential Fiscal Impact to the Electricity Sector

- The electricity sector has a significant impact on the Province's fiscal position; through both the revenue and expense sides of the Province's fiscal position.
  - Electricity Rate mitigation programs funded through the tax base have a direct fiscal impact on the Province's finances.
  - Alternatively, electricity rate mitigation programs funded by the rate base shift costs from one group of ratepayers to another.
- The Province's electricity sector agencies and corporations are each consolidated into the government's financial statements, and directly affect the Province's surplus/deficit position.
  - Ontario Power Generation (OPG) financial results have a dollar-for-dollar impact on the Province.
    - Electricity price mitigation strategies involving OPG would lead to a direct fiscal impact.
  - Hydro One financial results have a direct impact on the Province, based on the Province's proportionate ownership.
    - The Province currently holds about 70 per cent of Hydro One.

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Electricity Price Mitigation

Corporate and Electricity Finance Division
December 7, 2016

General Comments on Energy's Deck

- The Energy proposals may be seen as having a fairly limited impact, e.g., a little over $8/month for residential, or a little over 5% of the monthly bill.
  - The proposals would have a significant fiscal cost (about $1.5 billion per year).
- There is already significant amounts of existing electricity price mitigation that has a fiscal impact (averaging over $1.5 billion per year over the past five years, and estimated to increase to about $2 bn in 17-18 (see following slide for estimated costs over time, and likely increasing over time).
  - That is not presented in Energy's deck and would take the total contributions from the tax base to about $3.5 billion per year.
  - Also not included is any "hidden" price mitigation through constrained financial performance of, e.g., OPG.
- Energy is proposing additional electricity price mitigation programs, currently funded through the electricity system, be fiscally-funded, with an estimated impact of about $0.4 billion initially, and rising over time.
  - This includes shifting the cost of the Ontario Electricity Support Program (OESP) and the Rural or Remote Electricity Rate Program (RRRP) to the tax base.
  - Note that the fiscal exposure is larger if the OESP take up rate is larger, faster than assumed.

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General Comments on Energy's Deck (cont.)

- Industrial Conservation Initiative (ICI): Energy also presents as a residential mitigation measure the cancellation of the ICI.
  - Although Energy is not initially proposing the program to be ~~it~~ continue as taxpayer funded, but notes the about 30% price increase for the large Class A customers benefiting from ICI currently (at a cost shift of about $900 million per year) would see an increase of about $20 per MWh.
  - This cost is for 2016, prior to the planned expansion of the ICI, which could further increase the fiscal exposure.
- Departure Tax:
- Other fiscal cost risks include amortisation of conservation costs also poses a fiscal risk (about $0.4 bn/yr), and a lowering of the debt interest paid by OPG.

Electricity Price Mitigation

General Decision Points on Program Features:

- Funding: Rate base vs Tax base
  - Tax base programs have a direct fiscal impact on the Province's finances, and shift costs based on taxpayer incidence and impact on expenditure room for other, non-electricity, programs.
  - Rate base programs shift costs from one group of ratepayers to another.
- On-bill vs Not On-bill
  - Recent focus has been on on-bill programs, such as OESP and OREC.
  - Older tax-base funded programs that are not visible on the bill are still in place, such as NOEC and OEPTC.
  - As OESP enrollment increases, could consider phasing out the non-bill benefits of NOEC and OEPTC.
- Targeted vs General
  - Recent new programs include both general (OREC) and targeted (OESP) programs.
  - Consideration could be made to make OREC more conservation-friendly (e.g., a monthly eligible consumption cap brought in, as with the former Ontario Clean Energy Benefit), and maybe a higher cap in the winter to allow for space heating costs.
  - A targeted industrial program recently extended and made on-going is the Northern Industrial Electricity Rate (NIER) program.
  - In the past the government applied caps (OCEB) to programs in an effort to focused assistance to those that need it the most or to better align with conservation policy.

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Context: Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,100*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,005**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* * Sourced from Energy PRRT submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.1 billion.

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Proposed Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
OCEB	-	-	-	-	-
OREC	300	1,200*	1,200*	1,200*	1,200*
Ending DRC[2]	330	330	330	330	330
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
TOTAL	**1,195**	**2,105**	**2145**	**2156**	**2156**
1. Electricity Market Renewal Initiative		TBD	TBD	TBD	TBD
2. OESP		106	119	127	132
2. RRRP		292	300	306	315
2. First Nations Delivery Rate		18	18	18	18
3. Fund ICI through Tax Base		900	900	900	900
TOTAL	**1195**	**3,421**	**3,482**	**3,507**	**3,521**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

- As shown above if all measures proposed in this deck were to be accepted taxpayer funded contributions to electricity price mitigation would increase to about $3.5 billion by 2020-21. That is a 67% increase from the current forecast for 2017-18.
- These amounts were not considered in the 2016-17 Fiscal Plan and could put at risk the Province's fiscal objectives for 2017-18 and beyond.



Fiscal Mitigation Options

- With the addition of recent and new price mitigation measures, a review should be initiated on fiscally-funded programs. There could be a phase down / out transition period considered. Examples include the following:

- Ontario Energy and Property Tax Credit (OEPTC) and Northern Ontario Energy Credit (NOEC):
  - Phase down and/or out the non-on-bill benefits of. (Save up to about $460 M/yr)

- Ontario Rebate for Electricity Consumers (OREC):
  - Introduce over time a monthly eligible consumption cap, with perhaps a higher cap in the winter to allow for space heating costs.

- Greenhouse Gas Reduction Account:
  - If ICI is put on the tax-base, make it eligible for GGRA funding.
  - Positioned as, e.g., providing annual benefits from participants conserving and shifting off-peak to reduce reliance on GHG-emitting peaking plants

- The government could explore options to income test programs funded from the tax base to allow a better focus on those in need.

Appendix

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Background on Taxpayer-funded Electricity Price Mitigation

Program	Annual Fiscal Impacts ($M)	Date	Details
Ontario Clean Energy Benefit (OCEB)	~1,000	Jan 1 2011 to Dec 31, 2015	OCEB provided over four million residential customers, and over 400,000 farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax. Effective September 1, 2012, 10 per cent benefit was capped for the first 3,000 kWh of electricity consumed per month. OCEB expired December 31, 2015, as legislated.
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1. Energy portion cost only. Both the energy portion of the Ontario Energy and Property Tax Credit (OEPTC) and NOEC were introduced/enhanced following the introduction of the HST and have a significant annual fiscal cost (totalling about $500 million annually).

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Timeline: Taxpayer-funded Electricity Price Mitigation

Budget 2010: OEPTC, NOEC Proposed as part of the Ontario Trillium Benefit

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OCEB provided over four million residential customers, and over 400,000 farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax, for the first 3,000 kilowatt-hours (kWh) of monthly electricity consumption.

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As of January 1, 2017, OREC will reduce electricity costs by an amount equal to the provincial portion of the HST for about five million residential consumers, farms and small businesses.

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The government announced the extension of the NIER for three years, capping the rebates to a maximum of 2011-12 consumptions levels or $20 million, whichever is lower.

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Potential Fiscal Impact to the Electricity Sector

- The electricity sector has a significant impact on the Province's fiscal position; through both the revenue and expense sides of the Province's fiscal position.
  - Electricity Rate mitigation programs funded through the tax base have a direct fiscal impact on the Province's finances.
  - Alternatively, electricity rate mitigation programs funded by the rate base shift costs from one group of ratepayers to another.
- The Province's electricity sector agencies and corporations are each consolidated into the government's financial statements, and directly affect the Province's surplus/deficit position.
  - Ontario Power Generation (OPG) financial results have a dollar-for-dollar impact on the Province.
    - Electricity price mitigation strategies involving OPG would lead to a direct fiscal impact.
  - Hydro One financial results have a direct impact on the Province, based on the Province's proportionate ownership.
    - The Province currently holds about 70 per cent of Hydro One.

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Electricity Price Mitigation

Corporate and Electricity Finance Division
December 7, 2016

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General Comments on Energy's Deck

- Energy's deck note various actions taken to-date to reduce costs or cost pressures, such as deferring generation supply investments, improving market efficiency, and reducing the costs of existing procurements.
- Aside from reducing costs on the electricity bill, it is not clear what principles are being applied, short term or long term for electricity pricing.
  - A principle that was applied in the past was to ensure that electricity consumers paid the true cost of electricity, for example.
  - The Energy proposals appear to be about, in part at least, moving some costs from the rate base to the tax base.
- However, the Energy proposals may be seen as having a fairly limited impact, e.g., a little over $8/month for residential, or a little over 5% of the monthly bill (though not all of the proposals have been costed / assessed).
  - The proposals would have a significant fiscal cost [about $1.5 billion per year in new fiscal costs].
- There is already significant amounts of existing fiscally-funded electricity price mitigation
  - Averages over $1.5 billion per year over the past five years, and estimated to increase to about $2 billion in 17-18 (see subsequent slide for estimated costs over time, and likely increasing over time, with the total tax-base costs rising to about $3.5 billion.
  - These existing mitigation costs are not presented in Energy's deck.
  - Also not included is any "hidden" price mitigation through constrained financial performance of, e.g., OPG.

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General Comments on Energy's Deck (cont.)

- Energy is proposing additional electricity price mitigation programs, currently funded through the electricity system, be fiscally-funded, with an estimated impact of about $0.4 billion initially, and rising over time.
  - This includes shifting the cost of the Ontario Electricity Support Program (OESP) and the Rural or Remote Electricity Rate Program (RRRP) to the tax base.
  - Note that the fiscal exposure is larger if the OESP take up rate is larger, faster than assumed.

- Industrial Conservation Initiative (ICI): Energy also shows, as a potential residential price mitigation measure, the cancellation of the ICI.
  - Energy is not initially proposing it be continued instead as taxpayer funded, but notes the about 30% price increase (from $85/MWH to $110), if ICI is cancelled, for the large Class A customers benefiting from ICI currently (at a cost shift of about $900 million per year in 2016).
  - As this cost estimate is for 2016, prior to the planned expansion of the ICI, this could further increase the fiscal exposure by about $100 million).

- Departure Tax: As a result of the IPO, Hydro One paid a "departure tax" payment in lieu of tax (PIL) of $2.6 billion, as a final true-up of its PILs tax obligation.
  - This was paid to the Ontario Electricity Financial Corporation and helped reduce stranded debt.
  - Using some or all of it for price mitigation would change the net stranded debt paydown by OEFC resulting from the IPO. This would also be a one-time measure (potentially over a few years), and fiscal impact, as the departure tax amount was one-time.

- Other fiscal cost risks:
  - Amortisation of conservation costs also poses a fiscal risk (about $0.4 bn/yr),
  - Ending the DRC early for Class B customers (commercial, small industrial) (about $0.4 bn/yr to 2017-18)
  - Lowering of the debt interest paid by OPG (about $30 – 70 million/yr between 2017 and 2021),

Electricity Price Mitigation

General Decision Points on Program Features:

- Funding: Rate base vs Tax base
  - Tax base programs have a direct fiscal impact on the Province's finances, and shift costs based on taxpayer incidence and impact on expenditure room for other, non-electricity, programs.
  - Rate base programs shift costs from one group of ratepayers to another.
- On-bill vs Not On-bill
  - Recent focus has been on on-bill programs, such as OESP and OREC.
  - Older tax-base funded programs that are not visible on the bill are still in place, such as NOEC and OEPTC.
  - As OESP enrollment increases, could consider phasing out the non-bill benefits of NOEC and OEPTC.
- Targeted vs General
  - Recent new programs include both general (OREC) and targeted (OESP) programs.
  - Consideration could be made to make OREC more conservation-friendly (e.g., a monthly eligible consumption cap brought in, as with the former Ontario Clean Energy Benefit), and maybe a higher cap in the winter to allow for space heating costs.
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NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.1 billion.

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Fiscal Mitigation Options

- With the addition of recent and new price mitigation measures, a review should be initiated on fiscally-funded programs. There could be a phase down / out transition period considered. Examples include the following:

- Ontario Energy and Property Tax Credit (OEPTC) and Northern Ontario Energy Credit (NOEC):
  - Phase down and/or out the non-on-bill benefits of. (Save up to about $460 M/yr)
  - These targeted, low-income measures were introduced after the HST was introduced.
  - The OESP provides a larger, targeted and on-bill relief to qualifying consumers.

- Ontario Rebate for Electricity Consumers (OREC):
  - Introduce over time a monthly eligible consumption cap, with perhaps a higher cap in the winter to allow for space heating costs.
  - As with the prior OCEB cap, provides a rough incentive for conservation and correlation to larger homes. A higher cap in winter may help with space-heating issue.
  - May be challenging to implement.

- Greenhouse Gas Reduction Account:
  - If ICI is put on the tax-base, make it eligible for GGRA funding.
  - Positioned as, e.g., providing annual benefits from participants conserving and shifting off-peak to reduce reliance on GHG-emitting peaking plants

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Effect of Additional Proposed Taxpayer Funded Electricity Price Mitigation

Proposal	Fiscal Costs ($M)	*Residential* Ratepayer Savings
EXISTING MEASURES		
OREC	1,100	$11/month
NIERP	120	n/a*
NOEC	25	n/a*
OEPTC[3]	460	n/a*
TOTAL Costs from Existing Measures	**1,705**	**11**
PROPOSED MEASURES		
Proposal 2: Fund Electricity Support Programs Through the Tax-Base (OESP, RRRP, First Nations Delivery Rate)	421 (yr 2017-18)**	$2.45/month
Proposal 3: Eliminate the Industrial Conservation Initiative funding from ratebase, and shift to tax base	900	$4/month
Proposal 7: Reduced cost of OPG Borrowing	30-35	$0.18/month
Proposal 8: End DRC Early for Commercial/Small Industrial Class B Electricity Consumers, or DRC reduced to $3.5/MWh	189-378 (yr 2017-18)***	n/a*
TOTAL Costs/Savings from Proposed Measures	1,584 – 1,778	$6.63/month
TOTAL Costs/Savings from All Taxpayer funded Measures	**3,289 – 3,483**	**$17.63/month**

* Costs were not borne by the ratebase.
** Assumes 75%/25% split between 2017 and 2018 costs
*** DRC is removed from all electricity bill by April 1, 2018

Appendix

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Background on Taxpayer-funded Electricity Price Mitigation

Program	Annual Fiscal Impacts ($M)	Date	Details
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The government removed the DRC from residential electricity users' bills beginning on January 1, 2016. This saves a typical residential user about $70 each year and ends the DRC earlier for these users than otherwise provided for in the Electricity Act, 1998.

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As of January 1, 2017, OREC will reduce electricity costs by an amount equal to the provincial portion of the HST for about five million residential consumers, farms and small businesses.

2010 2011 2012 2013 2014 2015 2016 2017

History of Northern Industrial Electricity Price Relief

November 2006

The Ontario government announced the Northern Pulp and Paper Electricity Transition Program (NPPETP), a three-year $140 million, to be effective retroactively to October 1, 2006

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The government announced extension of the NPPETP by one year providing about $58 million with electricity price rebates of 1.8 cents/kWh.

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NIER program announced, with a projected fiscal cost of $150 M per year, to provide electricity price rebates for qualifying large industrial facilities in northern Ontario. An additional $21.8 million allocated for existing NPPETP in 2010-11 to be integrated with NIER.

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Transition from NPPETP to NIER: pulp and paper mills participating in NPPETP continued to receive the NPPETP rebate of 1.8 cents/kWh until September 30, 2010, with those qualifying for NIER receiving a top-up rebate of 0.2 cents/kWh.

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The government announced the extension of the NIER for three years, capping the rebates to a maximum of 2011-12 consumptions levels or $20 million, whichever is lower.

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Potential Fiscal Impact to the Electricity Sector

- The electricity sector has a significant impact on the Province's fiscal position; through both the revenue and expense sides of the Province's fiscal position.
  - Electricity Rate mitigation programs funded through the tax base have a direct fiscal impact on the Province's finances.
  - Alternatively, electricity rate mitigation programs funded by the rate base shift costs from one group of ratepayers to another.
- The Province's electricity sector agencies and corporations are each consolidated into the government's financial statements, and directly affect the Province's surplus/deficit position.
  - Ontario Power Generation (OPG) financial results have a dollar-for-dollar impact on the Province.
    - Electricity price mitigation strategies involving OPG would lead to a direct fiscal impact.
  - Hydro One financial results have a direct impact on the Province, based on the Province's proportionate ownership.
    - The Province currently holds about 70 per cent of Hydro One.

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Electricity Price Mitigation

Corporate and Electricity Finance Division
December 7, 2016

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General Comments on Energy's Deck

- Energy's deck note various actions taken to-date to reduce costs or cost pressures, such as deferring generation supply investments, improving market efficiency, and reducing the costs of existing procurements.
- Aside from reducing costs on the electricity bill, it is not clear what principles are being applied, short term or long term for electricity pricing.
  - A principle that was applied in the past was to ensure that electricity consumers paid the true cost of electricity, for example.
  - The Energy proposals appear to be about, in part at least, moving some costs from the rate base to the tax base.
- However, the Energy proposals may be seen as having a fairly limited impact, e.g., a little over $8/month for residential, or a little over 5% of the monthly bill (though not all of the proposals have been costed / assessed).
  - The proposals would have a significant fiscal cost [about $1.3 – 1.9 plus bn per year in new fiscal costs].
- There is already significant amounts of existing fiscally-funded electricity price mitigation
  - Averages over $1.5 billion per year over the past five years, and estimated to increase to about $2 billion in 17-18 (see subsequent slide for estimated costs over time, and likely increasing over time), with the total tax-based costs rising to about $3.3-3.9 plus billion in 2017-18, if Energy`s proposals are adopted.
  - These existing mitigation costs are not presented in Energy's deck.
  - Not included is any "hidden" price mitigation through constrained financial performance of, e.g., OPG.

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Context: Current Status on Taxpayer Funded Electricity Price Mitigation

($M)	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17[1]	2017-18[1]
OCEB	1,033	994	1,006	1,078	860	-	-
OREC	-	-	-	-	-	300	1,100*
Ending DRC[2]	-	-	-	-	85	330	330
NIERP	120	120	115	108	120	120	120
NOEC	23	24	25	24	26	25	25
OEPTC[3]	354	406	418	429	444	450	460
TOTAL	**1,530**	**1,544**	**1,564**	**1,639**	**1,525**	**1,195**	**2,005**

1. 2016-17, 2017-18 based on forecasted numbers
2. 2015-16 estimated for 3 months of reduced DRC revenue
3. OEPTC amounts in all years based on energy component of the rebate.

* Sourced from Energy PRRT submission

OCEB – Ontario Clean Energy Benefit
OREC – Ontario Rebate for Electricity Consumers
DRC – Debt Retirement Charge
NIERP – Northern Ontario Electricity Rate Program
NOEC – Northern Ontario Energy Credit
OEPTC – Ontario Energy and Property Tax Credit

- The table above shows the annual amount of taxpayer funded electricity price mitigation from 2011-12 to 2017-18.
- From 2011-12 to 2015-16 there has been an annual fiscal impact of approximately $1.6 billion due to electricity price mitigation programs.
- In 2016-17, the fiscal impact due to electricity price mitigation programs is estimated at approximately $1.2 billion.
- In 2017-18, due primarily to the start of the Ontario Rebate for Electricity Consumers, the expected fiscal impact due to electricity price mitigation programs is approximately $2.0 billion.

Electricity Price Mitigation

General Decision Points on Program Features:

- Funding: Rate base vs Tax base
  - Tax base programs have a direct fiscal impact on the Province's finances, and shift costs based on taxpayer incidence and impact on expenditure room for other, non-electricity, programs.
  - Rate base programs shift costs from one group of ratepayers to another.
- On-bill vs Not On-bill
  - Recent focus has been on on-bill programs, such as OESP and OREC.
  - Older tax-base funded programs that are not visible on the bill are still in place, such as NOEC and OEPTC.
  - As OESP enrollment increases, could consider phasing out the non-bill benefits of NOEC and OEPTC.
- Targeted vs General
  - Recent new programs include both general (OREC) and targeted (OESP) programs.
  - Consideration could be made to make OREC more conservation-friendly (e.g., a monthly eligible consumption cap brought in, as with the former Ontario Clean Energy Benefit), and maybe a higher cap in the winter to allow for space heating costs.
  - A targeted industrial program recently extended and made on-going is the Northern Industrial Electricity Rate (NIER) program.

Energy's Proposals

Energy is proposing additional electricity price mitigation programs, currently funded through the electricity system, be fiscally-funded. They could be upwards of $2 bn/year, (plus the departure tax), which is not included in the fiscal plan, which would challenge the path to balance.

- OESP & RRRP (Total of about $0.4 Bn/yr): This includes shifting the cost of the Ontario Electricity Support Program (OESP) and the Rural or Remote Electricity Rate Program (RRRP) to the tax base. Note that the fiscal exposure is larger if the OESP take up rate is larger, faster than assumed.

- Industrial Conservation Initiative (ICI -- About $900+ M/yr): Energy also shows, as a potential residential price mitigation measure, the cancellation of the ICI.
  - Energy is not initially proposing it be continued instead as taxpayer funded, but notes that about 30% price increase (from $85/MWh to $110), if ICI is cancelled, for the large Class A customers benefiting from ICI currently.
  - As this cost estimate is for 2016, prior to the planned expansion of the ICI, this could further increase the fiscal exposure by about $100 million).

- Departure Tax: As a result of the IPO, Hydro One paid a "departure tax" payment in lieu of tax (PIL) of $2.6 billion, as a final true-up of its PILs tax obligation.
  - This was paid to the Ontario Electricity Financial Corporation and helped reduce stranded debt.
  - Using some or all of it for price mitigation would change the net stranded debt paydown by OEFC resulting from the IPO. This would also be a one-time measure (potentially over a few years), and fiscal impact, as the departure tax amount was one-time.

- Other fiscal cost risks (Total of about $0.8+ Bn):
  - Amortisation of conservation costs also poses a fiscal risk (about $0.4 bn/yr),
  - Ending the DRC early for Class B customers (commercial, small industrial) (about $0.4 bn/yr to 2017-18)
  - Lowering of the debt interest paid by OPG (about $30 – 70 million/yr between 2017 and 2021),

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Fiscal Mitigation Options

- With the addition of recent and new price mitigation measures, a review should be initiated on fiscally-funded programs. There could be a phase down / out transition period considered. Examples include the following:

- Ontario Energy and Property Tax Credit (OEPTC) and Northern Ontario Energy Credit (NOEC):
  - Phase down and/or out the non-on-bill benefits of. (Save up to about $460 M/yr)
  - These targeted, low-income measures were introduced after the HST was introduced.
  - The OESP provides a larger, targeted and on-bill relief to qualifying consumers.

- Ontario Rebate for Electricity Consumers (OREC):
  - Introduce over time a monthly eligible consumption cap, with perhaps a higher cap in the winter to allow for space heating costs.
  - As with the prior OCEB cap, provides a rough incentive for conservation and correlation to larger homes. A higher cap in winter may help with space-heating issue.
  - May be challenging to implement.

- Greenhouse Gas Reduction Account:
  - If ICI is put on the tax-base, make it eligible for GGRA funding.
  - Positioned as, e.g., providing annual benefits from participants conserving and shifting off-peak to reduce reliance on GHG-emitting peaking plants

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Proposed Taxpayer Funded Electricity Price Mitigation
(To be revised)

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
OCEB	-	-	-	-	-
OREC	300	1,100*	1,100*	1,200*	1,200*
Ending DRC[2]	330	330	--	--	--
NIERP	120	120	120	120	120
NOEC	25	25	25	25	25
OEPTC[3]	450	460	470	481	481
CURRENT TOTAL	**1,195**	**2,005**	**1,715**	**1,826**	**1,826**
1. OESP		106	119	127	132
2. RRRP		292	300	306	315
3. First Nations Delivery Rate		18	18	18	18
4. Fund ICI through Tax Base		900+	900+	900+	900+
5. Departure Tax		TBD	TBD	TBD	TBD
6. Conservation Amortisation		TBD	TBD	TBD	TBD
7. DRC Ended for Class B	110	450			
8. Other		30	45	60	70
TOTAL	1,305	3,901	3,197	3,237	3,261

1. 2016-17, 2017-18 based on forecasted numbers
2. Estimated impact up to March 31, 2018
3. OEPTC amounts in all years based on energy component of the rebate.

- As shown above, if all measures proposed in this deck were to be accepted taxpayer funded contributions to electricity price mitigation would increase to about $3.4 – 3.9 billion in 2017-18. That is a 65-95% increase from the current forecast for 2017-18..
- These amounts were not considered in the 2016-17 Fiscal Plan and could put at risk the Province's fiscal objectives for 2017-18 and beyond.

Appendix

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Background on Taxpayer-funded Electricity Price Mitigation

Program	Annual Fiscal Impacts ($M)	Date	Details
Ontario Clean Energy Benefit (OCEB)	~1,000	Jan 1 2011 to Dec 31, 2015	OCEB provided over four million residential customers, and over 400,000 farm, small business and other small users with a benefit equal to 10 per cent of the total cost of electricity on their bills, including tax. Effective September 1, 2012, 10 per cent benefit was capped for the first 3,000 kWh of electricity consumed per month. OCEB expired December 31, 2015, as legislated.
Removed Debt Retirement Charge (DRC) from Residential Bills	~330	Jan 1, 2016 to Mar 31, 2018	The government removed the DRC from residential electricity users' bills as of January 1, 2016. This is saving a typical residential user about $70 each year and meant ending the DRC earlier for these users than otherwise provided for in the *Electricity Act, 1998*.
Ontario Rebate for Electricity Consumers (OREC)	~1,200	Jan 1, 2017 onward	This ongoing program will rebate -- directly on consumers' residential electricity bills -- an amount equal to the provincial portion of the Harmonized Sales Tax (HST).
Northern Industrial Electricity Rate (NIER) Program	120	March 2010	As announced in Budget 2015, the government committed to ongoing support for northern industrials with $120 million allocated annually. NIER was previously extended in 2012 for an additional three-year term, effective April 1, 2013 and also for a year effective April 1, 2016, with an allocation up to $120 million per year. Qualifying participants receive a rebate of two cents per kilowatt-hour (kWh) up to a maximum of $20 million per year per company. NIER initially established as a three-year program in Budget 2010, effective April 1, 2010.
Northern Ontario Energy Credit	~25	Budget 2010	Delivered as part of the Ontario Trillium Benefit, provides individuals living in northern Ontario with a credit of up to $146 per year for the 2016 benefit year, and families up to $224.[1]
Ontario Energy Property Tax Credit	~445[1]	Budget 2010	Delivered as part of the Ontario Trillium Benefit, energy portion provides up to $224 per year (inflation adjusted) for low-to moderate-income individuals and families, and for qualifying seniors.[1]

1. Energy portion cost only. Both the energy portion of the Ontario Energy and Property Tax Credit (OEPTC) and NOEC were introduced/enhanced following the introduction of the HST and have a significant annual fiscal cost (totalling about $500 million annually).

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Timeline: Taxpayer-funded Electricity Price Mitigation

Budget 2010: OEPTC, NOEC Proposed as part of the Ontario Trillium Benefit

In the 2011 Budget, the government combined the payments of three existing tax credits — the Ontario Sales Tax Credit, the Ontario Energy and Property Tax Credit, and the Northern Ontario Energy Credit — to create the OTB. The OTB is paid in monthly instalments throughout the year, which helps people meet their expenses as bills arrive.

Ontario Clean Energy Benefit (Jan 1 2011 to Dec 31 2015)

The OCEB was introduced in the 2010 Ontario Economic Outlook and Fiscal Review to help consumers transition to a cleaner electricity system. As set out in legislation, the OCEB ended on December 31, 2015. The Province has introduced rate mitigation measures to be implemented after December 31, 2015.

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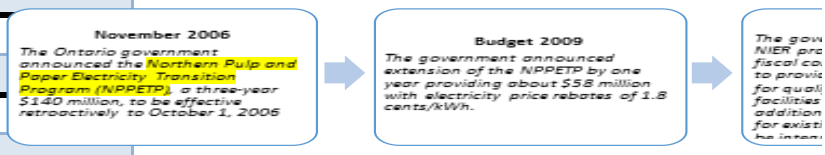
Program		2015-16
	Source link	https://files.ontario.ca/volume1-eng.pdf
Northern Industrial Electricity Rate Program (NIER)	Value	$ 108,443,047
	Page #	364
Northern Pulp and Paper Electricity Transition Program	Value	
	Page #	
Northern Ontario Energy Credit (NOEC)	Value	$ 26,000,000
	Page #	207
Ontario Clean Energy Benefit	Value	$ 860,000,000
	Page #	207
Ontario Energy and Property Tax Credit (OEPTC)	Source Link	S:\Users\CEF\Hydı
	Value	$ 1,297,000,000
	Energy Value	$ 443,900,000
	Property Value	$ 853,100,000

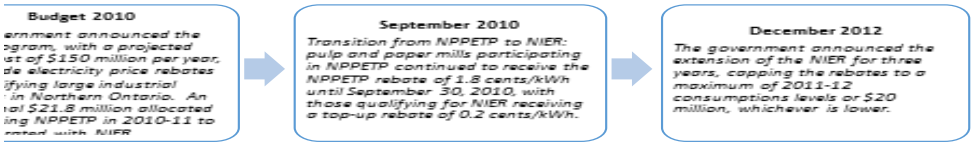
2014-15	2013-14	2012-13	2011-12	2010-11	2009-10
http://www.fin.gov.on.ca/en/budget/paccts/2015/15_vol1.pdf	http://www.fin.gov.on.ca/en/budget/paccts/2014/14vol1eng.pdf	http://www.fin.gov.on.ca/en/budget/paccts/2013/13vol1eng.pdf	http://www.ontla.on.ca/library/repository/ser/15767/2011-2012/V.1.pdf	http://www.ontla.on.ca/library/repository/ser/15767/2010-2011/V.1.pdf	http://www.ontla.on.ca/library/repository/ser/15767/2009-2010//V.1.pdf
$ 107,856,656	$ 115,026,742	$ 119,951,875	$ 120,059,036	$ 104,528,200	
374	360	366	354	344	
				$ 20,722,685	$ 24,942,193
				349	345
$ 24,333,870	$ 25,264,899	$ 24,229,499	$ 23,141,827	$ 24,085,111	
213	199	201	384	373	
$ 1,077,960,661	$ 1,006,201,055	$ 993,504,774	$ 1,032,568,697	$ 299,827,592	
213	199	201	191	195	

ro 2016\Electricity Prices\Cost Shifts\SOURCES\DATA COMPILATION\Source\RE_OEPTC.msg					
$ 1,253,100,000	$ 1,221,400,000	$ 1,189,300,000	$ 1,035,400,000	$ 328,100,000	
$ 428,500,000	$ 417,700,000	$ 406,300,000	$ 353,700,000	$ 112,700,000	
$ 824,500,000	$ 803,700,000	$ 783,000,000	$ 681,700,000	$ 215,400,000	

2008-09	2007-08	2006-07	2005-06	2004-05	2003-04	2002-03
http://www.ontla.on.ca/library/repository/ser/15767/2008-2009//V.1.pdf	http://www.ieso.ca/Documents/consult/sac/sac-20070124-NorthernPulpPaperBackgrounder.pdf	http://www.ontla.on.ca/library/repository/ser/15767/2006-2007//V.1.pdf				
$ 26,804,640	$ 35,888,994	$ 15,582,947				
323	346	341				

TOTAL	Year of Launch	Source
$ 675,865,556	2010	
$ 123,941,459	2006	
$ 147,055,206	2010	http://www.timminstimes.com/2010/04/29/province-reveals-new-p
$ 5,270,062,779	2011	http://www.entegrus.com/faq/what-ontario-clean-energy-benefit-o
$ 6,324,300,000	2010	https://news.ontario.ca/mof/en/2010/09/ontario-energy-and-prope
$ 2,162,800,000		
$ 4,161,400,000		





ermanent-northern-ontario-energy-credit

ceb

rty-tax-credit.html

Ontario

MINISTRY OF
ENERGY

Proposed Initiatives to Transform Ontario's Electricity Sector – Update

Working Draft

December 2016

CONFIDENTIAL DRAFT

Context

- Electricity costs are increasing as the necessary investments are made to decarbonize and modernize the province's electricity infrastructure (i.e., $35 billion+ investment in cleaner generation and $15.5 billion investment in Hydro One transmission and distribution systems).

- Ontario has taken a number of actions to lower electricity cost for all consumers by:
  - Deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., wind dispatch) and decreasing the cost of renewable procurements (e.g., GEIA renegotiation, decreasing FIT prices).
  - Increasing cost effectiveness and improving efficiency by adopting new electricity market approaches (e.g., competitive LRP, no new NUG contracting).

- Following the 2016 Throne Speech, actions were announced to further reduce electricity costs by:
  - Providing an 8% per cent rebate ($11/month savings), updating RRRP ($45/month savings), expanding ICI (up to one-third savings for participants), suspending the LRP II and the EFWSOP (up to $3.8 billion in cost savings) and recycling proceeds to industrial/ commercial consumers.

- On November 28, 2016, the Minister of Energy announced the need for changes in how electricity resources are procured, the need for wholesale market renewal and greater electricity consumer choice.

- The Ministry of Energy is currently updating its Long-Term Energy Plan (LTEP), which provides an opportunity to consider a range of policy changes to how the Ontario energy sector operates.

Broad Policy Themes / Rationale

- No longer use rate-base to pay for social programs by shifting cost of OESP, RRRP and proposed First Nation Rate to tax-base.
- Provide greater support for lower income Ontarians by enhancing the OESP or expanding eligibility.
- Fund conservation programs through the tax-base for the remaining term of the existing CDM framework and transition costs to the new “green bank entity” over time. Costs would be shifted in recognition of the burden borne by ratepayers in phasing out coal generation.
- Expand the scope of the “Trillium Trust” to make investments in energy infrastructure eligible for funding, such as remote electrification, large transmission projects, new or expanded interties and expansion of natural gas to rural areas, etc.
- Empower energy agencies to increase cost effectiveness and improve efficiency by having – IESO modernize Ontario’s electricity market through electricity market renewal initiatives, the OEB identify opportunities for future LDC cost reductions/efficiencies and work with OPG to find further efficiencies in operations and pass on savings to ratepayers.
- Give consumers more choice by allowing households to “opt into” a single rate plan as an interim measure as the Ontario Energy Board (OEB) develops more pricing options over time.
- Help small business manage their electricity costs and provide relief for cap and trade until proceeds recycling is fully operational by ending the Debt Retirement Charge (DRC) early for commercial and small industrial Class B electricity consumers.

Proposed Initiatives – Potential Savings for Typical Residential Electricity Consumers

$/750kWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
Recommended Initiatives							
1. No Longer Fund Social Programs Through the Rate-Base (i.e., OESP, RRRP, First Nations rate)	2.16	2.31	2.41	2.49	2.54	2.58	Immediate
2. Expand the OESP (i.e., 50% increase)	-	-	-	-	-	-	n/a
3. Fund Conservation Programs Through The Tax-Base	3.40	3.68	2.98	3.09	2.58	2.58	Immediate
4. Expand the Scope of Trillium Trust to Make Investments in Energy Infrastructure (e.g., Transmission upgrade, etc)	TBD	TBD	TBD	TBD	TBD	TBD	TBD
5. Empower Energy Agencies to Increase Cost Effectiveness and Improve efficiency*							
a. IESO – Market Renewal	-	-	-	-	1.00	1.03	Long-Term
b. OEB – LDC efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Medium-Term
c. OPG – Operational efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Medium-Term
6. Give Residential Consumers More Rate Choices	-	-	-	-	-	-	n/a
7. Help Small Business Manage Their Electricity Costs (i.e., End DRC early for Class B electricity consumers)**	-	-	-	-	-	-	n/a
8. Cancel / Adjust FIT	-	-	0.13	0.13	0.14	0.14	Long-Term
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
Considered but not Recommended							
1. Eliminate the Industrial Conservation Initiative (ICI)	4.40	4.24	4.10	4.24	3.73	3.58	Immediate
2. Cancel LRP I	-	-	TBD	TBD	TBD	TBD	Medium-Term

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 1 assumes OESP participation of 50% and 5-year maturity. *Assessing the range of ratepayer impacts will be done through the LTEP development and implementation process in conjunction with the OEB. **Class B includes small-medium enterprises (SMEs).

Proposed Initiatives – Potential Savings for Average Industrial Electricity Consumers

$/MWh	2017	2018	2019	2020	2021	2022	Timing of Benefit
Recommended Initiatives							
1. No Longer Fund Social Programs Through the Rate-Base (i.e., OESP, RRRP, First Nations rate)	2.88	3.08	3.21	3.33	3.39	3.44	Immediate
2. Expand the OESP (i.e., 50% increase)	-	-	-	-	-	-	n/a
3. Fund Conservation Programs Through The Tax-Base	2.82	3.05	2.47	2.56	2.13	2.14	Immediate
4. Expand the Scope of Trillium Trust to Make Investments in Energy Infrastructure (e.g., Transmission upgrade, etc)	TBD	TBD	TBD	TBD	TBD	TBD	TBD
5. Empower Energy Agencies to Increase Cost Effectiveness and Improve efficiency*							
a. IESO – Market Renewal	-	-	-	-	1.34	1.38	Long-Term
b. OEB – LDC efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Medium-Term
c. OPG – Operational efficiencies	TBD	TBD	TBD	TBD	TBD	TBD	Medium-Term
6. Give Residential Consumers More Rate Choices	-	-	-	-	-	-	n/a
7. Help Small Business Manage Their Electricity Costs (i.e., End DRC early for Class B electricity consumers)**	-	-	-	-	-	-	n/a
8. Cancel / Adjust FIT	-	-	0.10	0.10	0.11	0.11	Long-Term
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD	TBD	Immediate
Considered but not Recommended							
1. Eliminate the Industrial Conservation Initiative (ICI)	(24.12)	(23.21)	(22.45)	(23.23)	(20.42)	(19.61)	Immediate
2. Cancel LRP I	-	-	TBD	TBD	TBD	TBD	Medium-Term

Note: The above initiatives will provide similar benefits for non-RPP Class B electricity consumers. Proposal 1 assumes OESP participation of 50% and 5-year maturity. *Assessing the range of ratepayer impacts will be done through the LTEP development and implementation process in conjunction with the OEB. **Class B includes small-medium enterprises (SMEs).

Proposed Taxpayer Funded Electricity Price Mitigation

($M)	2016-17[1]	2017-18[1]	2018-19[1]	2019-20[1]	2020-21[1]
Recommended Initiatives					
1. No Longer Fund Social Programs Through the Rate-Base (i.e., OESP, RRRP, First Nations rate)		398	419	433	447
2. Expand the OESP (i.e., 50% increase)	TBD	TBD	TBD	TBD	TBD
3. Fund Conservation Programs Through The Tax-Base	110	450	450	450	450
4. Expand the Scope of Trillium Trust to Make Investments in Energy Infrastructure (e.g., Transmission upgrade, etc)	TBD	TBD	TBD	TBD	TBD
5. Empower Energy Agencies to Increase Cost Effectiveness and Improve efficiency*					
a. IESO – Market Renewal	-	-	-	-	-
b. OEB – LDC efficiencies	-	-	-	-	-
c. OPG – Borrowing	-	-	-	-	-
6. Give Residential Consumers More Rate Choices	-	-	-	-	-
7. Help Small Business Manage Their Electricity Costs (i.e., End DRC early for Class B electricity consumers)**	110	450	-	-	-
8. Cancel / Adjust FIT	-	-	-	-	-
9. Dedicate Departure Tax	TBD	TBD	TBD	TBD	TBD
Considered but not Recommended					
1. Eliminate the Industrial Conservation Initiative (ICI)	-	-	-	-	-
2. Cancel LRP I	-	-	-	-	-

Source: Ministry of Finance, Energy

Considerations / Outcomes

- The proposed initiatives provide the following opportunities to:
  - Lower the cost of electricity for all consumers;
  - Re-set how electricity programs and energy infrastructure is funded (i.e., shifting costs to the tax-base from rate-base);
  - Provide electricity consumers with greater choices (i.e., signal rate plan);
  - Provide system benefits (e.g., market renewal); and
  - Increase cost effectiveness and improve efficiency.

- The timing of the impact of these rate mitigation initiatives varies.
  - Immediate and near-term impacts can be achieved by shifting costs to the tax-base or changing how certain costs are recovered from consumers or eliminating certain programs.
  - Over the longer term, changes to the electricity supply mix and achieving efficiencies in the electricity market could yield system savings.

- Pursuing the initiatives would require regulatory amendments and working with the electricity sector agencies, LDCs and other stakeholders to implement the initiatives.

Price Mitigation Initiatives
September 2016
Key Messages/Questions and Answers
Last updated by: Comms, SNAP, ESP MO

KEY MESSAGES

- **Ontario is taking action to reduce electricity bills for families, farms, and businesses.**

- **We're doing this because we know that families need help with the cost of everyday living. Despite consistent economic growth since the global recession, many families aren't feeling the impact of the recovery in their everyday lives.**

- **We also recognize that rebuilding and cleaning up Ontario's electricity system has come at a cost. Over the last decade we've rebuilt our transmission and distribution grid, we've invested in clean generation, and we've closed the last dirty coal-fired power plant. But we need to take the next step in ensuring that clean, reliable system is affordable.**

- **Recognizing this, we are introducing new measures that would take effect January 1, 2017, including:**

    - **Rebating provincial portion of the HST to reduce bills by 8% ($11)**

    - **Cutting delivery charges for ~~the~~ most rural customers and reducing bills with the HST rebate by 20% ($45)**

    - **Empowering industrial businesses to reduce bills by up to one third through the Industrial Conservation Initiative**

- **Taken together, this plan represents the single largest action to reduce costs for electricity consumers in the province's history. It will provide needed assistance to consumers of all sizes, and it targets support to those that need it most.**

- **These actions build on our government's commitment to provide affordable access to energy, including providing support for low-income families, expanding natural gas to more communities, and grid-connecting remote First Nations communities.**

QUESTIONS AND ANSWERS

General

Q. Why is the government introducing these price mitigation measures? Is the government finally acknowledging that electricity prices are too high?

We're taking steps to ensure a clean, reliable and affordable energy system for all Ontarians.

We know that these changes have come at a cost to Ontario's residential and business consumers.

Ontario already has several programs in place to help all consumers manage their electricity costs, but we understand that some consumers continue to face challenges.

Recognizing this, we are proposing new measures, some of which would take effect January 1, 2017.

These measures will give Ontario's residential and business consumers more ways to manage their electricity costs while we continue to make the critical investments needed to maintain our ~~energy~~ electriciy system.

Q. Even with these price mitigation efforts, Ontarians will still likely struggle to pay their electricity costs. What are you going to do to stop further increases in the future?

We're taking steps to ensure a clean, reliable and affordable energy system for all Ontarians.

The good news is that Ontario has already done the heavy lifting in terms of rebuilding aging transmission infrastructure and transitioning off coal-fired generation. Because of these investments, Ontarians aren't forecast to see the kind of energy cost increases coal-dependent provinces like Alberta and Saskatchewan are expected to see.

Ontario's 2013 Long-Term Energy Plan (LTEP) forecasted a typical monthly residential bill of $167 in 2016. On a 750 kWh per month basis, actual and forecast monthly bills are $157 and $159 respectively.

Over the forecast period, the average annual increase in consumers' costs is generally in-line with expected inflation, which averaged about 1.7% over the last ten years (2006-2015).

Q. If the government is looking to reduce electricity system costs, why not simply cancel expensive renewable energy projects?

Ontario is committed to investing in a clean, modern and reliable electricity system that reduces greenhouse gas (GHG) emissions and provides cleaner air for this and future generations of Ontarians.

Ontario's 2013 LTEP includes targets for renewable energy:

- 10,700 megawatts (MW) for wind, solar, and bioenergy to be online by 2021; and
- 9,300 MW for hydroelectricity to be online by 2025.

We set those targets to fulfill our commitment to replace coal-fired generation with cleaner sources of energy, which not only benefits our environment but also the health of Ontarians.

The diversity of the current supply mix also insulates Ontario against sudden changes in cost or availability of any one source, and is one of the greatest strengths of Ontario's electricity system.

Each of the supply mix elements, including hydroelectric, nuclear, natural gas, non-hydro renewables, conservation and clean imports, plays a unique role in delivering a reliable and cost-effective source of energy to Ontarians.

Q. Was there any consultation with the public or businesses when developing these price mitigation measures?

We know Ontario homeowners and businesses have expressed concern about the cost of electricity and the impact these costs can have on their budgets.

We understand it can be challenging and we want Ontarians to know that we have been listening and are taking action.

This year, the Ministry of Energy is also beginning to develop its next Long-Term Energy Plan (LTEP).

Developing the LTEP is a highly collaborative process. The Ministry works closely with its agencies and stakeholders during LTEP consultations and development.

LTEP consultations are expected to take place in fall 2016 and we encourage all Ontarians to take part.

Q. When will these mitigation measures take effect?

We are introducing legislation to support the proposed 8% rebate on September 15, 2016 (TBC). If passed, residential consumers, small businesses and farms, will start receiving the rebate on January 1, 2017.

We will be moving as quickly and responsibly as we can to implement the rest of the measures.

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LDCs already have experience with the implementation of billing changes like those associated with the Ontario Clean Energy Benefit (OCEB) and the Ontario Electricity Support Program (OESP).

If LDCs cannot implement the necessary changes to their billing systems by January 1, 2017, it is expected that consumers would receive their rebates through catch-up payments.

8% rebate for residential consumers, small businesses and farms:

Q. How will customers receive this rebate? Is it permanent? Are there any requirements to be eligible? Who will be receiving this rebate?

The proposed rebate will be available to all consumers eligible for the Regulated Price Plan (RPP) – this includes about five million residential consumers, small businesses and farms.

The proposed rebate will provide 8% off total electricity costs before taxes, effectively offsetting the provincial portion of the HST.

Consumers won't have to do anything to receive the rebate.

The rebate will automatically be added to every eligible consumer's bill as of January 1, 2017.

Q. How much can an average customer expect to save off their electricity bill?

The proposed rebate will provide 8% off total electricity costs before taxes – effectively offsetting the provincial portion of the HST.

A typical urban residential customer that consumes 750 kWh per month will see an annual benefit of approximately $132 or a monthly benefit of approximately $11~~, before tax~~.

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A typical rural customer, eligible for the increased RRRP support, that consumes 1000 kWh per month will see an annual benefit of approximately $540 or a monthly benefit of approximately $45~~, before tax~~.

Commented [SK22]: Don't think this is necessary.

A small farm or small business will see an annual benefit of 8% before tax.

If pressed:

Taking into account all of the new measures we are introducing, we expect eligible consumers to see a 6% net reduction in their overall monthly bills after the impact of tax and the costs of the new programs.

Q. Will any other programs be affected by this rebate? For example, will recipients of the Ontario Electricity Support Program also receive the rebate?

The proposed rebate would apply to all RPP-eligible consumers regardless of income, status or location.

The rebate will work with other existing programs, such as the Ontario Electricity Support Program (OESP).

Q. Are consumers really receiving an 8% rebate when taking into account the costs associated with the other price mitigation measures you're announcing today (i.e. RRRP and ICI)?

The proposed rebate would provide 8% off total electricity costs before taxes, effectively offsetting the provincial portion of the HST.

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It is the cleanest and most cost-effective energy resource, offers consumers a way to reduce their energy bills and reduces the need to build new generation, transmission and distribution infrastructure.

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Isn't this just another version of the Ontario Clean Energy Benefit (OCEB) – except it's 8% instead of 10%? Why didn't you just keep the OCEB?

The Ontario Clean Energy Benefit (OCEB) was a five year temporary program that ended, as planned, on December 31, 2015.

The OCEB was introduced to help families, farms and small businesses, manage their costs during our transition from coal-fired electricity generation towards a clean, modern and more reliable electricity system.

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We understand the price of electricity can still be a particular challenge for those that pay a higher share of their income towards their bill – such as low-income families, seniors on a fixed income, and homeowners that heat with electricity.

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These initiatives will give Ontario's residential consumers, small businesses and farms, more ways to manage their electricity costs while we continue to make the critical investments needed to maintain our ~~energy~~ electricity system.

Expansion of the Industrial Conservation Initiative (ICI):

Q. Why are you expanding the Industrial Conservation Initiative? How will the expansion of ICI help businesses with their electricity costs?

The Industrial Conservation Initiative (ICI) allows large electricity consumers to reduce their electricity costs by reducing their demand during peak hours. Reducing consumption during peak hours benefits companies financially and benefits the electricity system by deferring the need for new peaking generation.
ICI is currently available to electricity consumers over 5 MW and consumers from 3-5 MW in certain energy intensive sectors.

To give more businesses the incentive to participate in the ICI, we will be taking measures to lower the threshold to 1 MW and will be removing sector restrictions so that more consumers can benefit.

Newly eligible consumers will be able to opt-in to the ICI program at their discretion.

Q. How much can ICI participants expect to save in terms of electricity costs? When will they start to see the benefit financially?

ICI participants can save approximately up to one-third on their electricity bills.

Companies that opt-in to ICI would see the impact in 2018 due to the time required to implement the expansion and the need to set a one-year baseline.

Q. How many companies will be eligible for the ICI once the expansion happens?

Currently there are about 300 consumers in the ICI program.

Newly eligible consumers would have to decide whether they wish to opt-in to ICI program.

We wouldn't want to speculate on the number of companies that will choose to participate in the program.

Q. What about companies that can't shift their operations to off-peak hours? Will they be penalized financially by having to pay higher rates?

We recognize that electricity costs are a major factor for businesses participating in Ontario's economy. That's why Ontario has programs in place to help industrial consumers address the cost of their electricity.

Ontario's hybrid electricity market, combining regulated, contract and competitive market pricing, provides long-term price stability for industrial and smaller customers.

In addition to the ICI, there are many existing programs and incentives available to support industrial consumers.

For example:

- Participants in the Northern Industrial Electricity Rate Program (NIERP) receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 25% through the program. In 2015, the Ontario government announced the commitment to an ongoing NIERP beyond March 2016.

- The Industrial Electricity Incentive (IEI) offers reduced electricity rates for companies starting or expanding operations in Ontario. To date, IESO has awarded 22 contracts to electricity-intensive companies across the province through the program.

- The Industrial Accelerator Program (IAP) provides financial incentives to eligible transmission-connected companies to fast track capital investment in major energy conservation projects.

- The IESO holds annual demand response auctions, which provide availability and utilization payments to successful participants that commit to reducing their electricity consumption when called upon to do so.

- The IESO's saveONenergy for Business conservation programs for commercial and industrial consumers offers financial incentives to distribution-connected small businesses, commercial, institutional and industrial consumers, to install energy-efficient equipment and improve the energy efficiency of their buildings.

As we move forward we will continue to look at all options to strike the balance between reliability and affordability, while continuing our work on modernizing our electricity system.

Q. If new ICI participants will be getting a break on their bills, where will the money come from? How will costs get shifted?

An ICI participant's share of peak demand is used to calculate some electricity charges. The remainder of these charges not allocated to ICI participants would be shared across remaining consumers.

Over the long-term, system benefits from ICI include reducing electricity use during peak periods and reducing the need for new peaking generation.

Impacts will depend on a number of factors, including how many eligible companies decide to opt-in and their ability to reduce their electricity demand during peak hours.

Greenhouse Gas Recycling Account proceeds for Commercial and Industrial Ratepayers

Q. How will GGRA recycling work to help reduce costs for commercial and industrial customers?

As outlined in the 2016 Budget and the Climate Change Action Plan (CCAP), the government intends to recycle a portion of the cap and trade auction proceeds to offset the impact of cap and trade on industrial and commercial electricity consumers to keep rates affordable.

Q. Why is the government using GGRA funds to help reduce the electricity costs of commercial and industrial companies? Aren't GGRA funds supposed to go to programs/initiatives that reduce greenhouse gas emissions?

As outlined in the 2016 Budget and the Climate Change Action Plan (CCAP), the government intends to recycle a portion of the cap and trade auction proceeds to offset the impact of cap and trade on industrial and commercial electricity consumers to keep rates affordable.

Using cap and trade auction proceeds to lower the cost of electricity would make it more competitive with traditionally cheaper fossil fuels.

By using the proceeds to lower the cost of electricity, there is potential to incent fuel-switching away from fossil fuels toward much cleaner grid-connected electricity and support the CCAP's goals of electrification.

Rural or Remote Rate Protection (RRRP) Update:

Q. What is Rural or Remote Rate Protection (RRRP)? How is ~~RPPP~~ RRRP being updated? What kind of relief will it provide to ratepayers that currently receive it?

The Rural or Remote Rate Protection (RRRP) is a program that provides a rate subsidy to rural and remote residential customers who are faced with higher distribution costs relative to urban areas.

Funding to support these rural customers has not been changed since ~~2003~~2004, which has resulted in diminishing relief for customers over the years.

Commented [SK23]: According to the Cabinet Submission.

That's why we are going to increase the RRRP subsidy for eligible consumers by updating the ~~RRRP~~ RRRP.

This update would result in additional support for eligible customers.

The typical eligible consumer (1000 kWh/month) will see their RRRP subsidy increase from $[31.50] per month to $[60.50] per month.

Q. If the government is putting more money towards RRRP, where are those extra funds coming from? Ratepayers in the rest of the province?

The RRRP is funded by Ontario ratepayers.

As a result of this update, residential consumers will see an average cost increase of approximately $0.60 per month.

This cost increase is more than offset thanks to the 8% rebate they will be receiving starting in January 1, 2017.

Q. The Minister of Energy recently requested asked the Ontario Energy Board to look into rate relief for First Nations. Will the OEB's report take the RRRP update into account?

Our government recognizes that the price of electricity can be a particular challenge for those that pay a higher share of their income towards the bill - particularly residents in rural and remote communities and on-reserve First Nation customers.

We have heard concerns about high electricity costs from First Nation leaders across Ontario and understand on-reserve First Nation customers often face unique challenges that lead to higher electricity consumption and higher costs that impact electricity affordability.

Given these unique challenges, the Minister of Energy committed to look at options for addressing First Nation electricity cost. That's why under s.35 of the Ontario Energy Board Act, 1998 the Minister of Energy requested that the Ontario Energy Board (OEB) investigate appropriate rate assistance options for on-reserve First Nation electricity consumers.

The OEB is an independent regulator with a mandate to protect Ontario consumers with respect to electricity prices and ensure the financial viability of electricity distributors.

We wouldn't want to speculate on what the OEB will be recommending in its report.

The OEB has been asked to report back to the Minister on rate options, cost and funding mechanisms and program development issues by January 1, 2017.

Q. Why are urban customers subsidizing rural consumers? Isn't this just a tax on some to provide relief for others? How does this rate relief benefit the electricity system?

The RRRP has been in place since 2001 and replaces a similar program that was in place prior to 1998.

Our energy system is being transformed and we are making needed investments to modernize the system. We chose to replace coal-fired generation with cleaner sources of energy, which will not only benefit our environment but also the health of Ontarians.

We're taking steps to ensure a clean, reliable and affordable energy system for all Ontarians.

We know that these changes have come at a cost to Ontario's residential and business consumers. Recognizing this, we are proposing news measures that would take effect January 1, 2017.

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Additional QAs provided by the Ministry of Finance

Q. How would the Ontario Rebate for Electricity Consumers impact Ontario's plans for a balanced budget?

The Ontario Rebate for Electricity Consumers would help make everyday life easier for Ontario families, small businesses and farms with electricity costs by providing a rebate that is equal to the eight per cent provincial portion of HST. This eight per cent rebate would appear directly on the consumer's electricity bill.

The government remains committed to balancing the budget by 2017-18 while continuing to invest in the economy, our people and a healthy, clean and prosperous low-carbon future. These investments will help enhance the public services that Ontarians rely on, as well as stimulate economic growth.

Q. Do other provinces provide harmonized sales tax (HST) rebates related to energy?

Currently, there are no federally-administered point-of-sale rebates for electricity in any of the other provinces participating in the HST.

Nova Scotia is the only province with a provincially administered home energy rebate program that is equal to the provincial portion of the HST, and applies to all sources of residential use energy, including electricity.

Newfoundland and Labrador had a “Residential Energy Rebate” that was eliminated, effective July 1, 2015. The rebate, which came into effect October 11, 2011, was a provincially administered energy rebate equal to the provincial portion of the HST on energy used for residential purposes, including electricity.

Q. Would the rebate affect HST paid by consumers?

No. The HST on electricity costs remains at 13 per cent.

Q. What happens to input tax credits claimed by businesses?

Most businesses engaged in commercial activities can claim input tax credits to recover the HST they pay to operate their business.

Following the introduction of the eight per cent rebate, businesses would continue to be able to claim the credits as usual.

With this rebate, businesses across Ontario would have even more opportunity to be competitive and manage their energy costs.

Q. How is Ontario helping to lower electricity costs for residential consumers?

Ontario has a number of programs in place to help low-to-moderate income individuals and families with energy costs, including the Ontario Energy and Property Tax Credit, the Ontario Electricity Support Program, the Ontario Sales Tax Credit and the Northern Ontario Energy Credit.

The Ontario Rebate for Electricity Consumers would be another program that would help Ontario families, small businesses and farms with electricity costs in addition to the above mentioned programs, if consumers were eligible.

Q. Will the federal government be rebating its portion of the HST?

The federal government has not shared any plans to mitigate electricity costs for Canadians.

The Province continues to work with the federal government when there is an opportunity to partner or consult as it relates to regulatory and emerging issues.

Ontario remains committed to making everyday life easier for people across the province by lowering costs and enhancing convenience and choice.

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QUESTIONS AND ANSWERS

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These initiatives will give Ontario's residential consumers, small businesses and farms, more ways to manage their electricity costs while we continue to make the critical investments needed to maintain our ~~energy~~ electricity system.

Expansion of the Industrial Conservation Initiative (ICI):

Q. Why are you expanding the Industrial Conservation Initiative? How will the expansion of ICI help businesses with their electricity costs?

The Industrial Conservation Initiative (ICI) allows large electricity consumers to reduce their electricity costs by reducing their demand during peak hours. Reducing consumption during peak hours benefits companies financially and benefits the electricity system by deferring the need for new peaking generation.
ICI is currently available to electricity consumers over 5 MW and consumers from 3-5 MW in certain energy intensive sectors.

To give more businesses the incentive to participate in the ICI, we will be taking measures to lower the threshold to 1 MW and will be removing sector restrictions so that more consumers can benefit.

Newly eligible consumers will be able to opt-in to the ICI program at their discretion.

Q. How much can ICI participants expect to save in terms of electricity costs? When will they start to see the benefit financially?

ICI participants can save approximately up to one-third on their electricity bills.

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Companies that opt-in to ICI would see the impact in 2018 due to the time required to implement the expansion and the need to set a one-year baseline.

Q. How many companies will be eligible for the ICI once the expansion happens?

Currently there are about 300 consumers in the ICI program.

Newly eligible consumers would have to decide whether they wish to opt-in to ICI program.

We wouldn't want to speculate on the number of companies that will choose to participate in the program.

Q. What about companies that can't shift their operations to off-peak hours? Will they be penalized financially by having to pay higher rates?

We recognize that electricity costs are a major factor for businesses participating in Ontario's economy. That's why Ontario has programs in place to help industrial consumers address the cost of their electricity.

Ontario's hybrid electricity market, combining regulated, contract and competitive market pricing, provides long-term price stability for industrial and smaller customers.

In addition to the ICI, there are many existing programs and incentives available to support industrial consumers.

For example:

- Participants in the Northern Industrial Electricity Rate Program (NIERP) receive a rebate of two cents per kilowatt hour. On average, industrial electricity prices can be reduced by up to 25% through the program. In 2015, the Ontario government announced the commitment to an ongoing NIERP beyond March 2016.

- The Industrial Electricity Incentive (IEI) offers reduced electricity rates for companies starting or expanding operations in Ontario. To date, IESO has awarded 22 contracts to electricity-intensive companies across the province through the program.

- The Industrial Accelerator Program (IAP) provides financial incentives to eligible transmission-connected companies to fast track capital investment in major energy conservation projects.

- The IESO holds annual demand response auctions, which provide availability and utilization payments to successful participants that commit to reducing their electricity consumption when called upon to do so.

- The IESO's saveONenergy for Business conservation programs for commercial and industrial consumers offers financial incentives to distribution-connected small businesses, commercial, institutional and industrial consumers, to install energy-efficient equipment and improve the energy efficiency of their buildings.

As we move forward we will continue to look at all options to strike the balance between reliability and affordability, while continuing our work on modernizing our electricity system.

Q. If new ICI participants will be getting a break on their bills, where will the money come from? How will costs get shifted?

An ICI participant's share of peak demand is used to calculate some electricity charges. The remainder of these charges not allocated to ICI participants would be shared across remaining consumers.

Over the long-term, system benefits from ICI include reducing electricity use during peak periods and reducing the need for new peaking generation.

Impacts will depend on a number of factors, including how many eligible companies decide to opt-in and their ability to reduce their electricity demand during peak hours.

Greenhouse Gas Recycling Account proceeds for Commercial and Industrial Ratepayers

Q. How will GGRA recycling work to help reduce costs for commercial and industrial customers?

As outlined in the 2016 Budget and the Climate Change Action Plan (CCAP), the government intends to recycle a portion of the cap and trade auction proceeds to offset the impact of cap and trade on industrial and commercial electricity consumers to keep rates affordable.

Q. Why is the government using GGRA funds to help reduce the electricity costs of commercial and industrial companies? Aren't GGRA funds supposed to go to programs/initiatives that reduce greenhouse gas emissions?

As outlined in the 2016 Budget and the Climate Change Action Plan (CCAP), the government intends to recycle a portion of the cap and trade auction proceeds to offset the impact of cap and trade on industrial and commercial electricity consumers to keep rates affordable.

Using cap and trade auction proceeds to lower the cost of electricity would make it more competitive with traditionally cheaper fossil fuels.

By using the proceeds to lower the cost of electricity, there is potential to incent fuel-switching away from fossil fuels toward much cleaner grid-connected electricity and support the CCAP's goals of electrification.

Rural or Remote Rate Protection (RRRP) Update:

Q. What is Rural or Remote Rate Protection (RRRP)? How is ~~RPPP~~ RRRP being updated? What kind of relief will it provide to ratepayers that currently receive it?

The Rural or Remote Rate Protection (RRRP) is a program that provides a rate subsidy to rural and remote residential customers who are faced with higher distribution costs relative to urban areas.

Funding to support these rural customers has not been changed since ~~2003~~2004, which has resulted in diminishing relief for customers over the years.

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That's why we are going to increase the RRRP subsidy for eligible consumers by updating the ~~RRRP~~ RRRP.

This update would result in additional support for eligible customers.

The typical eligible consumer (1000 kWh/month) will see their RRRP subsidy increase from $[31.50] per month to $[60.50] per month.

Q. If the government is putting more money towards RRRP, where are those extra funds coming from? Ratepayers in the rest of the province?

The RRRP is funded by Ontario ratepayers.

As a result of this update, residential consumers will see an average cost increase of approximately $0.60 per month.

This cost increase is more than offset thanks to the 8% rebate they will be receiving starting in January 1, 2017.

Q. The Minister of Energy recently requested asked the Ontario Energy Board to look into rate relief for First Nations. Will the OEB's report take the RRRP update into account?

Our government recognizes that the price of electricity can be a particular challenge for those that pay a higher share of their income towards the bill - particularly residents in rural and remote communities and on-reserve First Nation customers.

We have heard concerns about high electricity costs from First Nation leaders across Ontario and understand on-reserve First Nation customers often face unique challenges that lead to higher electricity consumption and higher costs that impact electricity affordability.

Given these unique challenges, the Minister of Energy committed to look at options for addressing First Nation electricity cost. That's why under s.35 of the Ontario Energy Board Act, 1998 the Minister of Energy requested that the Ontario Energy Board (OEB) investigate appropriate rate assistance options for on-reserve First Nation electricity consumers.

The OEB is an independent regulator with a mandate to protect Ontario consumers with respect to electricity prices and ensure the financial viability of electricity distributors.

We wouldn't want to speculate on what the OEB will be recommending in its report.

The OEB has been asked to report back to the Minister on rate options, cost and funding mechanisms and program development issues by January 1, 2017.

Q. Why are urban customers subsidizing rural consumers? Isn't this just a tax on some to provide relief for others? How does this rate relief benefit the electricity system?

The RRRP has been in place since 2001 and replaces a similar program that was in place prior to 1998.

Our energy system is being transformed and we are making needed investments to modernize the system. We chose to replace coal-fired generation with cleaner sources of energy, which will not only benefit our environment but also the health of Ontarians.

We're taking steps to ensure a clean, reliable and affordable energy system for all Ontarians.

We know that these changes have come at a cost to Ontario's residential and business consumers. Recognizing this, we are proposing news measures that would take effect January 1, 2017.

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Additional QAs provided by the Ministry of Finance

Q. How would the Ontario Rebate for Electricity Consumers impact Ontario's plans for a balanced budget?

The Ontario Rebate for Electricity Consumers would help make everyday life easier for Ontario families, small businesses and farms with electricity costs by providing a rebate that is equal to the eight per cent provincial portion of HST. This eight per cent rebate would appear directly on the consumer's electricity bill.

The government remains committed to balancing the budget by 2017-18 while continuing to invest in the economy, our people and a healthy, clean and prosperous low-carbon future. These investments will help enhance the public services that Ontarians rely on, as well as stimulate economic growth.

Q. Do other provinces provide harmonized sales tax (HST) rebates related to energy?

Currently, there are no federally-administered point-of-sale rebates for electricity in any of the other provinces participating in the HST.

Nova Scotia is the only province with a provincially administered home energy rebate program that is equal to the provincial portion of the HST, and applies to all sources of residential use energy, including electricity.

Newfoundland and Labrador had a “Residential Energy Rebate” that was eliminated, effective July 1, 2015. The rebate, which came into effect October 11, 2011, was a provincially administered energy rebate equal to the provincial portion of the HST on energy used for residential purposes, including electricity.

Q. Would the rebate affect HST paid by consumers?

No. The HST on electricity costs remains at 13 per cent.

Q. What happens to input tax credits claimed by businesses?

Most businesses engaged in commercial activities can claim input tax credits to recover the HST they pay to operate their business.

Following the introduction of the eight per cent rebate, businesses would continue to be able to claim the credits as usual.

With this rebate, businesses across Ontario would have even more opportunity to be competitive and manage their energy costs.

Q. How is Ontario helping to lower electricity costs for residential consumers?

Ontario has a number of programs in place to help low-to-moderate income individuals and families with energy costs, including the Ontario Energy and Property Tax Credit, the Ontario Electricity Support Program, the Ontario Sales Tax Credit and the Northern Ontario Energy Credit.

The Ontario Rebate for Electricity Consumers would be another program that would help Ontario families, small businesses and farms with electricity costs in addition to the above mentioned programs, if consumers were eligible.

Q. Will the federal government be rebating its portion of the HST?

The federal government has not shared any plans to mitigate electricity costs for Canadians.

The Province continues to work with the federal government when there is an opportunity to partner or consult as it relates to regulatory and emerging issues.

Ontario remains committed to making everyday life easier for people across the province by lowering costs and enhancing convenience and choice.

Price Mitigation Initiatives
September 2016
Key Messages/Questions and Answers
Last updated by: Comms, SNAP, ESP MO

KEY MESSAGES

- **Ontario is taking action to reduce electricity bills for families, farms, and businesses.**

- **We're doing this because we know that families need help with the cost of everyday living. Despite consistent economic growth since the global recession, many families aren't feeling the impact of the recovery in their everyday lives.**

- **We also recognize that rebuilding and cleaning up Ontario's electricity system has come at a cost. Over the last decade we've rebuilt our transmission and distribution grid, we've invested in clean generation, and we've closed the last dirty coal-fired power plant. But we need to take the next step in ensuring that clean, reliable system is affordable.**

- **Recognizing this, we are introducing new measures that would take effect January 1, 2017, including:**

    - **Rebating provincial portion of the HST to reduce bills by 8% ($11 for an average residential consumer)**

    - **Cutting ~~delivery~~electricity costs~~charges~~ for the most rural customers by 20% ($45)**

    - **Empowering large industrial and other large businesses to reduce bills by up to one third through the Industrial Conservation Initiative**

- **Taken together, this plan represents the single largest action to reduce costs for electricity consumers in the province's history. It will provide needed assistance to consumers of all sizes, and it targets support to those that need it most.**

- **These actions build on our government's commitment to provide affordable access to energy, including providing support for low-income families, expanding natural gas to more communities, and grid-connecting remote First Nations communities.**

Commented [JK1]: Here and below, Energy should make this consistent, i.e. whether to include "up to" or not.

QUESTIONS AND ANSWERS

General

Q. Why is the government introducing these price mitigation measures? Is the government finally acknowledging that electricity prices are too high?

We're taking steps to ensure a clean, reliable and affordable energy system for all Ontarians.

We know that these changes have come at a cost to Ontario's residential and business consumers.

Ontario already has several programs in place to help all consumers manage their electricity costs, but we understand that some consumers continue to face challenges.

Recognizing this, we are proposing new measures, some of which would take effect January 1, 2017.

These measures will give Ontario's residential and business consumers more ways to manage their electricity costs while we continue to make the critical investments needed to maintain our ~~energy~~ electricity system.

Q. Even with these price mitigation efforts, Ontarians will still likely struggle to pay their electricity costs. What are you going to do to stop further increases in the future?

We're taking steps to ensure a clean, reliable and affordable energy system for all Ontarians.

The good news is that Ontario has already done the heavy lifting in terms of rebuilding aging transmission infrastructure and transitioning off coal-fired generation. Because of these investments, Ontarians aren't forecast to see the kind of energy cost increases coal-dependent provinces like Alberta and Saskatchewan are.

Commented [JK2]: Check font in this paragraph.

Ontario's 2013 Long-Term Energy Plan (LTEP) forecasted a typical monthly residential bill of $167 in 2016. On a 750 kWh per month basis, actual and forecast monthly bills are $157 and $159 respectively.

Over the forecast period, the average annual increase in consumers' costs is generally in-line with expected inflation, which averaged about 1.7% over the last ten years (2006-2015).

Q. If the government is looking to reduce electricity system costs, why not simply cancel expensive renewable energy projects?

Ontario is committed to investing in a clean, modern and reliable electricity system that reduces greenhouse gas (GHG) emissions and provides cleaner air for this and future generations of Ontarians.

Ontario's 2013 LTEP includes targets for renewable energy:

- 10,700 megawatts (MW) for wind, solar, and bioenergy to be online by 2021; and
- 9,300 MW for hydroelectricity to be online by 2025.

We set those targets to fulfill our commitment to replace coal-fired generation with cleaner sources of energy, which not only benefits our environment but also the health of Ontarians.

The diversity of the current supply mix also insulates Ontario against sudden changes in cost or availability of any one source, and is one of the greatest strengths of Ontario's electricity system.

Each of the supply mix elements, including hydroelectric, nuclear, natural gas, non-hydro renewables, conservation and clean imports, plays a unique role in delivering a reliable and cost-effective source of energy to Ontarians.

Q. Was there any consultation with the public or businesses when developing these price mitigation measures?

We know Ontario homeowners and businesses have expressed concern about the cost of electricity and the impact these costs can have on their budgets.

We understand it can be challenging and we want Ontarians to know that we have been listening and are taking action.

This year, the Ministry of Energy is also beginning to develop its next Long-Term Energy Plan (LTEP).

Developing the LTEP is a highly collaborative process. The Ministry works closely with its agencies and stakeholders during LTEP consultations and development.

LTEP consultations are expected to take place in fall 2016 and we encourage all Ontarians to take part.

Q. When will these mitigation measures take effect?

We are introducing legislation to support the proposed 8% rebate on September 15, 2016 (TBC). If passed, residential consumers, small businesses and farms, will start receiving the rebate on January 1, 2017.

We will be moving as quickly and responsibly as we can to implement the rest of the measures.

Under the Industrial Conservation Initiative, Class A consumers pay Global Adjustment (GA) based on a percentage of their contribution to the top five Ontario peaks over a 12-month base period. New participants who opt-into Industrial Conservation Initiative (ICI) would see the change on their bills in 2018.

Q. Will Local Distribution Companies (LDCs) be ready to implement the bill changes? What happens if they are delayed? Will consumers be compensated retroactively?

We will work with the Ontario Energy Board and Local Distribution Companies (LDCs) to ensure the necessary adjustments are made to LDC billing systems.

LDCs already have experience with the implementation of billing changes like those associated with the Ontario Clean Energy Benefit (OCEB) and the Ontario Electricity Support Program (OESP).

If LDCs cannot implement the necessary changes to their billing systems by January 1, 2017, it is expected that consumers would receive their rebates through catch-up payments.

8% rebate for residential consumers, small businesses and farms:

Q. How will customers receive this rebate? Is it permanent? Are there any requirements to be eligible? Who will be receiving this rebate?

The proposed rebate will be available to all consumers eligible for the Regulated Price Plan (RPP) – this includes about five million residential consumers, small businesses and farms.

The proposed rebate will provide 8% off total electricity costs before taxes, effectively offsetting the provincial portion of the HST.

Consumers won't have to do anything to receive the rebate.

The rebate will automatically be added to every eligible consumer's bill as of January 1, 2017.

Q. How much can an average customer expect to save off their electricity bill?

The proposed rebate will provide 8% off total electricity costs before taxes – effectively offsetting the provincial portion of the HST.

A typical urban residential customer that consumes 750 kWh per month will see an annual benefit of approximately $1302 or a monthly benefit of approximately $11, ~~before tax~~.

A typical rural customer, eligible for the increased RRRP support, that consumes 1000 kWh per month will see an annual benefit of approximately $540 or a monthly benefit of approximately $45, ~~before tax~~.

A small farm or small business will see an annual benefit of 8% before tax.

If pressed:

Taking into account all of the new measures we are introducing, we expect eligible consumers to see a 6% net reduction in their overall monthly bills after the impact of tax and the costs of the new programs.

Q. Will any other programs be affected by this rebate? For example, will recipients of the Ontario Electricity Support Program also receive the rebate?

The proposed rebate would apply to all RPP-eligible consumers regardless of income, status or location.

The rebate will work with other existing programs, such as the Ontario Electricity Support Program (OESP).

Q. Are consumers really receiving an 8% rebate when taking into account the costs associated with the other price mitigation measures you're announcing today (i.e. RRRP and ICI)?

The proposed rebate would provide 8% off total electricity costs before taxes, effectively offsetting the provincial portion of the HST.

If pressed:

Taking into account all of the new measures we are introducing, we expect eligible consumers to see a 6% net reduction in their overall monthly bills after the impact of tax and the costs of the new programs.

Q. Doesn't the rebate reward those who use more electricity – how does this encourage conservation?

Commented [JK3]: Why not make it consistent with previous materials at $130?

Commented [SK24]: Don't think this is necessary.

Commented [SK25]: Don't think this is necessary.

We're taking steps to ensure a clean, reliable and affordable energy system for all Ontarians.

We know that these changes have come at a cost to Ontario's residential and business consumers.

Recognizing this, we are proposing new measures that would take effect January 1, 2017.

As we plan for Ontario's energy needs for the next 20 years, conservation will be the first resource considered, wherever cost-effective.

It is the cleanest and most cost-effective energy resource, offers consumers a way to reduce their energy bills and reduces the need to build new generation, transmission and distribution infrastructure.

We encourage all Ontarians to participate in conservation programs offered through their Local Distribution Company (LDC) and the Independent Electricity System Operator (IESO).

Isn't this just another version of the Ontario Clean Energy Benefit (OCEB) – except it's 8% instead of 10%? Why didn't you just keep the OCEB?

The Ontario Clean Energy Benefit (OCEB) was a five year temporary program that ended, as planned, on December 31, 2015.

The OCEB was introduced to help families, farms and small businesses, manage their costs during our transition from coal-fired electricity generation towards a clean, modern and more reliable electricity system.

The good news is that Ontario has already done the heavy lifting in terms of rebuilding aging transmission infrastructure and transitioning off coal-fired generation. Because of these investments, Ontarians aren't forecast to see the kind of energy cost increases coal-dependent provinces like Alberta and Saskatchewan are.

We understand the price of electricity can still be a particular challenge for those that pay a higher share of their income towards their bill – such as low-income families, seniors on a fixed income, and homeowners that heat with electricity.

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Total Cost for Electricity Service

$Billions ($2012)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Generation	10.7	11.6	12.3	12.6	12.4	12.8	13.0	13.1	13.5	13.8	12.7	12.5	12.5	12.5	12.4	12.3	12.2	12.1	11.9	11.8
Conservation	0.4	0.5	0.4	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Transmission	1.4	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Distribution	3.5	3.5	3.6	3.7	3.7	3.7	3.8	3.8	3.9	3.9	4.0	4.0	4.1	4.1	4.2	4.3	4.3	4.3	4.4	4.4
Wholesale	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
DRC	0.9	0.9	0.9	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Costs	**17.6**	**18.7**	**19.4**	**19.8**	**19.6**	**20.2**	**19.7**	**20.0**	**20.4**	**20.7**	**19.8**	**19.7**	**19.8**	**19.9**	**19.9**	**19.8**	**19.8**	**19.7**	**19.6**	**19.5**
HST @ 13%:	2.29	2.43	2.53	2.57	2.55	2.63	2.56	2.60	2.66	2.70	2.57	2.56	2.57	2.59	2.59	2.57	2.57	2.56	2.54	2.53
Provincial HST portion, 8%:	1.41	1.50	1.55	1.58	1.57	1.62	1.58	1.60	1.63	1.66	1.58	1.58	1.58	1.59	1.59	1.58	1.58	1.57	1.56	1.56

Therefore an assumption of $735M in HST likely refers to just the residential.

Gross Electricity Demand (TWh)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Residential	48.1	48.1	48.4	49.2	50.2	50.4	49.7	50.8	50.4	49.1	48.0	47.3	46.2	45.4	45.8	46.5	47.0	47.8	48.1	48.4	48.9	49.6	50.2	51.2	52.1	53.1	54.1	54.9	55.7
Commercial	53.8	54.1	54.8	56.0	57.2	56.8	57.2	57.8	58.2	58.0	58.0	58.4	59.1	59.0	59.8	60.9	61.5	62.8	63.6	64.2	65.0	65.9	66.8	68.1	69.2	70.4	71.6	72.7	73.8
Industrial	46.4	44.4	42.5	41.9	38.7	31.6	33.9	34.5	35.6	36.5	37.0	37.8	39.1	39.5	40.2	41.3	41.8	42.3	42.4	42.7	43.2	43.7	44.1	44.4	44.6	44.8	45.1	45.3	45.6
Agriculture	2.2	2.2	2.1	1.8	1.9	1.8	1.8	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Electrification of Transportation	-	-	-	-	-	-	-	-	0.0	0.0	0.1	0.2	0.3	0.5	0.8	1.1	1.3	1.4	1.6	1.7	1.8	2.0	2.2	2.4	2.6	2.8	3.1	3.3	3.6

Table for Slide 8 of Demand Forecast, 2013 LTEP: Module 1

Drivers – electricity prices ($2009/kWh)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Residential	0.12	0.13	0.13	0.12	0.12	0.12	0.14	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.19	0.18	0.18	0.17	0.17	0.18	0.18	0.18	0.18	0.17	0.17	0.17	0.17	0.17	0.17
Commercial	0.09	0.10	0.10	0.10	0.09	0.10	0.10	0.11	0.12	0.13	0.14	0.14	0.14	0.15	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.12	0.12
Industrial	0.07	0.08	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.10	0.10	0.10	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10

Residential	5,775,969,715.20	########	########	########	########	########	########	########	########	########	########	########	########	########	########	8,692,670,490.51
Commercial	4,840,324,489.14	########	########	########	########	########	########	########	########	########	########	########	########	########	########	8,368,638,547.95
Industrial	3,249,505,051.02	########	########	########	########	########	########	########	########	########	########	########	########	########	########	4,424,415,668.27
Agriculture	196,268,370.72	########	########	########	########	########	########	########	########	########	########	########	########	########	########	281,173,595.18
Electrification of Transportation																
	13,865,799,255.35															

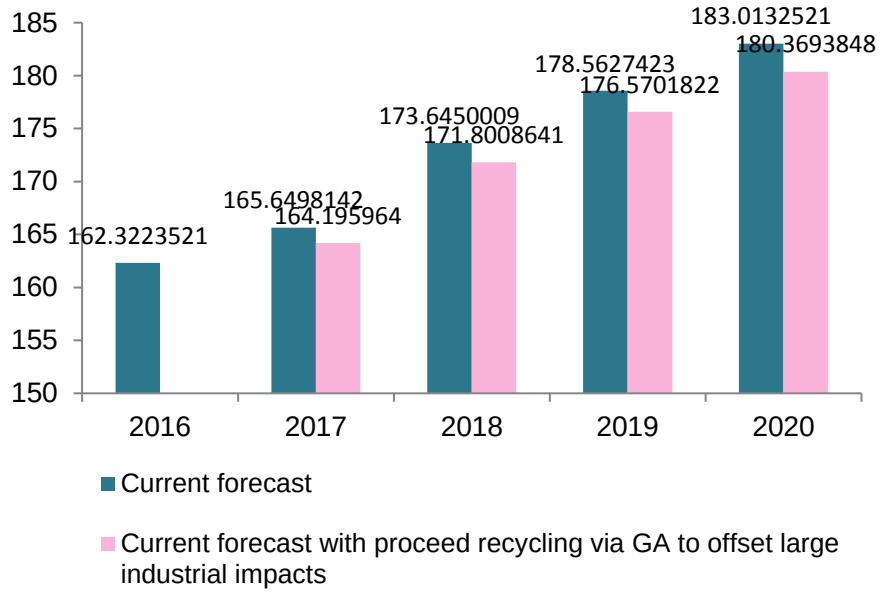
Residential Customer Bill - Assumes 800KWh/Mth

$ Nominal	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Distribution	$ 32	$ 34	$ 36	$ 37	$ 39	$ 40	$ 41	$ 43	$ 43	$ 45	$ 46	$ 47	$ 49	$ 50	$ 51	$ 52	$ 53	$ 54	$ 56	$ 57
Transmission	$ 11	$ 12	$ 12	$ 12	$ 13	$ 13	$ 14	$ 14	$ 15	$ 15	$ 15	$ 15	$ 16	$ 16	$ 16	$ 16	$ 16	$ 16	$ 17	$ 17
Regulated Charges (Wholesale Market Service Charge)	$ 5	$ 5	$ 5	$ 5	$ 6	$ 6	$ 6	$ 6	$ 6	$ 6	$ 6	$ 6	$ 7	$ 7	$ 7	$ 7	$ 7	$ 7	$ 7	$ 7
Debt Retirement Charge (DRC)	$ 6	$ 6	$ 6	$ 6	$ 6	$ 6	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Electricity	$ 69	$ 78	$ 84	$ 87	$ 88	$ 93	$ 95	$ 98	$ 101	$ 105	$ 99	$ 100	$ 101	$ 103	$ 103	$ 103	$ 104	$ 103	$ 103	$ 104
Total Bill before Taxes	$ 122	$ 134	$ 143	$ 148	$ 151	$ 158	$ 157	$ 161	$ 165	$ 171	$ 167	$ 169	$ 172	$ 176	$ 177	$ 179	$ 180	$ 181	$ 183	$ 185
HST	$ 16	$ 17	$ 19	$ 19	$ 20	$ 21	$ 20	$ 21	$ 21	$ 22	$ 22	$ 22	$ 22	$ 23	$ 23	$ 23	$ 23	$ 24	$ 24	$ 24
Total Residential Bill with Taxes (Before OCEB)	$ 138	$ 152	$ 162	$ 167	$ 170	$ 178	$ 177	$ 181	$ 187	$ 193	$ 188	$ 191	$ 194	$ 198	$ 200	$ 202	$ 204	$ 205	$ 207	$ 210
Ontario Clean Energy Benefit Credit (OCEB)	$ 14	$ 15	$ 16	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Residential Bill with Taxes: After OCEB	$ 125	$ 137	$ 145	$ 167	$ 170	$ 178	$ 177	$ 181	$ 187	$ 193	$ 188	$ 191	$ 194	$ 198	$ 200	$ 202	$ 204	$ 205	$ 207	$ 210

Note: Ontario Clearn Energy Benefit (OCEB) is a 10% credit to residential bills, which is in effect from 2011 to 2015. A 3,000 kWh per month cap was implement on September 2012.
Beyond 2015, the OECB program's future would require legislative changes and would need to take into account a number of factors including the province's fiscal position.

Forecast Residential Electricity Bills (2016-2020)

in $ per month, recycling to offset impacts to large industrials



Residential Bill	2016	2017	2018
Current forecast	162	166	174
$/Kwh	0.20	0.21	0.22

Gross Electricity Demand (TWh)	2016	2017	2018
Residential	46.2	45.4	45.8

Total Residential Electricit Expenditu	9,365,941,131.22	9,410,132,496.44	9,930,518,259.12
	9,366	9,410	9,931
8% Rebate	**749,275,290.50**	**752,810,599.72**	**794,441,460.73**
10% Rebate	936,594,113.12	941,013,249.64	993,051,825.91
8% Rebate	749	753	794
10% Rebate	937	941	993

2019	2020
179	183
0.22	0.23

2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
46.5	47.0	47.8	48.1	48.4	48.9	49.6	50.2	51.2	52.1	53.1

10,377,017,523.02	10,759,700,044.11
10,377	10,760
830,161,401.84	**860,776,003.53**
1,037,701,752.30	1,075,970,004.41
830	861
1,038	1,076

2030	2031	2032
54.1	54.9	55.7

Q. For a typical residential consumer, what is the benefit of the proposed 8% rebate?

A. For a current Regulated Price Plan time-of-use consumer in Toronto using 750 kWh per month, the typical pre-tax monthly bill is about $139 ($157 with tax).

The proposed rebate would be ~~applied~~ calculated on the pre-tax electricity cost, and ~~therefore~~ would save a typical residential consumer just over $11/month, or $133 annually. As electricity charges ~~increase~~change over time, the amount of the benefit would ~~increase~~change.

[Note: the net benefit, including ~~after~~ the cost of ~~new~~other, expanded programs, is $10 per month.]

Bill Impacts for Average Consumer – Toronto Hydro (750 kWh – $/month)

Current bill (after tax) (A)	HST on Current Bil (B)~~l~~	Current bill (pre-tax) (C)	~~8% pre-tax rebate~~	Cost of RRRP and ICI expansion (D)	New bill (pre-tax) E = C+D	New bill (after tax) F = E + 13%	8% rebate on new bill (G)	Net benefit ~~(pre-tax)~~ H = G - D	New bill (after rebate, after tax) I = F - G	~~(after tax)~~
$157	$18	$139	~~$11~~	$1.31	~~$129~~$140	$~~147~~158	$11.2	$10	$~~147~~	

*Note some totals may not sum due to rounding.

Q. What is the combined benefit of the 8% rebate and updated RRRP subsidy?

A. A Hydro One R2 consumer using 1000 kWh per month currently pays $229 before tax. The updated RRRP subsidy would decrease this by $29 to $200 per month and the 8% rebate would decrease their bill by a further $16 for a new total of $184 per month before tax. This represents a $45 per month pre-tax benefit or $540 per year.

[Note: the net benefit after the cost of additional programs is $46 per month]

Bill Impacts for Rural Consumers – Hydro One R2 (1000 kWh – $/month)

Current bill (after tax)	HST on Current Bill	Current bill (pre-tax)	Update RRRP Subsidy	~~8% pre-tax~~ rebate	Net benefit (pre-tax) w/o cost of ICI/RRRP	Cost of RRRP and ICI expansion	New bill (pre-tax)	8% rebate on new bill	Net benefit (pre-tax)	New bill (after tax)	New bill (after rebate, after tax)	Net benefit (after tax)
$259	$30	$229	$29	$16	**$45**	$1.74	$~~196~~202	$16	**$43**	$~~228~~	$212	

*Note some totals may not sum due to rounding.

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Commented [RK1]: Is the note needed? It may be confusing – the rebate would actually be higher, since the bill would be higher with the cost shifting from the RRRP and ICI changes.

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Commented [RK2]: Column seems out of place, unless there is a no RRRP expansion option.

Commented [LL3]: The 8% rebate does not reduce the amount of the bill before HST is calculated.

Commented [RK4]: This column seems out of place – not sure it is needed. The last column makes more sense.

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Commented [RK5]: If edits to the above table work, could make similar edits to this one.

Commented [RK6]: Column seems out of place, unless there is a no RRRP expansion option.

Commented [LL7]: 3rd column minus 4th column plus 7th column equals the electricity costs before tax is calculated.

Q. For a typical residential consumer, what is the benefit of the proposed 8% rebate?

A. For a current Regulated Price Plan time-of-use consumer in Toronto using 750 kWh per month, the pre-tax monthly bill is about $139 ($157 with tax).

The proposed rebate would be applied pre-tax, and therefore would save a typical residential consumer just over $11/month, or $133 annually. As electricity charges increase over time, the amount of the benefit would increase.

[Note: the net benefit after the cost of new programs is $10 per month.]

Bill Impacts for Average Consumer – Toronto Hydro (750 kWh – $/month)

Current bill (after tax)	HST on Current Bill	Current bill (pre-tax)	8% pre-tax rebate	Cost of RRRP and ICI expansion	New bill (pre-tax)	Net benefit (pre-tax)	New bill (after tax)	Net benefit (after tax)
$157	$18	$139	**$11**	$1.31	$129	**$10**	$147	**$10 (6%)**

Q. What is the combined benefit of the 8% rebate and updated RRRP subsidy?

A. A Hydro One R2 consumer using 1000 kWh per month currently pays $229 before tax. The updated RRRP subsidy would decrease this by $29 to $200 per month and the 8% rebate would decrease their bill by a further $16 for a new total of $184 per month before tax. This represents a $45 per month pre-tax benefit or $540 per year.

[Note: the net benefit after the cost of additional programs is $46 per month]

Bill Impacts for Rural Consumers – Hydro One R2 (1000 kWh – $/month)

Current bill (after tax)	HST on Current Bill	Current bill (pre-tax)	Update RRRP Subsidy	8% pre-tax rebate	Net benefit (pre-tax) w/o cost of ICI/RRRP	Cost of RRRP and ICI expansion	New bill (pre-tax)	Net benefit (pre-tax)	New bill (after tax)	Net benefit (after tax)
$259	$30	$229	$29	$16	**$45**	$1.74	$186	**$43**	$212	**$46 (18%)**

*Note some totals may not sum due to rounding.

From: Hunter, Robert A. (ENERGY) [Robert.A.Hunter@ontario.ca]
To: Risa Thau [Risa.Thau@ofina.on.ca]
CC: Brett Smith (ENERGY) [Brett.Smith@ontario.ca]; Mike Smith (ENERGY) [Mike.Smith@ontario.ca]; Sunita Chander (ENERGY) [Sunita.Chander@ontario.ca]; Dade, Christine (ENERGY) [Christine.Dade@ontario.ca]; Shajee Kathirgamanathan [Shajee.Kathirgamanathan@ofina.on.ca]; Bruno Amara [Bruno.Amara@ofina.on.ca]; Tai An (ENERGY) [Tai.An@ontario.ca]; Pratima Gounden (ENERGY) [Pratima.Gounden@ontario.ca]
Subject: Social Program Payment
Date: Wednesday, August 16, 2017 08:45:57
Attachment 1: July 2017 IESO Invoice.pdf
Attachment 2: OFHP IESO Settlement Statement July 2017.xlsx
Attachment 3: OFHP Monthly Invoice Approval July 2017 Signed.pdf
Attachment 4: 20170810 Acting ADM SNAP.PDF

Hi Risa,

Thank you for making the payment for the Fair Hydro Plan programs this month. The payment information is listed below. The IESO's account information may be accessed from the attached invoice. Note that the direction for payment of the OCEB and the OREC by the OFA will come through its regular channels. Please let me know if you require any additional information to process these payments.

Program	Payment Amount	TP Line	IFIS Account String
On-Reserve First Nations Delivery Credit	$384,083.93	TP_On-Reserved First Nations Delivery Credit	029-290501-0000-980651-981653
Distribution Rate Protection	$4,893,759.65	TP_Rural or Remote Rate Protection Program	029-290501-0000-980657-981658
Rural and Remote Rate Protection	$9,260,204.19	TP_Rural or Remote Rate Protection Program	029-290501-0000-980657-981658
Total	$14,538,047.77		

*It is intentional that the DRP and RRRP come from the same TP line

Thank you,

Robert Hunter
Policy Analyst

Ministry of Energy: Distribution and Agency Policy Branch
77 Grenville Street, 6th Floor
Toronto, ON M7A 2C1
Phone: (416) 325-6899
Email: robert.a.hunter@ontario.ca

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002
Issue / Re-Issue Date: 15-AUG-2017

MINISTRY OF ENERGY
880 Bay Street
3rd Floor
Toronto, ON M7A 2C1
Canada

Invoice: PI00020017
Invoice Date: 15-AUG-2017
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**

Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-JUL-2017 To 31-JUL-2017

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$384,083.93
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$4,893,759.65
1465	ONTARIO CLEAN ENERGY BENEFIT (-10%) PROGRAM BALANCING AMOUNT	$401,756.33
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$66,793,141.00
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$9,260,204.19
Invoice Total:	$CAD	81,732,945.10

Payment Due Date 17-AUG-2017

This invoice also constitutes a debit/credit note for GST/HST purposes

1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X

Name													
HYDRO ONE NETWORKS INC.		MP	1753	31-Jul-17	0	0	-2055348.32	ONZN		P	102007	0	0 MOE - Rural and Remote Settlement Debit, previous month balancing amount
HYDRO ONE NETWORKS INC.		MP	1753	31-Jul-17	0	0	-7204855.87	ONZN		P	102007	0	0 MOE - Rural and Remote Settlement Debit, current month balancing amount

#N/A
#N/A
#N/A

1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X

#N/A
#N/A
#N/A

	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
ATIKOKAN HYDRO INC.	MP	756	31-Jul-17	0	0	-12380.9	ONZN		P	104277		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
CHAPLEAU PUBLIC UTILITIES CORPORATION	MP	756	31-Jul-17	0	0	-728.06	ONZN		P	102049		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
NORTHERN ONTARIO WIRES, INC.	MP	756	31-Jul-17	0	0	-2826.95	ONZN		P	102042		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala
HYDRO ONE NETWORKS INC.	MP	756	31-Jul-17	0	0	-4877823.74	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan Distribution Rate Protection Amount, current month bala

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#N/A

1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X

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	1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
	record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
	MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X
Name														
KASHECHEWAN POWER CORPORATION	MP	755	31-Jul-17	0	0	-12526.41	ONZN		P	105833		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
FORT ALBANY POWER CORPORATION	MP	755	31-Jul-17	0	0	-10733.36	ONZN		P	105832		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	MP	755	31-Jul-17	0	0	-1839.41	ONZN		P	102741		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
HYDRO ONE NETWORKS INC.	MP	755	31-Jul-17	0	0	-341645	ONZN		P	102007		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
ATTAWAPISKAT POWER CORPORATION	MP	755	31-Jul-17	0	0	-17321.68	ONZN		P	105834		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month
PUC DISTRIBUTION INC.	MP	755	31-Jul-17	0	0	-18.07	ONZN		P	102316		0	0	MOE - Ontario Fair Hydro Plan First Nations On-Reserve Delivery Amount, current month

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#N/A

1	2	3	4	5	6.00	7	8	9	10	11	12	13	14
record type	charge type	trading date	trading hour	trading interval	adjustment amount	zone id	location id	settlement type	MP ID	price	tax rate	tax amount	adjustment comment
MP	1465		0	0	$	ONZN	null	P	MP ID	null	0	0	X

#N/A
#N/A
#N/A

n balancing amount
n balancing amount
n balancing amount
n balancing amount
n balancing amount
n balancing amount

Organization Id	Name	Short Name
110073	ALGOMA POWER INC.	ALGOMAPI
105834	ATTAWAPISKAT POWER CORPORATION	APC
104277	ATIKOKAN HYDRO INC.	ATHYDRO
104290	ENERGY + INC. (SETL)	BCPINC
104279	HYDRO ONE BRAMPTON NETWORKS INC.	BHNI
104271	BLUEWATER POWER DISTRIBUTION CORPORATION	BPDC
102321	BRANTFORD POWER INC.	BRANTFORD
102298	BURLINGTON HYDRO INC.	BURLHYDRO
102049	CHAPLEAU PUBLIC UTILITIES CORPORATION	CHAPLEAUPUC
102140	ENTEGRUS POWERLINES INC.	CKHYDRO
106103	CAT LAKE POWER UTILITY LTD.	CLPU
102299	ENERGY + INC.	CNDHI
102110	CANADIAN NIAGARA POWER INC.	CNPINC
104281	COLLUS POWERSTREAM CORP.	COLLUSPOWER
104468	CENTRE WELLINGTON HYDRO LTD.	CWHYDRO
102006	E. L. K. ENERGY INC.	ELKENERGY
102217	ESSEX POWERLINES CORPORATION	EPLC
104323	ERIE THAMES POWERLINES CORPORATION	ETPOWER
106085	ENWIN UTILITIES LTD.	EWUTIL
105832	FORT ALBANY POWER CORPORATION	FAPC
104313	FORT FRANCES POWER CORPORATION	FFPC
104489	VERIDIAN CONNECTIONS INC. - GRAVENHURST	GHI
104297	WEST COAST HURON ENERGY INC.	GODERICHHYDR
104471	GRIMSBY POWER INCORPORATED	GRIMSBYPOWER
104325	GUELPH HYDRO ELECTRIC SYSTEMS INC.	GUELPHHYDRO
102207	HALDIMAND COUNTY HYDRO INC.	HALDIMANDHEC
102084	HORIZON UTILITIES CORPORATION	HAMHYDRO
104339	HYDRO HAWKESBURY INC./HAWKESBURY HYDRO INC.	HAWKHYDRO
104249	HEARST POWER DISTRIBUTION COMPANY LIMITED	HEARSTPDCL
104284	HALTON HILLS HYDRO INC.	HHHYDRO
102007	HYDRO ONE NETWORKS INC.	HONI
102089	ENERSOURCE HYDRO MISSISSAUGA INC.	HYDROMISS
104299	INNPOWER CORPORATION	INNISFILHDSL
104269	KENORA HYDRO ELECTRIC CORPORATION LTD.	KENORAHYDRO
105833	KASHECHEWAN POWER CORPORATION	KPC
104267	KITCHENER-WILMOT HYDRO INC.	KWHYDRO
113624	LAKELAND POWER DISTRIBUTION LTD.	LAKELAND
104282	LONDON HYDRO INC.	LONDONHYDRO
104487	LAKEFRONT UTILITIES INC	LUI
102743	MILTON HYDRO DISTRIBUTION INC.	MILTONHYDRO
104296	ENTEGRUS POWERLINES INC.-MPDC (SETL)	MPDC
104363	MIDLAND POWER UTILITY CORPORATION	MPUC
102099	NORTH BAY HYDRO DISTRIBUTION LIMITED	NBHYDRO
102105	NEWMARKET - TAY POWER DISTRIBUTION LTD.	NEWMARKETHYD
102102	NIAGARA PENINSULA ENERGY INC.	NIAGARAHYDRO
104422	NIAGARA-ON-THE-LAKE HYDRO INC.	NOTLHYDRO

102042	NORTHERN ONTARIO WIRES, INC.	NOWINC
102366	OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.	OAKVILLEHYD
104319	ORILLIA POWER DISTRIBUTION CORPORATION	OPDC
104481	OSHAWA PUC NETWORKS INCORPORATED	OPUCNI
104480	ORANGEVILLE HYDRO LIMITED	ORANGVLHYDRO
102070	HYDRO OTTAWA LIMITED	OTTAWAHYDRO
104306	CANADIAN NIAGARA POWER INC.-PORT COLBORNE (SETL)	PCHYDROINC
105361	PARRY SOUND POWER CORPORATION	PSPOWER
102082	PETERBOROUGH DISTRIBUTION INC.	PTBODIST
102316	PUC DISTRIBUTION INC.	PUCDISTRIBUT
108825	POWERSTREAM INC.	PWRSTRM
105232	RIDEAU ST.LAWRENCE DISTRIBUTION INC.	RIDEAU
102340	FESTIVAL HYDRO INC.	STRATFORDPUC
102100	ST. THOMAS ENERGY INC.	STTHOMASPUC
102009	GREATER SUDBURY HYDRO INC.	SUDBURYHYDRO
102329	TORONTO HYDRO-ELECTRIC SYSTEM LIMITED	THESL
102673	TILLSONBURG HYDRO INCORPORATED	THI
102741	THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.	THUNDERBAY
104322	KINGSTON HYDRO CORPORATION	UK
102120	VERIDIAN CONNECTIONS INC.	VERIDIAN
104278	WASAGA DISTRIBUTION INC.	WASAGALDC
104248	WELLAND HYDRO ELECTRIC SYSTEM CORP.	WELLANDHYDRO
105222	WELLINGTON NORTH POWER INC.	WELLINGTON
104421	WESTARIO POWER INC	WESTARIOPOWR
104276	WHITBY HYDRO ELECTRIC CORPORATION	WIRESCO
102004	WATERLOO NORTH HYDRO INC.	WNHYDRO
102246	WOODSTOCK HYDRO SERVICES INC.	WOODSTOCK
110345	CARMA BILLING SERVICES INC.	CARMA
145763	CLEAN CUT ENERGY CORP.	CCE
109821	DIRECT ENERGY BUSINESS SERVICES LIMITED	DIRECT
109735	ENERGY CURTAILMENT SPECIALISTS, INC.	ECS
110401	ENERCAN ENERGY MANAGEMENT	ENERCAN
110332	ENERCARE CONNECTIONS INC.	ENERCARE
110354	MINISTRY OF ENERGY	MOEI
110343	ODEM ELECTRIC BILLING SERVICES INC.	ODEM
110330	PROVIDENT ENERGY MANAGEMENT INC.	PEMI
145734	PIKE LAKE GOLF CENTRE LIMITED	PIKELAKE
110334	PRIORITY SUBMETERING SOLUTIONS INC.	PRIORITY
114461	POWERSTREAM ENERGY SERVICES INC.	PSESI
110379	QUEENS UNIVERSITY AT KINGSTON	QUEENS
110328	STRATACON INC.	STRATINC
110329	TRILLIANT ENERGY SERVICES INC.	TRILLINC
110494	WYSE METER SOLUTIONS INC.	WYSE
112232	YES ENERGY MANAGEMENT, INC.	YES

107810 O.N.TEL INC.

Participation Name
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Ministry of Energy

Ontario

Ontario Fair Hydro Plan Monthly Invoice Approval Form

Reviewed by		Date
Manager, DAP Branch, SNAP *Mike Smith*		Aug. 15, 2017
Manager, DAP Branch, SNAP *Brett Smith*		2017/08/15
Director, DAP Branch, SNAP *Sunita Chander*		

Approvals		Date
ADM, SNAP Acting ADM, SNAP		2017/08/15

DRP + RRRP Claims Summary

Date Invoice Received:	August 15, 2017
IESO Invoice Amount ($):	$ 14,153,963.84 (For July monthly bill)
Transfer Payment Line:	Rural or Remote Rate Protection Plan

Expenditure Summary ($M)

DRP Claim	RRRP Claim	Total Claim
$ 4,893,759.65	$ 9,260,204.19	$ 14,153,963.84

Budget FY 17-18	YTD Actuals (beginning July 1, 2017)	Remaining Balance
$ 344,000,000.00	$ 14,153,963.84	$ 329,846,036.16

Key Comments/Issues

- Note that bills are for one month prior i.e. a payment in August is for reimbursements provided for July usage.
- The RRRP and DRP are combined as they both fall under the same transfer payment line. (TP_Rural or Remote Rate Protection Plan)
- Hydro One is the only LDC that submits RRRP claims
  - Note a submission error resulted in a claim overstatement of $2,055,348.32. The IESO has committed to reimbursing this overpayment on the next invoice.
- DRP is missing claims for July 2017 from:
  - Innpower Corporation
  - Algoma Power Inc.
  - Sioux Lookout Hydro Inc.
  - Lakeland Power Distribution Ltd.
- The Ministry is working on setting up a call to confirm with LDCs when they expect to be making their claims.

Reconciliation Prepared By		
	Name:	**Robert Hunter**
	Date:	**August 15, 2017**

FNDC Claims Summary

Date Invoice Received:	August 15, 2017
IESO Invoice Amount ($):	$ 384,083.93 (For July monthly bill)
Transfer Payment Line:	On-Reserve First Nations Delivery Credit

Expenditure Summary ($M)

FNDC Claim Amount	$ 384,083.93

Budget FY 17-18	YTD Actuals (beginning July 1, 2017)	Remaining Balance
$15,000,000.00	$ 384,083.93	$14,615,916.07

Key Comments/Issues

- Note that bills are for one month prior i.e. a payment in August is for reimbursements provided for July usage.
- FNDC is missing claims for July 2017 from:
  - Algoma Power Inc.
  - Bluewater Power Distribution Corporation
  - Cornwall Electric Distribution
- The Ministry is working on setting up a call to confirm with LDCs when they expect to be making their claims.

Reconciliation Prepared By		
	Name:	**Robert Hunter**
	Date:	**August 15, 2017**

OESP Claims Summary

Date Invoice Received:
IESO Invoice Amount ($): $(For xxx monthly bill)
Transfer Payment Line: Ontario Electricity Support Program

For Future Use

Expenditure Summary ($M)	**OESP Claim Amount**	**$**	
	Budget FY 17-18	**YTD Actuals (beginning July 1, 2017)**	**Remaining Balance**
	$140,000,000.00		$140,000,000.00
Key Comments/Issues	• *Note that bills are for one month prior i.e. a payment in August is for reimbursements provided for July usage.*		
Reconciliation Prepared By	Name:	**Robert Hunter**	
	Date:		

Independent Electricity System Operator
PHYSICAL INVOICE

Independent Electricity System Operator
Station A, Box 4474
Toronto, ON
M5W 4E5

HST: 870513959RT0002
Issue / Re-Issue Date: 15-AUG-2017

MINISTRY OF ENERGY
880 Bay Street
3rd Floor
Toronto, ON M7A 2C1
Canada

Invoice: PI00020017
Invoice Date: 15-AUG-2017
MP ID: 110354
MP GST/HST: N/A

Please send payment by WIRE or EFT to:

Bank Name: **TD Bank**
Bank ID Number: **0004**
Bank Account Number: **0690-0458762**

Bank Acc Type: **Settlement Clearing**
Bank Transit Number: **10202**

For all inquiries contact:
IESO Account Representative
Tel: 905-403-6900
Toll Free: 1-888-448-7777

Comments:

Charges for settlement statements issued: From 01-JUL-2017 To 31-JUL-2017

Charge Type	Description	Amount
755	MOE - ONTARIO FAIR HYDRO PLAN FIRST NATIONS ON-RESERVE DELIVERY BALANCING AMOUNT	$384,083.93
756	MOE - ONTARIO FAIR HYDRO PLAN DISTRIBUTION RATE PROTECTION BALANCING AMOUNT	$4,893,759.65
1465	ONTARIO CLEAN ENERGY BENEFIT (-10%) PROGRAM BALANCING AMOUNT	$401,756.33
1467	ONTARIO REBATE FOR ELECTRICITY CONSUMERS (8% PROVINCIAL REBATE) BALANCING AMOUN T	$66,793,141.00
1753	MOE - RURAL AND REMOTE SETTLEMENT DEBIT	$9,260,204.19
Invoice Total:	$CAD	81,732,945.10

Payment Due Date 17-AUG-2017

This invoice also constitutes a debit/credit note for GST/HST purposes

Ministry of Energy

Office of the Deputy Minister
Hearst Block, 4th Floor
900 Bay Street
Toronto ON M7A 2E1
Tel.: 416-327-6734
Fax: 416-327-6755

Ministère de l'Énergie

Bureau du sous-ministre
4e étage, édifice Hearst
900, rue Bay
Toronto ON M7A 2E1
Tél.: 416-327-6734
Téléc.: 416-327-6755

Ontario

DATE: August 10, 2017

MEMORANDUM TO: Ministry of Energy- All Staff

FROM: Serge Imbrogno, Deputy Minister

SUBJECT: Acting Assistant Deputy Minister, Strategic, Network and Agency Policy Division

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For the week of August 14- August 18, 2017 inclusive, Shruti Talwar will be Acting as Assistant Deputy Minister of the Strategic, Network and Agency Policy Division with full signing authority.

Regards,

Serge Imbrogno
Deputy Minister

Electricity Price Mitigation – Speaking Notes [FULL]

- The Ministry of Energy is proposing measures to provide relief to various electricity consumer classes. These include:
    - Provide an 8% rebate equal to the provincial portion of HST to consumers eligible for the Regulated Price Plan (RPP);
    - Updating Rural or Remote Rate Protection (RRRP);
    - Expanding the Industrial Conservation Initiative (ICI) eligibility to customers above 1MW in all sectors;
    - Recycle cap and trade proceeds to commercial and industrial electricity consumers to provide a modest 1% reduction in rates, with modest savings from proceeds intended for electricity relief through the Climate Change Action Plan to provide fiscal offsets.

No substantial changes in this proposal from previous discussions. As you can see in the table at the [bottom] of Page [2].

- ENERGY projects the 8% rebate would have approximately a $1 billion annual fiscal impact
- The RRRP program would transfer $110M to the rate base,
    - At a cost of $0.60/month to the average residential electricity consumer
    - And would provide a rebate of approximately $28 for a typical RRRP customer.
    - Energy will consider options to periodically adjust this amount.
- The ICI expansion would shift costs to the Class B consumers. Estimated at $47M in the short term and $82M in the long term.
    - The savings to new participants range from 21% in the short term up to 34% long-term.
    - The costs for typical residential customer would be about $1.31/month.
- As part of the original CCAP policy, $330M of the cap & trade proceeds was to be recycled for electricity price mitigation for residential and non-residential users.

    - Under this proposal, $270 M would be used to mitigate non-residential users
    - And leaves $60M for potential fiscal offsets to the 8% rebate;
    - provided it is directed to in-plan initiatives.

In terms of our considerations

- The 8% rebate does not align with the 2016 Budget fiscal plan and no proposed offsets.
- The 8% rebate applies to a similar group of as the previous Ontario Clean Energy Benefit,
    - However the lack of a cap makes this proposal more generous to the highest volume RPP users.
        - OCEB rebate maxed at 36,000 kWh annually, this would be more generous for those over 51,000 kWh
        - At the highest end, users in this proposal would receive up to $392% more than under the OCEB program.
    - It's unclear why the proposal for a cap would be any more complex or onerous to LDCs than the prior OCEB cap.
- As this proposal is not directly linked to the HST, businesses will continue to be able to claim input tax credits on the full HST amount
- Contradicts and dulls-down prices signals that promote conservation.
- Cap and Trade 60M savings will only materialize if $60M is diverted to in-plan items.

Electricity Price Mitigation – Shortened

- This Electricity Price Mitigation proposal, known as "Ontario Rebate for Electricity Consumers",
- It's my understanding that you would have been briefed and sat on meeting concerning this proposal several times over the last two weeks.

- Perhaps we can just jump directly to our considerations beginning on page [x]:

    - The 8% rebate applies to a similar group as the previous Ontario Clean Energy Benefit,
        - The Ontario Clean Energy Benefit was a 10% rebate for the first 3,000 kWh after the HST, this proposal is an 8% rebate on the HST eligible portion.

        - However the lack of a cap makes this proposal more generous to the highest volume RPP users.
        - OCEB rebate maxed at 36,000 kWh annually, this would be more generous for those over 51,000 kWh annually.
        - At the highest end, users in this proposal would receive up to 392% more than under the OCEB program.
    - It's unclear why the proposal for a cap would be any more complex or onerous to LDCs than the prior OCEB cap.

- [OCEB COMPARISION ON DEMAND MOUNTS]
- As this proposal is not directly linked to HST, businesses will continue to be able to claim input tax credits on the full HST amount
- Contradicts and 'dulls' TOU price signals that promote conservation.

- Cap and Trade $60M savings will only materialize if $60M is diverted to in-plan items.

Back Pocket Items

- Contradicts and ‘dulls’ TOU price signals that promote conservation.

	Current TOU	Delta with On-Peak	8% reduction	Delta with On-Peak
Off-Peak	8.7	9.3	8.0	8.6
Mid-Peak	13.2	4.8	12.1	4.4
On-Peak	18.0		16.6	

Relief on electricity bills

- The government will introduce legislation that will rebate — directly on consumers' monthly residential electricity bills — the provincial portion of the Harmonized Sales Tax, an eight per cent saving
- The rebate would go into effect on January 1, 2017
- Eligible rural and remote customers will receive additional savings, which would result in a~~n on-bill~~ monthly saving of about 20 per cent — about $45 a month

Removing the Debt Retirement Charge from electricity bills

- This measure is saving a typical residential electricity user about $70 each year with the removal of the debt retirement charge, as of January 1, 2016

Ontario Electricity Support Program

- The new Ontario Electricity Support Program (OESP), which is now accepting applications, will help make electricity more affordable for low-income families
- The OESP was developed by the Ontario Energy Board and is designed to lower electricity bills through an on-bill credit. Consumers will receive an on-bill credit of between $30 and $50 a month.
- [The OESP offers a larger credit to low-income consumers whose homes are electrically heated, and those who rely on certain medical devices. Eligible First Nation and Metis households also qualify for a larger credit. The credit for those receiving a larger reduction is between $45 and $75 a month.]

Commented [SK21]: My understanding of the current RRRP program is that the rebate is embedded in the delivery portion of the bill.

As such the RRRP expansion will not show up on the bill, unless there are changes made to how it is shown. However the 8% rebate will be shown.

See page 10 of this pdf:
http://www.hydroone.com/RegulatoryAffairs/Documents/EB-2015-0079/Rate_Order_HONI_Dx%20_20160114.pdf