From:	Francisco Chinchon
To:	Ronald Kwan; John Kim
Subject:	FHP bonds
Date:	Tuesday, June 05, 2018 11:22:38 AM

https://www.bloomberg.com/news/articles/2018-06-05/even-investors-are-holding-their-nose-over-ontario-s-hydro-bonds

From:	Bruno Amara
To:	Bonnie Lemcke
Cc:	John Kim
Subject:	FW: 20bn on FHP
Date:	Thursday, January 25, 2018 2:46:14 PM

Hi Bonnie

See email below for the revised estimate.

Bruno

From: Christie, Tim (ENERGY) [mailto:Tim.Christie@ontario.ca]
Sent: Thursday, January 25, 2018 1:56 PM
To: John Kim <John.Kim@ofina.on.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>
Subject: RE: 20bn on FHP

Hi John, we use about $20b.

Tim

From: John Kim [mailto:John.Kim@ofina.on.ca]
Sent: January-25-18 1:51 PM
To: Christie, Tim (ENERGY)
Cc: Bruno Amara; Kathirgamanathan,Shajee (OFA)
Subject: 20bn on FHP

Hi Tim,

Do you know if you have any public material on the peak debt under 20Bn figure? We've seen a fact sheet but with caveat to use reactively.

Thanks,

John

Y. John Kim
Director, Electricity Finance Branch
Ontario Financing Authority
e-mail: john.kim@ofina.on.ca
Ph: 416-212-6996

From: John Kim
To: Ronald Kwan
Cc: Gavin He
Subject: FW: Draft Global Adjustment disclosure for OPG
Date: Thursday, March 02, 2017 2:01:10 PM

Hi Ron,

I have no issue with the paragraph for the reason that it is largely consistent with the backgrounder.

Thanks,

John.

From: HO Philip -FIN & C CTRL [mailto:philip.ho@opg.com]
Sent: Thursday, March 02, 2017 1:31 PM
To: John Kim <John.Kim@ofina.on.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: CHENG Alec -FIN & C CTRL <alec.cheng@opg.com>
Subject: Draft Global Adjustment disclosure for OPG

Hi John and Ronald,

We are proposing to include the following language regarding the Global Adjustment refinancing portion of the Ontario's Fair Hydro Plan into OPG's 2016 MD&A and AIF.

We will be mailing the relevant documents to our Board today. Your comments will be appreciated. Please let us know if you have questions.

Ontario's Fair Hydro Plan

On March 2, 2017, the Province announced Ontario's Fair Hydro Plan (the Plan) aimed at reducing electricity bills by 25 per cent on average for all residential consumers in the province. As part of the Plan, the Province has proposed refinancing a portion of total electricity system Global Adjustment costs over a longer time period for residential consumers. According to the Plan, the Province intends to introduce legislation that would, if passed, enable the IESO and OPG to work together to undertake this financing. The Global Adjustment portion of the total price of electricity in the province is administered by the IESO. The Global Adjustment includes the difference between Ontario's electricity market clearing price used to dispatch generation and the prices paid to contracted and regulated generators in the province, and the cost of conservation and demand management programs. Virtually all generators in Ontario have bilateral contracts with the IESO that provide for payments that are different from the market clearing price of electricity, while the prices for all of OPG's nuclear and most of its hydroelectric generation are set by the OEB. OPG intends to work with the Province and the IESO as part of the refinancing proposal.

Regards,

Philip

Philip Ho, CPA, CA | Senior Manager, External Reporting & Accounting Policy (Acting)| Ontario Power Generation
700 University Avenue, Toronto ON M5G 1X6 | Phone: (416) 592-3320| E-mail: philip.ho@opg.com

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From:	John Kim
To:	Ronald Kwan
Subject:	FW: EXTERNAL – RE: Draft Global Adjustment disclosure for OPG
Date:	Monday, March 06, 2017 11:38:11 AM

Hi Ron,

These are my edits….just trying to simplify and delete words that could become problematic later on.

Ontario's Fair Hydro Plan

On March 2, 2017, the Province announced Ontario's Fair Hydro Plan (the Plan) aimed at reducing electricity bills by 25 percent on average for all residential consumers in the province. As part of the Plan, the Province has proposed refinancing a portion of the Global Adjustment costs over a longer time period for Regulated Price Plan eligible customers (e.g., residential , farm, small businesses). According to the Plan, the Province intends to introduce legislation that would, if passed, enable the IESO and OPG to work together to undertake this financing. The Global Adjustment is administered by the IESO. OPG intends to work with the Province and the IESO ~~as part of~~ the ~~refinancing~~ proposal. ~~Based on the Province's Plan,~~ OPG is exploring implementation options. The final plan is expected to be reviewed and is subject to approval by OPG's Board of Directors. The Global Adjustment includes the difference between Ontario's electricity market clearing price used to dispatch generation and the prices paid to contracted and regulated generators in the province, and the cost of conservation and demand management programs. Virtually all generators in Ontario have bilateral contracts with the IESO that provide for payments that are different from the market clearing price of electricity, while the prices for all of OPG's nuclear and a majority of its hydroelectric generation are set by the OEB.

From: HO Philip -FIN & C CTRL [mailto:philip.ho@opg.com]
Sent: Monday, March 06, 2017 11:22 AM
To: John Kim <John.Kim@ofina.on.ca>
Cc: CHENG Alec -FIN & C CTRL <alec.cheng@opg.com>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Subject: RE: EXTERNAL – RE: Draft Global Adjustment disclosure for OPG

Hi John,

Please see the amended current wording which takes into consideration your edits. Please let us know if you have any further comments. Thank you.

Ontario's Fair Hydro Plan

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time period for Regulated Price Plan eligible customers (e.g., residential , farm, small businesses). According to the Plan, the Province intends to introduce legislation that would, if passed, enable the IESO and OPG to work together to undertake this financing. The Global Adjustment is administered by the IESO. OPG intends to work with the Province and the IESO as part of the refinancing proposal. Based on the Province's Plan, OPG is exploring implementation options. The final plan is expected to be reviewed and is subject to approval by OPG's Board of Directors. The Global Adjustment includes the difference between Ontario's electricity market clearing price used to dispatch generation and the prices paid to contracted and regulated generators in the province, and the cost of conservation and demand management programs. Virtually all generators in Ontario have bilateral contracts with the IESO that provide for payments that are different from the market clearing price of electricity, while the prices for all of OPG's nuclear and a majority of its hydroelectric generation are set by the OEB.

Regards,

Philip

From: John Kim [mailto:John.Kim@ofina.on.ca]
Sent: Thursday, March 02, 2017 7:55 PM
To: HO Philip -FIN & C CTRL
Cc: CHENG Alec -FIN & C CTRL; Ronald Kwan
Subject: EXTERNAL – RE: Draft Global Adjustment disclosure for OPG

*** Exercise caution. This is an EXTERNAL email. DO NOT open attachments or click links from unknown senders or unexpected email. ***

Hi Philip,

Suggestions below:

Ontario's Fair Hydro Plan

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From: HO Philip -FIN & C CTRL [mailto:philip.ho@opg.com]
Sent: March-02-17 1:31 PM
To: John Kim <John.Kim@ofina.on.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: CHENG Alec -FIN & C CTRL <alec.cheng@opg.com>
Subject: Draft Global Adjustment disclosure for OPG

Hi John and Ronald,

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Regards,

Philip

Philip Ho, CPA, CA | Senior Manager, External Reporting & Accounting Policy (Acting)| Ontario Power Generation
700 University Avenue, Toronto ON M5G 1X6 | Phone: (416) 592-3320| E-mail: philip.ho@opg.com

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From:	Ronald Kwan
To:	John Kim
Subject:	FW: FHT - Rating Presentation
Date:	Thursday, July 06, 2017 1:01:56 PM
Attachments:	Rating Agency Presentation July_5 r1.pptx

Hi John,

Please review.

Thanks,
Ron

From: Nelms, Scott (MOF) [mailto:Scott.Nelms@ontario.ca]
Sent: July-06-17 12:51
To: Gadi Mayman <Gadi.Mayman@ofina.on.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Subject: FW: FHT - Rating Presentation

Fyi – I have shared with Energy as well.

From: LEE John -TREASURY [mailto:john.s.lee@opg.com]
Sent: July 5, 2017 7:26 PM
To: Nelms, Scott (MOF)
Cc: HARTWICK Ken -FINANCE; CROZZOLI Carlo -CBUSDEV&STRT; RYFA Ken -TREASURY
Subject: FHT - Rating Presentation

Scott:

As requested attached is the Rating presentation which we intend to use to solicit "soft" feedback from each Rating agency. A fulsome deck will be provided once they have been formally engaged. Our first meeting will be with DBRS tomorrow afternoon.

Please forward to both Andrew and Serge who I believe had expressed some interest in seeing the package.

John

Fair Hydro Plan Financing Program

Rating Agency Presentation

July 6, 2017

ONTARIO POWER GENERATION

CIBC Goldman Sachs RBC | RBC Capital Markets

Table of Contents

Executive Summary

Purpose

- To provide high-level overview of what is being contemplated by Ontario's Fair Hydro Plan and related financing
- This presentation is based on the legislation and regulations in place and anticipated contractual arrangements
- To explore both securitization and traditional structured corporate bond ratings
  - Various financing alternatives are being explored, most of which have potential rating agency involvement
- To set expectations for timing and process

Brief Overview

- On March 2, 2017 Ontario announced its Fair Hydro Plan which proposes to lower the average residential electricity bill by 25%
  - 25% reduction includes the 8% rebate introduced in January 2017 as part of the Ontario Rebate for Electricity Consumers Act, 2016
  - The 25% reduction is expected to be in effect until 2021 (approximately 4 years) although bills may be allowed to increase by the rate of inflation
- The 17% incremental reduction as part of the Fair Hydro Plan will be recorded as a regulatory deferred asset for future recovery
  - The recovery period depends on the final fair allocation but is expected to begin in 2027 with a hard stop in 2047
- The exact quantum and duration of the program is still being developed, but the deferral is expected to amount to ~C$2.5bn / year
  - It is expected that 50+% of the financing will be derived from the capital markets
- Legislation to effect the recovery right was enacted in early June, and the regulations were largely completed at the end of June
  - Legislation and regulations were designed with capital market financing objectives in mind
  - Careful consideration given to possible structural enhancements with respect to creating the regulatory asset, assignability, achieving a true-sale opinion, being non-bypassable and including a true up mechanism to ensure repayment

Ratings Objectives

- Initially we are reaching-out to better understand what methodologies you will apply to this program / structure
- Ultimately, we will be pursuing some combination of ABCP conduit rating confirmation, and/or explicit long-term ratings for the credit facility, term debt and sub-debt

Transaction Parties

Issuer	Fair Hydro Trust ("FHT")	
Advisors	CIBC, Goldman Sachs, RBC	
Financial Services Manager	Ontario Power Generation ("OPG") is 100% owned by the Province of Ontario (the "Province")	A low (DBRS), BBB+ (S&P)
Servicer	Independent Electricity System Operator ("IESO")	A high (DBRS), Aa2 (Moody's)
Provincial Rate Authority	Ontario Energy Board ("OEB")	
Guarantor	Province of Ontario (the "Province")	AA low (DBRS), AA- (Fitch), Aa2 (Moody's), A+ (S&P)
Issuer's Counsel	Torys LLP (Canada), Hunton & Williams LLP (U.S.)	
Advisor's Counsel	Osler, Hoskin & Harcourt LLP (Canada, U.S.)	

Timeline

- Deferral started in June 2017
- Warehouse financing to begin as soon as possible
- Currently educating agencies and seeking to better understand applicable criteria / methodologies

Key Dates

- Select Rating Agencies
- Complete Ratings Process

Market Holidays

- Canadian
- U.S.

July 2017

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9	10	11	12	13	14	15
16	17	18	19	20	21	22
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30	31					

August 2017

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20	21	22	23	24	25	26
27	28	29	30	31		

Ontario Electricity Market

SECTION I

Overview of the Electricity Market in Ontario

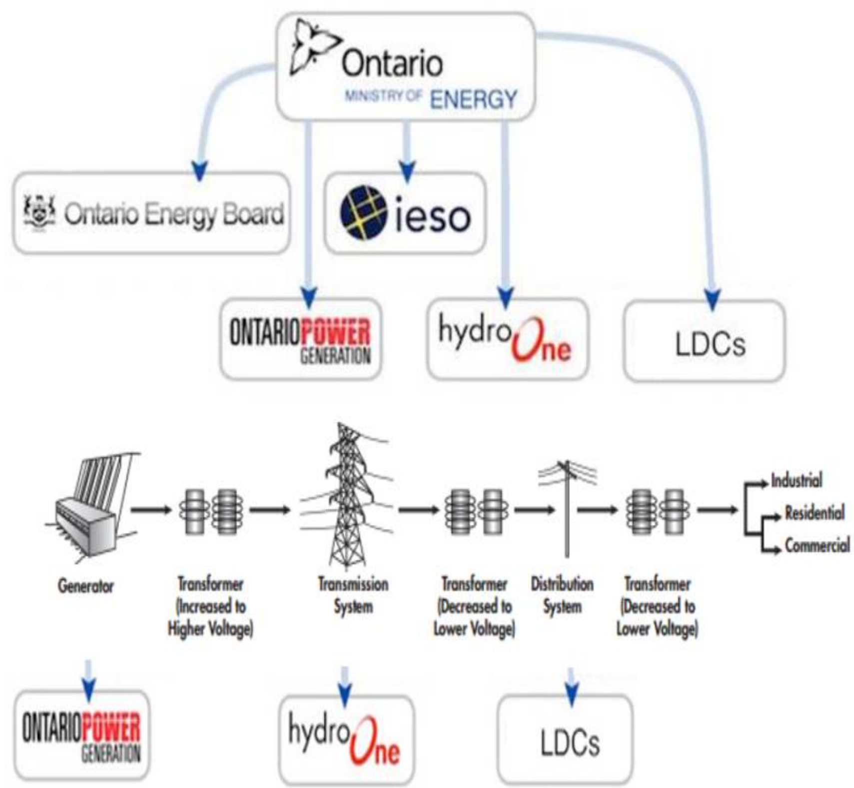
The Ontario electricity market is highly regulated

- Transmission rates, Distribution rates, and OPG's Generation are set by the Ontario Energy Board
- Rates for the majority of the remaining generation are set by direct contracts with the IESO (e.g. Bruce, Wind / Solar Power)

Key Entities

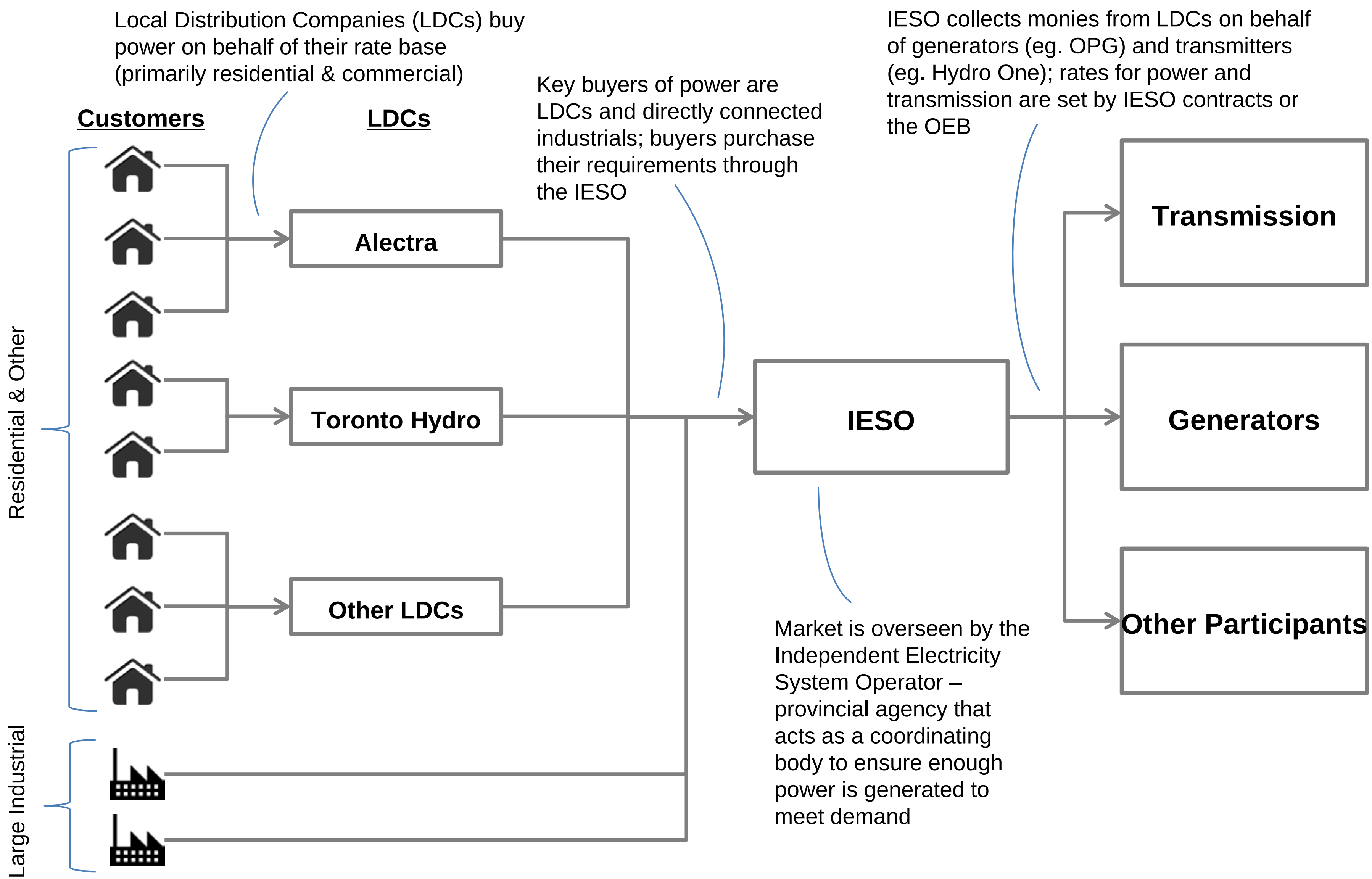
Ontario Ministry of Energy	▪ Sets policy for the electricity system
Ontario Energy Board	▪ Ontario Energy Board is Ontario's independent energy regulator that evaluates rates paid to regulated energy providers ▪ The Ontario Energy Board has a statutory obligation to set the regulated electricity price for Regulated Price Plan (RPP) consumers
IESO	▪ The Independent Electricity System Operator manages the operation and reliability of Ontario's bulk power system and administers the wholesale electricity market
OPG	▪ Ontario Power Generation is Ontario's largest electricity generator, producing approximately half of Ontario's electricity – Wholly owned by the Province of Ontario
Hydro One	▪ Owns and administers transmission in the province
LDC's	▪ Local Distribution Companies (LDC's) provide power to end-users (residential / commercial / industrial) ▪ There are 60+ LDC's operating in the IESO market; the 3 largest LDCs[1] account for ~60% of Ontario's 5.1 million customers

The Ontario electricity market has $22B in annual cash flows



(1) Hydro One, Toronto Hydro, and Alectra

Flow of Funds Through Key Market Participants



The IESO

Key Credit Strengths

- The IESO is at the center of the market, as buyers purchase power from the IESO and sellers of power are paid by the IESO
- IESO is effectively a clearing house and establishes the terms by which buyers are able to purchase power
- IESO Market Rules - Chapter 2 of the Market Rules outlines the parameters for Participation or “the procedures pursuant to which persons may apply to the IESO for the authorization to participate in the IESO-administered markets or to cause or permit electricity to be conveyed into, through or out of the IESO-controlled grid”
- The credit conditions are outlined in Chapter 2 and involves the “prudential support” provided by the LDC
- Based on public credit ratings or credit payment history, a buyer of power may be required to post collateral to support their projected exposure; LDCs, given their strong credit structure are awarded higher unsecured purchase limits
- The Prudential Rules are reviewed every few years and maintain a conservative stance regarding collateral

Strong Credit History

- Approximately $22 billion in costs flow through the Ontario electricity system each year (60% goes to generators)
- Since the beginning of the IESO open market in 2002, there have been 20 defaults
- Only three defaults could not be fully covered by the collateral posted by the defaulters
- Of the three defaults that resulted in “default levies” to the market participants, the total the levies were under $1 million
- Default levies are allocated 50% to Buyers of Power and 50% to the Sellers of Power, based on their usage/generation

LDCs

Key Credit Strengths

- The majority of power purchased in Ontario is by LDCs on behalf of residential and commercial customers; LDCs make up approximately 80% of the market
- The typical customer bill includes charges for the power itself (which goes to the generators), transmission (e.g. Hydro One), to the LDC itself (for local distribution), and for other market charges (e.g. IESO costs)
- LDC rates are governed by the OEB rate setting process; LDCs under the OEB's Retail Settlement and Distribution System Code may obtain a security deposit or letter of credit from their customers to mitigate risk of payment default
- LDCs are able to include an amount for accounts receivable write-offs within operating expenses for rate setting purposes. They can also apply for any extra-ordinary write-offs as a variance account adjustment to be considered by the OEB
- Approximately 10 LDC's have credit ratings through DBRS or S&P; the ratings are generally A, based on very low industry risk of regulated utilities and supportive regulatory framework;
- The OEB deems the capital structure of a LDC to include 40% equity and sets an allowed rate of return

Strong Credit History

- Given the strong credit mitigation measures available to the LDCs, a review of 8 LDCs (varied in size and geographic region), indicated a similar and very low loss rate
- LDC data was based on the financial statements of Toronto Hydro, North Bay Hydro, Horizon Utilities, Enersource, Collus PowerStream, Energy Plus, PowerStream, and Hydro One

	Average	Last 5 Years Average
AFDA / AR	3.40%	3.70%
AFDA / Sales	0.42%	0.44%
Write-Off / Sales	0.29%	0.28%

AFDA: Allowance for doubtful accounts

Fair Hydro Plan

SECTION II

Background

On March 2nd the Ontario Government Announced its Fair Hydro Plan

- The plan proposes to lower the average residential electricity bill by 25 percent
- In part by reallocating the charges paid by ratepayers for generation contracts and conservation programs over an extended period to match the expected life of the assets and the benefits of these initiatives
- In order to reallocate the payments, an OPG managed Financing Entity will use debt to purchase Regulatory Assets from the IESO and amortize them over a longer period
- This will lead to a near-term reduction in electricity bills followed by an increase in electricity bills over the long-term as interest and principal is repaid
- The government has further committed to capping the increase on the average residential bill at the rate of inflation for three years following the initial year

Financing Entity Overview

- OPG has the mandate to create and oversee a Trust separate from regular operations, that will finance costs related to the Fair Hydro Plan and spread the recovery through 2047
- The OEB will set the Regulated Price Plan to meet the requirements of the Fair Hydro Plan
- The IESO will create a regulatory asset approximately equal to the difference between collections from ratepayers and payment obligations to generators and conservation
- The Trust will have the right, but not the obligation, to purchase these regulatory assets / investment interests to support the debt required
  - Upon purchase by the trust, the regulatory asset becomes investment interest for the trust
- The Trust will enter the capital markets 1-3 times per year to secure long-term investment interests

Given the province’s commitment to reduce electricity bills, there is a requirement to establish a financing entity, the “Trust”, that will finance the shortfall in revenues not received from the market

Regulatory Asset / Investment Asset

Regulatory Asset

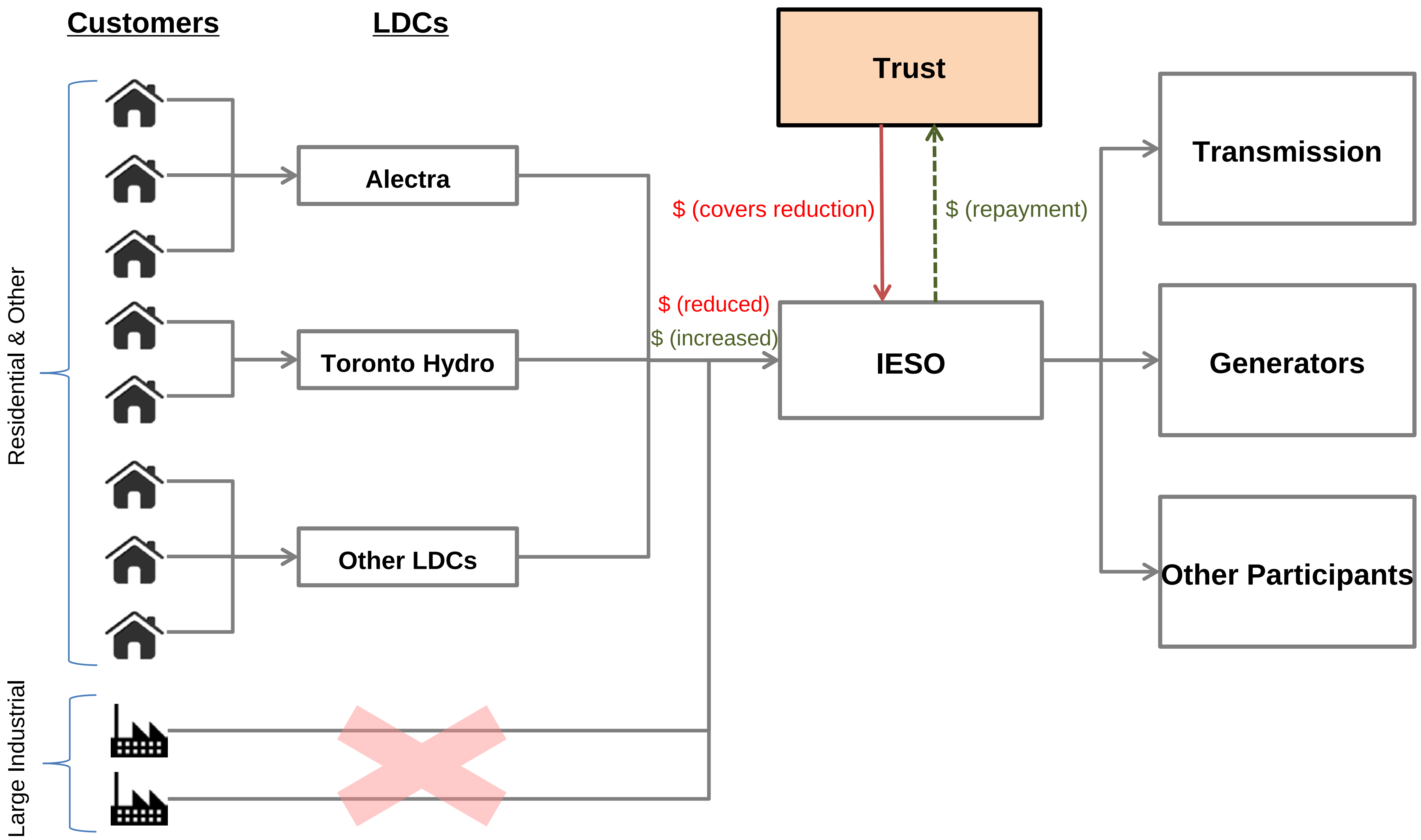
- IESO has authority under the Act to create a variance account to track the regulatory asset and is able to recover the balance in the variance account from consumers
- The OEB will set rates in accordance with regulation to recover the variance account balance through the clean energy adjustment but the OEB cannot change the amount of the clean energy adjustment to be recovered
- IESO is not able to recover the variance account balance prior to May 1, 2021
- IESO can transfer a portion of the variance account / regulatory asset to a financing entity
- A transfer of the variance account / regulatory asset is treated as an absolute sale of the IESO's right to recover the balance [and is not simply a security interest]

Investment Asset

- Transfer of the regulatory asset to a financing entity becomes an investment asset in the financing entity
- The investment asset constitutes an irrevocable property right and interest consisting of all rights of the IESO with respect to the variance account including the right to determine, impose, invoice, and collect the clean energy adjustment
- Investment interest owner can grant a security interest in order to secure a funding obligation

Addition of the Trust

In order to facilitate a ratepayer discount, the Trust is introduced to pay the difference to the IESO



Financial Services Manager - OPG

The Fair Hydro legislation names OPG, as the Financial Services Manager

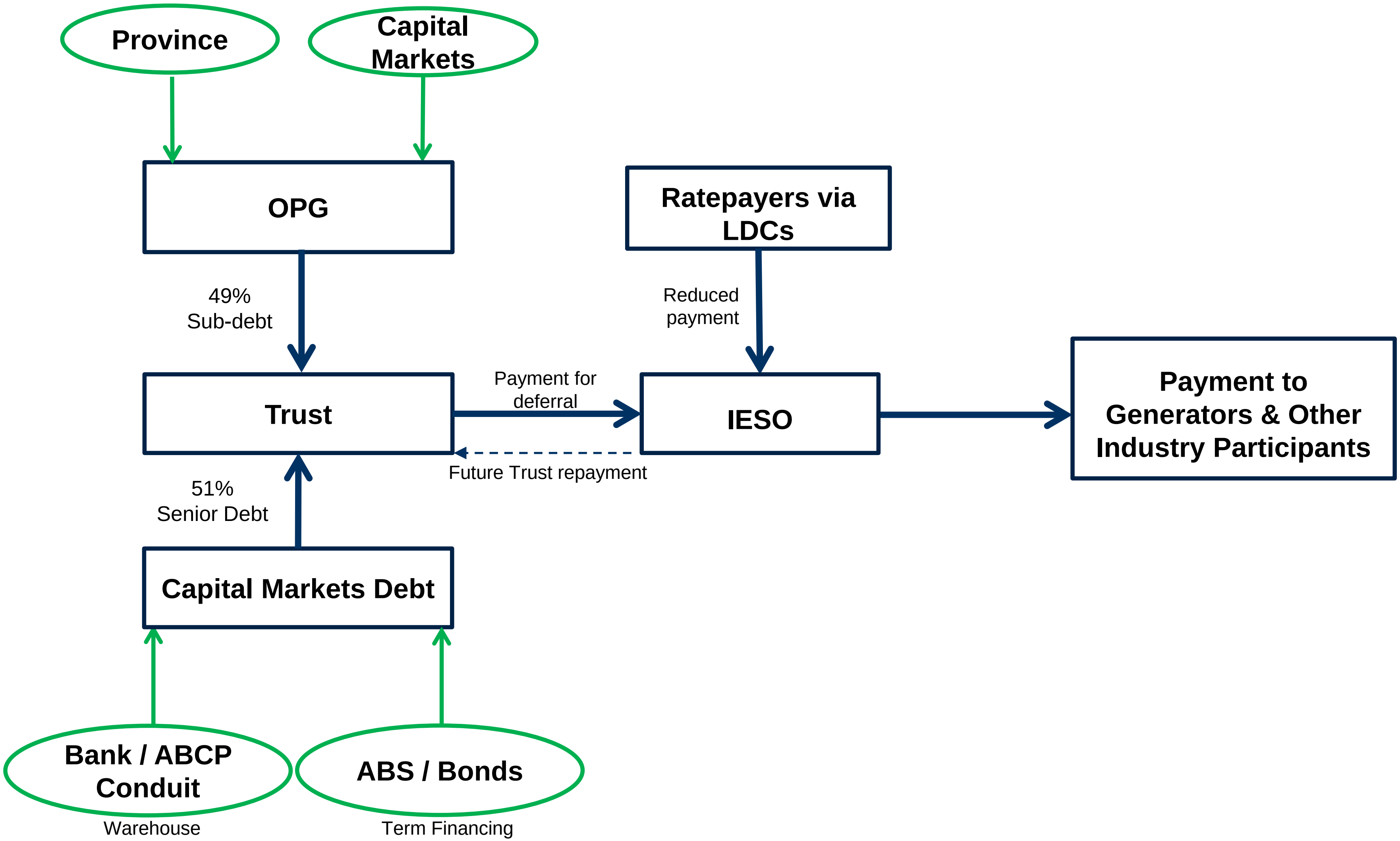
Why OPG

- One of the most experienced and largest generating companies in Canada, OPG has a broad set of relationships and capabilities that make it a valuable resource to the Province of Ontario
- Experienced in successful complex financing arrangements of large capital projects (such as OPG's recently completed Lower Mattagami project)

OPG's Role as Financial Services Manager

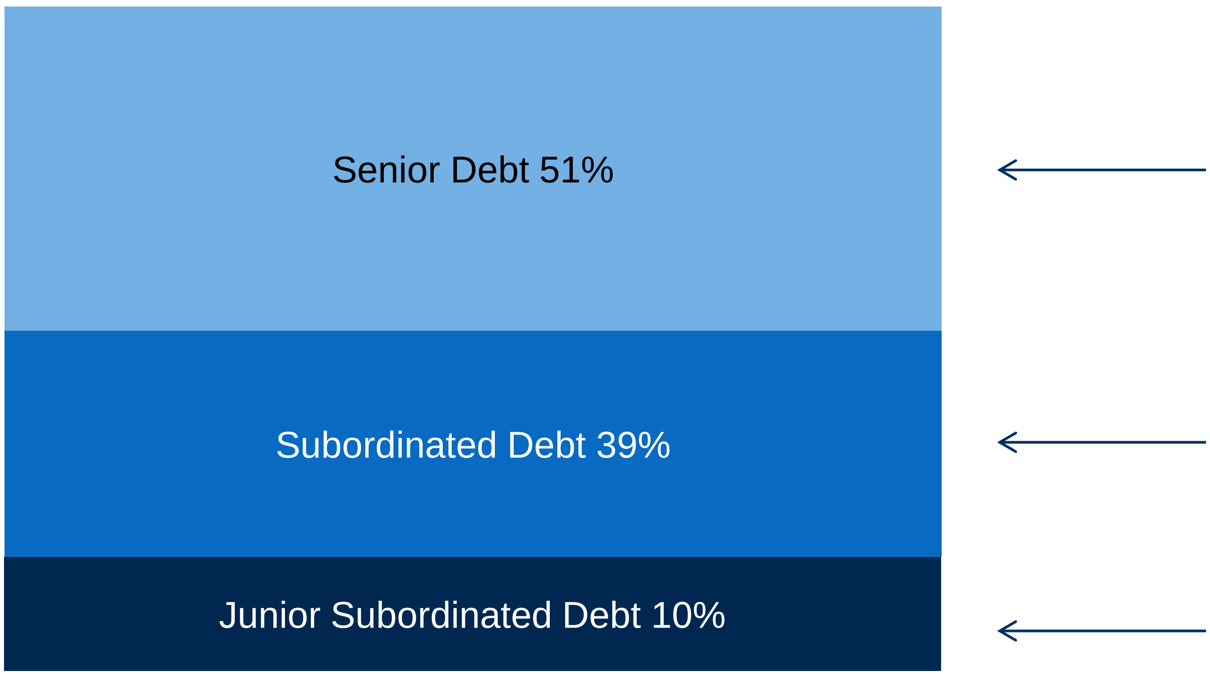
- Prepare a Financing Plan to evaluate whether potential funding obligations should be incurred for the purposes of acquiring an investment asset
- Administer the investment asset on behalf of the financing entities
- Ensure that funding obligations are incurred in a manner that is consistent with the Financing Plan
- Establish and charge fees for Financial Management Services
- Shall not provide for funding obligations to be incurred with any recourse to any assets of an electricity vendor, OPG, the OEB, the Province or the Lieutenant Governor in Council

Flow of Money between Trust and IESO



Simplified Trust Structure

- The Fair Hydro Trust will fund regulatory asset purchases through the issuance of senior and subordinated secured debt
  - Senior debt (51%) will be sourced monthly from committed warehouse facilities (bank and / or ABCP), and the periodic issuance of term debt
  - Subordinated debt (49%) will be provided by OPG; 44% of which will be obtained from an OEFC equity injection and 5% from OPG via external markets
  - Senior and subordinated principal will be scheduled to amortize to maintain the original proportions, shortfalls to be allocated first to the subordinated debt



<u>Senior Debt (Public Markets)</u>
Accessed from:
1) Canadian Securitization Program
2) U.S. Market Program

<u>Subordinated Debt</u>
- Provided to Trust by OPG via Ontario government

<u>Junior Subordinated Debt</u>
- OPG Injection (5%)
- Province to Trust by OPG via Ontario government (5%)

Financing Strategy

SECTION III

Financing Strategy – Funding Alternatives

- There are several potential funding sources that OPG can consider to structure the overall financing program, including securitization (issued in Canada or the U.S.), bonds, bank financing, and subordinated debt
- Warehouse financing (ABCP or bank debt) and OPG sub-debt will be used to fund monthly investment asset purchases from the IESO (monthly IESO funding shortfalls anticipated to be ~$200 million)
  - Fair Hydro Trust will periodically refinance the warehouse facility through the issuance of term debt
- It is anticipated that the first term debt takeout will be completed in the fall of 2017
  - Aggregate financing for the first offering could be ~$400 - $600 million, with senior-debt of about $200 - $300 million
- Both Canadian and U.S. term debt markets will be considered but decision on which markets to access will be determined on a deal by-deal-basis
- Term debt can take the form of bullet bonds or could be issued as amortizing bonds

ABCP Conduit	▪ R-1(high) rating confirmation will be required from DBRS pre-closing ▪ Used to fund monthly regulatory asset purchases from the IESO
Bank	▪ Two explicit long-term ratings will be required ▪ Used to fund monthly regulatory asset purchases from the IESO
Canadian Term ABS / Bond	▪ Two explicit long-term ratings required; AAA rating will be targeted
US Term Debt (ABS / Bonds)	▪ Two explicit long-term ratings required; AAA rating will be targeted ▪ Requires cross-currency swaps
Subordinated Debt	▪ Subordinated notes will provide credit enhancement for senior debt (ranks behind senior debt in cash flow waterfall) ▪ Two explicit long-term ratings required

Indicative Waterfall

Allocation of Collections

Taxes, Trustee Fees & Operating Expenses (to lawyers, accountants, IESO, rating agencies, etc.)

Interest on Senior Notes

Scheduled Principal – Senior

Replenishment of Reserve Accounts

Financial Services Manager fees (OPG)

Interest on Subordinated Notes

Scheduled Principal – Subordinated

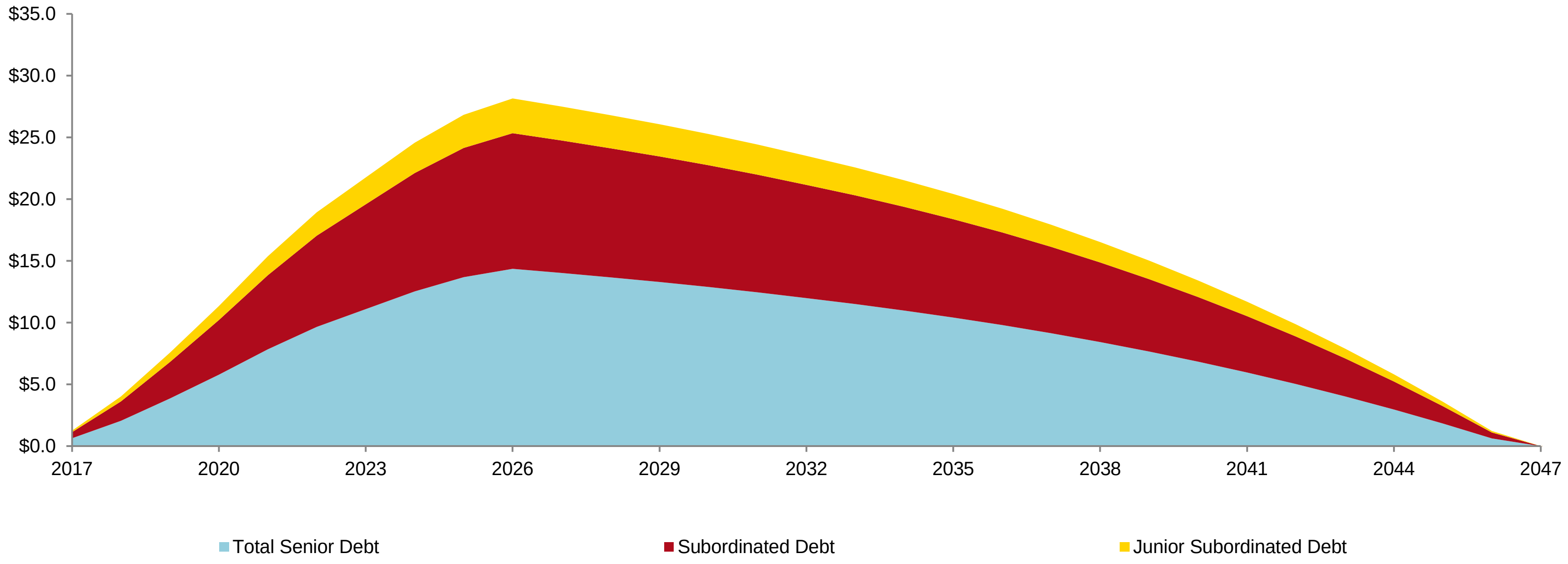
Interest on Junior Subordinated Notes

Scheduled Principal – Junior Subordinated

Excess Funds Account (amounts available for next payment period)

Illustrative Trust Debt Balance: Borrowing and Repayment

Illustrative Total Debt Summary - Funding / Repayment (Annual)



Transaction Structure

SECTION IV

Structural Comparison

	Precedent Utility Charge Securitizations	Proposed Fair Hydro Structure
Legislation	Legislation creates regulatory basis for implementation and servicing of the charge	
Details of Financing	Outlined in irrevocable Financing Order	Outlined in Regulations supported by province guarantee
Collateral	The right to impose and collect a charge from electric utility customers as well as transaction reserve accounts	
Government Support	State pledge not to permit any action that would impair the value of the Collateral	Province guarantee of repayment if any action taken that would impair the value of the Collateral
Non-Bypassability	Charge to be paid by all existing and future electric customers in included customer classes	
Impacted Customers	The majority of customers in service territory (including residential, commercial and industrial)	The majority of customers are residential and light commercial
Recovery Charge	Relatively low, <5% of total bill	Approximately 10% of total bill
Issuer	Varies, but generally a newly formed special purpose vehicle ("SPV") that is a subsidiary of Investor Owned Utility	Newly formed special purpose vehicle ("SPV") would be consolidated into Ontario Power Generation ("OPG") financial statements
Servicer	Varies, but generally Investor Owned Utility	Independent Electricity System Operator ("IESO")
Third Party Billing	Varies depending on State	Yes, via Local Distribution Companies ("LDC")
Nonpayment & Partial Payment by Customers	To the extent that any electric utility customer makes a partial payment of a bill containing the charge, the charge collection will be a pro-rata portion of the payment	
Amortization	Fully amortizing with principal payments beginning at first issuance	Bullet or amortizing bonds with principal payments deferred for a number of years following issuance
Establishment of First Charge	Generally within 1 year of issuance	Delayed start
Credit Enhancement	True-up mechanism, reserve accounts	True-up mechanism, reserve accounts, and subordinated debt
Hedging	Historically limited to interest rates	May include interest rate and currency hedging
Trust Structure	Discrete (single issue) trust	Master trust with multiple series issued over a 10 year period
Legal Opinions	Standard opinions regarding Validity, Enforceability and Regulatory Issues (Constitutionality opinion not applicable for Canadian transactions)	

Transaction Includes Same Key Elements as ‘AAA’ Investor-Owned Utility Securitizations

- Based on the existing Ontario Electricity market infrastructure no credit losses are anticipated
- Fair Hydro Trust true-up mechanism will ensure timely and full collectability of all debt
- OPG subordinated debt will provide incremental credit enhancement for the senior debt
- Provincial guarantee protects investors from an adverse change in law or inability to fund in capital markets
- The Province of Ontario has very low credit risk and is considered to be stable
  - High likelihood of Government of Canada (Aaa, stable) actions to prevent provincial default
  - Ontario is the largest economy of Canadian provinces: 40% of national economic output, 38% of national population, strong destination for immigration, lower than national unemployment rate

✓	**Experienced Operating Agent**	▪ OPG, IESO, and LDC are experienced operators
✓	**Strong Service Territory**	▪ Stable customer base with diversified service territory
✓	**Enhanced True-up**	▪ Mandatory semi-annual true-ups to correct for any over or under collections ▪ Optional interim adjustments permitted as necessary
✓	**Irrevocable & Nonbypassable Charge**	▪ Final and effective upon issuance of Bonds ▪ Applies to all residential and small commercial consumers receiving power through T&D system
✓	**No “Cap” on Collection of Charge**	▪ No limits on collection of charge that may be imposed on all customers after moratorium period
✓	**Province Guarantee**	▪ Strong government support through guarantee of bond legal and regulatory framework
✓	**Full Cross-Collateralization**	▪ Any collection shortfall is allocated among all specified consumers
✓	**No Industrial Risk**	▪ No single large customer or industry exposure

Legislative and Regulatory Overview

Authorizes Use of Securitization and Establishes Servicing Relationship between OPG, IESO and LDCs

General Powers and Authority of Legislation

- Creation of mechanism for deferral of costs by the IESO and establishment of the Regulatory Asset
- Creation of mechanism for absolute sale of Regulatory Asset to Financing Entity
- Definition of impacted customers ("specified consumers")
- Establishment of right to bill and collect a non-bypassable clean energy adjustment from future specified consumers
- Establishes principles of the Financing Plan
- Statement of non-impairment by the Crown and provision for a Provincial Guarantee
- Allowance for the establishment of a bankruptcy-remote issuer
- Allowance for true-up mechanism

Fair Hydro Regulations

- Details on calculation of the fair allocation amount
- Details on eligible financeable amounts
- Additional details on clean energy adjustment assessment methodology (true-up mechanism):
  - Timing (mandatory semi-annual + more frequent as needed)
  - Calculation (accounts for expected charge-offs, billing delays and usage as well as any under / over collection in previous period)
- Additional details around servicing / billing mechanics (e.g., LDCs and IESO)

Responsibilities Under New Structure

OPG

- OPG to act as Financial Services Manager including the development and implementation of the Financing Plan
- Calculates the clean energy adjustment including semi-annual true-up

IESO

- Establishment of IESO as Servicer
- Aggregation of collections by LDCs and remittance to Trustee

LDCs

- Manage the billing and remittance of the non-by-passable charge
- Includes charge as a separate line-item on customer bills

Ontario Energy Board

- Must accept clean energy adjustment, and converts to customer charge
- Allow for the charge to go into effect
- Review / approve ongoing Financial Services Manager fees and expenses

Objective of the Legislative, Regulatory and Contractual Structure

- Due to the number of related parties participating in the transaction an overarching theme of the structure is to establish the transaction on a commercial basis
- OPG expects to consolidate the results of the Trust in its financial statements based on the commercial relationship between OPG and the Trust
- The commercial basis is established by a number of elements which work together
  - Trust has the right but not the obligation to purchase a Regulatory Asset
  - Regulatory Asset purchased by the Trust provides the right to bill and collect a charge from future consumers
  - Transactions in the Trust to finance the asset purchase to be on an arm's length basis
  - Amount collected from consumers includes costs of financing the asset purchase, costs to manage the financing, costs to operate the Trust and repayment of principal
  - OEB role established to support recognition of asset and customer charge
  - Debt of the Trust structured to balance risk and cost with objective to achieve highest rating possible
  - Subordinated debt issued by the Trust will be rated and will price off of the senior debt based on a survey of banks
  - Subordinated debt will absorb uncertainties of the senior debt to support highest rating of the senior debt
  - OPG will manage the activities of the Trust for a fee comparable to fees charged by 3rd party managers. OEB role will be limited to reviewing the application of the fee methodology
- Notwithstanding consolidation of the Trust into OPG the Trust will be structured to be bankruptcy remote from OPG

Bill 132 Fair Hydro Plan Act, 2017 Legislation

The Act establishes a framework under which the costs and benefits associated with the “clean energy initiative” are to be allocated among present and future consumers of electricity

Rate Reduction Time Period

- From July 1, 2017 until April 30, 2019, electricity rates payable by a “regulated rate consumer” will be the rate that would result in a representative regulated rate consumer who meets the prescribed criteria being charged an invoice amount that is 25% less than the regulated rate that would otherwise have been determined by the OEB
  - For the 12 month period beginning May 1, 2018 the invoice amount established previously would increase by the rate of inflation in Ontario
  - Subsequent rate reductions beyond April 30, 2019 will be established by regulation

Regulatory Asset

- Each month, the IESO will determine the shortfall resulting from the rate reduction and record in a variance account. IESO has the right to recover the balance recorded in the variance account from specified consumers and this right will be a “regulatory asset” under the Act. IESO will not be entitled to collect the balance recorded in the variance account from specified consumers before May 1, 2021

Investment Asset

- IESO may transfer (sell) a specified portion of the regulatory asset to the financing entity established by OPG. The Trust is not obligated to purchase the asset. Upon the transfer, the financing entity acquires an interest in the investment asset that is a current and irrevocable property right consisting of the right to impose, invoice, collect, receive and recover the clean energy adjustment from specified consumers or electricity vendors

Components of the legislation and accompanying agreements that are of interest to investors

- Investment assets created by the IESO represents a claim on the rate-payers that is a current and irrevocable property right consisting of the right to impose, invoice, collect, receive and recover from the market
- The trust is not obligated to purchase the regulatory asset from the IESO
- The various investment assets are pari passu
- **The province is providing a guarantee to the trust; backstopping its obligations, either if there are changes in future legislation or if there are market disruption (liquidity) issues**

Clean Energy Adjustment – Proposed Billing and Collection Process

- Clean Energy Adjustment 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
  - As such, CEA amounts will not benefit from the rights the IESO currently has under the Market Rules – ability to charge interest, draw down on prudential amounts, and borrow to cover shortfalls
  - Collections risk for CEA amounts are dealt with through statutory rights in the Act, the collection obligations of the IESO under the Master Sales and Services Agreement (to be finalized) and the ability to include amounts into the true up mechanism

1 Financial Services Manager

Determines the CEA (monthly) based on legislation and regulation and notifies the OEB of CEA for each reference period

2 OEB

Determines volumetric rates[1] to invoice specified consumers to recover CEA expressed as a cent per kWh

3 Electricity Vendors

Invoice specified consumers for CEA amount by using volumetric rate set by OEB and report the amount invoiced and collected from consumers to the IESO

4 Specified Consumers

Must pay invoice from Electricity Vendors for CEA amount

5 Electricity Vendors

Must collect CEA amounts from specified consumers, hold amounts in a segregated account and remit CEA amounts to the IESO (separate from any other amount collected and remitted)

6 IESO

Must receive CEA amounts paid by Electricity Vendors, hold CEA amounts in a trust and remit the CEA amounts to the financing entities

[1] The rates will be determined by dividing the CEA amount by the forecasted energy consumption in the reference period by specified consumers

Indicative Allocation of Servicing Role and Responsibilities

	OPG / Financing Entity	IESO	LDC
Management of Ongoing Issuance	✓		
Meter Reading			✓
Billing			✓
Collections			✓
Cash Management		✓	
Remittance of Charge to Trustee	✓	✓	
(Responding to inquiries by customers if practicable, or forwarding such inquiries to OPG)	✓		✓
Ongoing Filings for Trustee and Rating Agencies	✓		
True-Up Calculation	✓	✓	

From:	GRECO Clara -LAWDIV
To:	Shruti Talwar (shruti.talwar@ontario.ca); John Kim; Gavin He
Cc:	LADAK Lubna -TREASURY; GO Matthew -TREASURY; LAURETA LAPIRA May -TREASURY
Subject:	Fair Hydro - Lessons Learned for Equity Injections -- ENERGY/OFA
Date:	Tuesday, May 22, 2018 4:12:12 PM
Attachments:	Lessons Learned Equity Injection Ene and OFA May 2018.docx

Hello

Thanks for all the comments provided for our lessons learned process.

I attach the updated lessons learned summary which incorporates the comments from ENERGY and the OFA together with OPG's replies. If anyone would like to have a call to discuss any of the items further please let me know and I can canvass for a convenient time.

I'm also happy to address any further comments or questions by email so please do not hesitate to contact me.

Regards,

Clara

Clara Greco

Senior Counsel – FHP

Ontario Power Generation

700 University Avenue, H18 C19

Toronto, Ontario M5G 1X6

416-592-8226 | Cell 416-859-6416

clara.greco@opg.com

May 9, 2018

Lessons Learned – OPG/FHT - Ministry of Energy/Ministry of Finance Equity Injection Process

Description of Problem/Success	Impact	Recommendation	Comments
1. Equity Subscription Notice			
ENERGY: more advance notice of when payments will be requested		Monthly or quarterly schedule Notice of payment requests one week in advance	OPG response: OPG can advise the months in which purchases are expected to occur and provide a general idea of the amount. However, the final amount cannot be finalized until the applicable transfer notice is received by OPG. OPG will continue to provide as much advance notice as reasonably possible of the required equity request.
ENERGY: equity calculation document to be included with Share Subscription agreement	While the document is included as part of the Exhibit B attachment by OPG in accordance with the Master Share Subscription Agreement, it would be incrementally more efficient in ENERGY dealings with OFA to have both pages (share subscription + equity calculation) in one attachment as well as part of Exhibit B	Share subscription agreement/form sent to ENERGY to include as an attachment the equity calculation	OPG response: going forward OPG will include the equity calculation in both the share subscription and Exhibit B.

Description of Problem/Success	Impact	Recommendation	Comments
OFA: clarification on timeline: would there be a problem if OFA makes the payments later in the morning or before noon on the date of closing?	Timing of availability of equity funds to OPG and closing – later in the day could result in follow on wire transfers being delayed and ultimately not being able to close asset transaction with IESO on closing date Timing obligations of OFA Settlements Group	OFA settlements group would like to effect wire transfers later in the day on day of closing.	OPG response: First thing in the morning is required as this is the first of many steps required to close the purchase. The main risk with pushing this out is not being able to close on the intended day. If OFA prefers transferring its funds later in the day, we would require that that happen the day before closing rather than the day of closing as we have been doing. This would be acceptable from our end. Keep in mind that we would continue to expect no more than 5 business days from notice to Energy to funding in accordance with the Master Share Subscription Agreement. OFA reply: OFA Settlements team will continue to do their best to accommodate OPG timeline. According to OFA's Cash Management Directive, it does not allow ministries to pay earlier than required. To move up the payment day to the day before, I believe it would require discussion between OPG and ENERGY.

Description of Problem/Success	Impact	Recommendation	Comments
			OPG Proposal: OPG would like to retain the 5 BD requirement in the Master Share Subscription Agreement with ENERGY. OPG intends to send the equity request to ENERGY at least 5 BD before closing permitting ENERGY and OFA to fund on or before closing. Given the number of succeeding wire transfers that must occur after the equity funds arrive in FHT's account, OPG would like to discuss with ENERGY timing--OFA providing the funds the day before closing would be consistent with the terms of the MSSA as long as FHT gave notice of the equity requirement more than 5 BDs before closing with IESO.
2. Communications			
ENERGY: Information on debt financing provided for April issue for first time	Information about FHT debt transactions is helpful. Provides information about related equity needs and timing where equity and term debt issuances occur close together. Allows Ministry/Minister to remain current on progress FHT financing plan	It would be helpful to ENERGY to have information about the related debt issues when they occur	OPG: OPG will provide term debt summary prior to debt issuances and inform ENERGY by email of upcoming term debt issuances.

From:	GRECO Clara -LAWDIV
To:	John Kim
Subject:	Fair Hydro - Lessons Learned for Equity Process
Date:	Wednesday, May 02, 2018 9:36:33 AM
Attachments:	Lessons Learned_Equity Injections_April 2018.docx

Hi John
Hope this finds you well. Shruti Talwar suggested I contact you directly about this.

I'm am coordinating a lessons learned exercise for our equity transactions – now that we have completed 3 of these we thought it a good idea. I've already solicited Shruti's input for Energy and was hoping to get yours/your colleagues' input for Finance/OFA. I attach a template we are using.

Could I prevail upon you to provide me with your feedback, and seek out similar from your colleagues? You/they can either email me directly any issues/suggestions or populate the template and return it to me.

Once we've received all Ministry feedback, I will assemble it together with OPG input/responses, into one document and circulate to all interested parties. If appropriate I can also arrange for a quick call or meeting to review the lessons learned and any future changes in our processes going forward.
Thanks for your time,
Regards,
Clara

Clara Greco
Senior Counsel – FHP
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clara.greco@opg.com

April , 2018
Lessons Learned – OPG/FHT – Ministry of Energy/Ministry of Finance Equity Injection Process

Description of Problem/Success	Impact	Recommendation	Comments:
1. Equity Subscription Notice			

Description of Problem/Success	Impact	Recommendation	Comments
2. Communications			
3. Master Subscription Agreement			
4.			

From:	Carlos Yep
To:	Ken Kandeepan; John Psinas; John Kim
Subject:	Fwd: FHT - Rating Presentation
Date:	Thursday, July 06, 2017 3:11:36 PM
Attachments:	Rating Agency Presentation July_5 r1.pptx ATT00001.htm

Sent from my iPhone

Begin forwarded message:

From: "Gadi Mayman" <Gadi.Mayman@ofina.on.ca>
To: "Bonnie Lemcke" <Bonnie.Lemcke@ofina.on.ca>, "Mike Manning" <Mike.Manning@ofina.on.ca>, "Carlos Yep" <Carlos.Yep@ofina.on.ca>
Cc: "Anna Strathy" <Anna.Strathy@ofina.on.ca>
Subject: FW: FHT - Rating Presentation

From: Nelms, Scott (MOF) [mailto:Scott.Nelms@ontario.ca]
Sent: Thursday, July 06, 2017 12:51 PM
To: Gadi Mayman <Gadi.Mayman@ofina.on.ca>; Ken Kandeepan <Ken.Kandeepan@ofina.on.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Subject: FW: FHT - Rating Presentation

Fyi – I have shared with Energy as well.

From: LEE John -TREASURY [mailto:john.s.lee@opg.com]
Sent: July 5, 2017 7:26 PM
To: Nelms, Scott (MOF)
Cc: HARTWICK Ken -FINANCE; CROZZOLI Carlo -CBUSDEV&STRT; RYFA Ken -TREASURY
Subject: FHT - Rating Presentation

Scott:

As requested attached is the Rating presentation which we intend to use to solicit "soft" feedback from each Rating agency. A fulsome deck will be provided once they have been formally engaged.
Our first meeting will be with DBRS tomorrow afternoon.

Please forward to both Andrew and Serge who I believe had expressed some interest in seeing the package.

John

Fair Hydro Plan Financing Program

Rating Agency Presentation

July 6, 2017




ONTARIO POWER GENERATION

CIBC Goldman Sachs RBC | RBC Capital Markets

Table of Contents

Executive Summary

Purpose

- To provide high-level overview of what is being contemplated by Ontario's Fair Hydro Plan and related financing
- This presentation is based on the legislation and regulations in place and anticipated contractual arrangements
- To explore both securitization and traditional structured corporate bond ratings
  - Various financing alternatives are being explored, most of which have potential rating agency involvement
- To set expectations for timing and process

Brief Overview

- On March 2, 2017 Ontario announced its Fair Hydro Plan which proposes to lower the average residential electricity bill by 25%
  - 25% reduction includes the 8% rebate introduced in January 2017 as part of the Ontario Rebate for Electricity Consumers Act, 2016
  - The 25% reduction is expected to be in effect until 2021 (approximately 4 years) although bills may be allowed to increase by the rate of inflation
- The 17% incremental reduction as part of the Fair Hydro Plan will be recorded as a regulatory deferred asset for future recovery
  - The recovery period depends on the final fair allocation but is expected to begin in 2027 with a hard stop in 2047
- The exact quantum and duration of the program is still being developed, but the deferral is expected to amount to ~C$2.5bn / year
  - It is expected that 50+% of the financing will be derived from the capital markets
- Legislation to effect the recovery right was enacted in early June, and the regulations were largely completed at the end of June
  - Legislation and regulations were designed with capital market financing objectives in mind
  - Careful consideration given to possible structural enhancements with respect to creating the regulatory asset, assignability, achieving a true-sale opinion, being non-bypassable and including a true up mechanism to ensure repayment

Ratings Objectives

- Initially we are reaching-out to better understand what methodologies you will apply to this program / structure
- Ultimately, we will be pursuing some combination of ABCP conduit rating confirmation, and/or explicit long-term ratings for the credit facility, term debt and sub-debt

Transaction Parties

Issuer	Fair Hydro Trust ("FHT")	
Advisors	CIBC, Goldman Sachs, RBC	
Financial Services Manager	Ontario Power Generation ("OPG") is 100% owned by the Province of Ontario (the "Province")	A low (DBRS), BBB+ (S&P)
Servicer	Independent Electricity System Operator ("IESO")	A high (DBRS), Aa2 (Moody's)
Provincial Rate Authority	Ontario Energy Board ("OEB")	
Guarantor	Province of Ontario (the "Province")	AA low (DBRS), AA- (Fitch), Aa2 (Moody's), A+ (S&P)
Issuer's Counsel	Torys LLP (Canada), Hunton & Williams LLP (U.S.)	
Advisor's Counsel	Osler, Hoskin & Harcourt LLP (Canada, U.S.)	

Timeline

- Deferral started in June 2017
- Warehouse financing to begin as soon as possible
- Currently educating agencies and seeking to better understand applicable criteria / methodologies

Key Dates

- Select Rating Agencies
- Complete Ratings Process

Market Holidays

- Canadian
- U.S.

July 2017

S	M	T	W	T	F	S
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16	17	18	19	20	21	22
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30	31					

August 2017

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13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Ontario Electricity Market

SECTION I

Overview of the Electricity Market in Ontario

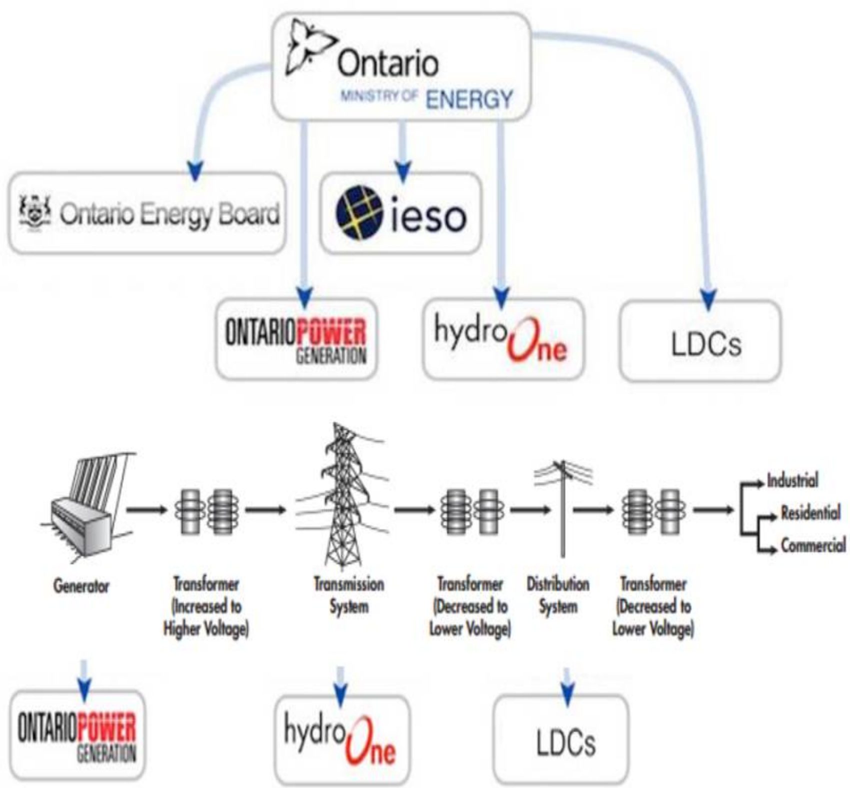
The Ontario electricity market is highly regulated

- Transmission rates, Distribution rates, and OPG's Generation are set by the Ontario Energy Board
- Rates for the majority of the remaining generation are set by direct contracts with the IESO (e.g. Bruce, Wind / Solar Power)

Key Entities

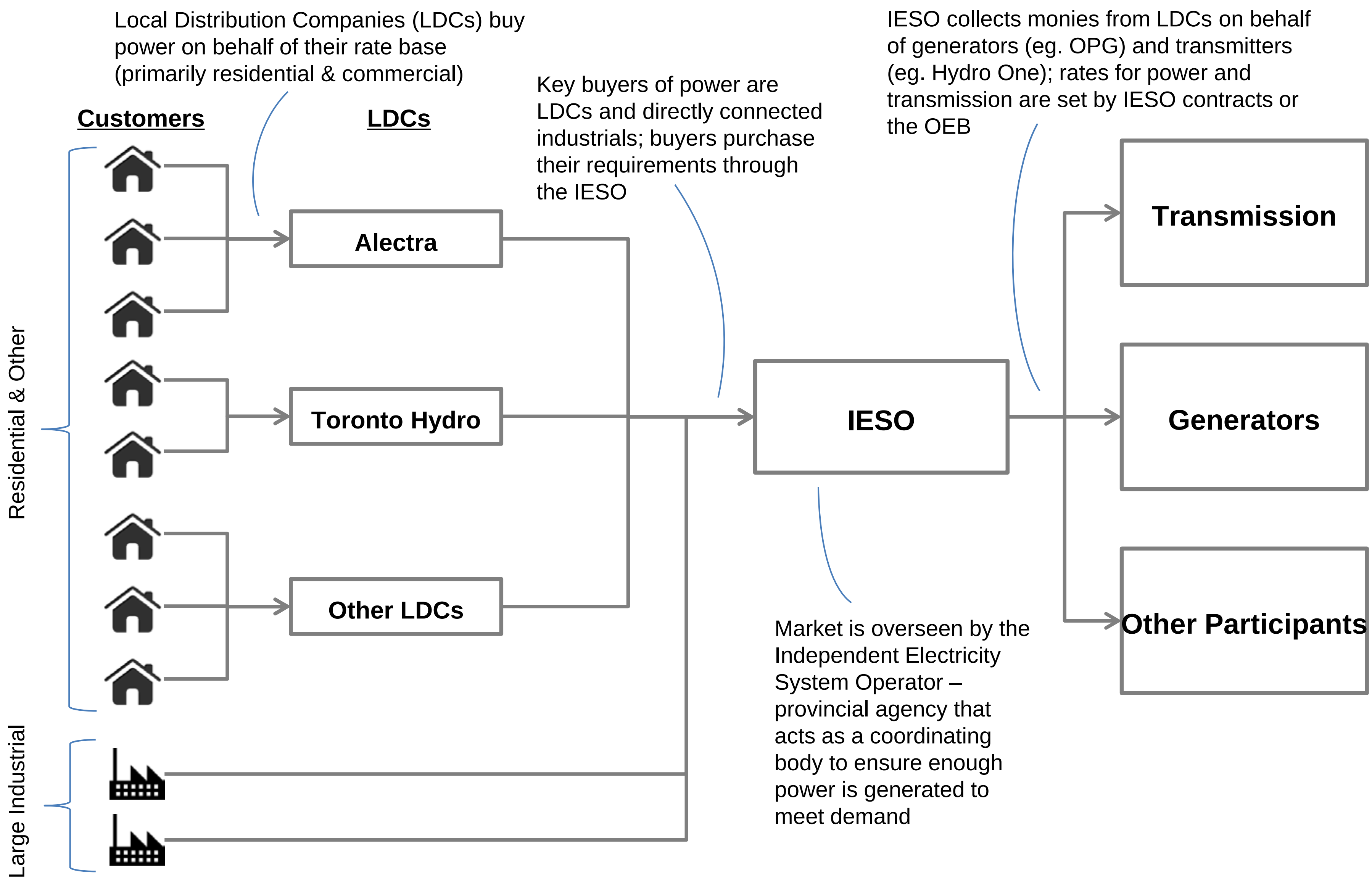
Ontario Ministry of Energy	▪ Sets policy for the electricity system
Ontario Energy Board	▪ Ontario Energy Board is Ontario's independent energy regulator that evaluates rates paid to regulated energy providers ▪ The Ontario Energy Board has a statutory obligation to set the regulated electricity price for Regulated Price Plan (RPP) consumers
IESO	▪ The Independent Electricity System Operator manages the operation and reliability of Ontario's bulk power system and administers the wholesale electricity market
OPG	▪ Ontario Power Generation is Ontario's largest electricity generator, producing approximately half of Ontario's electricity – Wholly owned by the Province of Ontario
Hydro One	▪ Owns and administers transmission in the province
LDC's	▪ Local Distribution Companies (LDC's) provide power to end-users (residential / commercial / industrial) ▪ There are 60+ LDC's operating in the IESO market; the 3 largest LDCs[1] account for ~60% of Ontario's 5.1 million customers

The Ontario electricity market has $22B in annual cash flows



(1) Hydro One, Toronto Hydro, and Alectra

Flow of Funds Through Key Market Participants



The IESO

Key Credit Strengths

- The IESO is at the center of the market, as buyers purchase power from the IESO and sellers of power are paid by the IESO
- IESO is effectively a clearing house and establishes the terms by which buyers are able to purchase power
- IESO Market Rules - Chapter 2 of the Market Rules outlines the parameters for Participation or “the procedures pursuant to which persons may apply to the IESO for the authorization to participate in the IESO-administered markets or to cause or permit electricity to be conveyed into, through or out of the IESO-controlled grid”
- The credit conditions are outlined in Chapter 2 and involves the “prudential support” provided by the LDC
- Based on public credit ratings or credit payment history, a buyer of power may be required to post collateral to support their projected exposure; LDCs, given their strong credit structure are awarded higher unsecured purchase limits
- The Prudential Rules are reviewed every few years and maintain a conservative stance regarding collateral

Strong Credit History

- Approximately $22 billion in costs flow through the Ontario electricity system each year (60% goes to generators)
- Since the beginning of the IESO open market in 2002, there have been 20 defaults
- Only three defaults could not be fully covered by the collateral posted by the defaulters
- Of the three defaults that resulted in “default levies” to the market participants, the total the levies were under $1 million
- Default levies are allocated 50% to Buyers of Power and 50% to the Sellers of Power, based on their usage/generation

LDCs

Key Credit Strengths

- The majority of power purchased in Ontario is by LDCs on behalf of residential and commercial customers; LDCs make up approximately 80% of the market
- The typical customer bill includes charges for the power itself (which goes to the generators), transmission (e.g. Hydro One), to the LDC itself (for local distribution), and for other market charges (e.g. IESO costs)
- LDC rates are governed by the OEB rate setting process; LDCs under the OEB's Retail Settlement and Distribution System Code may obtain a security deposit or letter of credit from their customers to mitigate risk of payment default
- LDCs are able to include an amount for accounts receivable write-offs within operating expenses for rate setting purposes. They can also apply for any extra-ordinary write-offs as a variance account adjustment to be considered by the OEB
- Approximately 10 LDC's have credit ratings through DBRS or S&P; the ratings are generally A, based on very low industry risk of regulated utilities and supportive regulatory framework;
- The OEB deems the capital structure of a LDC to include 40% equity and sets an allowed rate of return

Strong Credit History

- Given the strong credit mitigation measures available to the LDCs, a review of 8 LDCs (varied in size and geographic region), indicated a similar and very low loss rate
- LDC data was based on the financial statements of Toronto Hydro, North Bay Hydro, Horizon Utilities, Enersource, Collus PowerStream, Energy Plus, PowerStream, and Hydro One

	Average	Last 5 Years Average
AFDA / AR	3.40%	3.70%
AFDA / Sales	0.42%	0.44%
Write-Off / Sales	0.29%	0.28%

AFDA: Allowance for doubtful accounts

Fair Hydro Plan

SECTION II

Background

On March 2nd the Ontario Government Announced its Fair Hydro Plan

- The plan proposes to lower the average residential electricity bill by 25 percent
- In part by reallocating the charges paid by ratepayers for generation contracts and conservation programs over an extended period to match the expected life of the assets and the benefits of these initiatives
- In order to reallocate the payments, an OPG managed Financing Entity will use debt to purchase Regulatory Assets from the IESO and amortize them over a longer period
- This will lead to a near-term reduction in electricity bills followed by an increase in electricity bills over the long-term as interest and principal is repaid
- The government has further committed to capping the increase on the average residential bill at the rate of inflation for three years following the initial year

Financing Entity Overview

- OPG has the mandate to create and oversee a Trust separate from regular operations, that will finance costs related to the Fair Hydro Plan and spread the recovery through 2047
- The OEB will set the Regulated Price Plan to meet the requirements of the Fair Hydro Plan
- The IESO will create a regulatory asset approximately equal to the difference between collections from ratepayers and payment obligations to generators and conservation
- The Trust will have the right, but not the obligation, to purchase these regulatory assets / investment interests to support the debt required
  - Upon purchase by the trust, the regulatory asset becomes investment interest for the trust
- The Trust will enter the capital markets 1-3 times per year to secure long-term investment interests

Given the province’s commitment to reduce electricity bills, there is a requirement to establish a financing entity, the “Trust”, that will finance the shortfall in revenues not received from the market

Regulatory Asset / Investment Asset

Regulatory Asset

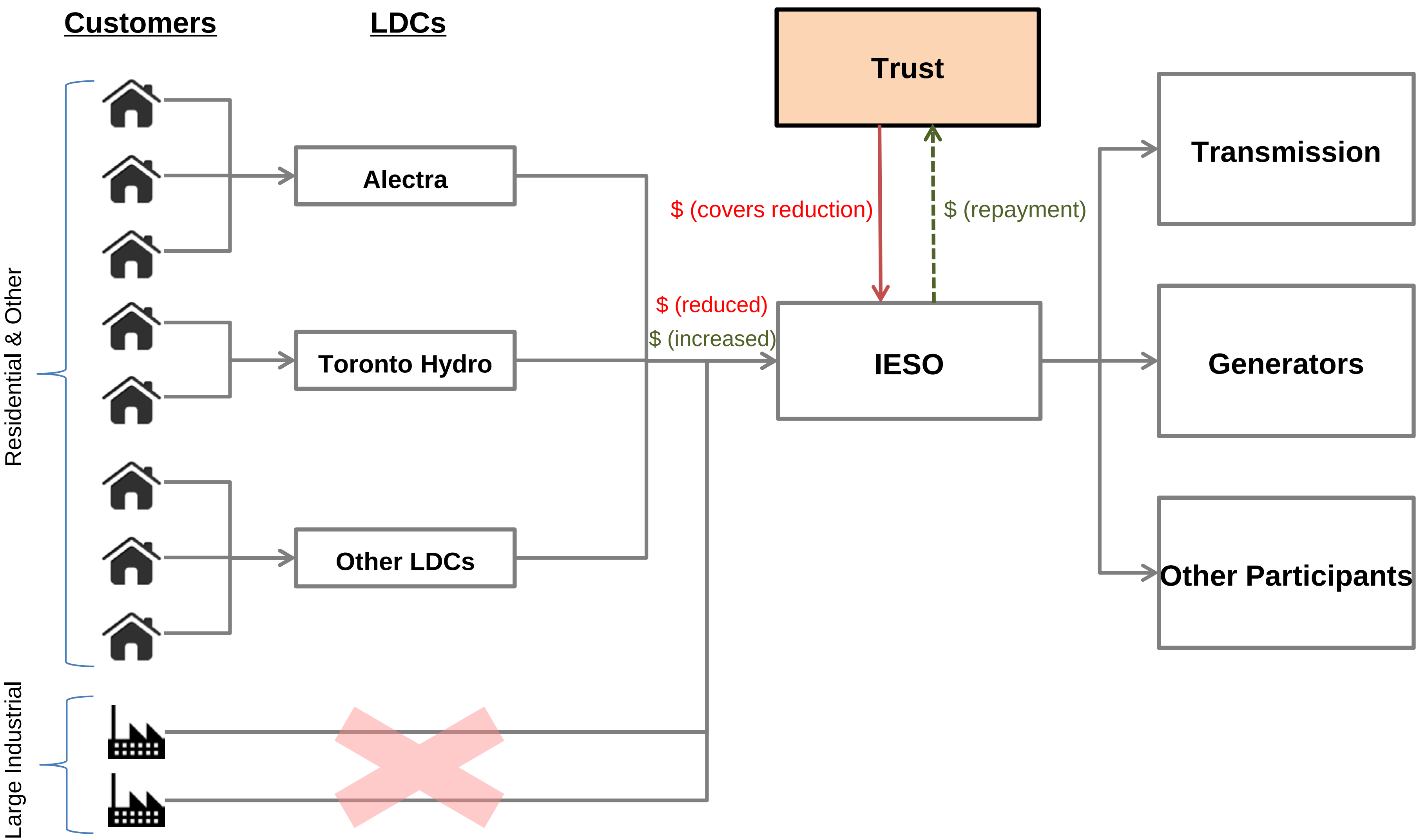
- IESO has authority under the Act to create a variance account to track the regulatory asset and is able to recover the balance in the variance account from consumers
- The OEB will set rates in accordance with regulation to recover the variance account balance through the clean energy adjustment but the OEB cannot change the amount of the clean energy adjustment to be recovered
- IESO is not able to recover the variance account balance prior to May 1, 2021
- IESO can transfer a portion of the variance account / regulatory asset to a financing entity
- A transfer of the variance account / regulatory asset is treated as an absolute sale of the IESO's right to recover the balance [and is not simply a security interest]

Investment Asset

- Transfer of the regulatory asset to a financing entity becomes an investment asset in the financing entity
- The investment asset constitutes an irrevocable property right and interest consisting of all rights of the IESO with respect to the variance account including the right to determine, impose, invoice, and collect the clean energy adjustment
- Investment interest owner can grant a security interest in order to secure a funding obligation

Addition of the Trust

In order to facilitate a ratepayer discount, the Trust is introduced to pay the difference to the IESO



Financial Services Manager - OPG

The Fair Hydro legislation names OPG, as the Financial Services Manager

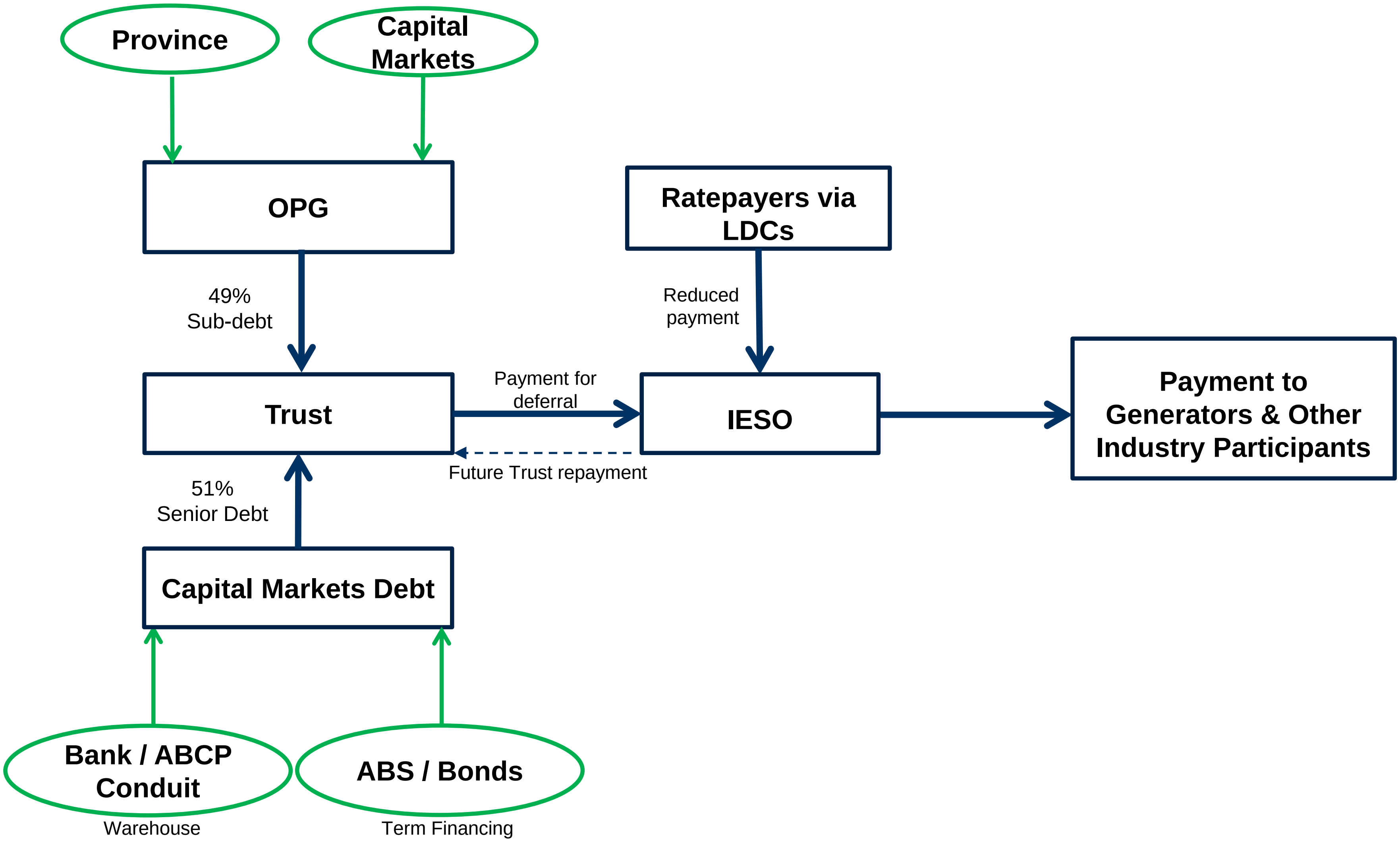
Why OPG

- One of the most experienced and largest generating companies in Canada, OPG has a broad set of relationships and capabilities that make it a valuable resource to the Province of Ontario
- Experienced in successful complex financing arrangements of large capital projects (such as OPG's recently completed Lower Mattagami project)

OPG's Role as Financial Services Manager

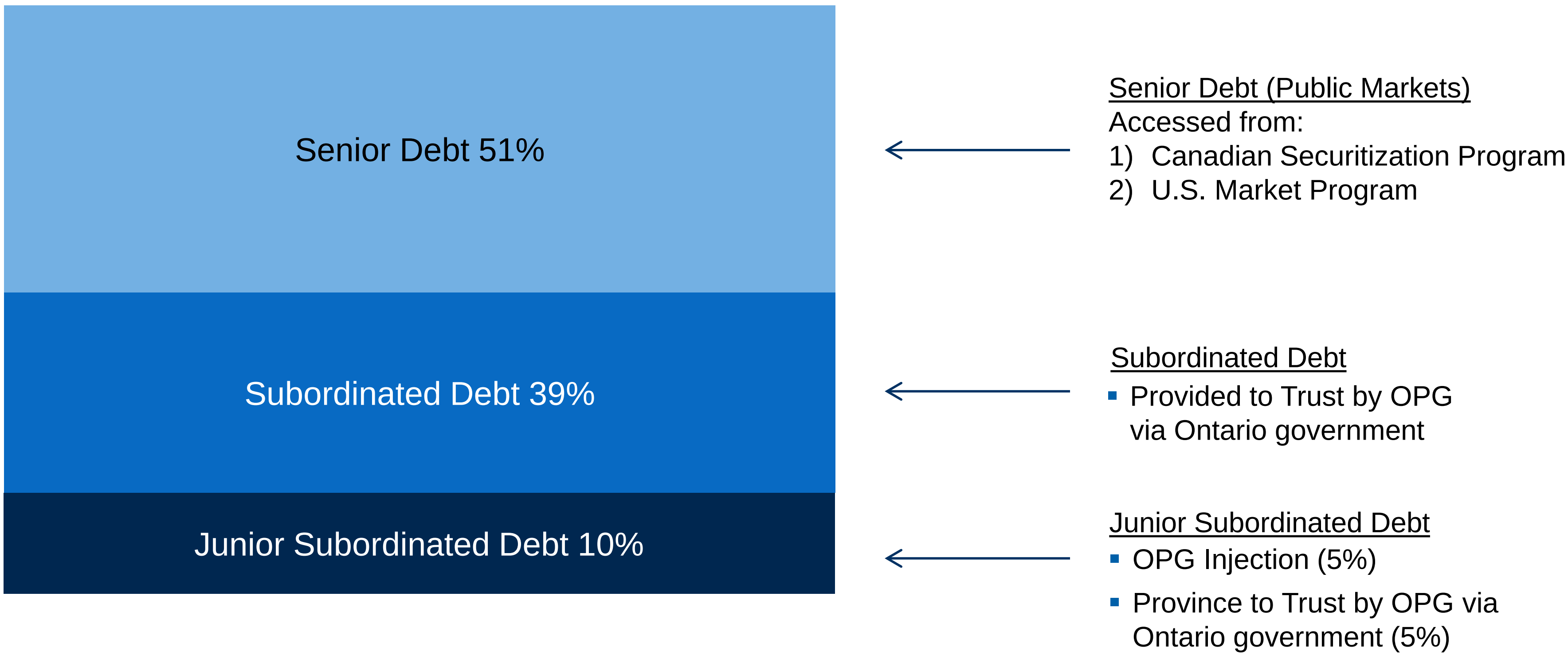
- Prepare a Financing Plan to evaluate whether potential funding obligations should be incurred for the purposes of acquiring an investment asset
- Administer the investment asset on behalf of the financing entities
- Ensure that funding obligations are incurred in a manner that is consistent with the Financing Plan
- Establish and charge fees for Financial Management Services
- Shall not provide for funding obligations to be incurred with any recourse to any assets of an electricity vendor, OPG, the OEB, the Province or the Lieutenant Governor in Council

Flow of Money between Trust and IESO



Simplified Trust Structure

- The Fair Hydro Trust will fund regulatory asset purchases through the issuance of senior and subordinated secured debt
  - Senior debt (51%) will be sourced monthly from committed warehouse facilities (bank and / or ABCP), and the periodic issuance of term debt
  - Subordinated debt (49%) will be provided by OPG; 44% of which will be obtained from an OEFC equity injection and 5% from OPG via external markets
  - Senior and subordinated principal will be scheduled to amortize to maintain the original proportions, shortfalls to be allocated first to the subordinated debt



Financing Strategy

SECTION III

Financing Strategy – Funding Alternatives

- There are several potential funding sources that OPG can consider to structure the overall financing program, including securitization (issued in Canada or the U.S.), bonds, bank financing, and subordinated debt
- Warehouse financing (ABCP or bank debt) and OPG sub-debt will be used to fund monthly investment asset purchases from the IESO (monthly IESO funding shortfalls anticipated to be ~$200 million)
  - Fair Hydro Trust will periodically refinance the warehouse facility through the issuance of term debt
- It is anticipated that the first term debt takeout will be completed in the fall of 2017
  - Aggregate financing for the first offering could be ~$400 - $600 million, with senior-debt of about $200 - $300 million
- Both Canadian and U.S. term debt markets will be considered but decision on which markets to access will be determined on a deal by-deal-basis
- Term debt can take the form of bullet bonds or could be issued as amortizing bonds

ABCP Conduit	▪ R-1(high) rating confirmation will be required from DBRS pre-closing ▪ Used to fund monthly regulatory asset purchases from the IESO
Bank	▪ Two explicit long-term ratings will be required ▪ Used to fund monthly regulatory asset purchases from the IESO
Canadian Term ABS / Bond	▪ Two explicit long-term ratings required; AAA rating will be targeted
US Term Debt (ABS / Bonds)	▪ Two explicit long-term ratings required; AAA rating will be targeted ▪ Requires cross-currency swaps
Subordinated Debt	▪ Subordinated notes will provide credit enhancement for senior debt (ranks behind senior debt in cash flow waterfall) ▪ Two explicit long-term ratings required

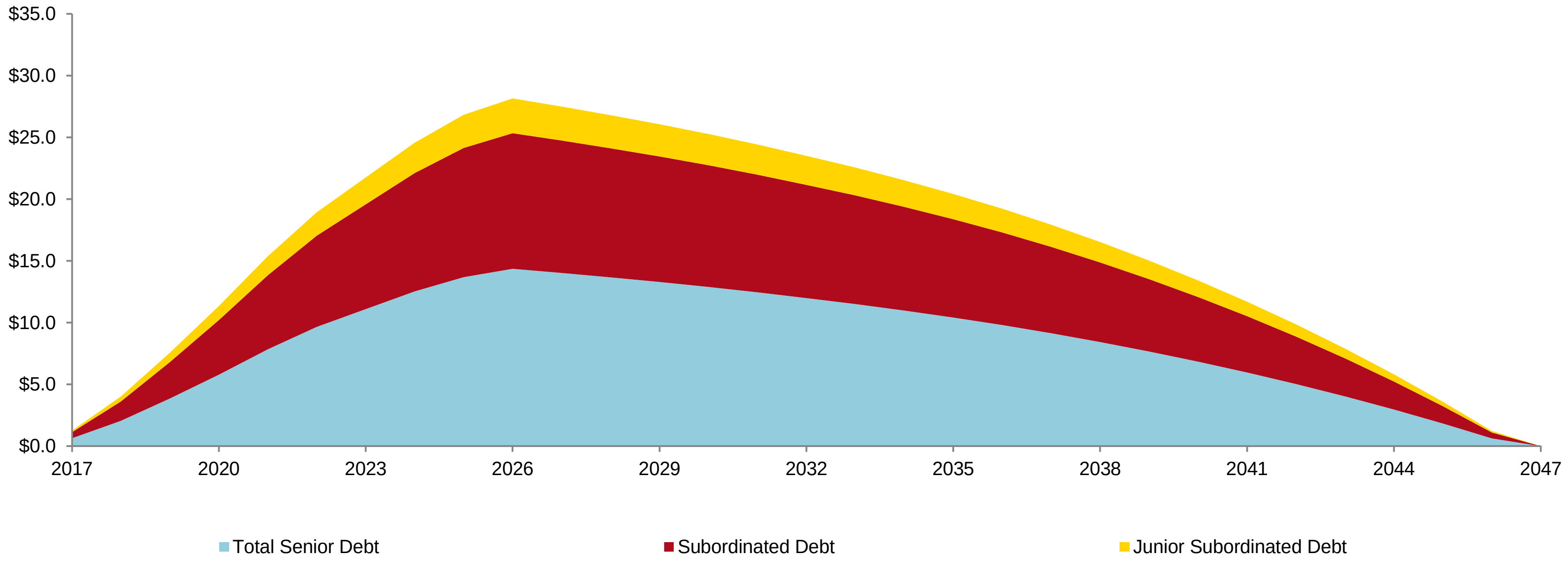
Indicative Waterfall

Allocation of Collections

- Taxes, Trustee Fees & Operating Expenses (to lawyers, accountants, IESO, rating agencies, etc.)
- Interest on Senior Notes
- Scheduled Principal – Senior
- Replenishment of Reserve Accounts
- Financial Services Manager fees (OPG)
- Interest on Subordinated Notes
- Scheduled Principal – Subordinated
- Interest on Junior Subordinated Notes
- Scheduled Principal – Junior Subordinated
- Excess Funds Account (amounts available for next payment period)

Illustrative Trust Debt Balance: Borrowing and Repayment

Illustrative Total Debt Summary - Funding / Repayment (Annual)



Transaction Structure

SECTION IV

Structural Comparison

	Precedent Utility Charge Securitizations	Proposed Fair Hydro Structure
Legislation	Legislation creates regulatory basis for implementation and servicing of the charge	
Details of Financing	Outlined in irrevocable Financing Order	Outlined in Regulations supported by province guarantee
Collateral	The right to impose and collect a charge from electric utility customers as well as transaction reserve accounts	
Government Support	State pledge not to permit any action that would impair the value of the Collateral	Province guarantee of repayment if any action taken that would impair the value of the Collateral
Non-Bypassability	Charge to be paid by all existing and future electric customers in included customer classes	
Impacted Customers	The majority of customers in service territory (including residential, commercial and industrial)	The majority of customers are residential and light commercial
Recovery Charge	Relatively low, <5% of total bill	Approximately 10% of total bill
Issuer	Varies, but generally a newly formed special purpose vehicle ("SPV") that is a subsidiary of Investor Owned Utility	Newly formed special purpose vehicle ("SPV") would be consolidated into Ontario Power Generation ("OPG") financial statements
Servicer	Varies, but generally Investor Owned Utility	Independent Electricity System Operator ("IESO")
Third Party Billing	Varies depending on State	Yes, via Local Distribution Companies ("LDC")
Nonpayment & Partial Payment by Customers	To the extent that any electric utility customer makes a partial payment of a bill containing the charge, the charge collection will be a pro-rata portion of the payment	
Amortization	Fully amortizing with principal payments beginning at first issuance	Bullet or amortizing bonds with principal payments deferred for a number of years following issuance
Establishment of First Charge	Generally within 1 year of issuance	Delayed start
Credit Enhancement	True-up mechanism, reserve accounts	True-up mechanism, reserve accounts, and subordinated debt
Hedging	Historically limited to interest rates	May include interest rate and currency hedging
Trust Structure	Discrete (single issue) trust	Master trust with multiple series issued over a 10 year period
Legal Opinions	Standard opinions regarding Validity, Enforceability and Regulatory Issues (Constitutionality opinion not applicable for Canadian transactions)	

Transaction Includes Same Key Elements as ‘AAA’ Investor-Owned Utility Securitizations

- Based on the existing Ontario Electricity market infrastructure no credit losses are anticipated
- Fair Hydro Trust true-up mechanism will ensure timely and full collectability of all debt
- OPG subordinated debt will provide incremental credit enhancement for the senior debt
- Provincial guarantee protects investors from an adverse change in law or inability to fund in capital markets
- The Province of Ontario has very low credit risk and is considered to be stable
  - High likelihood of Government of Canada (Aaa, stable) actions to prevent provincial default
  - Ontario is the largest economy of Canadian provinces: 40% of national economic output, 38% of national population, strong destination for immigration, lower than national unemployment rate

✓	**Experienced Operating Agent**	▪ OPG, IESO, and LDC are experienced operators
✓	**Strong Service Territory**	▪ Stable customer base with diversified service territory
✓	**Enhanced True-up**	▪ Mandatory semi-annual true-ups to correct for any over or under collections ▪ Optional interim adjustments permitted as necessary
✓	**Irrevocable & Nonbypassable Charge**	▪ Final and effective upon issuance of Bonds ▪ Applies to all residential and small commercial consumers receiving power through T&D system
✓	**No “Cap” on Collection of Charge**	▪ No limits on collection of charge that may be imposed on all customers after moratorium period
✓	**Province Guarantee**	▪ Strong government support through guarantee of bond legal and regulatory framework
✓	**Full Cross-Collateralization**	▪ Any collection shortfall is allocated among all specified consumers
✓	**No Industrial Risk**	▪ No single large customer or industry exposure

Legislative and Regulatory Overview

Authorizes Use of Securitization and Establishes Servicing Relationship between OPG, IESO and LDCs

General Powers and Authority of Legislation

- Creation of mechanism for deferral of costs by the IESO and establishment of the Regulatory Asset
- Creation of mechanism for absolute sale of Regulatory Asset to Financing Entity
- Definition of impacted customers ("specified consumers")
- Establishment of right to bill and collect a non-bypassable clean energy adjustment from future specified consumers
- Establishes principles of the Financing Plan
- Statement of non-impairment by the Crown and provision for a Provincial Guarantee
- Allowance for the establishment of a bankruptcy-remote issuer
- Allowance for true-up mechanism

Fair Hydro Regulations

- Details on calculation of the fair allocation amount
- Details on eligible financeable amounts
- Additional details on clean energy adjustment assessment methodology (true-up mechanism):
  - Timing (mandatory semi-annual + more frequent as needed)
  - Calculation (accounts for expected charge-offs, billing delays and usage as well as any under / over collection in previous period)
- Additional details around servicing / billing mechanics (e.g., LDCs and IESO)

Responsibilities Under New Structure

OPG

- OPG to act as Financial Services Manager including the development and implementation of the Financing Plan
- Calculates the clean energy adjustment including semi-annual true-up

IESO

- Establishment of IESO as Servicer
- Aggregation of collections by LDCs and remittance to Trustee

LDCs

- Manage the billing and remittance of the non-by-passable charge
- Includes charge as a separate line-item on customer bills

Ontario Energy Board

- Must accept clean energy adjustment, and converts to customer charge
- Allow for the charge to go into effect
- Review / approve ongoing Financial Services Manager fees and expenses

Objective of the Legislative, Regulatory and Contractual Structure

- Due to the number of related parties participating in the transaction an overarching theme of the structure is to establish the transaction on a commercial basis
- OPG expects to consolidate the results of the Trust in its financial statements based on the commercial relationship between OPG and the Trust
- The commercial basis is established by a number of elements which work together
  - Trust has the right but not the obligation to purchase a Regulatory Asset
  - Regulatory Asset purchased by the Trust provides the right to bill and collect a charge from future consumers
  - Transactions in the Trust to finance the asset purchase to be on an arm's length basis
  - Amount collected from consumers includes costs of financing the asset purchase, costs to manage the financing, costs to operate the Trust and repayment of principal
  - OEB role established to support recognition of asset and customer charge
  - Debt of the Trust structured to balance risk and cost with objective to achieve highest rating possible
  - Subordinated debt issued by the Trust will be rated and will price off of the senior debt based on a survey of banks
  - Subordinated debt will absorb uncertainties of the senior debt to support highest rating of the senior debt
  - OPG will manage the activities of the Trust for a fee comparable to fees charged by 3rd party managers. OEB role will be limited to reviewing the application of the fee methodology
- Notwithstanding consolidation of the Trust into OPG the Trust will be structured to be bankruptcy remote from OPG

Bill 132 Fair Hydro Plan Act, 2017 Legislation

The Act establishes a framework under which the costs and benefits associated with the "clean energy initiative" are to be allocated among present and future consumers of electricity

Rate Reduction Time Period

- From July 1, 2017 until April 30, 2019, electricity rates payable by a "regulated rate consumer" will be the rate that would result in a representative regulated rate consumer who meets the prescribed criteria being charged an invoice amount that is 25% less than the regulated rate that would otherwise have been determined by the OEB
  - For the 12 month period beginning May 1, 2018 the invoice amount established previously would increase by the rate of inflation in Ontario
  - Subsequent rate reductions beyond April 30, 2019 will be established by regulation

Regulatory Asset

- Each month, the IESO will determine the shortfall resulting from the rate reduction and record in a variance account. IESO has the right to recover the balance recorded in the variance account from specified consumers and this right will be a "regulatory asset" under the Act. IESO will not be entitled to collect the balance recorded in the variance account from specified consumers before May 1, 2021

Investment Asset

- IESO may transfer (sell) a specified portion of the regulatory asset to the financing entity established by OPG. The Trust is not obligated to purchase the asset. Upon the transfer, the financing entity acquires an interest in the investment asset that is a current and irrevocable property right consisting of the right to impose, invoice, collect, receive and recover the clean energy adjustment from specified consumers or electricity vendors

Components of the legislation and accompanying agreements that are of interest to investors

- Investment assets created by the IESO represents a claim on the rate-payers that is a current and irrevocable property right consisting of the right to impose, invoice, collect, receive and recover from the market
- The trust is not obligated to purchase the regulatory asset from the IESO
- The various investment assets are pari passu
- **The province is providing a guarantee to the trust; backstopping its obligations, either if there are changes in future legislation or if there are market disruption (liquidity) issues**

Clean Energy Adjustment – Proposed Billing and Collection Process

- Clean Energy Adjustment 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
  - As such, CEA amounts will not benefit from the rights the IESO currently has under the Market Rules – ability to charge interest, draw down on prudential amounts, and borrow to cover shortfalls
  - Collections risk for CEA amounts are dealt with through statutory rights in the Act, the collection obligations of the IESO under the Master Sales and Services Agreement (to be finalized) and the ability to include amounts into the true up mechanism

1 Financial Services Manager

Determines the CEA (monthly) based on legislation and regulation and notifies the OEB of CEA for each reference period

2 OEB

Determines volumetric rates[1] to invoice specified consumers to recover CEA expressed as a cent per kWh

3 Electricity Vendors

Invoice specified consumers for CEA amount by using volumetric rate set by OEB and report the amount invoiced and collected from consumers to the IESO

4 Specified Consumers

Must pay invoice from Electricity Vendors for CEA amount

5 Electricity Vendors

Must collect CEA amounts from specified consumers, hold amounts in a segregated account and remit CEA amounts to the IESO (separate from any other amount collected and remitted)

6 IESO

Must receive CEA amounts paid by Electricity Vendors, hold CEA amounts in a trust and remit the CEA amounts to the financing entities

[1] The rates will be determined by dividing the CEA amount by the forecasted energy consumption in the reference period by specified consumers

Indicative Allocation of Servicing Role and Responsibilities

	OPG / Financing Entity	IESO	LDC
Management of Ongoing Issuance	✔		
Meter Reading			✔
Billing			✔
Collections			✔
Cash Management		✔	
Remittance of Charge to Trustee	✔	✔	
(Responding to inquiries by customers if practicable, or forwarding such inquiries to OPG)	✔		✔
Ongoing Filings for Trustee and Rating Agencies	✔		
True-Up Calculation	✔	✔	

From:	Christie, Tim (ENERGY)
To:	John Kim
Cc:	Bruno Amara; Shajee Kathirgamanathan
Subject:	RE: 20bn on FHP
Date:	Thursday, January 25, 2018 1:59:56 PM

No, but that's what we're building into our responses for public accounts.

From: John Kim [mailto:John.Kim@ofina.on.ca]
Sent: January-25-18 1:59 PM
To: Christie, Tim (ENERGY)
Cc: Bruno Amara; Kathirgamanathan,Shajee (OFA)
Subject: RE: 20bn on FHP

Is there a News Release or other?

From: Christie, Tim (ENERGY) [mailto:Tim.Christie@ontario.ca]
Sent: Thursday, January 25, 2018 1:56 PM
To: John Kim <John.Kim@ofina.on.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>
Subject: RE: 20bn on FHP

Hi John, we use about $20b.

Tim

From: John Kim [mailto:John.Kim@ofina.on.ca]
Sent: January-25-18 1:51 PM
To: Christie, Tim (ENERGY)
Cc: Bruno Amara; Kathirgamanathan,Shajee (OFA)
Subject: 20bn on FHP

Hi Tim,

Do you know if you have any public material on the peak debt under 20Bn figure? We've seen a fact sheet but with caveat to use reactively.

Thanks,

John

Y. John Kim
Director, Electricity Finance Branch
Ontario Financing Authority
e-mail: john.kim@ofina.on.ca
Ph: 416-212-6996

From:	Christie, Tim (ENERGY)
To:	John Kim
Cc:	Bruno Amara; Shajee Kathirgamanathan
Subject:	RE: 20bn on FHP
Date:	Thursday, January 25, 2018 1:56:17 PM

Hi John, we use about $20b.

Tim

From: John Kim [mailto:John.Kim@ofina.on.ca]
Sent: January-25-18 1:51 PM
To: Christie, Tim (ENERGY)
Cc: Bruno Amara; Kathirgamanathan,Shajee (OFA)
Subject: 20bn on FHP

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John

Y. John Kim
Director, Electricity Finance Branch
Ontario Financing Authority
e-mail: john.kim@ofina.on.ca
Ph: 416-212-6996

From:	Bonnie Lemcke
To:	Bruno Amara
Cc:	John Kim
Subject:	RE: 20bn on FHP
Date:	Thursday, January 25, 2018 3:31:09 PM

Is there anything public – ie document or something in the press that states this figure.

Bonnie

From: Bruno Amara
Sent: Thursday, January 25, 2018 2:46 PM
To: Bonnie Lemcke <Bonnie.Lemcke@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>
Subject: FW: 20bn on FHP

Hi Bonnie

See email below for the revised estimate.

Bruno

From: Christie, Tim (ENERGY) [mailto:Tim.Christie@ontario.ca]
Sent: Thursday, January 25, 2018 1:56 PM
To: John Kim <John.Kim@ofina.on.ca>
Cc: Bruno Amara <Bruno.Amara@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>
Subject: RE: 20bn on FHP

Hi John, we use about $20b.

Tim

From: John Kim [mailto:John.Kim@ofina.on.ca]
Sent: January-25-18 1:51 PM
To: Christie, Tim (ENERGY)
Cc: Bruno Amara; Kathirgamanathan,Shajee (OFA)
Subject: 20bn on FHP

Hi Tim,

Do you know if you have any public material on the peak debt under 20Bn figure? We've seen a fact sheet but with caveat to use reactively.

Thanks,

John

Y. John Kim
Director, Electricity Finance Branch
Ontario Financing Authority
e-mail: john.kim@ofina.on.ca
Ph: 416-212-6996

From:	Usman Zahid
To:	Bonnie Lemcke
Cc:	Ronald Kwan; Francisco Chinchon; John Kim; Bruno Amara; Shajee Kathirgamanathan; Gavin He
Subject:	RE: DBRS ratings report
Date:	Wednesday, May 02, 2018 9:46:15 AM
Attachments:	DBRS - 2018 Rating Report_v7_Markup.docx

Hi Bonnie,

Please see attached feedback from CEFD.

Regards,
Usman

From: Bonnie Lemcke
Sent: Tuesday, May 01, 2018 10:43 AM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>; Francisco Chinchon <Francisco.Chinchon@ofina.on.ca>; David Cross <David.Cross@ofina.on.ca>; Usman Zahid <Usman.Zahid@ofina.on.ca>
Subject: DBRS ratings report
Importance: High

We have the draft full report from DBRS. There are a number of sections that comment on hydro/electricity prices that we would like you to review. Please provide edits by end of day tomorrow (May 2nd).

Page 3
Provincial electricity policy has contributed to high prices and substantial electricity system debt. Ontario's electricity prices have risen significantly over the past decade, diminishing Ontario's competitiveness and prompting concerns by households and businesses. In response to political pressure, the Province announced a series of new policy interventions in March 2017. The changes have reduced household electricity prices by 25%, on average. The policy measures have a direct impact of about $1.6 billion on the fiscal plan (2018–19) and will lead to about $20.0 billion in electricity system debt over the next decade, which will be repaid by consumers in the future. This is in addition to the $19.1 billion in Ontario Electricity Financial Corporation (OEFC; rated AA (low) with a Stable trend by DBRS) debt currently outstanding.

Page 6
With Fair Hydro Trust having borrowed $1.0 billion in February 2018, the Auditor General of Ontario would likely argue that the deficit is understated by upward of $3.0 billion in 2017–18 and that the net debt is understated by about $15.0 (1.9% of GDP).

Page 7
In March 2017, the Province unveiled its Fair Hydro Plan, which includes, among other elements, the use of debt to refinance a portion of the global adjustment. Effectively, debt is being used to lower

prices over the next ten years. The cost of that debt will then be recovered through higher prices in subsequent years. The Province estimates that the annual borrowings will be about $2.5 billion over the first ten years, of which about $1.4 billion will be sourced from debt markets by Fair Hydro Trust (a special-purpose financing trust) and the remaining $1.1 billion by OPG. However, much of the funds provided by OPG will come from the Province in the form of equity injections. The Province will borrow to fund these equity investments, and in the absence of information as to how these equity investments will be recovered, DBRS considers this debt to be tax-supported debt, consistent with established practice. Given the existing size of the Province's debt burden, the incremental borrowing to fund the equity injection is modest.

When creating Fair Hydro Trust, the Province provided the trust's noteholders with a limited guarantee. If the Province makes a substantive change to the Fair Hydro Plan Act, its regulations or related legislation/regulations, the Province will assume responsibility for servicing the debt issued by the trust. If this were to occur, DBRS could adjust the Province's DBRS-adjusted debt. The extent of this adjustment would depend on what measures are taken by the Province to limit the balance sheet impacts (e.g., an offsetting equity withdrawal). The increase in DBRS-adjusted debt would likely be modest relative to the overall size of the Provincial debt burden.

Thanks,
Bonnie Lemcke
Manager, Credit Analysis and Rating Relations
Ontario Financing Authority
416-325-8170 (w)
416-716-4092 (m)

Rating Report

Province of Ontario

Paul LeBane
+1 416 597 7478
plebane@dbrs.com

Travis Shaw
+1 416 597 7582
tshaw@dbrs.com

Ratings

Debt	Rating	Rating Action	Trend
Issuer Rating	AA (low)	Confirmed	Stable
Long-Term Debt*	AA (low)	Confirmed	Stable
Short-Term Debt	R-1 (middle)	Confirmed	Stable

*Includes debt issued by the Ontario Electricity Financial Corporation based on its status as an agent of the Crown.

Rating Update

On April 24, 2018, DBRS Limited (DBRS) confirmed the Issuer Rating, Long-Term Debt rating and Short-Term Debt rating of the Province of Ontario (Ontario or the Province) at AA (low), AA (low) and R-1 (middle), respectively. The trends on all ratings are Stable.

The Province accomplished its long-sought goal of balancing the provincial budget in 2017–18, achieving a modest surplus of $642 million. On a DBRS-adjusted basis, recognizing capital investment on a pay-as-you-go basis, this equated to a deficit of $4.4 billion, or 0.5% of gross domestic product (GDP).

In March 2018, the Liberal government tabled a pre-election budget in which the government abandoned its commitment to balanced budgets and reducing the debt-to-GDP ratio. The budget proposed $20.3 billion in new initiatives over a three-year period. In the absence of substantive offsetting revenue measures to pay for the new initiatives, the Province is planning to incur deficits ranging between $6.5 billion and $6.7 billion over the period. This equates to DBRS-adjusted deficits ranging between $10.5 billion and $13.0 billion, or 1.2% to 1.4% of GDP. The budget plan suggests a return to balance would occur in the mid-2020s, providing the economic expansion continued unabated and expense growth can be constrained.

The policy shift clearly demonstrates the elected government is no longer committed to disciplined fiscal policy. Rather than shifting to a neutral or conservative fiscal policy stance and rebuilding budget and balance sheet flexibility, the government proposed to pursue expansionary fiscal policy potentially near the peak of the business cycle when the economy is already at or near full capacity.

If the budget plan is implemented as proposed, DBRS-adjusted debt will likely stabilize around 43.0% of GDP over the medium term. While halting the improvement in the debt-to-GDP ratio, the outlook is not inconsistent with the AA (low) ratings. However, the policy shift increases the risk that the Province's ratings may come under pressure in the future. In past recessions, budgetary results have weakened and the debt-to-GDP ratio has increased sharply. If such circumstances were to materialize, Ontario's ratings could be adversely affected.

At this time, the outlook for budgetary results and debt is uncertain and will depend on the outcome of the June 7, 2018, provincial election. DBRS understands that the Province will seek to pass the budget before the writ of election is issued; however, implementation of the substantive budget measures will not occur unless the Liberal government returns to office. Current polls suggest a change in government is possible. The direction of fiscal policy under an alternative government is not clear at this time.

DBRS expects the ratings to remain stable in the near term. A downgrade could occur if debt were to rise sharply because of a downturn in the economy or a deterioration in the budgetary outlook beyond what is already proposed in the 2018 budget. An upgrade could occur if there was a significant reduction in the provincial debt burden to a level commensurate with the AA-range ratings.

Financial

	For the year ended March 31				
	2019B	2018P	2017	2016	2015
Debt/GDP	43.3%	43.9%	43.8%	44.3%	44.6%
Surplus (deficit)/GDP	(1.2%)	(0.5%)	(0.7%)	(1.7%)	(2.1%)
Federal transfers/total revenue	17.2%	17.0%	17.7%	17.7%	18.6%
Interest costs/total revenue	7.7%	7.4%	7.7%	8.0%	8.1%
Real GDP growth	2.2%	2.7%	2.6%	2.9%	2.7%

Notes: B = budget. P = projected. GDP on a calendar year basis.
Source: Province of Ontario, Statistics Canada, DBRS calculations.

Issuer Description

Ontario is Canada’s largest province with a population of 14.4 million and accounts for about 40.0% of the country’s economic output. The Province is located in Central Canada and has a large, diversified economy that is highly integrated with the U.S. and global economies.

Rating Considerations

Strengths

(1) Large, diversified economy
Ontario has a large and diversified economy with a mix of industries, including traditional sectors, like manufacturing and resource development, and a large and well-developed services sector, which includes technology, financial services and other professional services. Ontario's economy benefits from favourable demographics, high net in-migration, high levels of post-secondary education and strong trade linkages in North America and globally. This results in relatively strong economic growth and translates into rising revenue and debt capacity for the Province.

(2) Capacity to raise revenue
Ontario has a competitive overall tax system, and among provinces, per-capita revenue is relatively low. The Province has the capacity to raise revenue if required.

(3) Effective borrowing platform
Ontario has excellent market access. The Province has well-established borrowing programs in Canada, the United States, Europe and a number of other markets. The Province has a large and growing investor mix and is able to issue large amounts of debt with little impact on pricing. In addition, the debt stock is prudently structured to reduce risk associated with refinancing and changing interest and exchange rates.

(4) Ample liquidity to manage risk
The Province maintains a large liquidity reserve to manage risks related to its borrowing program. The liquidity reserve is now in excess of $30.0 billion, which provides ample cash to meet large single-day maturities or fund operating requirements should market conditions deteriorate. The Province also maintains significant excess capacity on its short-term Canada/U.S. borrowing platforms.

Challenges

(1) Relatively high debt burden
The Province's debt-to-GDP ratio, projected to be 43.3% of GDP in 2018–19 and is high for a AA-rated province. Over the medium term, the debt burden would likely remain near the current level if the budget is implemented as proposed and economic expansion continues as expected. The Province is no longer targeting a reduction in the debt-to-GDP ratio and the ratio will remain substantially higher than the pre-recessionary lows (25% to 26%) for the foreseeable future.

(2) Consistency and coherence of fiscal policy
The elected government has signalled that it is no longer committed to balanced budgets or prudent, countercyclical fiscal policy. The fiscal policy direction put forth in this budget appears inconsistent with the Liberal government's fiscal legislation and much of the government's messaging over the past decade. Despite the economy being at or near full capacity, the Province has proposed new debt-financed spending measures to, in part, stimulate economic activity. The Province has proposed a plan to return to balance, as required by legislation, but DBRS questions the credibility of that plan in light of the recent policy reversal.

(3) High electricity prices and electricity system debt
Provincial electricity policy of encouraging investments in a clean and reliable electricity system has contributed to high prices ~~and substantial electricity system debt~~. Ontario's electricity prices have risen significantly over the past decade, diminishing Ontario's competitiveness and prompting concerns by households and businesses. In response to the increases~~political pressure~~, the Province announced a series of new policy interventions in March 2017. The changes have reduced household electricity prices by 25%, on average, and provided additional support to lower income and eligible rural and remote households~~–~~. These policy measures, including the Ontario Rebate for Electricity Consumers announced in September 2016, have a direct impact of about $1.6 billion on the fiscal plan (2018–19) ~~19)~~. Part of this price increase includes deferring and refinancing cost recovery from consumers a portion of the costs of investments in new generation and conservation programs, which~~and~~ will lead to an estimated about $20.0 billion in electricity system debt held by a Trust established by Ontario Power Generation over the next decade. These deferred costs~~, which~~ will be repaid by consumers in the future. This is in addition to the $19.1 billion in Ontario Electricity Financial Corporation (OEFC; rated AA (low) with a Stable trend by DBRS) legacy debt currently outstanding.

Commented [KR(1]: Presumably IR or OB will comment on this, say by adding "in the near-term"

Commented [GH2]: I think it's the electricity investments that led to increasing electricity prices.

Commented [JK3]: Which electricity system debt? Most of the investments were by the private sector, or regulated utilities.

The electricity sector debt of the Province, the historical debt of the former Ontario Hydro, particularly the stranded debt of the sector has been getting paid down dramatically and is a success story in the government's policy for stranded debt management, including 14 consecutive years of reduction.

Commented [SK4R3]: It's unclear what the time period is. Agreed with the deletion.

Commented [JK5]: The report would benefit from reviewing a number of electricity price mitigation programs such as the Industrial Conservation Initiative, Northern Industrial Electricity Rate program and the Fair Hydro Plan which put the costs of certain electricity support programs to be funded by the government revenue. Simply stating diminished competitiveness based on rising electricity prices seem a bit one-sided.

Commented [BA6]: Is this emphasis intentional? Alternate for consideration: "In response, the Province announced…."

Commented [KR(7]: For brevity, I eft out the part about ICI, as it is small, and has no impact fiscally or on the debt parts of this section.

Commented [GH8]: OEFC has a total debt of $20.4 billion as of Mar 31, 2017, based on the 2017 OEFC AR. Where is this number from?

Commented [KR(9R8]: You should check with FTD to see if they provided that, as a preliminary interim update.

2018–19 Budget

Exhibit 1. DBRS-Adjusted Surplus(Deficit)-to-GDP

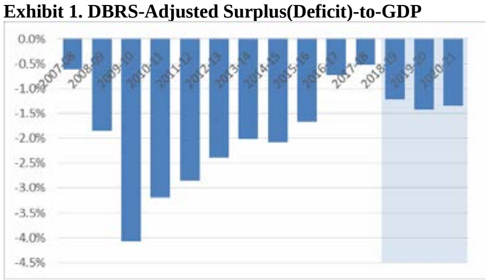
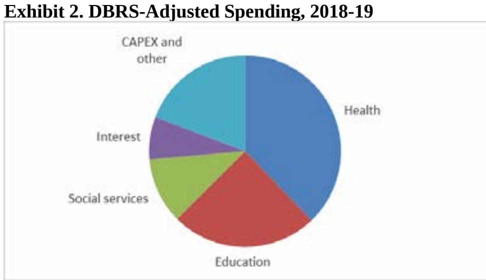


Exhibit 2. DBRS-Adjusted Spending, 2018-19



Ontario's 2018–19 budget outlined a significant shift in provincial fiscal policy. For much of the past 15 years, provincial fiscal policy has been guided by the principles set out in the Liberal government's *Fiscal Transparency and Accountability Act, 2004*. That legislation requires the government to maintain a prudent debt-to-GDP ratio, to plan for a balanced budget unless Executive Council deems it prudent because of extraordinary circumstances to plan for a deficit and to have a plan for achieving a balanced budget if the government does plan for a deficit.

Since the financial crisis, the Province has continuously reiterated its commitment to these fiscal policy principles, frequently citing, as evidence, its deficit-reduction plan and its budget outperformance. The Province was, as recently as last fall, still reiterating its commitment to balanced budgets and a gradual reduction in the debt-to-GDP ratio.

The policy shift signals that the elected government is no longer committed to balanced budgets even in the best of economic circumstances. With the Provincial economy now at or near full capacity, prudent fiscal policy would generally dictate a shift to a neutral or conservative fiscal policy stance. Ontario has, however, opted to pursue expansionary fiscal policy with the goal, in part, to stimulate near-term growth. The shift to deficit spending at this stage of the business cycle creates the risk of structural budget imbalances.

The budget proposes an expansion of government health and social programming aimed at ensuring all Ontarians share in the benefits of economic growth and prosperity. While many of the program announcements are focused on the near term, the Province is continuing to invest in critical infrastructure and enhance access to education and child care in a bid to support long-term potential output growth (i.e., productivity growth, labour force expansion, etc.).

DBRS now understands that the government will seek to pass the budget before the June 2018 election. However, the public service will revert to a caretaker role once the writ of election is issued (expected May 9, 2018), and much of the substantive work on the new program announcements will pause. Implementation of the policy measures will depend on the outcome of the June election. At this time, a change in government appears possible.

The budget projects a deficit of $6.7 billion in 2018–19, which equates to a DBRS-adjusted deficit of $10.5 billion, or 1.2% of GDP. DBRS makes a number of adjustments to reported results/budget projections to improve comparability between provinces. For Ontario, the most significant adjustments include recognizing capital investment on a pay-as-you basis and removing budgetary reserves and contingencies.

The 2018 budget, like previous budgets, includes significant prudence. These measures are intended to address unforeseen spending pressures, revenue volatility and statutory spending (e.g., response to disasters, litigation, etc.). In the past, the prudence in budget estimates has enabled the Province to outperform its budget projections in most years. For 2018–19, explicit measures of budgetary conservatism include

- A budget reserve ($700.0 million) and contingencies ($1.6 billion),
- A revenue forecast based on an economic forecast that is modestly weaker than the private-sector consensus (approximately $100 million) and
- A prudent interest rate forecast that assumes interest rates rise quickly to historical levels.

The Province has projected modest revenue growth (+1.6% on a DBRS-adjusted basis), which follows the revenue growth of 7.3% in the prior year. Underlying tax (+4.4) and transfer (+2.7%) revenue growth are being offset by declines in government business enterprises' net income and other own-source revenue, both of which are related to policy actions that bumped up revenue in the prior year (e.g., elimination of the electricity debt retirement charge).

The budget includes only modest tax policy changes, the most significant of which are changes to the personal income tax rate structure and the elimination of the surtax. The tax announcements, collectively, will provide about $500 million in incremental revenue in 2018–19 and between $700 million and $800 million in the outer years.

Total DBRS-adjusted expenditures are projected to rise by $8.6 billion (+5.6%), significantly outpacing revenue growth. This follows similarly strong growth (+6.0%) in 2017–18. Expenditure growth is expected to be broad-based in 2018–19, with most ministries seeing moderate-to-strong growth in their appropriations, driven by the announcement of major new spending initiatives.

The new initiatives are to be phased in over the next three years, with a cumulative cost of $20.3 billion over the three-year period. The initiatives include

- Increased funding for hospitals/health care (+$1.3 billion);
- Improved services and access to mental health and addictions services (+$1.2 billion);
- Improved affordability/access to child care, including free preschool for children two-and-a-half and older (+$2.2 billion);
- Social assistance and income security reform (+$2.3 billion);
- Increased support for individuals with developmental disabilities (+$1.8 billion);
- Free prescription drugs (extension of OHIP+) for senior citizens (+$1.0 billion);
- Senior's Healthy Home Program to help with the costs of home ownership (+$0.7 billion);
- New drug and dental program for individuals without workplace coverage (+$0.8 billion); and
- More funding for economic development and similar activities (+$0.9 billion).

By ministry, the largest ministries will see a healthy lift in appropriations: Health and Long-Term Care (+5.1%), Education (+4.4%), Advanced Education and Skills Development (+5.9%) and Community and Social Services (+7.5%).

Ontario's multi-year capital plan remains largely similar to that of previous years, with the government planning to spend $182 billion over the next decade. Capital spending is budgeted to rise strongly (+22.6%) in 2018–19, with growth in both grants and capital investment. Capital investment by the Province (not included in expense) is budgeted to rise by nearly $3.0 billion to $16.1 billion, which follows a similar-sized increase in the prior year. Ontario, like other provinces, frequently underspends its capital appropriation. As such, DBRS assumes only 85% of capital investment is achieved for DBRS-adjusted debt projections.

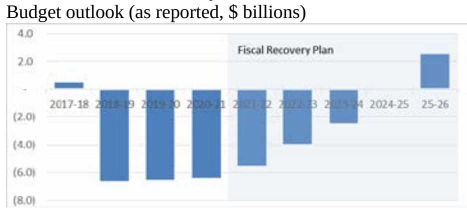
Outlook

The major initiatives announced in the budget are to be phased in over the next three years. As such, there would be a step-up in expense, resulting in deficits ranging between $6.5 billion and $6.7 billion during the 2018–19 to 2020–21 period. On a DBRS-adjusted basis, deficits range between $10.5 billion and $13.0 billion.

The Fiscal Recovery Plan, required by legislation, contained in the 2018–19 budget indicates the government would gradually reduce the deficit beginning in 2020–21 with a return to balance in 2024–25.

The deficit-reduction target in the later years are aspirational. The projections assume that revenue growth returns to trend (3.0% to 3.5% annually) and that the government will limit program expense growth to 2.5% between 2018–19 and 2024–25.

Exhibit 3. Fiscal Recovery Plan
Budget outlook (as reported, $ billions)



Source: Province of Ontario.

While the plan is aspiration, DBRS notes that the Province has outperformed its budget deficit reduction targets in the past and the 2018 budget outlook does include considerable reserves and contingencies. If revenue growth proves to be stronger than expected (i.e., through economic growth or policy measures) and the various contingencies are undrawn, the Province could meet the schedule put forward in the budget.

However, this forecast also assumes that the economic expansion continues unhindered for another eight years. In past recessions, deficits have widened and debt growth accelerated. A significant deterioration in operating results would put pressure on the credit profile and could have an adverse impact on the ratings.

The outlook for the medium term is speculative and will ultimately depend on the outcome of the upcoming provincial election. Opposition parties have begun to put forward platforms, but the outlook for budget results under an alternative government remains unclear. Further uncertainty stems from the opposition's criticism of the prospective qualified audit opinion and the financing structure used for Ontario's Fair Hydro Plan. If a new government were to change the structure of Fair Hydro Trust's financing or the accounting of the net pension asset, there could be a meaningful impact on the statement of operations and the statement of financial position.

2017–18 Preliminary Results

The Province has projected a surplus of $642 million for the year ended March 31, 2018. On a DBRS-adjusted basis, this equates to a deficit of $4.3 billion (0.5% of GDP), which is also better than what was expected at the time of the last review.

Total revenue growth was strong in 2017–18, rising by $10.2 billion (+7.3%) on a DBRS-adjusted basis. Revenue growth was broad-based, reflecting the ongoing economic expansion, as well as some one-time impacts lifting year-over-year growth. The major lift to revenue came from the introduction of the cap-and-trade carbon pricing scheme (+$2.4 billion), as well as increased federal infrastructure funding (+$0.8 billion) and better results from Ontario Power Generation Inc. (OPG; rated A (low) with a Stable trend by DBRS) and Hydro One Inc. (rated A (high) with a Stable trend by DBRS; collectively, +$0.6 billion).

Total expenditure growth was similarly strong in 2017–18, rising by $8.7 billion (+6.0%) on a DBRS-adjusted basis. Spending growth was broad-based, with most ministries seeing moderate growth in appropriations. In 2017–18, the Province announced a number of significant spending initiatives, including an increase in hospital funding (+$518 million); the introduction of Pharmacare for individuals under the age of 25 (+$465 million); funding for 24,000 new child-care spaces (+$200 million); and measures to reduce household electricity costs ($1.4 billion). In addition, it was also the first full year of the new cap-and-trade system. Under the governing legislation, the proceeds from the carbon allowance auctions are required to be spent on programs, rebates and incentives to reduce carbon emissions.

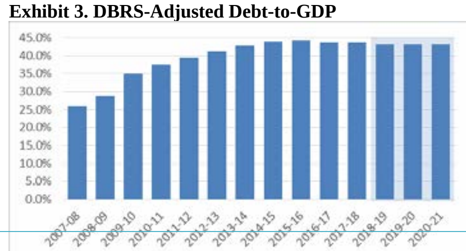
Capital investment was markedly lower than planned. The Province had planned to increase capital investment to $13.1 billion from $10.0 billion the year prior but was only able to realize about $10.7 billion.

Relative to its 2017–18 budget, the outperformance largely reflects the $600 million undrawn budget reserve. Total revenue was marginally higher ($117 million) than expected, which reflects higher net income from government business enterprises and other revenue offsetting the lower-than-expected tax revenue and federal government transfers. Similarly, total expense was modestly higher than expected (+$75 million). Program spending was higher than planned (+$356 million), with increases for health care, post-secondary education and justice, but these were mostly offset by lower-than-expected interest costs (-$281 million).

Ontario has exceeded its deficit targets in each of the last nine years, which reflects the use of budget reserves and contingencies and a conservative interest rate forecast. The cost of in-year spending announcements have often been offset by better-than-expected revenue, and capital investment tends to be lower than budgeted. Taken together, these factors typically result in debt and deficits being lower than projected by the Province.

The Province's budget presentation is consistent with that of its audited public accounts. The Auditor General of Ontario has, however, qualified the financial statements in each of the last two years and has indicated that she is likely to add a further qualification on the 2017–18 financial statements if the Province accounts for the Fair Hydro Plan as currently proposed. The 2016–17 audit report indicated that the deficit was understated by $1.4 billion and that net debt was understated by $12.4 billion (equivalent to 1.6% of nominal GDP). The 2018 budget does not provide disaggregated balance sheet data, but given the performance of the pension plans in recent years and the budget projection for other net assets, the reported net pension asset appears likely to rise. With Fair Hydro Trust having borrowed about $1.0 billion in February 2018, the Auditor General of Ontario would likely argue that the deficit is understated by upward of $3.0 billion in 2017– 18 and that the net debt is understated by about $15.0 (1.9% of GDP).

Exhibit 3. DBRS-Adjusted Debt-to-GDP



Source: Province of Ontario and DBRS calculations.

Debt Profile

Growth in the provincial debt stock has slowed in recent years as deficits narrowed, enabling a modest improvement in the debt-to-GDP ratio.

In 2017–18, DBRS-adjusted debt rose by $16.7 billion (+4.8%) to $364.6 billion. The DBRS-adjusted debt-to-GDP ratio was largely unchanged at 43.9% in 2017–18.

Commented [BA10]: Misstated? "..the opposition's criticism of the qualified audit opinion.."

Assume "qualified audit opinion" refers to the Auditor General's August 18, 2017 opinion with respect to the Province's 2016-17 results. The qualified opinion was related to 1) net pension assets and 2) consolidation of the IESO's market accounts.

While 2) is related prospectively to the Fair Hydro Plan, the main discussion of financial structure was under heading "Other Matters". This included concerns over IESO's recognition of rate regulated assets which was tied to the Ontario Fair Hydro Plan Act, 2017 and which the Auditor felt could lead to future material impacts on the province's financial statement for 2017-18 and out-years. This concern, however, was not the basis for the 2016-17 qualified opinion.

The Auditor General has since reviewed the issue further and as noted below the financial structure of FHP could result in a future qualified opinion.

Commented [BA11]: Can we just fact check this number. Not sure we want to comment on DBRS speculation.

Commented [SK12R11]: Looks fine. From our Liquidity note, the FHT issued 500M in Sr. Notes, 382M in sub debt and 98M in jr sub debt in Feb 2018. Totalling 980M. It's not public as far as I know.

Commented [JK13]: Not all of this amount is tied to the FHP, correct?

Commented [SK14R13]: I think it includes the FHT borrowing in Feb 2018. Eg. Assuming FHT borrowing is added to the deficit.

Several sentences above it also stated 'deficit was understated by $1.4 billion'

However, if FHT borrowing is $1.0B + $1.4 = $2.4B. Should this be $2.4B instead of $3.0B.

Commented [BA15R13]: I could not reconcile figures. Suggest we ask for clarification. Not sure why February borrowing would change Auditor's views on deficit or net debt.

Commented [KR(16R13]: The $3 bn may be the pension accounting adjustment plus the part year amount for the FHP, which was implemented part way through the year. However, IR may want to ask DBRS on its calculation.

IR could also note that the FHT Trust borrowing is not what we understand the AG would say should be added to the expense of the Province, but rather it would be the IESO's deferral amounts for the Fair Hydro Plan.

The overall direction of the borrowing program and strategy remains largely unchanged, with a focus on extending the duration of the debt stock, expanding the investor base and prudently hedging risk.

Ontario continues to have excellent access to debt markets — both domestically and internationally — and has been able to issue large amounts of debt with little impact on pricing. The Province has established borrowing programs in Canada, the United States, Europe and a number of other smaller markets and has seen its international investor base continue to expand in recent years.

The Province has shifted its target for domestic–international issuance. Previously, Ontario sought to accomplish three-quarters of its borrowing in the domestic market and the remaining quarter elsewhere. The Province will now target two-thirds of its issuance to the domestic market. The shift generally reflects the excellent investor receptivity in international markets and the continued desire to expand the investor base. The domestic–international target is not a firm requirement, and the Province will deviate from the target when opportunities to broaden the investor mix or reduce costs arise.

While Ontario does borrow heavily in international markets, the Province swaps back the foreign currency exposure to Canadian dollars. As at March 31, 2018, there was effectively no foreign currency exposure. Similarly, the Province seeks to limit its exposure to rate increases. As at March 31, 2018, only 20% of the debt stock was subject to interest rate reset for the following 12 months.

As at March 31, 2018, the Province was party to derivatives contracts with notional principal amounts totalling $xx.x billion, consisting largely of foreign currency and interest rate swaps. The Province has CSAs in place with its counterparties, which are all large domestic and international banks rated xxx or better.

The Province maintains ample liquidity to reduce the risk associated with its borrowing program. During 2017–18, the unrestricted liquidity reserve averaged $30.1 billion, which was a significant increase over the average size of the reserve in previous years. In addition, the Province maintain significant capacity on its short-term borrowing programs. The Province currently has $xxx billion outstanding on its Canadian and U.S. short-term programs, which is against the authorized limit of $48.0 billion.

Ontario sponsors several defined-benefit pension plans, acting as the sole sponsor for the Public Service Pension Plan and joint sponsor for both the OPSEU Pension Plan and the Ontario Teachers' Pension Plan. Ontario does not report any unfunded pension liabilities in its financial statements. As such, DBRS's measure of tax-supported debt does not include any unfunded pension liabilities.

DBRS excludes the debt issued on behalf of the OEFC from the calculation of tax-supported debt, as the cost of this debt is expected to be recovered from ratepayers as opposed to taxpayers.

In March 2017, the Province unveiled its Fair Hydro Plan, which includes, among other elements, the use of debt to refinance a portion of the global adjustment. Effectively, debt is being used to lower prices over the next ten years. The cost of that debt will then be recovered through higher prices in subsequent years. The Province had provided a preliminary estimate~~s~~ that the annual borrowings would~~ill~~ average~~be~~ about $2.5 billion over the ~~first~~ ten years, of which about $1.4 billion will be sourced from debt markets by Fair Hydro Trust (a special-purpose financing trust) and the remaining $1.1 billion by OPG. However, much of the funds provided by OPG will come from the Province in the form of equity injections. The Province will borrow to fund these equity investments, and in the absence of information as to how these equity investments will be recovered, DBRS considers this debt to be tax-supported debt, consistent with established practice. Given the existing size of the Province's debt burden, the incremental borrowing to fund the equity injection is modest.

When creating the structure for the Fair Hydro Plan and OPG's Fair Hydro Trust, the Province provided the trust's noteholders with a limited guarantee. If the Province makes a substantive change to the *Fair Hydro Plan Act*, its regulations or related legislation/regulations, the Province will assume responsibility for servicing the debt issued by the trust. If this were to occur, DBRS could adjust the Province's DBRS-adjusted debt. The extent of this adjustment would depend on what measures are taken by the Province to limit the balance sheet impacts (e.g., an offsetting equity withdrawal). The increase in DBRS-adjusted debt would likely be modest relative to the overall size of the Provincial debt burden.

Outlook

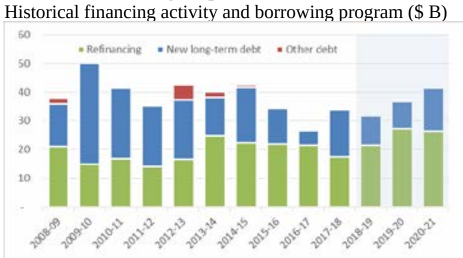
After slowing in recent years, debt growth is expected to accelerate with the planned return to deficit spending. In 2018–19, DBRS-adjusted debt is project to rise by $9.5 billion (+2.6%) to $374.1 billion.

Ontario's credit profile had stabilized in recent years and was beginning to show modest signs of improvement. This trend is now likely to stall or reverse if the budget is implemented as proposed. Previously, DBRS expected that the DBRS-adjusted debt-to-GDP ratio would decline slowly and approach 40% over the medium term. The outlook contained in the budget now suggests that the ratio will remain stable around 43.0% provided that economic expansion continues.

The Province's borrowing requirement for 2018–19 is $31.7 billion,

Exhibit 4. Borrowing Requirement

Historical financing activity and borrowing program ($ B)



Source: Province of Ontario

Commented [KR(17]: This is dated, based on the March 2017 preliminary estimates and a peak debt closer to about $29 bn. DBRS is using elsewhere Energy's revised peak debt of $20 bn. Can we point DBRS to public numbers on the revised consistent numbers of average annual borrowings related to the $20 bn peak amount?

Commented [KR(18]: Isn't it clear that OPG lends sub-debt to the Trust and earns a return on it, and the Province is the sole shareholder of OPG derives an offsetting benefit to the cost of the equity injection?

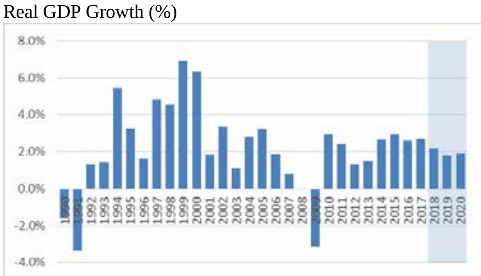
Commented [JK19]: The plan is clear that there will be a recovery phase from the initial debt. Also, OPG is expected to earn a return on the capital (or equity injection). Would it not be expected that the fiscal capacity, with OPG's results consolidated, would grow along with the debt?

Commented [SK20R19]: Agreed, just while debt increases, assets (investment in OPG) also increase.

which is slightly lower than what was expected at the time of the last review. As at April 20, 2018, the Province has completed $7.5 billion in borrowing. The Province will only issue debt in the domestic market during the election period. If a change in government were to occur, the Province would likely halt issuance until the new government could provide the market with some guidance on the direction of fiscal policy.

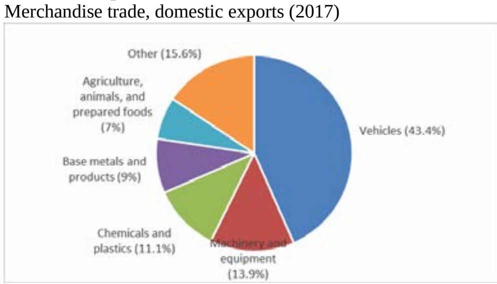
Economy

Exhibit 5. Economic Growth
Real GDP Growth (%)



Source: Statistics Canada/Haver Analytics and Province of Ontario

Exhibit 6. Exports to the United States
Merchandise trade, domestic exports (2017)



Source: Statistics Canada.

Ontario is Canada's largest province with a population of 14.4 million and annual economic output approaching $900 billion. The Province accounts for about 40% of Canada's population and economic activity. The provincial economy is well diversified with a mix of goods- and services-oriented industries, including well-developed technology and financial industries. Over the last two decades, traditional industries have declined in relative importance as knowledge-based and service industries have rapidly grown.

Population growth has quickened in recent years as a result of the downturn in resource-producing provinces. Annual growth is now near 1.5%, with natural increase, interprovincial migration and international migration all contributing positively to growth. As is the case for most provinces, Ontario's population is aging, though the median age (40.6 years) remains at the national average and the overall age profile remains similar to that of British Columbia and Québec. The age-related pressures in Ontario are not as pronounced as seen in the Atlantic region.

Ontario's economy has performed relatively strongly over the last three years in response to improving internal and external economic conditions — low interest rates and oil prices, a weak Canadian dollar and the improving U.S. and global economies. In 2017, the Province's economy is estimated to have grown by 2.7%, which places it ahead of many provinces. Growth was driven in large part by strengthening household consumption (+4.0%) and residential construction (+4.4%) and improving business investment.

The labour market continued to perform strongly, adding 128,000 jobs (+1.8%), supporting a further decline in the unemployment rate, which has fallen to 6.0% (2017) from a peak of 8.3% (2009).

The Province's budget forecast expects growth to moderate to 2.2% in 2018 but for growth to remain well balanced. The moderation reflects, in large part, the expectation that growth in household consumption and real estate investment will slow because of rising interest rates, the introduction of the Office of the Superintendent of Financial Institutions' (OSFI) mortgage financing stress test and the various provincial measures intended to cool the housing market.

Nevertheless, Ontario's economy is now at or near full capacity. The labour market is showing signs of tightening, with unemployment rate falling, wage pressures beginning to emerge (fair?) and businesses beginning to ramp-up investment to address capacity constraints. The Province projects relatively strong growth in non-residential investment (+5.0%) and machinery and equipment (+5.3%) in 2018, which is broadly consistent with results from recent business surveys.

The housing market remains a vulnerability to the provincial credit profile. Household debt levels are elevated after years of low interest rates and the rapid increase in housing prices over the last decade. Relatively high debt levels leave households vulnerable to increases in interest rates and employment/economic shocks. A significant deleveraging caused by an economic shock could exacerbate the effect of a downturn on the Provincial credit profile, though the extent of the deterioration would largely depend on the nature and severity of the underlying economic shock and the government's policy response.

The housing market has been resilient because of the persistent demand for housing; however, the recent introduction of OSFI's mortgage financing stress test, rising interest rates and the housing measures introduced in 2017 have supported a rebalancing of the housing market. Price growth has eased and transaction volumes have fallen. The rebalancing is continuing, and the outlook appears more stable.

The outlook for global trade remains another risk to the provincial credit profile, as trade accounts for a meaningful share of provincial economic activity. The rise in protectionist rhetoric and rising risk of disruption in global trade could challenge the Canadian economy and adversely affect Ontario given its more pronounced integration in global supply chains and trade.

The United States is Ontario's largest export market, accounting for 80% of provincial merchandise-goods exports. Ontario's largest goods exports to the United States are vehicles and part (43.4%), machinery and equipment (13.9%), chemicals and plastics (11.1%) and base metals and related products (9.0%). The largest export states are Michigan, California and New York.

Outlook

The Province and private-sector economists are projecting that economic growth will moderate in the coming years, with growth expected to be about 2.0% annually over the medium term. Downside risks to the economic outlook include U.S. trade and fiscal policy, broader trade disruptions, rising interest rates, a strengthening Canadian dollar and oil prices, and possible economic disruptions emanating from Asia or Europe.

Economic Statistics

	2019	2018	2017	2016	2015	2014	2013
Nominal GDP ($ millions)	897,341	863,690	829,984	794,835	762,029	726,053	695,354
Nominal GDP growth	3.9%	4.1%	4.4%	4.3%	5.0%	4.4%	2.2%
Real GDP growth	1.8%	2.2%	2.7%	2.6%	2.9%	2.7%	1.5%
Population (thousands)	14,634	14,439	14,193	13,976	13,790	13,680	13,556
Population growth	1.4%	1.7%	1.6%	1.4%	0.8%	0.9%	1.1%
Employment (thousands)	7,325	7,249	7,128	7,000	6,923	6,878	6,823
Unemployment rate	5.4%	5.5%	6.0%	6.5%	6.8%	7.3%	7.6%
Housing starts	69,500	72,400	79,123	74,952	70,156	59,134	61,085
Retail sales ($ millions)	232,896	224,370	215,120	202,235	188,893	179,100	169,341
Inflation rate (CPI)	2.2%	2.2%	1.7%	1.8%	1.2%	2.3%	1.1%
Household income per capita ($)	40,870	39,724	38,375	37,808	37,170	35,776	34,887

Sources: Statistics Canada/Haver Analytics, Ministry of Finance estimates and projections.

Budget Summary

($ millions)	**Budget**	**Projection**				
	2018-19	**2017-18**	**2016-17**	**2015-16**	**2014-15**	**2013-14**
Revenue	151,390	149,023	138,869	130,938	116,448	113,367
Program expenditure	(150,278)	(142,350)	(134,008)	(133,163)	(122,070)	(118,044)
Interest costs	(11,655)	(11,034)	(10,682)	(10,473)	(9,457)	(9,324)
DBRS-Adjusted Surplus (Deficit)	**(10,543)**	**(4,361)**	**(5,821)**	**(12,698)**	**(15,079)**	**(14,001)**
DBRS Adjustments:						
Contingencies and reserves	(2,300)	(50)				
Net non-recurring items	-	-	-	3,175	-	-
Adjustments for capital expenditures (1)	6,139	5,052	4,830	6,009	4,745	3,547
Surplus (deficit), as reported	**(6,703)**	**641**	**(991)**	**(3,514)**	**(10,334)**	**(10,453)**
Gross long-term borrowing requirements	31,700	33,900	27,000	30,100	39,849	35,985
Capital Investment	14,233	10,686	10,045	10,922	9,389	10,322
Total DBRS-Adjusted Debt	**374,122**	**364,623**	**347,884**	**337,544**	**318,696**	**299,502**

1 DBRS adjusts reported figures to recognize capital expenditures as incurred, rather than as amortized, to improve interprovincial comparability

Selected Financial Indicators
(DBRS-Adjusted)

	Budget	Projection				
	2018-19	**2017-18**	**2016-17**	**2015-16**	**2014-15**	**2013-14**
DBRS-Adjusted Debt as a % of GDP	43.3%	43.9%	43.8%	44.3%	43.9%	43.1%
Surplus (deficit) as % of GDP	(1.2%)	(0.5%)	(0.7%)	(1.7%)	(2.1%)	(2.0%)
Surplus (deficit) as % of revenue	(7.0%)	(2.9%)	(4.2%)	(9.7%)	(12.9%)	(12.3%)
Tax-supp. interest costs as % of revenue	7.7%	7.4%	7.7%	8.0%	8.1%	8.2%
Federal transfers as % of revenue	17.2%	17.0%	17.7%	17.7%	18.6%	19.7%
Program expenditures as a % of revenue	99.3%	95.5%	96.5%	101.7%	104.8%	104.1%
Health spending as a % of total expenditures	37.8%	38.0%	38.7%	38.2%	38.0%	38.4%
Total revenue growth	1.6%	7.3%	6.1%	12.4%	2.7%	2.4%
Program expenditure growth	5.6%	6.2%	0.6%	9.1%	3.4%	0.1%
Total expenditure growth	5.6%	6.0%	0.7%	9.2%	3.3%	0.4%
DBRS-Adjusted Debt as a % of GDP	43.3%	43.9%	43.8%	44.3%	43.9%	43.1%

Background Political Information			
Party in Power:	Ontario Liberal Party	Number of seats:	55 out of 107
Premier:	Kathleen Wynne	Next election:	June 2018

Statement of Operations (DBRS-Adjusted)

($ millions)	Budget 2018-19	Projection 2017-18	2016-17	2015-16	2014-15	2013-14
Revenue						
Personal income tax	35,612	32,319	30,671	31,141	29,313	26,929
Sales tax	26,808	25,954	24,750	23,455	21,689	20,481
Corporate income tax	15,137	15,800	14,872	11,428	9,557	11,423
Education property tax	6,076	5,968	5,868	5,839	5,561	5,457
Employer health tax	6,554	6,184	5,908	5,649	5,415	5,283
Ontario Health Premium	3,914	3,679	3,575	3,453	3,366	3,128
Gasoline and fuel taxes	3,483	3,443	3,368	3,210	3,186	3,081
Land transfer taxes	3,142	3,091	2,728	2,118	1,765	1,614
Tobacco and cannabis	1,285	1,251	1,230	1,226	1,163	1,110
Other taxes	563	558	453	470	520	360
Total Tax Revenue	**102,574**	**98,247**	**93,423**	**87,989**	**81,535**	**78,866**
Liquor and cannabis retailing	2,832	2,795	2,938	2,538	2,391	2,280
Lotteries and casinos	2,245	2,509	2,358	2,234	1,995	2,009
Vehicle licence and other fees	3,006	2,957	2,490	2,529	2,126	2,007
Net income from electricity sector (1)	375	1,691	917	1,489	1,994	2,097
Carbon pricing	1,979	2,395			-	-
Broader public sector entities	8,552	8,283	7,957	7,493		
Other revenue	3,821	4,818	4,242	3,525	4,792	3,831
Own-Source Revenue	**125,384**	**123,695**	**114,325**	**107,797**	**94,833**	**91,090**
Equalization	963	1,424	2,304	2,363	1,988	3,169
Canada Health and Social Transfer	20,420	19,673	19,056	18,073	17,255	16,629
Other federal transfers	4,623	4,231	3,184	2,705	2,372	2,479
Total Federal Transfers	**26,006**	**25,328**	**24,544**	**23,141**	**21,615**	**22,277**
DBRS-Adjusted Revenue	**151,390**	**149,023**	**138,869**	**130,938**	**116,448**	**113,367**
Non-recurring revenue (2)				3,219	-	-
DBRS adjustments	1,071	1,113	1,865	1,991	2,098	2,544
Total revenue, as reported	**152,461**	**150,136**	**140,734**	**136,148**	**118,546**	**115,911**
Expenditures						
Health	61,278	58,290	55,945	54,925	50,039	48,933
Education	40,003	38,162	36,334	35,978	32,878	32,117
Social services	17,911	16,842	16,076	15,596	14,683	13,950
Transportation	5,566	5,095	3,636	3,284	2,944	2,823
Public protection	5,625	5,476	5,213	5,148	4,923	4,791
Municipal affairs and housing	1,858	1,877	2,049	1,601	1,591	1,777
Agri., Environment and Resources	5,696	4,849	3,640	3,743	3,835	3,861
General government	3,015	2,584	2,365	2,496	2,671	2,633
Economic development	4,217	3,766	3,596	4,112	3,531	3,380
Other expenditure	(1,028)	357	324	271	230	232
Adjustments for capital expenditures (3)	6,139	5,052	4,830	6,009	4,745	3,547
DBRS-Adjusted Program Expenditures	**150,278**	**142,350**	**134,008**	**133,163**	**122,070**	**118,044**
Tax-supported interest expense	11,655	11,034	10,682	10,473	9,457	9,324
DBRS-Adjusted Expenditures	**161,933**	**153,384**	**144,690**	**143,636**	**131,527**	**127,368**
Budgetary contingencies	1,600	50				
Adjustments for capital expenditures (3)	(6,139)	(5,052)	(4,830)	(6,009)	(4,745)	(3,547)
Other DBRS adjustments	1,071	1,113	1,865	1,991	2,098	2,544
Non-recurring expenditures (2)				44	-	-
Total expense, as reported	**158,465**	**149,495**	**141,725**	**139,661**	**128,880**	**126,365**

(1) Net income of OPG and Hydro One plus revenues of OEFC, less interest on OEFC debt, and costs of power purchase agreements. (2) Excludes non-recurring revenue related to the partial privatization of HydroOne. (3) DBRS recognizes capex as they occur (pay-as-you-go basis).

Commented [GH21]: Not sure the source of these numbers.

Commented [BA22R21]: unable to verify

Statement of Financial Position (DBRS-Adjusted)
As at March 31($ millions)

	2017	2016	2015		2017	2016	2015
Financial Assets				**Liabilities**			
Cash and cash equivalents	16,401	13,600	15,193	Accounts payable and accrued liabilities	20,248	19,361	20,055
Investments	17,983	21,765	20,366	Debt	346,799	341,558	328,895
Accounts receivable	11,192	11,059	10,306	Deferred revenue and capital contributions	11,538	10,779	10,110
Loans receivable	11,868	11,545	11,125	Pensions and other employee future benefits	10,478	10,751	10,830
Net pension asset	11,033	9,312	7,679	Other liabilities	6,367	6,348	4,878
Other assets	3,036	2,572	2,021	**Net Debt**	**(301,648)**	**(295,372)**	**(284,576)**
Investment in GBEs	22,269	23,572	23,502	Non-financial assets	107,288	102,536	97,065
Total Financial Assets	93,782	93,425	90,192	**Accumulated deficit**	**(193,510)**	**(192,029)**	**(187,511)**
Financial Assets	**16,401**	**13,600**	**15,193**				

Public Sector Debt
As at March 31($ millions)

	2019	2018	2017	2016	2015	2014	2013	2012
Direct debt	339,262	329,609	312,680	303,055	284,819	267,012	251,629	230,314
Local government sector (1)	18,292	18,557	18,857	18,335	17,990	17,570	16,978	20,180
University and hospital sector	6,672	6,561	6,451	5,751	5,816	5,640	5,260	5,052
Alternative financing obligations (P3s)	8,700	8,700	8,700	9,100	8,400	7,500	6,600	4,400
Loan guarantees	900	900	900	1,000	1,400	1,500	1,200	931
Capital leases	296	296	296	303	271	280	299	297
Tax-Supported Debt	**374,122**	**364,623**	**347,884**	**337,544**	**318,696**	**299,502**	**281,966**	**261,174**
OEFC debt (self-supp.) (2)	19,575	19,179	20,422	24,358	25,341	26,146	27,336	26,964
Fair Hydro Trust	3,480	980						
Total public sector debt	**397,177**	**384,782**	**368,306**	**361,902**	**344,037**	**325,648**	**309,302**	**288,138**
Pension Liabilities	-	-	-	-	-	-	-	-
DBRS-Adjusted Debt (3)	**374,122**	**364,623**	**347,884**	**337,544**	**318,696**	**299,502**	**281,966**	**261,174**
DBRS-Adjusted Debt								
Per Capita ($)	25,911	25,690	24,891	24,478	23,647	22,286	21,177	19,691
As a share of GDP (%)	43.3%	43.9%	43.8%	44.3%	44.6%	43.4%	41.8%	39.6%
Direct Debt Breakdown by Currency (4)								
Canadian dollar pay	n.a.	99.8%	99.8%	99.7%	99.7%	99.7%	99.3%	99.1%
Non-Canadian dollar pay	n.a.	0.2%	0.2%	0.3%	0.3%	0.3%	0.7%	0.9%
Fixed/Floating Rate Direct Debt Breakdown (4)								
Fixed Rate	n.a.	79.8%	81.9%	80.1%	82.4%	81.3%	80.4%	83.5%
Floating Rate	n.a.	20.2%	18.1%	19.9%	17.6%	18.7%	19.6%	16.5%
Debt Maturity Profile (4) (6)	**2018-19**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24 to 2027-28**	**2028-29+**	**Total**
Total Debt ($ millions)								
Share (%)								

B = Budget. P = Projected. n.a. = not available. (1) Excludes municipal debt obligations funded through OILC which are included in direct debt. (2) Ontario Electricity Financial Corporation is the agency responsible for the servicing and management of the former Ontario Hydro's debt, derivatives contracts, and certain other liabilities. OEFC debt is issued in the name of the Province and is to be recovered from ratepayers. (3) DBRS adjusted debt comprises tax-supported debt and unfunded pension liabilities. (4) Includes hedges. Floating rate debt is defined as debt that matures or is repriced within 12 months.

Commented [KR(23]: Looks odd. Verification?

Rating History

	Current	2017	2016	2015	2014	2013
Issuer Rating	AA (low)	AA (low)	AA (low)	AA (low)	AA (low)	AA (low)
Long-Term Debt	AA (low)	AA (low)	AA (low)	AA (low)	AA (low)	AA (low)
Short-Term Debt	R-1 (middle)	R-1 (middle)	R-1 (middle)	R-1 (middle)	R-1 (middle)	R-1 (middle)

Previous Action ments

- Confirmed, June 28, 2017.

Related Research

- *Ontario's 2018 Budget: Billions for the Ballot*, March 29, 2018.
- *DBRS 2018 Provincial Government Factsheet*, April xx, 2018.
- *Corporate Risk Assessment Scorecard for Canadian Provincial Governments*, April xx, 2018.
- Fair Hydro Trust: Presale Report, April 18, 2018.
- *Rating Canadian Provincial Governments*, May 2017.
- *Rating Canadian Provincial Agents of the Crown*, April 2018.

Previous Report

- Ontario, Province of: Rating Report, July 14, 2017.

Notes:
All figures are in Canadian dollars unless otherwise noted.

For the definition of Issuer Rating, please refer to Rating Definitions under Rating Policy on www.dbrs.com.

Generally, Issuer Ratings apply to all senior unsecured obligations of an applicable issuer, except when an issuer has a significant or unique level of secured debt.

From:	John Kim
To:	Ronald Kwan
Cc:	Gavin He
Subject:	RE: Draft Global Adjustment disclosure for OPG
Date:	Thursday, March 02, 2017 7:52:38 PM

Thanks Ron. Looks good to me.

I will send it back.

John.

From: Ronald Kwan
Sent: March-02-17 7:48 PM
To: John Kim <John.Kim@ofina.on.ca>
Cc: Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: Draft Global Adjustment disclosure for OPG

Hi,

A few suggested edits below.

Ron

Ontario's Fair Hydro Plan

On March 2, 2017, the Province announced Ontario's Fair Hydro Plan (the Plan) aimed at reducing electricity bills by 25 per cent on average for all residential consumers in the province. As part of the Plan, the Province has proposed refinancing a portion of total electricity system Global Adjustment costs over a longer time period for regulated price plan eligible customers (e.g., residential , farm, small businesses). According to the Plan, the Province intends to introduce legislation that would, if passed, enable the IESO and OPG to work together to undertake this financing. The Global Adjustment portion of the total price of electricity in the province is administered by the IESO. The Global Adjustment includes the difference between Ontario's electricity market clearing price used to dispatch generation and the prices paid to contracted and regulated generators in the province, and the cost of conservation and demand management programs. Virtually all generators in Ontario have bilateral contracts with the IESO that provide for payments that are different from the market clearing price of electricity, while the prices for all of OPG's nuclear and a majority of its hydroelectric generation are set by the OEB. OPG intends to work with the Province and the IESO as part of the refinancing proposal.

From: John Kim
Sent: March-02-17 2:01 PM
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: Gavin He <Gavin.He@ofina.on.ca>

Subject: FW: Draft Global Adjustment disclosure for OPG

Hi Ron,

I have no issue with the paragraph for the reason that it is largely consistent with the backgrounder.

Thanks,

John.

From: HO Philip -FIN & C CTRL [mailto:philip.ho@opg.com]
Sent: Thursday, March 02, 2017 1:31 PM
To: John Kim <John.Kim@ofina.on.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: CHENG Alec -FIN & C CTRL <alec.cheng@opg.com>
Subject: Draft Global Adjustment disclosure for OPG

Hi John and Ronald,

We are proposing to include the following language regarding the Global Adjustment refinancing portion of the Ontario's Fair Hydro Plan into OPG's 2016 MD&A and AIF.

We will be mailing the relevant documents to our Board today. Your comments will be appreciated. Please let us know if you have questions.

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Regards,

Philip

Philip Ho, CPA, CA | Senior Manager, External Reporting & Accounting Policy (Acting)| Ontario Power Generation
700 University Avenue, Toronto ON M5G 1X6 | Phone: (416) 592-3320| E-mail: philip.ho@opg.com

---

From:	John Kim
To:	Bruno Amara
Cc:	Shajee Kathirgamanathan
Subject:	RE: Draft Global Adjustment disclosure for OPG
Date:	Thursday, March 02, 2017 2:27:22 PM

I might have picked the wrong version but the GA backgrounder had it in the first sentence.

From: Bruno Amara
Sent: Thursday, March 02, 2017 2:10 PM
To: John Kim <John.Kim@ofina.on.ca>
Cc: Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>
Subject: RE: Draft Global Adjustment disclosure for OPG

You're referring to all versus typical right? I didn't notice "all" getting back in there this morning.

From: John Kim
Sent: Thursday, March 02, 2017 2:00 PM
To: Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: Draft Global Adjustment disclosure for OPG

In agreement….even the "all" is in the backgrounder.

John.

From: Shajee Kathirgamanathan
Sent: Thursday, March 02, 2017 1:40 PM
To: John Kim <John.Kim@ofina.on.ca>; Bruno Amara <Bruno.Amara@ofina.on.ca>
Subject: RE: Draft Global Adjustment disclosure for OPG

Not real issues on my end.

I saved the files under the OPG Financials folder file attached for editing also found here:
S:\Users\CEF\Hydro 2017\OPG\Financials\Q4 - 2016\Fair Hydro Plan Text v1.docx

Thanks,
Shajee

Shajee Kathirgamanathan
Office: 416-325-1402 | Mobile: 647-294-3359
shajee.kathirgamanathan@ofina.on.ca

From: John Kim

Sent: Thursday, March 02, 2017 1:34 PM
To: Bruno Amara <Bruno.Amara@ofina.on.ca>; Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>
Subject: FW: Draft Global Adjustment disclosure for OPG

Could we take a look? Suggested edits would be welcome…..maybe in a Word document so we could massage things.

From: HO Philip -FIN & C CTRL [mailto:philip.ho@opg.com]
Sent: Thursday, March 02, 2017 1:31 PM
To: John Kim <John.Kim@ofina.on.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: CHENG Alec -FIN & C CTRL <alec.cheng@opg.com>
Subject: Draft Global Adjustment disclosure for OPG

Hi John and Ronald,

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700 University Avenue, Toronto ON M5G 1X6 | Phone: (416) 592-3320| E-mail:
philip.ho@opg.com

From:	John Kim
To:	"HO Philip -FIN & C CTRL"
Cc:	CHENG Alec -FIN & C CTRL; Ronald Kwan
Subject:	RE: Draft Global Adjustment disclosure for OPG
Date:	Thursday, March 02, 2017 7:54:35 PM

Hi Philip,

Suggestions below:

Ontario's Fair Hydro Plan

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Sent: March-02-17 1:31 PM
To: John Kim <John.Kim@ofina.on.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: CHENG Alec -FIN & C CTRL <alec.cheng@opg.com>
Subject: Draft Global Adjustment disclosure for OPG

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---

From:	John Kim
To:	"HO Philip -FIN & C CTRL"
Cc:	CHENG Alec -FIN & C CTRL; Ronald Kwan
Subject:	RE: EXTERNAL – RE: Draft Global Adjustment disclosure for OPG
Date:	Monday, March 06, 2017 11:50:09 AM

Hi Philip,

Some minor changes.

Thanks,

John.

<u>Ontario's Fair Hydro Plan</u>

On March 2, 2017, the Province announced Ontario's Fair Hydro Plan (the Plan) aimed at reducing electricity bills by 25 percent on average for all residential consumers in the province. As part of the Plan, the Province has proposed refinancing a portion of the Global Adjustment costs over a longer time period for Regulated Price Plan eligible customers (e.g., residential , farm, small businesses). According to the Plan, the Province intends to introduce legislation that would, if passed, enable the IESO and OPG to work together to undertake this financing. The Global Adjustment is administered by the IESO. OPG intends to work with the Province and the IESO as part of the ~~refinancing~~ proposal, and~~.~~ ~~Based on the Province's Plan,~~ OPG is exploring implementation options. The final plan is expected to be reviewed and is subject to approval by OPG's Board of Directors. The Global Adjustment includes the difference between Ontario's electricity market clearing price used to dispatch generation and the prices paid to contracted and regulated generators in the province, and the cost of conservation and demand management programs. Virtually all generators in Ontario have bilateral contracts with the IESO that provide for payments that are different from the market clearing price of electricity, while the prices for all of OPG's nuclear and a majority of its hydroelectric generation are set by the OEB.

From: HO Philip -FIN & C CTRL [mailto:philip.ho@opg.com]
Sent: Monday, March 06, 2017 11:22 AM
To: John Kim <John.Kim@ofina.on.ca>
Cc: CHENG Alec -FIN & C CTRL <alec.cheng@opg.com>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Subject: RE: EXTERNAL – RE: Draft Global Adjustment disclosure for OPG

Hi John,

Please see the amended current wording which takes into consideration your edits. Please let us know if you have any further comments. Thank you.

<u>Ontario's Fair Hydro Plan</u>

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Regards,

Philip

From: John Kim [mailto:John.Kim@ofina.on.ca]
Sent: Thursday, March 02, 2017 7:55 PM
To: HO Philip -FIN & C CTRL
Cc: CHENG Alec -FIN & C CTRL; Ronald Kwan
Subject: EXTERNAL – RE: Draft Global Adjustment disclosure for OPG

Hi Philip,

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Sent: March-02-17 1:31 PM
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Cc: CHENG Alec -FIN & C CTRL <alec.cheng@opg.com>
Subject: Draft Global Adjustment disclosure for OPG

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Philip

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700 University Avenue, Toronto ON M5G 1X6 | Phone: (416) 592-3320| E-mail:

philip.ho@opg.com

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From:	John Kim
To:	Ronald Kwan
Subject:	RE: EXTERNAL – RE: Draft Global Adjustment disclosure for OPG
Date:	Monday, March 06, 2017 11:50:16 AM

Yes, I'd have gone with "on" but fine with "as part of". Sending back now.

From: Ronald Kwan
Sent: Monday, March 06, 2017 11:47 AM
To: John Kim <John.Kim@ofina.on.ca>
Subject: RE: EXTERNAL – RE: Draft Global Adjustment disclosure for OPG

Hi John,

Without "as part of", I'm not sure that the sentence makes sense. An alternative to "as part of" could be "on".

Ron

<u>Ontario's Fair Hydro Plan</u>

On March 2, 2017, the Province announced Ontario's Fair Hydro Plan (the Plan) aimed at reducing electricity bills by 25 percent on average for all residential consumers in the province. As part of the Plan, the Province has proposed refinancing a portion of the Global Adjustment costs over a longer time period for Regulated Price Plan eligible customers (e.g., residential , farm, small businesses). According to the Plan, the Province intends to introduce legislation that would, if passed, enable the IESO and OPG to work together to undertake this financing. The Global Adjustment is administered by the IESO. OPG intends to work with the Province and the IESO as part of the ~~refinancing~~ proposal, and~~.~~ ~~Based on the Province's Plan,~~ OPG is exploring implementation options. The final plan is expected to be reviewed and is subject to approval by OPG's Board of Directors. The Global Adjustment includes the difference between Ontario's electricity market clearing price used to dispatch generation and the prices paid to contracted and regulated generators in the province, and the cost of conservation and demand management programs. Virtually all generators in Ontario have bilateral contracts with the IESO that provide for payments that are different from the market clearing price of electricity, while the prices for all of OPG's nuclear and a majority of its hydroelectric generation are set by the OEB.

From: John Kim
Sent: March-06-17 11:38
To: Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Subject: FW: EXTERNAL – RE: Draft Global Adjustment disclosure for OPG

Hi Ron,

These are my edits….just trying to simplify and delete words that could become problematic later on.

Ontario's Fair Hydro Plan

On March 2, 2017, the Province announced Ontario's Fair Hydro Plan (the Plan) aimed at reducing electricity bills by 25 percent on average for all residential consumers in the province. As part of the Plan, the Province has proposed refinancing a portion of the Global Adjustment costs over a longer time period for Regulated Price Plan eligible customers (e.g., residential , farm, small businesses). According to the Plan, the Province intends to introduce legislation that would, if passed, enable the IESO and OPG to work together to undertake this financing. The Global Adjustment is administered by the IESO. OPG intends to work with the Province and the IESO ~~as part of~~ the ~~refinancing~~ proposal. ~~Based on the Province's Plan,~~ OPG is exploring implementation options. The final plan is expected to be reviewed and is subject to approval by OPG's Board of Directors. The Global Adjustment includes the difference between Ontario's electricity market clearing price used to dispatch generation and the prices paid to contracted and regulated generators in the province, and the cost of conservation and demand management programs. Virtually all generators in Ontario have bilateral contracts with the IESO that provide for payments that are different from the market clearing price of electricity, while the prices for all of OPG's nuclear and a majority of its hydroelectric generation are set by the OEB.

From: HO Philip -FIN & C CTRL [mailto:philip.ho@opg.com]
Sent: Monday, March 06, 2017 11:22 AM
To: John Kim <John.Kim@ofina.on.ca>
Cc: CHENG Alec -FIN & C CTRL <alec.cheng@opg.com>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Subject: RE: EXTERNAL – RE: Draft Global Adjustment disclosure for OPG

Hi John,

Please see the amended current wording which takes into consideration your edits. Please let us know if you have any further comments. Thank you.

Ontario's Fair Hydro Plan

On March 2, 2017, the Province announced Ontario's Fair Hydro Plan (the Plan) aimed at reducing electricity bills by 25 percent on average for all residential consumers in the province. As part of the Plan, the Province has proposed refinancing a portion of the Global Adjustment costs over a longer time period for Regulated Price Plan eligible customers (e.g., residential , farm, small businesses). According to the Plan, the Province intends to introduce legislation that would, if passed, enable the IESO and OPG to work together to undertake this financing. The Global Adjustment is administered by the IESO. OPG intends to work with the Province and the IESO as part of the refinancing proposal. Based on the Province's Plan, OPG is exploring implementation options. The final plan is expected to be reviewed and is subject to approval by OPG's Board of Directors. The Global Adjustment includes the difference between Ontario's electricity market clearing price used to dispatch generation and the prices paid to contracted and regulated generators in the province, and the cost of conservation and demand management programs. Virtually all generators in Ontario have bilateral contracts with the IESO that provide for payments that are different from the market clearing price of electricity, while the prices for all of OPG's nuclear and a majority of its hydroelectric generation are set by the OEB.

Regards,

Philip

From: John Kim [mailto:John.Kim@ofina.on.ca]
Sent: Thursday, March 02, 2017 7:55 PM
To: HO Philip -FIN & C CTRL
Cc: CHENG Alec -FIN & C CTRL; Ronald Kwan
Subject: EXTERNAL – RE: Draft Global Adjustment disclosure for OPG

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Hi Philip,

Suggestions below:

Ontario's Fair Hydro Plan

On March 2, 2017, the Province announced Ontario's Fair Hydro Plan (the Plan) aimed at reducing electricity bills by 25 per cent on average for all residential consumers in the province. As part of the Plan, the Province has proposed refinancing a portion of total electricity system Global Adjustment costs over a longer time period for regulated price plan eligible customers (e.g., residential , farm, small businesses). According to the Plan, the Province intends to introduce legislation that would, if passed, enable the IESO and OPG to work together to undertake this financing. The Global Adjustment portion of the total price of electricity in the province is administered by the IESO. The Global Adjustment includes the difference between Ontario's electricity market clearing price used to dispatch generation and the prices paid to contracted and regulated generators in the province, and the cost of conservation and demand management programs. Virtually all generators in Ontario have bilateral contracts with the IESO that provide for payments that are different from the market clearing price of electricity, while the prices for all of OPG's nuclear and a majority of its hydroelectric generation are set by the OEB. OPG intends to work with the Province and the IESO as part of the refinancing proposal.

From: HO Philip -FIN & C CTRL [mailto:philip.ho@opg.com]
Sent: March-02-17 1:31 PM

To: John Kim <John.Kim@ofina.on.ca>; Ronald Kwan <Ronald.Kwan@ofina.on.ca>
Cc: CHENG Alec -FIN & C CTRL <alec.cheng@opg.com>
Subject: Draft Global Adjustment disclosure for OPG

Hi John and Ronald,

We are proposing to include the following language regarding the Global Adjustment refinancing portion of the Ontario's Fair Hydro Plan into OPG's 2016 MD&A and AIF.

We will be mailing the relevant documents to our Board today. Your comments will be appreciated. Please let us know if you have questions.

Ontario's Fair Hydro Plan

On March 2, 2017, the Province announced Ontario's Fair Hydro Plan (the Plan) aimed at reducing electricity bills by 25 per cent on average for all residential consumers in the province. As part of the Plan, the Province has proposed refinancing a portion of total electricity system Global Adjustment costs over a longer time period for residential consumers. According to the Plan, the Province intends to introduce legislation that would, if passed, enable the IESO and OPG to work together to undertake this financing. The Global Adjustment portion of the total price of electricity in the province is administered by the IESO. The Global Adjustment includes the difference between Ontario's electricity market clearing price used to dispatch generation and the prices paid to contracted and regulated generators in the province, and the cost of conservation and demand management programs. Virtually all generators in Ontario have bilateral contracts with the IESO that provide for payments that are different from the market clearing price of electricity, while the prices for all of OPG's nuclear and most of its hydroelectric generation are set by the OEB. OPG intends to work with the Province and the IESO as part of the refinancing proposal.

Regards,

Philip

Philip Ho, CPA, CA | Senior Manager, External Reporting & Accounting Policy (Acting)| Ontario Power Generation
700 University Avenue, Toronto ON M5G 1X6 | Phone: (416) 592-3320| E-mail: philip.ho@opg.com

---

From:	GRECO Clara -LAWDIV
To:	Gavin He
Cc:	John Kim
Subject:	RE: EXTERNAL – RE: Fair Hydro - Lessons Learned for Equity Process
Date:	Monday, May 07, 2018 10:08:55 AM

Hi Gavin,

First thing in the morning is required as this is the first of many steps required to close the purchase. The main risk with pushing this out is not being able to close on the intended day. A number of different wires have to be processed.

In general, as the day progresses, wires are slower to process. It's simply like traffic. Early morning, things go smooth. But later on, things slow to a crawl due to volume.

If OFA prefers transferring its funds later in the day, we would require that that happen the day before closing rather than the day of closing as we have been doing. This would be acceptable from our end. Keep in mind that we would continue to expect no more than 5 business days from notice to Energy to funding in accordance with the Master Share Subscription Agreement.

Happy to discuss further if you like

Regards.

Clara

Clara Greco
Senior Counsel – FHP
Ontario Power Generation
700 University Avenue, H18 C19
Toronto, Ontario M5G 1X6
416-592-8226 | Cell 416-859-6416
clara.greco@opg.com

From: Gavin He [mailto:Gavin.He@ofina.on.ca]
Sent: Wednesday, May 02, 2018 11:38 AM
To: GRECO Clara -LAWDIV <clara.greco@opg.com>
Cc: John Kim <John.Kim@ofina.on.ca>
Subject: EXTERNAL – RE: Fair Hydro - Lessons Learned for Equity Process

Thanks John!

Hi Clara – just a clarification question on the payment timeline. For the previous 3 transactions, I know that OPG had required the payments to be made early in the morning. Would there be a problem if OFA makes the payments later in the morning or before noon?

Regards,
Gavin He

From: John Kim
Sent: Wednesday, May 02, 2018 11:30 AM
To: 'GRECO Clara -LAWDIV' <clara.greco@opg.com>
Cc: Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: Fair Hydro - Lessons Learned for Equity Process

Hi Clara,

Gavin in my group sought out for comments/feedback and I believe OFA people are fine/happy with the current process in place thus far.

Thanks,

John

From: GRECO Clara -LAWDIV [mailto:clara.greco@opg.com]
Sent: Wednesday, May 02, 2018 9:36 AM
To: John Kim <John.Kim@ofina.on.ca>
Subject: Fair Hydro - Lessons Learned for Equity Process

Hi John
Hope this finds you well. Shruti Talwar suggested I contact you directly about this.

I'm am coordinating a lessons learned exercise for our equity transactions – now that we have completed 3 of these we thought it a good idea. I've already solicited Shruti's input for Energy and was hoping to get yours/your colleagues' input for Finance/OFA. I attach a template we are using.

Could I prevail upon you to provide me with your feedback, and seek out similar from your colleagues? You/they can either email me directly any issues/suggestions or populate the template and return it to me.

Once we've received all Ministry feedback, I will assemble it together with OPG input/responses, into one document and circulate to all interested parties. If appropriate I can also arrange for a quick call or meeting to review the lessons learned and any future changes in our processes going forward.
Thanks for your time,
Regards,
Clara

Clara Greco
Senior Counsel – FHP
Ontario Power Generation

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From: Gavin He
To: "GRECO Clara -LAWDIV"
Cc: John Kim
Subject: RE: EXTERNAL – RE: Fair Hydro - Lessons Learned for Equity Process
Date: Monday, May 07, 2018 10:35:07 AM

Hi Clara,

Thanks for the response. That's fine, our Settlements team will continue to do their best to accommodate your timeline.

According to OFA's Cash Management Directive, it does not allow ministries to pay earlier than required. To move up the payment day to the day before, I believe it would require discussion between OPG and ENERGY. So I will leave that with you if you prefer to change that.

Regards,
Gavin He

From: GRECO Clara -LAWDIV [mailto:clara.greco@opg.com]
Sent: Monday, May 07, 2018 10:09 AM
To: Gavin He <Gavin.He@ofina.on.ca>
Cc: John Kim <John.Kim@ofina.on.ca>
Subject: RE: EXTERNAL – RE: Fair Hydro - Lessons Learned for Equity Process

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First thing in the morning is required as this is the first of many steps required to close the purchase. The main risk with pushing this out is not being able to close on the intended day. A number of different wires have to be processed.
In general, as the day progresses, wires are slower to process. It's simply like traffic. Early morning, things go smooth. But later on, things slow to a crawl due to volume.
If OFA prefers transferring its funds later in the day, we would require that that happen the day before closing rather than the day of closing as we have been doing. This would be acceptable from our end. Keep in mind that we would continue to expect no more than 5 business days from notice to Energy to funding in accordance with the Master Share Subscription Agreement.

Happy to discuss further if you like
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clara.greco@opg.com

From: Gavin He [mailto:Gavin.He@ofina.on.ca]
Sent: Wednesday, May 02, 2018 11:38 AM
To: GRECO Clara -LAWDIV <clara.greco@opg.com>
Cc: John Kim <John.Kim@ofina.on.ca>
Subject: EXTERNAL – RE: Fair Hydro - Lessons Learned for Equity Process

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Thanks John!

Hi Clara – just a clarification question on the payment timeline. For the previous 3 transactions, I know that OPG had required the payments to be made early in the morning. Would there be a problem if OFA makes the payments later in the morning or before noon?

Regards,
Gavin He

From: John Kim
Sent: Wednesday, May 02, 2018 11:30 AM
To: 'GRECO Clara -LAWDIV' <clara.greco@opg.com>
Cc: Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: Fair Hydro - Lessons Learned for Equity Process

Hi Clara,

Gavin in my group sought out for comments/feedback and I believe OFA people are fine/happy with the current process in place thus far.

Thanks,

John

From: GRECO Clara -LAWDIV [mailto:clara.greco@opg.com]
Sent: Wednesday, May 02, 2018 9:36 AM
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Subject: Fair Hydro - Lessons Learned for Equity Process

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From:	Gavin He
To:	John Kim
Cc:	Shajee Kathirgamanathan
Subject:	RE: Fair Hydro - Lessons Learned for Equity Process
Date:	Wednesday, May 02, 2018 11:27:30 AM

Hi John,

So far I haven't encountered any issues with the process, so I don't have any comments to add. Settlements and Cash Management also confirmed that they don't have any comments either.

Regards,
Gavin He

From: John Kim
Sent: Wednesday, May 02, 2018 9:38 AM
To: Gavin He <Gavin.He@ofina.on.ca>
Cc: Shajee Kathirgamanathan <Shajee.Kathirgamanathan@ofina.on.ca>
Subject: FW: Fair Hydro - Lessons Learned for Equity Process

Hi Gavin,

Pls. take a look.

John

From: GRECO Clara -LAWDIV [mailto:clara.greco@opg.com]
Sent: Wednesday, May 02, 2018 9:36 AM
To: John Kim <John.Kim@ofina.on.ca>
Subject: Fair Hydro - Lessons Learned for Equity Process

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clara.greco@opg.com

From:	Gavin He
To:	"GRECO Clara -LAWDIV"
Cc:	John Kim
Subject:	RE: Fair Hydro - Lessons Learned for Equity Process
Date:	Wednesday, May 02, 2018 11:37:39 AM

Thanks John!

Hi Clara – just a clarification question on the payment timeline. For the previous 3 transactions, I know that OPG had required the payments to be made early in the morning. Would there be a problem if OFA makes the payments later in the morning or before noon?

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Cc: Gavin He <Gavin.He@ofina.on.ca>
Subject: RE: Fair Hydro - Lessons Learned for Equity Process

Hi Clara,

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416-592-8226 | Cell 416-859-6416
clara.greco@opg.com

From:	John Kim
To:	James Strang (MOF)
Cc:	Chris Skubel (MGS); Felix Fung (MOF); Bruno Amara
Subject:	RE: OPG Business Plan
Date:	Wednesday, May 03, 2017 6:22:20 PM
Attachments:	5 2017-05-09 RAN OPG Business Plan v2 Received May2_CEFDMarkup8 (Sent).doc

Hi James,

There you go.

What time is the meeting? I heard it may have moved?

John

From: Strang, James (TBS) [mailto:James.Strang@ontario.ca]
Sent: Tuesday, May 02, 2017 4:17 PM
To: John Kim <John.Kim@ofina.on.ca>
Cc: Chris Skubel (MGS) <Chris.Skubel@ontario.ca>; Felix Fung (MOF) <Felix.Fung@ontario.ca>
Subject: OPG Business Plan

John,

Chair's - Thursday, May 4th 1:00-3:00pm. OPG and FHP towards at the beginning of the Agenda.

OPCD is reviewing the note (Attached). Sec was very brief today. Cindy V (OPCD) Indicated there's a few accounting aspects at play – I caught the IFRS consolidation risk and she referenced another in general terms, I'm guessing nuclear funds related? Please confirm if the first bullet under Key Income Statement Forecasts is correct.

I also noticed the financial table on page 12 repeats amounts appearing on page 11 (for example OPG IFRS consolidation, and Net Income (including OPG Head Office). The blurb at the top of page is talking about the following table being other OPG fiscal results. Perhaps the blurb at the top of page 12 can be updated to reflect what's in the table, and clarify what '2017 budget adjustments" are as adjustments to what?

Thanks in advance,

James

TAB 3

TREASURY BOARD / MANAGEMENT BOARD OF CABINET
REQUEST ASSESSMENT NOTE

Ontario

Ministry:	Energy
Meeting Date:	May 9, 2017
Agenda Class:	Discussion (In Camera)
Last reviewed by: TB/MBC March 24, 2015	**Tracking to: Fast Track** Cabinet (May 10, 2017)

SUBMISSION TITLE:	2017-2019 Business Plan for Ontario Power Generation

~~Prepared based on draft submission~~

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I. DECISION BEFORE THE BOARD

- Receive Ontario Power Generation's (OPG) 2017-2019 Business Plan

II. RECOMMENDATIONS:

• Receive the 2016-2018 business plan for Ontario Power Generation	*Receive*
• Note Minister of Energy will provide concurrence with OPG's Business Plan	*Note*
• Approval giving special status to OPG under Section 5.3 of the MBC Travel, Meal and Hospitality Expenses Directive, giving it the authority to approve international travel for its employees.	*tbd*

III. FINANCIAL SUMMARY

$ Millions	**2014-15**	**2015-16**	**2016-17**
Initiative cost requested	0.0	0.0	0.0
Initiative cost recommended	0.0	0.0	0.0
Recommended program base	0.0	0.0	0.0
Offset Recommended (Specify Ministry/Program)	0.0	0.0	0.0
Total Fiscal Impact	0.0	0.0	0.0

IV. KEY COMMENTS AND CONSIDERATIONS

As stipulated as part of the 2013-14 Results-based Planning process, the Ministry of Energy is submitting OPG's annual business plans for review by Treasury Board to facilitate incorporating implications into the Province's fiscal plan.

It is under the responsibility of the Minister of Energy on whether or not to provide the Minister's concurrence of OPG's annual multi-year business plan. The Treasury Board submission provides the Minister of Energy with an opportunity to highlight why concurrence is being given and any conditions placed on it. Appendix C provides more information on the concurrence process and the 2013-14 minute.

Under the memorandum of agreement (MOA, July 2015) between the Province (as sole shareholder and the Ministry of Energy as representative of the shareholder) and OPG, the company is required to annually submit its board-approved multi-year business plan to the Minister of Energy for concurrence.

The concurrence letter from the Minister to the company will note key elements of the business plan, how these elements relate to the policy direction and priorities of the Province, and the government's expectation for the performance of the company including indicating any elements of the business plan the government does not concur.

In November 2016, OPG submitted its Board approved 2017-2019 Business Plan ~~(Board-approved?)~~ to the Ministry.

Ontario's Fair Hydro Plan (OFHP) is not reflected in OPG's latest Business Plan. The Ministry notes the following OFHP implications for OPG:

- As part of supporting the financing and administration of the global adjustment smoothing mechanism, OPG would develop a Special Purpose Vehicle (OPG Trust) which would use 100 per cent debt financing to purchase the right to future cash flows from IESO. It is proposed that the OPG Trust would raise 51% of required funding directly from capital markets while OPG would provide 49% of the financing requirements. The latter would be financed by OPG raising a targeted up to 5% from capital markets, with the remaining~~include~~ 44-49% ~~debt or~~ equity injection [and/or debt financing] from the Province (Estimates provides for a Ministry of Energy operating asset to make an equity injection) ~~with OPG raising the remaining 5% from capital markets~~.
  - Provincial borrowing for an equity injection would be offset by an increase in an investment asset in OPG, so the Province's net debt position would remain unchanged.
  - These changes are expected to be fiscally neutral as they would result in an increase in Provincial interest on debt, offset by increases in OPG net income.
    ~~In addition, the Province's net debt position should remain unchanged~~
  - ~~As part of supporting the financing and administration of the global adjustment smoothing mechanism, OPG would purchase the right to future cash flows from IESO, financed by capital infusions from the Province (Equity injection via an operating asset, raised from higher debt, with additional shares to the Province as sole shareholder), and by third-party lending (check with OFA – currently 256.3M common shares increasing to….needed? Perhaps explain why there are shares given province is sole shareholder, linked to value of OPG assets/equity)~~
  - ~~These changes are expected to be fiscally neutral as they would result in an increase in Provincial interest on debt, offset by increases in OPG net income~~
  - ~~In addition, the Province's net debt position should remain unchanged (Check is OFA)~~

The Ministry of Energy indicates it is generally supportive of the fiscal, financial and operational strategies laid out in the business plan while noting also that OFHP is not reflected in the current business plan.

Financial figures from the OPG Business Plan are included and supplemented with more recent forecast adjustments from the Ontario Financing Authority, MOF, for more recent OPG in-year forecast updates, and for estimated OFHP implications, as part of Province's finalized fiscal plan for the 2017 Budget. Also identified~~, and for~~ are risks related to the Auditor General recommendation that Ontario include Hydro One and OPG financial information in the consolidated financial statements using the International Financial Reporting System (IFRS) reporting framework as required by PSAB standards. ~~The Ministry of Energy indicates it is generally supportive of the fiscal, financial and operational strategies laid out in the business plan while noting also that OFHP is not reflected in the current business plan.~~ ~~Financial figures from the OPG Business Plan are included and supplemented with forecast changes for the Ontario Financing Authriy, MOF for OFHP implications as part of Province's finalized fiscal plan for the 2017 Budget. The Ministry of Energy indicates it is generally supportive of the~~

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Commented [BA1]: Also added MoF changes for IFRS risk

~~fiscal, financial and operational strategies laid out in the business plan.~~

The earnings before tax (net income and income tax payments in lieu – PILs) of OPG are consolidated on the Province's financial statements and have a~~n~~ one-for-one impact on the Province's surplus/deficit position, excluding adjustments that the Province ~~may~~ make upon consolidation of OPG's financials (e.g., unrealized gains or losses in the nuclear funds). OPG is expected to submit its next multi-year business plan later this year for the period starting January 1, 2018~~7~~.

Overview of Current Business Plan

OPG's 2017-19 Business Plan details key company undertakings such as business transformation and nuclear refurbishment that will have a substantial electricity system benefit, ratepayer and shareholder impacts. These items were flagged in the previous year's multi-year business plan as well.

- Key Income Statement Forecasts:

  2017 Budget projections were based on t~~T~~he figures in the OPG Board approved 2017-2019 Business Plan, with adjustments made by OFA/MOF, and show a decrease in earnings before tax of $291~~9~~~~4~~M in 2016-17 and $556M in 2017-18 compared to the 2016 Budget projections [with $75M and $400M of the declines in 2016-17 and 2017-18 due to IFRS-related consolidation risks], primarily due to estimated impact of ~~Ontario n~~Nuclear ~~Funds Agreement~~asset retirement obligations-related IFRS risks, followed by an increase of $12~~1~~M in 2018-19 ~~and a decrease of $14M in 2019-20~~ versus ~~-~~the estimates in the 2016 Budget. The 2019-20 decrease also largely reflects an IFRS-related consolidation risk of $200M) as described above.

  ~~The figures in the OPG Board approved 2017-2019 Business Plan, along with OFA forecast updates for OFHP (TBC), show a decrease in earnings before tax of $84M in 2017-18 and $89M in 2017-18, followed by increases of $59M in 2018-19 and $120M in 2019-20 over the estimates in the 2016 Budget..~~

  OPG is forecasting net income attributable to the Shareholder to reach $1B in 2021, from $463~~36~~M in 2016. Net income in 2017 is forecast to increase as a result of new regulated rates, a gain on sale of OPG's head office, higher capitalized interest for the Darlington Refurbishment expenditures partially offset by reduced production as a result of planned outages at Sir Adam Beck I and DeCew II hydro stations

  Net income in 2018 and 2019, before OFA an~~m~~d MOF adjustments, is projected~~lanned~~ to increase, primarily due to higher production, and earnings from oncoming stations including Nanticoke solar in 2019. Return-on-equity (ROE) is estimated to increase from 4.2% in 2016 to 7.3% by 2021.

  These estimates are highly dependent on electricity and financial market conditions, regulatory decisions by the Ontario Energy Board (OEB), potential changes to accounting standards or the basis of consolidation in Public Accounts, operational performance, and/or government policy, which can change materially.

  Also, i~~I~~n early January 2017, subsequent to the OPG Board's approval of the 2017-2019 Business Plan, OPG reached an agreement with KingSett Canadian Real Estate Income Fund LP for the purchase of OPG's head office property. The net gain is estimated to be $285M and will be distributed to the Trillium Trust.

  ~~These estimates are highly dependent on electricity and financial market conditions, regulatory decisions by the Ontario Energy Board (OEB), potential changes to accounting standards or the basis of consolidation in Public Accounts, operational performance, and/or government policy, which can change materially.~~ The first table in Appendix ~~G~~E shows the OPG 2017-19 Business Plan fiscal impact changes to the Province's Budget

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2016 fiscal plan.

- Key Operational Metrics:
  - Annual Operations, Maintenance & Administration (OM&A) expenses from ongoing operations are expected to stay consistent over the plan period, averaging $2.9B per year.
  - The cost of OPG generated electricity to customers is projected to remain ~40% below the average non-OPG cost of electricity to 2018, and over ~30% by 2021. Note: OPG provides predominantly, lower-cost baseload generating capability, rather than more expensive peaking generating capability.
  - Headcount Efficiencies – Headcount has fallen from 11,686 in 2010 to a forecasted 9,009 in 2016 while GWh per headcount has increased from 7.6 to 9.3.

    OPG continues ramping up recruitment in 2017 to fill key vacancies in certain areas (particularly in the nuclear business unit) due to high levels of attrition, as well as continued Pickering operations beyond 2020. OPG is forecasting regular headcount to show a net increase of ~300 by the end of 2017 before gradually decreasing to 4% lower than 2017 levels in 2021.

    OPG has hired ~95 Term employees, a new category of non-regular staff negotiated with the Power Workers' Union (PWU) through collective bargaining in 2015. OPG intends to add fewer regular staff in circumstances where they are likely to be laid off as a result of the end of Pickering commercial operations.

- Key Projects:
  - The plan assumes ongoing operations at Pickering for about four years beyond 2020, and, as approved by Cabinet, the execution of the Darlington refurbishment consistent with an approved budget of $12.8 billion (including assumed inflation escalation and interest), is now under way. First unit refurbishment, Unit 2, began in October 2016~~, Unit 2~~ and is assumed to be returned to service in February 2020, with the second unit refurbishment commencing immediately thereafter and the third unit refurbishment starting in July 2021, assuming necessary concurrence from the Province is obtained.
  - Sustaining capital expenditures average $570M per year include nuclear expenditures unrelated to Darlington refurbishment and costs for continued operation of Pickering (e.g., ~~U~~upgrades at Sir Adam Beck and upgrades to DeCew II, and investments in current and emerging generation technologies including solar and energy storage including construction and operation of the Nanticoke solar facility).

- Rate Application to the OEB:
  - OPG's 2017-19 Business Plan is dependent on the outcome of its rate filing with the OEB for the five-year period from 2017-2021, submitted in [month] 2016. Oral hearings began February 2017, decision expected in Q3 2017.
    - OPG 2017-2019 BP assumes new rates effective January 1, 2017. The OEB setting a later effective date would negatively impact OPG's 2017-18 fiscal year net income by ~$50-60M per month of delay.
  - On March 2, 2017 the Province filed an amendment to O.Reg.53/05, which enables OPG to smooth its rates based on OPG's total bill impact, rather than on the basis of nuclear rates only.
  - On March 8, 2017 OPG filed a revised rate smoothing proposal with the OEB, which is expected to decrease the average annual impact on the monthly customer bill for an average consumption of 750 KWh/month from about $1.05 to 65 cents per month per

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year

- OPG Request – Special Stats for OPG to Approve International Travel (Appendix F provides more information):
  - OPG has placed a request with the Ministry for authority to approve international travel for its employees. OPG has asked that this application be included with its BP submission to TB/MBC.
    - Section 5.3 of the Management Board of Cabinet's Travel, Meal and Hospitality Expenses Directive allows agencies/organizations, for which international travel may be integral to their business, to seek TB/MBC approval for special status to ensure that the approval process does not have an undue negative effect on its ability to conduct business.
    - OPG cites the importance of enabling its engagement with the international community (in particular in regards to nuclear safety), procurement activities, and investment and due diligence processes for its pension fund and nuclear funds.
    - OPG requires a high level of international business travel at approximately 90-100 trips annually, while Darlington accounts for 45% and is expected see increases.
    - OPG indicated that the approval process, which took 23 days on average in 2016, delays flight bookings which results in higher costs as airlines raise fares closer to the travel date.

Other Key Fiscal Risks:

Regulatory risks: OPG's multi-year rate application to the Ontario Energy Board for the period starting January 1, 2017, is currently in process. Potential OEB decisions providing for lower rates, including disallowance of recovery of OPG's operating costs, current or future deferral and variance account balances (including for the proposed nuclear rate smoothing)~~,~~ and unfavourable future treatment of pension costs would adversely affect OPG's results, resulting in negative fiscal impacts.

Performance risks: [...]OPG's financial performance could be subjected to nuclear reliability issues such as unplanned outages and financial market risk on the performance of the nuclear funds, for which the Province consolidates on a realized [gains or losses] basis.

Commented [RK3]: Could list nuclear performance, financial market risk on the performance of the nuclear funds.

Accounting risks: A change in the basis of accounting used for consolidation of OPG results from U.S. GAAP to International Financial Reporting Standards (IFRS) on the Province's financial statements is expected to result in potentially significant fiscal impacts.

Financing Costs: Higher cost public capital market borrowing (vs the Province's borrowing cost for OEFC to lend to OPG) would have a negative fiscal impact.~~Regulatory risks: Potential disallowance of recovery of OPG's current or future deferral and variance account balances (including for the proposed nuclear rate smoothing), future treatment of pension costs.~~

~~Accounting risks: Any change in the basis of accounting used for consolidation of OPG on the Province's financial statements could result in potentially significant fiscal impacts.~~

~~Financing Costs: Higher cost public capital market borrowing (vs the Province's borrowing cost for OEFC to lend to OPG) would have a negative fiscal impact.~~

Name of analyst:	James Strang	**Phone number:**	7-2071
Date:	May 1, 2017	**Log number:**	
Branch / Division:	General Government, Planning and Resources Branch, PEM, TBS		

APPENDIX A: PROPOSED MINUTE (UNDER DEVELOPMENT)

Note receipt of a Business Plan for Ontario Power Generation.

In this regard,

i.) Note the Minister of Energy will provide Ontario Power Generation (OPG) with a concurrence letter for its Business Plan.

ii.) …..request for special status…international travel

iii.) Direct the Ministry, in consultation with the Ministry of Finance / Ontario Financing Authority, to report back to the Board in early January each year with the approved or latest draft business plans for Ontario Power Generation for fiscal planning purposes.

FINANCIAL IMPACTS: CHANGES TO EXPENSE AND REVENUE					**TABLE B1**
			Fiscal Plan Basis		***Appropriations Basis***
$ Millions		**2014-15**	**2015-16**	**2016-17**	**2014-15**
Initiative cost recommended		0.0000	0.0000	0.0000	
Expense changes:					
Operating item	Oper	0.0000	0.0000	0.0000	0.0000
Capital item	Cap	0.0000	0.0000	0.0000	00000
Revenue changes:					
Revenue increase/offset		0.0000	0.0000	0.0000	
Revenue decrease		0.0000	0.0000	0.0000	
Total Fiscal Impact (draw from c-funds)		**0.0000**	**0.0000**	**0.0000**	**0.0000**

APPENDIX C: CONCURRENCE OVERVIEW

Under agreements between the Province (as sole shareholder) and OPG, the company is required to annually submit its multi-year business plan to the Minister of Energy for concurrence. Review of the business plan by Treasury Board prior to concurrence was stipulated as part of the 2013-14 Results-based Planning process (see below).

Concurrence is typically provided to OPG via a letter from the Minister of Energy. The letter will note key elements of the business plan, how these elements relate to the policy direction and priorities of the Province, and the government's expectation for the performance of the company. The letter may also indicate any elements of the business plan of which the government does not concur and/or provide additional guidance on expectations going forward.

The current submission looks at the multi-year business plan for OPG covering 2016-2018. Concurrence with the plan is still pending.

Below is the 2013-14 Results-based Plan Minute:

> Directed the Ministry of Energy and its agencies, Ontario Power Generation Inc. and Hydro One Inc., in consultation with the Ontario Financing Authority, to report back:

- Annually each autumn with the respective multi-year business plans of the agencies as approved by the Boards of the companies, for review by Treasury Board/Management Board of Cabinet.
    - In this regard, the report should include the following, on a calendar and government fiscal year basis:
    - Multi-year financial and operational targets, including net income and earnings-before-tax.
    - Projected revenues and cash flows to the Province, including the Ontario Electricity Financial Corporation.
    - Planned financings from the Ontario Electricity Financial Corporation.
- Quarterly with financial projection updates and progress reports on the agencies' respective business plan targets and any other new developments, initiatives or risks that may have a material fiscal impact on the Province including variance analysis of last quarter and year-to-date against the annual business plan reviewed by Treasury Board/Management Board of Cabinet.

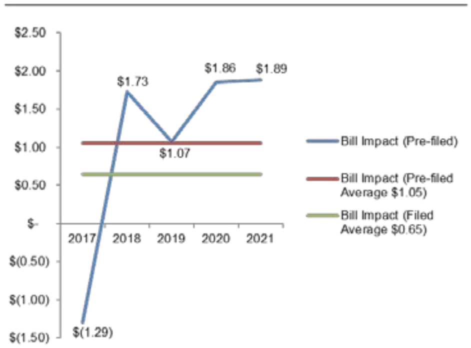
APPENDIX D: SUMMARY OF KEY HIGHLIGHTS FROM OPG BUSINESS PLAN

The Ministry indicates OPG financial and ratepayer forecasts show some changes from last year's business plan projections, as reviewed by Treasury Board in September 2016.

This is in part because 2017 net income is forecast to increase as a result of new regulated rates, higher capitalized interest for the Darlington Refurbishment expenditures partially offset by reduced production as a result of planned outages at Sir Adam Beck I and DeCew II hydro stations.

Also, actions taken by the Province and OPG in early 2017 to enable OPG to smooth its rates based on OPG's weighted average hydroelectric and nuclear all-in rates (which approximates total bill impact), rather than on the basis of nuclear base rates only. OPG filed a revised rate smoothing proposal with the OEB, which is expected to decrease the average year-over-year annual impact on the monthly customer bill for an average consumption of 750 KWh/month from about $1.05 to 65 cents per month per year.

Comparison of Annual Bill Impact ($/Month per year)



Production and Total Cost of Generation

OPG's production is expected to fall to 69.8 TWh by 2021 from 77.6 TWh in 2016. This reflects a declining trend in the Darlington production due to refurbishment outages starting in October 2016 and overlaps between unit refurbishments, as well as, the Pickering Vacuum Building Outage (VBO) in 2021 requiring the shutdown of all units for the duration of the outage.

Total generating cost shows an increasing trend over the planning period relative to 2016, reflecting Lower nuclear production due to Darlington refurbishment outages, increased sustaining capital spending on two large hydroelectric projects (The Lower Mattagami dam safety upgrade and the Sir Adam Beck I GS power canal liner rehabilitation).

Operations, Maintenance and Administration (OM&A) Expenses

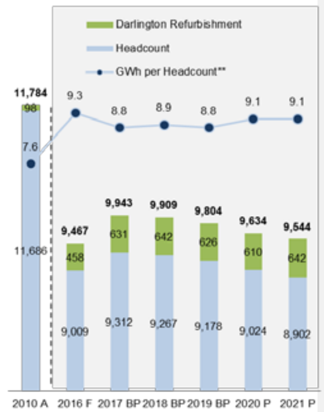
Annual OM&A expenses (excluding Darlington refurbishment OM&A) from ongoing operations are expected to stay consistent over the plan period, averaging $2.9B per year. Increases related to changes in nuclear outage scope at Darlington and planned hiring to fill staffing gaps, and enabling Pickering continued operations, offset by declining pension related costs, due to projected pension asset returns, increases employee contributions, and new method for dermining interest components of pension costs.

Business Transformation and Labour Costs

As part of a company-wide business transformation, OPG saved over $1B in costs from January 2011 to December 2016:

- Headcount has fallen from 11,686 in 2010 to a forecasted 9,009 in 2016 while GWh per headcount has increased from 7.6 to 9.3.
- OPG continues recruitment in 2017 to fill key vacancies in certain areas (particularly in the Nuclear business unit) due to high levels of attrition, as well as continued Pickering operations beyond 2020
  - OPG is forecasting regular headcount to show a net increase of ~300 by the end of 2017 before gradually decreasing to 4% lower than 2017 levels in 2021
  - To date in 2017, OPG has hired ~95 Term employees, a new category of non-regular staff negotiated with the Power Workers' Union (PWU) through collective bargaining in 2015
    - Intention is to add fewer regular staff in circumstances where they are likely to be laid off as a result of the end of Pickering commercial operations, per the terms of the collective agreement

Ongoing Operations Regular Headcount and Productivity



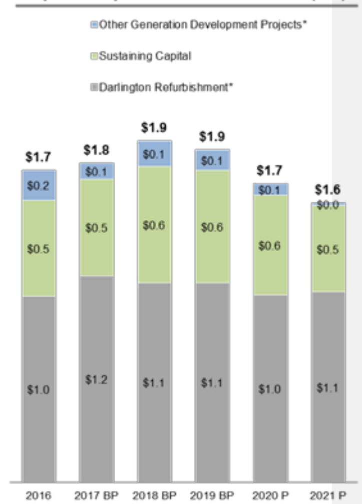
**Production is normalized by adding back hydroelectric surplus baseload generation losses and, in 2017- 2021, the lower production due to the Darlington refurbishment outages

Projects and Capital Expenditures

OPG continues delivery of major projects over the plan period, including:

- Darlington Refurbishment – Unit 2 is assumed to be returned to service in February 2020 with the second unit refurbishment commencing immediately thereafter and the third unit refurbishment starting in July 2021, requiring concurrence from the Province prior to commencement
- Sustaining Capital – Expenditures average $570M, including:
  - Nuclear expenditures unrelated to refurbishment at Darlington and costs for continued operation of Pickering
  - Regulated hydro expenditures including upgrades at Sir Adam Beck and upgrades to DeCew ll
  - Lower Mattagami upgrades in 2018 and 2019
- Other Generation Development Projects – Investments in current (e.g., hydroelectric) and emerging generation technologies including solar and energy storage including construction and operation of the Nanticoke solar facility by 2019

Capital Expenditure Estimates ($B)



*Includes expenditures budgeted by Support Services

Sales

The following table summarizes sales recently completed and currently underway (as of April 2017). The fiscal plan implications of the completed OPG Head Office sale is reflected in the 2017 Budget. (TBC).

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	OPG Head Office	R.L. Hearn Site	Lakeview Site
Current Status	Completed	Agreement Reached	OPG and Infrastructure Ontario are preparing for marketing
Site Description	700 University Ave. and parking garage at 40 Murray St. in Toronto	~33 acres at the R.L. Hearn site in Toronto	~67 acres to be transferred by the purchaser to the City of Mississauga (Municipal Park Lands) and ~110 acres to be developed for mixed uses (Uplands)
Buyer	KingSett Canadian Real Estate Income Fund LP	Studios of America Limited Partner	TBD
Value	Estimated up-front 2017-18 fiscal impact of ~$375M (includes after-tax gain as well as PILs to OEFC)	TBD	TBD
Other Considerations	N/A	N/A	Negotiations with the City have been lengthy and costs to remediate/prepare site may be significant due to concerns regarding site condition
Timing	The sale closed in April 2017	Anticipated to close in Q3 2017	Marketing is planned to start in April 2017, pending negotiations with the City, with an anticipated closing in 2017

APPENDIX E: PROVINCIAL FISCAL PLAN IMPLICATIONS OF BUSINESS PLANS PROCEEDING – (UNDER DEVELOPMENT)

Ontario Power Generation is a Government Business Enterprises (GBE), and consolidated to the Province's financials on a modified equity basis. The Province's Fiscal Plan reflects the entity as Income from Business Enterprises and Electricity Payments-in-Lieu of Taxes (PILs) (As Revenue only).

~~Revenue ($millions)~~	~~2016-17~~	~~2017-18~~	~~2018-19~~	~~2019-20~~
~~2016 Ontario Budget~~				
~~Ontario Power Generation~~				
~~Net Income~~	~~471~~	~~586~~	~~673~~	
~~Income Tax~~	~~224~~	~~159~~	~~182~~	
~~2017-2019 OPG Business Plan~~				
~~Ontario Power Generation~~				
~~Net Income~~	~~349~~	~~702~~	~~678~~	~~726~~
~~Income Tax~~	~~96~~	~~166~~	~~135~~	~~170~~
~~2017 Ontario Budget~~				
~~Ontario Power Generation~~				
~~Net Income~~	~~304~~	~~97~~	~~732~~	~~825~~
~~Income Tax~~	~~92~~	~~92~~	~~135~~	~~170~~
~~Adjustments to OPG BP~~				
~~Net Income~~				
~~OPG Head Office*~~		~~222~~		
~~Net Income (before IFRS Risk)~~	~~379~~	~~480~~	~~678~~	~~726~~
~~IFRS Consolidation Adjustment~~	~~(75)~~	~~(400)~~		~~(200)~~
~~GA – OPG Trust Net Income Impact (assumed, to offset IOD)~~	~~17~~	~~1754~~	~~5499~~	~~99153~~
~~OPG Head Office*~~		~~222~~		
~~Income Tax~~				
~~Net Income~~	~~304~~	~~97~~	~~732~~	~~825~~
~~Income Tax~~	~~92~~	~~92~~	~~135~~	~~170~~
~~OPG Head Office*~~		~~74~~		
~~Change in GBE Net Income (Between Budgets)~~				
~~Ontario Power Generation~~	~~(167)~~	~~(489)~~	~~59~~	~~120~~
~~Change in GBE Income Tax PILs +/(-)~~				
~~Ontario Power Generation~~	~~(132)~~	~~(67)~~	~~(47)~~	~~6~~
~~TOTAL OF OPG CHANGES~~	~~(299)~~	~~(556)~~	~~12~~	~~182~~

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Net Income and PILs contributions from OPG Head Office are included in Sales and Rental under Other Non-Tax Revenue in the 2017 Budget.

OPG Net Income and Income tax ($ Millions)				
	2016-17	2017-18	2018-19	2019-20
2016 Budget[1]*				
Net Income	471	586	673	
Income Tax	224	159	182	
2017-2019 OPG Business Plan				
Net Income	349	702	678	726
Income Tax	96	166	135	170
2017 Budget				
Net Income				
OPG 2017-19 Business Plan	349	702	678	726
Adjustments				
OPG Update[2]	30			
IFRS Risk adjustment[3]	-75	-400		-200
related to OPG Head Office Sale[4] (reported under Sales & Rentals)		-222		
GA – OPG Trust Net Inc. Impact (assumed to offset IOD)		17	54	99
Nuclear Funds fair value adjustment[5]	8			
Net Income 2017 Budget	312	97	732	625
Income Tax				
OPG 2017-19 Business Plan	96	166	135	170
Adjustments				
OPG Update[2]	-4			
related to OPG Head Office Sale[4] (reported under Sales & Rentals)		-74		
Income tax 2017 Budget	92	92	135	170
201~~7~~6 Budget vs. 201~~7~~6 Budget (including IFRS and sales &rental adjustments)				
Net Income	-~~379~~167	-~~494~~489	~~-538~~59	
Income taxes	-132~~-92~~	-67~~-92~~	-47	
2016 Budget vs. 2017 Budget (Before IFRS and sales &rental adjustments)				
Net Income	-84	133	59	200
Income taxes	-132	7	-47	0

1. 2016 Budget fiscal plan was largely based on OPG's 2015 multi-year business plan, as the 2016 multi-year business plan was approved and submitted following the timeframe for locking the numbers for the early 2016 Budget.
2. OPG February 2017 Monthly Update
3. IFRS risk is related to Province's reporting of nuclear asset retirement obligations. The Ontario Auditor General recommended (2016 AG Report) that the Province include Hydro One and OPG financial information in the consolidated financial statements using the IFRS reporting framework as required by PSAB standards, versus the companies U.S. GAAP basis of reporting.
4. For public Budget reporting, projected net impacts of Province asset optimization strategy including, OPG Head Office sale, are reported under Sales and Rentals for commercial confidentiality. OPG proceeds estimate updated per 2017 Budget.
5. Provincial consolidation adjustments for unrealized earnings on decommissioning and

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used fuel segregated funds net of Bruce variance account and change in Due to the Province on the decommissioning and used fuel segregated funds.

~~* 2016 Budget fiscal plan was largely based on OPG's 2015 multi-year business plan, as the 206 multi-year business plan was approved and submitted following the timeframe for locking the numbers for the early 2016 Budget.~~

~~Monthly Updatepublic , for commercial confidentiality.~~

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~~Revenue ($millions)~~	~~2016-17~~	~~2017-18~~	~~2018-19~~	~~2019-20~~
~~2016 Ontario Budget~~				
~~Ontario Power Generation~~				
~~Net Income~~	~~471~~	~~586~~	~~673~~	~~705~~
~~Income Tax~~	~~224~~	~~159~~	~~182~~	~~108~~
~~2017-2019 OPG Business Plan~~				
~~Ontario Power Generation~~				
~~Net Income~~	~~349~~	~~702~~	~~678~~	~~726~~
~~Income Tax~~	~~111~~	~~184~~	~~154~~	~~189~~
~~2017 Ontario Budget~~				
~~Ontario Power Generation~~				
~~Net Income~~	~~387~~	~~497~~	~~732~~	~~825~~
~~Income Tax~~	~~?~~	~~?~~	~~?~~	~~?~~
~~Change in GBE Net Income (Between Budgets)~~				
~~Ontario Power Generation~~	~~(84)~~	~~(89)~~	~~59~~	~~120~~
~~Change in GBE Income Tax PILs +/(-)~~				
~~Ontario Power Generation~~	~~?~~	~~?~~	~~?~~	~~?~~
~~TOTAL OF OPG CHANGES~~	~~?~~	~~?~~	~~?~~	~~?~~

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OPG's fiscal results are also impacted by Other PILs to the Ontario Electricity Financial Corporation (OEFC) and the Province. The following table reflects these others impacts in addition to the latest net income and income tax PILs from OPG's August update~~[, combined with a summary of net income and income tax PILs in the above table]~~.

Commented [JK6]: Consider deleting that section of the table. It was the format we followed last year but could be confusing people.

~~Table below to be updated – OFA~~

~~Revenue ($millions)~~	~~2016-17~~	~~2017-18~~	~~2018-19~~	~~2019-20~~
~~2016 Ontario Budget~~				
~~Combined Other PILs & Other GRC~~	~~342~~	~~351~~	~~359~~	
~~Other PILs (GRC to OEFC, Proxy Property Tax)~~	~~213~~	~~223~~	~~232~~	
~~Other GRC (to MOF & Niagara Parks Commission)[1]~~	~~129~~	~~128~~	~~137~~	
~~2016-18 OPG Business Plan~~				
~~Combined Other PILs & Other GRC[2]~~	~~353~~	~~358~~	~~366~~	
~~Other PILs (GRC to OEFC, Proxy Property Tax)[3]~~	~~215~~	~~220~~	~~220~~	
~~Other PILs (GRC to MOF & Niagara Parks Commission)[3]~~	~~135~~	~~140~~	~~140~~	
~~OPG Monthly Update (August 2016)~~				
~~Net Income~~	~~361~~	~~-~~	~~-~~	
~~Income Tax PILs to OEFC~~	~~98~~	~~-~~	~~-~~	

1. ~~The GRC to MOF & Niagara Parks Commission (NPC) is provided to enable comparison to the 2016-18 Business Plan.~~
2. ~~Include GRC to OEFC, GRC to MOF and NPC and Proxy Property Tax, provided to TBS by Energy on September 14, 2016.~~
3. ~~Preliminary 2016-19 Business Plan forecast provided by Energy, January 29, 2016. (Do not add to the Combined Other PILs & Other GRC row, likely due to rounding.)~~

Revenue ($millions)	2016-17	2017-18	2018-19	2019-20
2016 Ontario Budget				
Combined Other PILs & Other GRC	342	351	359	
Other PILs (GRC to OEFC, Proxy Property Tax)	213	223	232	
Other GRC (to MOF & Niagara Parks Commission)	129	128	137	
2017-19 OPG Business Plan				
Combined Other PILs & Other GRC	329	350	363	362
Other PILs (GRC to OEFC, Proxy Property Tax)[3]	218	232	243	241

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Other PILs (GRC to MOF & Niagara Parks Commission)	110	118	120	121
~~Net Income (including OPG Head Office sale)~~	~~379~~	~~702~~	~~678~~	~~726~~
~~2017 Budget Adjustments~~				
~~ONFA adjustment~~	~~8~~			
~~OPG Trust Interest Revenue - TBC~~		~~17~~	~~54~~	~~99~~
~~OPG IFRS consolidation risk reflected in fiscal plan~~	~~(75)~~	~~(400)~~	~~-~~	~~(200)~~
~~Income Tax PILs to OEFC~~	~~92~~	~~166~~	~~135~~	~~170~~

Source: OPG 2017-2019 Business Plan and further details provided by OPG March 14, 2017

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