

MINISTRY OF ENERGY

**TREASURY BOARD / MANAGEMENT
BOARD of CABINET SUBMISSION**

ONTARIO'S FAIR HYDRO PLAN – REPORT BACK

May 9, 2017

CONFIDENTIAL
MINISTRY OF ENERGY

1.0 MINISTRY REQUEST

1. The Ministry of Energy is reporting back to the Treasury Board/Management Board of Cabinet (TB/MBC) on following:

- i. Implementation of Global Adjustment (GA) Refinancing;

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2.0 PURPOSE OF REQUEST

On March 2, 2017, the government announced Ontario's Fair Hydro Plan (OFHP), which will lower bills by 25 per cent for a typical residential consumer, starting in the summer of 2017. Up to half a million small businesses and farms are also expected to benefit. Any rate increases for residential consumers over four years would be held to the rate of inflation. Note: These measures include the 8 per cent rebate introduced in January 2017 and builds on previously announced initiatives to deliver broad-based rate relief on electricity bills.

As part of the OFHP approval process, TB/MBC requested that the Ministry “report back” before legislation to enable OFHP was introduced on the following items:

- 1) GA Refinancing;
- 2) Social Programs; and
- 3) ICI Expansion.

In addition to the report back, the Ministry is also requesting the creation of a new transfer payment line, “Price Mitigation Support Initiatives” in Vote 2905-01. The purpose for this is to provide the Ministry an appropriate transfer payment line to support future activities and initiatives around electricity price mitigation for Ontarians.

There is no fiscal impact associated with this request. All new funding placed into the transfer payment lines will be offset by services dollars previously approved within the Ministry’s multi-year allocation.

In February 2017, the Ministry reported back to TB/MBC on the details related to the establishment of the new Affordability Fund announced in the OFHP. In April 2017, the Affordability Fund Trust was established. It is expected that electricity distributors will be able to begin applying to the Affordability Fund Trust in Summer 2017.

The Ministry has developed proposed legislation to implement key components of OFHP by summer 2017, and address financing, accounting and legal issues raised in the March 1, 2017 Cabinet Submission. Note: The Ministry is also preparing a number of supporting regulations to enable implementation of OFHP.

1. GA Refinancing:

Ontario’s energy system is being transformed – more than \$50 billion has been invested to decarbonize and modernize the electricity system, including an investment of over \$35 billion in clean and renewable generation.

Over the last decade the government has invested in Ontario’s transmission and distribution infrastructure (i.e., the grid), clean generation and phased out the use of coal-fired generation, which has resulted in electricity prices increasing.

Proposal

On March 2, 2017, as part of OFHP, it was announced that a portion of the GA would be refinanced in order to fairly allocate costs across present and

future generations of electricity consumers with respect to investments made to decarbonize (i.e., phase-out coal) and modernize Ontario's electricity system (i.e., build and maintain a reliable electricity system).

Refinancing a portion of GA provides significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. For example, by recognizing that generation assets are expected to continue to provide residual benefit to future ratepayers, beyond the term of current contracts, future ratepayers are expected to be able to utilize these assets and reduce the need to finance the development of new generation assets.

Under this proposal, the electricity bills of current residential consumers would be reduced by 25 per cent on average starting in summer 2017. In addition, increases to electricity bill would be held to the rate of inflation for four years. Up to 500,000 small businesses and farms would also benefit.

Implementation

To implement GA refinancing and mitigate financing, accounting and legal risks, the Ministry has:

- Worked closely with key ministries (i.e., TBS-OPCD, MOF-OFA/IGS, MAG, CO), OEB, IESO, OPG and their independent advisors and third party financing (i.e., dealers);
- Developed proposed legislation to respond to the financing, accounting and legal issues outlined in the March 1, 2017 Cabinet Submission. Note: The Ministry is also preparing a number of supporting regulations;
- Sought independent advice regarding financing, accounting and legal requirements from E&Y (OPG), KPMG (IESO), TD Securities (OFA) and Blakes (ENERGY);
- Launched a third party research project to assist with implementation of GA refinancing; and
- Developed comprehensive risk-based costing, including forecast models and sensitivity tests on key assumptions.

Proposed legislation to enable GA refinancing is planned for a May 2017 introduction.

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Ontario Electricity Support Program (OESP)

The OESP began on January 1, 2016 as a rate-payer funded program to provide relief to low income Ontarians who are struggling to afford their electricity bills. The OEB administers the program.

The Fair Hydro Plan committed to move the program from the rate base to the tax base, and to expand the OESP by increasing the credit amounts by 50 per cent, making more Ontarians eligible for the program, and aligning the OESP with other social assistance programs to increase uptake.

On March 23, 2017, the OEB issued a Decision and Order to end the OESP volumetric charge paid by all Ontario consumers on May 1, 2017 (\$0.0011 per kilowatt-hour of power consumed). On April 10, 2017, Cabinet approved amendments to the OESP regulation (O.Reg. 314/15) to increase credit amounts by 50% and introduce new eligibility categories so more Ontarians can access the program. These changes will also come into effect on May 1, 2017.

The amendments to the *Ontario Energy Board Act, 1998* pertaining to OESP will move the program funding from the rate-base and transfer it to the tax-base, and enable alignment of the OESP with social assistance programs delivered by the Ministry of Community and Social Services.

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3.0 KEY CONTEXT

On March 2, 2017, the government announced Ontario's Fair Hydro Plan (OFHP), which would reduce the electricity bills of residential consumers by 25 per cent on average starting in summer 2017. In addition, increases to electricity bill would be held to the rate of inflation for four years. Up to 500,000 small businesses and farms would also benefit.

OFHP also announced other measures to enhance business competitiveness, helping vulnerable consumers and bend the future cost curve of electricity (see Background for details).

On April 20, 2017, the OEB announced new Regulated Price Plan (RPP) rates effective May 1, 2017 that include a portion of the bill reduction proposed under OFHP and the shifting of the funding of the OESP to provincial revenues. The full reduction from OFHP is expected to be addressed through a July 1st RPP rate adjustment.

The Ministry's report back to TB/MBC focuses on the following OFHP initiatives:

1) GA Refinancing:

As part of OFHP, it was announced that a portion of the GA would be refinanced in order to fairly allocate costs across present and future generations of electricity consumers with respect to investments made to decarbonize (i.e., phase-out coal) and modernize Ontario's electricity system (i.e., build and maintain a reliable electricity system).

- Today's electricity consumers have been responsible for the costs of investments in developing the clean, modern and reliable electricity system that Ontario has today and that will continue to provide benefit to future generations. There is an opportunity to recognize the long-term benefit of these generation assets to the electricity system and "bring forward" that benefit for ratepayers today by deferring some of the current costs.

Refinancing a portion of GA provides significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.

To implement GA refinancing and to mitigate the financing, accounting and legal risks, the Ministry has:

- Worked closely with key ministries (i.e., TBS-OPCD, MOF-OFA/IGS, MAG, CO), OEB, IESO, OPG and their independent advisors and third party financing (i.e., dealers);
- Developed proposed legislation to respond to the financing, accounting and legal issues outlined in the March 1, 2017 Cabinet Submission. Note: The Ministry is also preparing a number of supporting regulations;
- Sought independent advice regarding financing, accounting and legal requirements from E&Y (OPG), KPMG (IESO), TD Securities (OFA) and Blakes (ENERGY);
- Launched a third party research project to assist with implementation of GA refinancing; and
- Developed comprehensive risk-based costing, including forecast models and sensitivity tests on key assumptions.

Financing, Accounting and Legal Risk Considerations / Mitigations

The Ministry was asked to report back to TBS/MBC with on details on how financing, accounting and legal risks would be mitigated.

Financing

OFHP Legislation

The purpose of the proposed legislation is to support the Government of Ontario's commitment to ensure that the costs of investments in the electricity system are allocated fairly among present and future generations of consumers. Costs to be allocated include clean and renewable generation facilities, conservation, demand management, energy efficiency programs.

The supporting legislation defines the mechanisms and framework that would achieve the refinancing of the (GA), including:

- Fair Allocation Amount: Is a calculation and allocation of clean energy costs over time. It is expected that the calculation would lead to decreased rates in the near term with rates higher than forecast in the long term. The Minister of Energy is to calculate the Fair Allocation Amount and provide the amount to the Financial Services Manager

(OPG). Subsequent calculations may be undertaken by other agents as prescribed by the Minister.

- Fair Adjustment: Sets out the mechanism for the Ontario Energy Board (OEB) to determine the “relief”, including the initial decrease in rates to achieve the 25% decrease, for the period July 1, 2017 to April 30, 2018. Under the legislation, the OEB must determine the amount within 15 business days of the legislation coming into force. The Fair Adjustment also allows the Lieutenant Governor in Council (LGIC) to make regulations prescribing electricity rates for the period May 1, 2018 to June 30, 2021.
- Clean Energy Adjustment: Is the mechanism to recover the under-collection of GA from eligible consumers during the recovery period. This is an adjustment to a consumer invoice on a monthly basis to repay principal, interest and other financing. IESO and each electricity distributor will act as an agent for the financing entity to impose, invoice and collect the clean energy adjustments.

The Ministry has prepared legislation and regulations in close collaboration with key ministries (i.e., TB, MOF, AG and CO), agencies (i.e., OEB, IESO, OPG) and third party financial advisors.

- The proposed legislation enables the province to provide assurances in the form of a “provincial guarantee” to OPG and investors regarding the permanence of the GA Refinancing framework and the authority of the legislature to pass the legislation. The intent is to ensure that the full value of any investment is recoverable.
- The legislation also enables the Province to guarantee borrowing of the trust in the event of a market disruption to mitigate OPG’s financing risk. Specifics of these guarantees will be determined in agreements to be negotiated later this year

It is still possible that the full value of the Regulatory Asset may not be purchased. In such cases, IESO may be able to retain the unsold amounts recorded in its variance account for a short period of time.

In addition, the Ministry has been worked closely with the Ontario Financing Authority (OFA) and TD Securities (TD), as the Province’s external financial advisor, on the financing structure (i.e., legislation, provincial guarantees, OPG’s equity injections and IESO’s enhanced credit facilities).

In particular, the proposed legislation enables a structure that OFA and TD believe will enable financing at a reasonable cost. Key elements that support this financing structure include:

- OPG issuances of subordinated debt to the SPV/Trust representing up to 49% of total borrowing; and
- Conditional (springing) guarantees by the Province to provide a backstop in the event of specific and limited events (e.g., changes to legislation that harm investor interests).

Note: The ability to finance and the cost of financing will only be known with certainty once OPG takes this structure to market.

OPG Financing / OPG Equity Financing

The ability to engage in the fair distribution of clean energy costs requires financing during periods where the collection of the clean energy costs is deferred to later years. The proposed legislation outlines mechanisms that are required to enable the financing and meet requirements for rating agencies and investors.

IESO will have a funding gap resulting from the reduction in amounts collected over four years. The legislation enables IESO to record the under-collection of GA in a variance account, and deems this under-collected amount to be a "Regulatory Asset".

- OEB would determine rates to allow IESO to recover under-collection recorded in its variance account.
- IESO is authorized to sell all or a portion to the OPG Special Purpose Vehicle (SPV)/Trust under the Financing Plan.

As part of supporting the financing and administration of the GA refinancing mechanism, it is expected that OPG would purchase the right to future cash flows from IESO on an ongoing basis.

The sale of the regulatory asset from IESO to the OPG Special Purpose Vehicle (SPV)/Trust creates an "Investment Asset".

- The Investment Asset allows for the recovery of the under-collected GA as the Investment Asset may in turn be sold to other investors or group of investors.

The Ministry has worked closely with third-party financial advisors in advance of and throughout the drafting process to help to ensure that the proposed legislation enables refinancing of the GA.

These purchases would be financed in part by capital infusions from the Province to OPG for the purposes of stabilizing OPG's capital structure:

- OPG would require monthly "equity injections" from the Province which would be fiscally neutral as OPG would issue new shares to the Province in exchange;
- Funds from the Province would flow from the Ontario Financing Authority (OFA); and
- The Ministry, OFA and OPG are working through the specific mechanisms, timelines and share features.
- It is anticipated that the initial equity injection would take place as early as June 2017.

Through PRRT, the Ministry of Energy received approval for the creation of an operating asset "OPG Share Purchase" and expenditure increase of \$1.1 billion in 2017-18 within Vote 2905-5, which is based on the latest estimates by IESO, and provides flexibility to account for forecasting uncertainty. This approval is pending passage of the proposed legislation.

OPG will provide a two year forecast of its equity requirements to the Ministry on annual basis, as part of OPG's business plan process. Note: While included in the business plan, equity requirements will not form part of the Ministry of Energy's concurrence process.

For future funding requirements, the Ministry will seek appropriation through the PRRT process.

OPG will seek to achieve the highest possible credit rating (i.e., AAA is possible) in order to reduce borrowing costs and attract a wide investor base. Credit ratings will depend on provisions in legislation, regulation and agreements as well as the capital structure of the SPV / Trust. Despite these factors, rating agencies may see the Province's rating forming a ceiling given the contingent guarantees that the Province will provide (described above).

In addition, given the long term nature of this program (i.e., approximately thirty-years), the calculations related to refinancing of the GA set out in the proposed legislation will be subject to fluctuations in Ontario electricity demand, GA and interest rates in the medium to long-term.

- Should electricity demand be higher than forecast as a result of greater electrification, the cost of paying off the debt will be spread over a greater pool of consumption and decreasing future costs for individual

ratepayers. Note: The reverse is also true in regards to decreasing demand.

- Should interest costs increase from the assumed 5%, total borrowing costs would rise. Given that this is a unique offering, managing investor confidence will be key to ensure borrowing costs don't rise. Note: The reverse is also true in regards to interest rates being lower than assumed.

IESO's Credit Facilities

IESO is in discussions with the Ontario Financing Authority (OFA) regarding an increase to its current "line of credit" with the OFA and OEFC (i.e., credit facilities). The increases are in response to IESO's role in the delivery of OFHP and to provide a necessary buffer to fund short periods where OPG SPV/Trust does not fund a shortfall.

IESO advises that this is important not only for IESO solvency, but also to maintain its credit rating (i.e., IESO's contracted suppliers' credit arrangements are often based on IESO maintaining a certain rating).

IESO would require financing to compensate generators should it be required to hold any portion of the unpurchased Regulatory Asset beyond each monthly settlement period. OPG Trust is not expected to access public capital markets monthly, nor is it required to purchase the regulatory asset. Therefore, IESO will need a credit facility for interim financing. IESO may also require longer-term financing to maintain the deferral financing plan, should the OPG Trust not be able to access debt markets on a timely basis for purchase of some or all of the regulatory asset.

Accounting

The legislation to enable GA refinancing has benefitted from the review and input of IESO/KPMG, OPG/E&Y and OPCD/E&Y.

The proposed legislation establishes mechanisms to enable the funding, sale and transfer between IESO and OPG that respond to the accounting requirements and advice outlined in the March 1, 2017 Cabinet Submission, such as concerns regarding consolidation by the Province.

Under the proposed legislation, OEB will issue an "accounting order" to authorize IESO to create a variance account in which it will record the funding shortfall and recover the shortfall in accordance with the legislation and regulations. This satisfies accounting concerns regarding OEB oversight in the establishment of the Regulatory Asset.

IESO will effectively sell the “right to collect” deferred future revenue from ratepayers to OPG in return for cash proceeds.

The proposed legislation and the associated amendments to the Electricity Act, 1998, enable OPG to create OPG’s SPV/Trust as a stand-alone entity able to conduct business separately under a Trust agreement.

To recover its revenue shortfall, IESO will establish a Regulatory Asset that it would sell to OPG’s SPV/Trust.

KPMG

The Ministry has worked closely with the Independent Electricity System Operator (IESO) and KPMG on the accounting considerations of GA Refinancing (i.e., legislation, applications of accounting standards/principles, minimizing consolidation risks and ability to establish a regulatory asset).

In particular, the proposed legislation provides a structure that IESO and KPMG believe meets the necessary accounting requirements. Key elements include:

- An IESO variance account created by the proposed legislation that would be recognized as a “regulatory asset”.
- An Ontario Power Generation (OPG) special purpose vehicle (SPV) / Trust that would not controlled by IESO and thus have no consolidation risk for IESO.

In addition, KPMG provided some commentary on the accounting requirement for the “derecognition” of the regulatory asset once it’s sold to OPG SPV/Trust. KPMG advised that the regulatory asset should be derecognized upon transfer to the OPG SPV/Trust as IESO no longer has rights or obligations to the asset (i.e., the transformation from a regulatory asset to an investment asset).

OPG

The Ministry has worked closely with the Ontario Power Generation (OPG) and E&Y, on the accounting requirements to enable GA Refinancing with respect to consolidation (i.e., legislation, applications of accounting standards/principles, establishing a special purpose vehicle (SPV) / Trust).

The proposed legislation and the associated amendments to the Electricity Act, 1998, enable OPG to create OPG’s SPV/Trust as a stand-alone entity able to conduct business separately under a Trust agreement. Note: To further support the operations and mechanics of the OPG SPV/Trust,

additional work will be done through the regulations and supporting agreements/documents.

- OPG will have the authority to set up the SPV/Trust and assign it with powers regarding decision-making, funding and ongoing operation.
- OPG and IESO are developing a process that will allow interest payments to occur under GA Refinancing.

Based on the existing and proposed legislation, key operating conditions being addressed in regulations and supporting agreements/documents and no introduction of new conditions that would conflict with OPG's control of the SPV/Trust, E&Y concurs with OPG's assessment that the accounting requirements to support "consolidation" of OPG SPV / Trust with OPG Inc. can be met.

Legal

In principle, refinancing the Global Adjustment (GA) to spread the costs of generation and conservation assets over the useful life of the assets presents only a "low" risk of being an unconstitutional tax, as each cohort of consumers pays for a proportion of the GA cost roughly equal to the proportion of the benefit they receive from the useful life of the assets.

Legal risk arises if it becomes apparent that the Government is not spreading cost so that it is shared proportionately by future consumers who cause a need for or benefit from the generation asset, but rather is doing so in order to lower the price in the "short" term by increasing the price in the long term. If the proposed financing served to encumber future consumers with a premium payment to cover the GA financing in order to subsidize current ratepayers, then there would be a moderately high constitutional risk that the financing proposal would result in an unconstitutional tax.

Former Supreme Court Justice Ian Binnie has provided a legal opinion concluding that the current proposal is at a moderately high risk of being a tax, for the following reasons:

- The degree of constitutional risk is in direct proportion to the extent the government is not able to show a proper match between the cost of providing facilities for electricity generation and the group of consumers who benefit year to year from electricity generated by those facilities.
- If the government fails to establish that the relevant electricity generating assets will continue to perform economically over the 30-

year period, or if the GA charge is in the opinion of the Court disproportionately backend loaded, the GA will not qualify as a regulatory charge (and would be characterized as a tax).

- By shifting costs to the 20-30 year customers, the government may in reality be disproportionately back-end loading the GA with the effect that the 20-30 year consumers will be subsidizing the 1-20 year consumers.
- The judges can be expected to be aware of the difficult political problem of high energy costs in Ontario, and will take a careful look at the government's evidence in support of the re-allocation of the GA.

The legislation contains provisions to mitigate the constitutional law risks, including requiring the Minister of Energy to reallocate estimated clean energy costs attributable to each reference period in a way that takes into account the need to align those costs with the estimated clean energy benefits attributable to the same period. Limiting the near-term rate reductions to such amounts which can be justified as counterbalancing disproportionate GA payments during the 2005-2017 period ensures that the statutory 25% reduction is consistent with proportionate reallocation.

The bill provides for provincial assurances, guarantees and a statutory cause of action.

The provincial assurance provision is intended to mirror as closely as possible the language of a similar provision that appears in legislation in the United States that purports to limit a state legislature's ability to enact legislation that would affect the transaction.

The main legal risk associated with the provision is that its precise legal purpose and intended effect are not clear. Under Canadian law, it is not possible for legislation to limit the future exercise of legislative power by the Legislature, including the power to amend or repeal statutory provisions or to expropriate private rights conferred under past statutes.

In light of this limitation, the U.S. provision has been modified to focus on possible actions by the executive branch of government that might undermine the value of the proposed securities (including regulation-making), rather than seeking to constrain the Legislature's powers. However, in the absence of some future statutory amendment, it is not clear what, if any, executive action could have the effect of undermining the payment obligation that would be

imposed on consumers under the Act and, therefore, it is not clear what practical risk the provision is designed to mitigate against. This uncertainty creates a risk that a reviewing court could construe the provision in unanticipated ways.

The guarantee provisions are intended to backstop the provincial assurance provision and provide that:

- The Minister of Energy and Minister of Finance may, with LGIC approval, enter into agreements regarding the performance of IESO or electricity vendors; and
- The Minister of Energy and Minister of Finance may, pursuant to LGIC order, agree to guarantee and indemnify any debt, obligation, security or undertaking associated with an investment interest.

Legal risk to the province will be assessed as the agreements are negotiated and drafted.

A statutory cause of action may be created by LGIC regulation. Much like the provincial assurance provision, the statutory cause of action provision is intended to mirror features of US legislation. Legal risk to the province will be assessed as the regulation defining the statutory cause of action is developed.

The Ministry retained Blakes to provide external legal advice in the development of the legislation. The Blakes team provided securitization, constitutional law, energy sector and government expertise. This team was integral to balancing the accounting, legal and financeability imperatives, as well as differing interests among OPG, IESO, OEB and investment dealers, in crafting the legislation. Blakes will continue to advise through the development of regulations and the commercial agreements that will ensue.

Navigant Analysis

Navigant Consulting has been retained and is conducting research and analysis that would support the implementation of GA refinancing. Specifically, Navigant is conducting analysis that would inform the expected lifecycle of existing generation infrastructure. Navigant is also analyzing the financial benefits that could be achieved by more closely aligning the costs of this infrastructure with the period over which it is expected to provide benefits. In addition, the Ministry has asked for analysis of the social, health and environmental benefits of phasing-out of coal-fired generation in the province and identify which, if any of these benefits are already accounted for in generator contracts.

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Ontario's Fair Hydro Plan

On March 2, 2017, the government announced Ontario's Fair Hydro Plan (OFHP). The OFHP includes the following:

- Refinancing the GA over a longer period for Regulated Price Plan (RPP) eligible consumers, including residential consumers and most small businesses and farms.
- Shifting cost recovery for Rural or Remote Rate Protection (RRRP) and Ontario Electricity Support Program (OESP) from electricity bills to the tax base, lowering the regulatory charges paid by ratepayers. Consumers of all sizes would benefit from this change.
- Helping vulnerable electricity consumers by enhancing electricity support programs, including:
 - Broadening RRRP to provide delivery charge relief for the customers of the local distribution companies (LDCs) with the highest delivery charges. We currently support approximately 350,000 Ontarians living in rural or remote areas through RRRP. The enhancement would extend relief to approximately 800,000 households in total.
 - Expanding the OESP, which provides relief directly on the bills of low-income consumers who have applied and meet the eligibility criteria. The expansion would increase OESP credits by 50 per cent and allow more Ontarians to benefit from the program.
 - Establishing a new Affordability Fund, which would provide financial support to lower-income Ontarians who are not eligible for the Home Assistance Program to make home energy efficiency improvements, helping to manage their energy costs.
 - Establishing a Delivery Credit to eliminate delivery charges for all First Nations people living on reserve.
- Expanding the Industrial Conservation Initiative (ICI), which allows large consumers to reduce their electricity bills by up to one-third by reducing their consumption during peak hours. The expansion will allow manufacturers and greenhouses between 500 kW and 1 MW to

participate, in addition to the consumers over 1 MW that are already eligible.

- OFHP also committed to reducing system costs by improving sector efficiency and modernizing Ontario's electricity market, working in collaboration with the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

Legislation to Enable the Refinancing of Global Adjustment

To enable implementation of GA refinancing and mitigate financing, accounting and legal risks, the Ministry has developed proposed legislation (and is working on supporting regulations) that outlines:

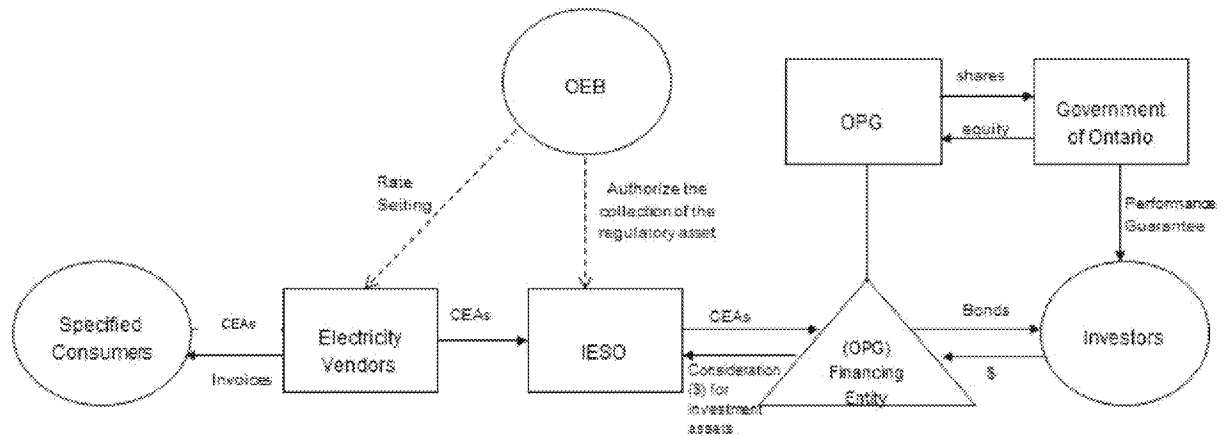
- Roles and responsibilities for the OEB, IESO, OPG and the Province;
- A detailed Preamble, Purpose and Definitions;
- Details with respect to Fair Adjustment, Clean Energy Adjustment, Implementation (i.e., Financial Services Manager, Fair Allocation Amount, Financing Plan), Regulatory Asset and Investment Asset;
- Scope of provincial undertaking and enabling the Province to provide guarantees and indemnities to back stop that undertaking; and
- Amendments to other acts (i.e., *Electricity Act* and *Ontario Energy Board*).

The supporting legislation defines the mechanisms and framework that would achieve the refinancing of the Global Adjustment.

The Ministry has worked closely with key ministries (i.e., TBS-OPCD, MOF-OFA/IGS, MAG, CO), OEB, IESO, OPG and their independent advisors and third party financing in the development of the proposed legislation.

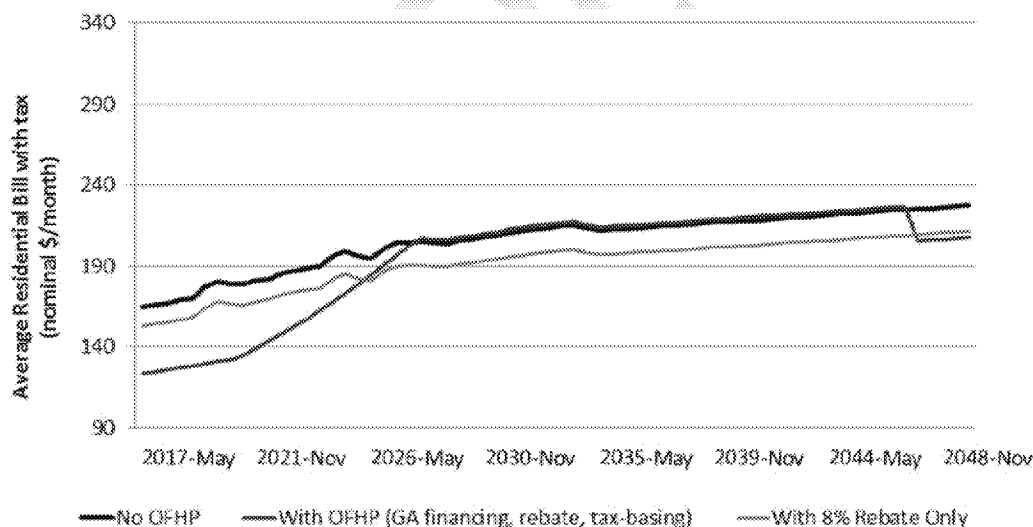
GA Refinancing Implementation Model – Overview

The diagram below outlines how the refinancing of GA would be implemented:



Note: CEAs are “clean energy adjustments”.

Multi-Year Profile of GA Refinancing / Assumptions



The chart above shows the expected multi-year profile under GA Refinancing for each Regulated Price Plan (RPP) period. In the first year, residential bills are projected to be 25 per cent lower as result of the OFHP. In the early years, bills increases are held to the rate of inflation – assumed to be 2% per year in the chart above. From July 1, 2021 onwards, prices increase at a higher rate compared to the first four years on the OFHP.

In the medium to longer term, residential bills exceed what they would have been but for the OFHP. However, in any given year, a typical residential bill under the OFHP cannot exceed what it would have been without OFHP by more than 10 per cent.

OPG's Financing Structure / Equity Financing

The ability to engage in the fair distribution of clean energy costs requires financing during periods where the collection of the clean energy costs is deferred to later years. The legislation outlines mechanisms that are required to enable the financing and meet requirements for rating agencies and investors.

IESO will have a funding gap resulting from the reduction in amounts collected during four years. The legislation enables IESO to record the under-collection of GA in a variance account, and deems this under-collected amount to be a "Regulatory Asset".

- OEB would determine rates to allow IESO to recover under-collection recorded in its variance account.
- IESO is authorized to sell all or a portion to the OPG Special Purpose Vehicle (SPV)/Trust under the Financing Plan.

As part of supporting the financing and administration of the GA refinancing mechanism, it is expected that OPG would purchase the right to future cash flows from IESO on an ongoing basis.

The sale of the regulatory asset from IESO to the OPG Special Purpose Vehicle (SPV)/Trust creates an "Investment Asset".

- The Investment Asset allows for the recovery of the under-collected GA as the Investment Asset may in turn be sold to other investors or group of investors.

As part of supporting the financing and administration of the GA refinancing mechanism, it is expected that OPG would purchase the right to future cash flows from IESO on an ongoing basis.

These purchases would be financed in part by capital infusions from the Province to OPG for the purposes of stabilizing OPG's capital structure:

- OPG would require monthly "equity injections" from the Province;
- Funds from the Province would flow from the Ontario Financing Authority (OFA); and

- The Ministry, OFA and OPG are working through the specific mechanisms, timelines and share features.

Global Adjustment – Overview

The Global Adjustment (GA) accounts for the fixed costs, including capital costs, of running Ontario's generation fleet, as well as the cost of conservation programs. GA is instrumental in maintaining a reliable electricity system by ensuring that sufficient generating capacity is available.

It is via GA that much of the costs of investments in developing a clean, modern and reliable electricity system with a diverse supply mix are recovered.

The vast majority of GA costs now stem from greenhouse gas (GHG) emissions-free renewable and nuclear generation facilities, as well as natural gas plants that were constructed to improve system reliability and replace coal-fired capacity. Generators in Ontario received contracted or regulated rates, which are typically designed to recover capital, financing and fixed operations costs. The GA recovers these fixed costs of running the province's generation fleet, as well as the cost of conservation programs.

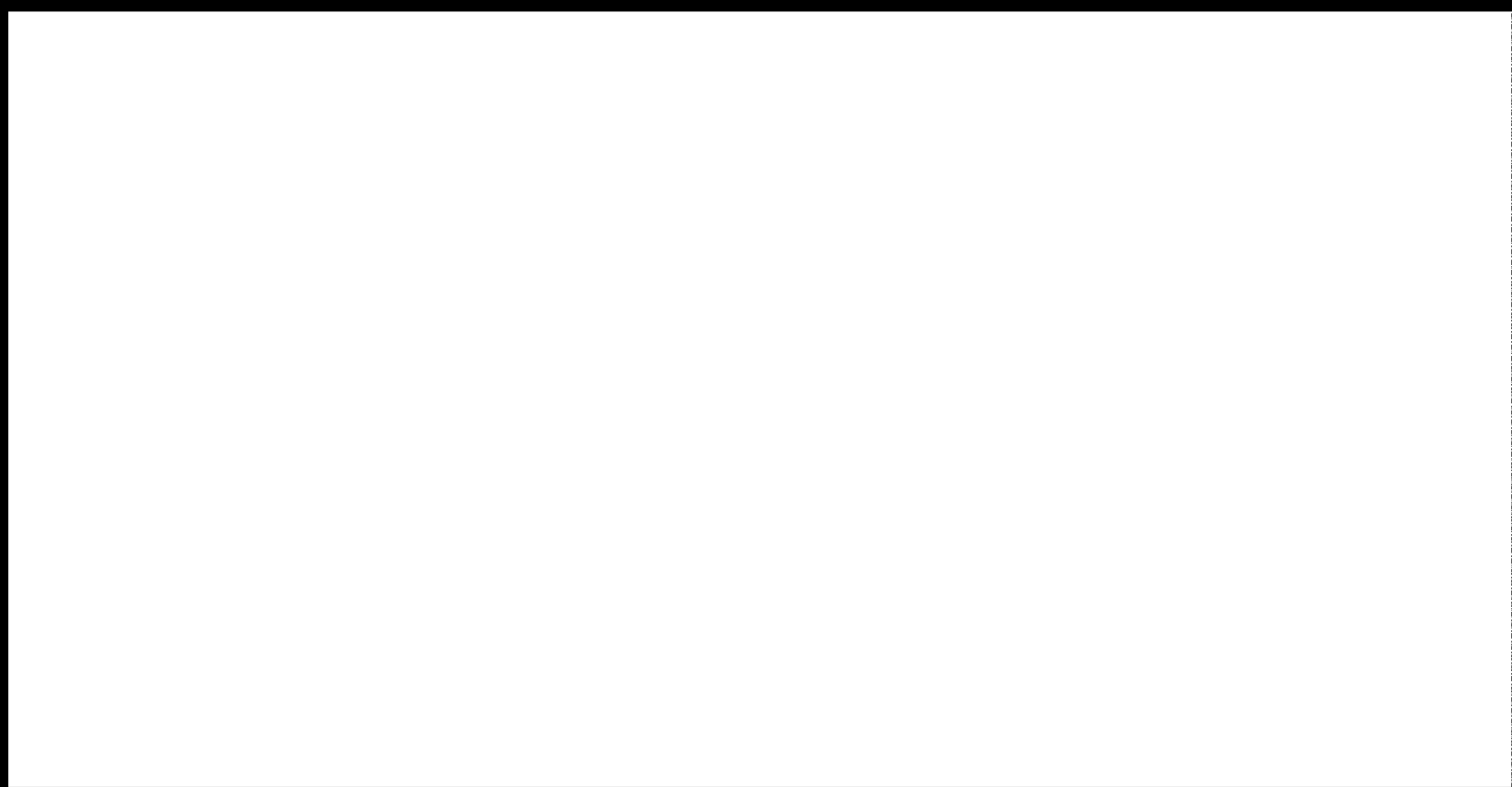
The majority of the province's electricity generators are under 20-year contracts and account for under 50% of the GA. Some of these generators will continue to provide value to the electricity system beyond their contract lives (i.e., beyond 20 years). Similarly, conservation costs are recovered annually on an 'as incurred basis' through GA while conservation initiatives can reasonably be expected to provide benefits to the electricity system over many years.

The Ministry is proposing in legislation to recognize the long-term benefit of specific assets to the electricity system and "bring forward" that benefit for ratepayers today by deferring some of the current costs. The proposed legislation outlines how costs would be fairly allocated among eligible consumers over time.

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5.0 TIMING

As part of OFHP, the government announced that eligible electricity consumers would see the reduction to their electricity bills in the summer of 2017 (i.e., July).

On April 20, 2017, OEB announced that it has adjusted the RPP rates effective May 1, 2017 to account for its estimation of the impact of a portion of GA Refinancing. The Ministry anticipates that the OEB will set an interim rate adjustment following the passage of the legislation to enable GA Refinancing that would account for the full impact (i.e., 25 per cent).

The Ministry is planning to introduce legislation in early May 2017 and develop supporting regulations in early summer 2017 to enable GA Refinancing. Note: The OPG will require legislation and regulations to be in place to support its discussions with rating agencies and third-party financing.

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Some of Ontario's Fair Hydro Plan commitments for the OESP came into effect on May 1, 2017 (e.g., removal of the OESP charge from customer bills; expanding credit amounts and program eligibility). Remaining changes associated with moving the program from the rate-base to the tax-base will be proclaimed at a later date when the OESP variance account is depleted. Additional regulatory amendments needed to implement this legislative change will come into effect on the same date.

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6.0 FINANCIAL IMPACT

1) GA Refinancing:

As it relates to the "equity injection", these changes are expected to have no impact on the Provincial net debt position as the Province's increased investment in OPG will be offset by the incremental borrowing to fund the

equity injections. The Province has assumed incremental income from OPG arising from interest income on the subordinated debt which OPG will lend to the OPG Special Purpose Vehicle (SPV)/Trust. This offsets forecast increases in Provincial interest on debt expenses associated with equity injections.

Proposed legislation to enable GA refinancing has been drafted to mitigate financing, accounting and legal risks. In addition, IESO and OPG have sought independent advice and confirmation with respect to financing, accounting and legal matters.

Note: There would be a significant impact on provincial net debt and the fiscal plan if the legal, financing and accounting conditions change.

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7.0 STAKEHOLDER ANALYSIS

Stakeholder	Comments
Eligible Electricity Consumers	As a result of OFHP, eligible electricity consumers will welcome the immediate reduction in electricity bills that they will experience in the short to medium term.
Electricity Agencies	In the development of legislation to enable implementation of OFHP, the Ministry has been working closely with OEB, IESO and OPG and their independent advisors.
Local Distribution Companies (LDCs)	The Ministry hosted LDC workshop sessions on March 16 and April 19, 2017. Nearly 40 LDC representatives attended in person or by phone and were briefed on OFHP, including implementation.
Chief of Ontario (COO)	- COO have publicly supported the introduction of the First Nations Delivery Credit. - ENERGY met with COO on April 26, 2017 to discuss implementation.
Future Industrial Conservation Initiative (ICI) Participants	- On March 9, 2017, the Ministry posted an ICI expansion proposal for comment on the Regulatory Registry for stakeholder comment. The Ministry has received 7 comments. - The Ministry is also working with the IESO, OCC and the CME regarding targeted outreach in relation to the ICI expansion.

8.0 RISK ASSESSMENT AND MITIGATION

Risk	Likelihood (L/M/H)	Impact (L/M/H)	Mitigation Strategy
1) <i>Global Adjustment (GA) Refinancing</i>			
Maintaining OPG's Financial Viability / Capital Structure	L	H	- OPG requires equity injections on an on-going basis from the Province (i.e., Ministry of Energy). - Equity injections are necessary to support OPG as the owner and manager of GA refinancing. The equity injections allow OPG to strengthen the capital structure of the Trust in order to secure financing at a reasonable cost.

Risk	Likelihood (L/M/H)	Impact (L/M/H)	Mitigation Strategy
			- In order to provide financing, OPG would develop a special purpose vehicle (SPV). - OPG has a great deal of experience managing the risks associated with borrowing through its experience developing capital-intensive generation projects as well as their management of Nuclear Funds. - OPG will seek to achieve the highest possible credit rating (i.e., AAA is possible) in order to reduce borrowing costs and attract a wide investor base.
OPG Securing Capital Markets Funding	L	H	- OPG will need to obtain a portion of the required funding from the capital markets. - The Ministry has worked closely with third-party financial advisors in advance of and throughout the drafting process to help to ensure that the proposed legislation enables refinancing of the GA. - In order to provide financing, OPG would develop a special purpose vehicle (SPV) which will use 100% debt financing to purchase the regulatory asset, financing 51% through capital markets as senior debt, with the remaining 49% being provided by OPG as subordinated debt. - The 49% subordinated debt from OPG will be financed through debt OPG issues in its own capacity, through capital markets (up to 5%) with the remainder (44-49%) financed through equity injections from the Province. This will help to ensure OPG's capital structure remains in line.
Managing Interest Cost Risks	M	H	- Proposed legislation has been drafted with input from third-party financiers (i.e., dealers). - OPG's Special Purpose Vehicle (SPV) / Trust is borrowing in its own

Risk	Likelihood (L/M/H)	Impact (L/M/H)	Mitigation Strategy
			corporate capacity from the capital markets. • Risk that it may incur a higher interest cost than what was originally forecast (i.e., 5%).
Provincial Guarantee is Triggered	L	H	• The proposed legislation sets out that the province would provide assurances in the form of a “provincial guarantee” to OPG and investors regarding the permanence of the GA Refinancing framework. The intent is to ensure that the full value is recovered. • The legislation also establishes assurances that the Province would: – Through the Minister of Finance as provided by Lieutenant Governor in Council, agree to guarantee any debts and obligations; and – Not hinder the charging and remittance of the under-collection of GA refinancing (i.e., through a provincial undertaking and guarantee).
IESO Failure to Establish a Regulatory Asset	L	H	• Under the proposed legislation, the Ontario Energy Board (OEB) is providing the necessary oversight required to enable IESO the ability to establish a Regulatory Asset. • To recover its revenue shortfall, IESO will establish as a Regulatory Asset that it would sell to OPG’s SPV / Trust. • The OEB will issue an accounting order to authorize IESO to do create a variance account in which it will record the funding shortfall and recover the shortfall in accordance with the legislation and regulations.
GA Refinancing Approach is Viewed as an Indirect-tax	L	H	• Proposed legislation to enable GA refinancing the costs associated with electricity generation facilities will be allocated across present and future electricity consumers will be set out in the Fair Allocation Amount. • The degree of constitutional risk is in direct proportion to the extent the government is not able to show a

Risk	Likelihood (L/M/H)	Impact (L/M/H)	Mitigation Strategy
			proper match between the cost of providing facilities for electricity generation and the group of consumers who benefit year to year from electricity generated by those facilities. • The Fair Allocation Amount will help to ensure that the allocation of costs associated with electricity generation facilities is reflected over the term of GA Refinancing.

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10.0 PERFORMANCE MEASURES

The proposed legislation sets parameters within which refinancing of GA can proceed. These parameters include the initial percentage reduction in eligible electricity rates, the number of years that rates will increase at a rate equivalent to CPI and the length of time within which the recovery of funds must take place (i.e., by 2047). In addition, OPG's existing financial reporting process provides an additional framework for monitoring and reporting of OPG's role in OFHP.

With respect to the social programs, performance will be evaluated by the amount of funding flowed to consumers in order to reduce their electricity bills. The Ministry will work with the OEB over the coming years to ensure that data is available to determine if the programs continue to provide meaningful rate relief.

The Ministry and the OEB have engaged with the Behavioral Insights Office at the TBS to consider ways to increase program participation. Discussions are ongoing.

With respect to ICI, the Ministry regularly monitors electricity prices and electricity demand for all classes of electricity consumers and would be able to assess the potential impacts of the regulatory amendments, starting in July 2017.

11.0 COMMUNICATIONS

ENERGY has developed a comprehensive, two-phase media campaign to increase awareness of Ontario's existing rate mitigation measures and new proposed electricity initiatives under Ontario's Fair Hydro Plan (OFHP):

- Phase I – Launched on March 13, 2017 and included radio and digital media in English and French. This was followed by multi-cultural extensions on radio in 19 languages. Phase I of the media campaign is complete.
- Phase II – Is expected to launch early Summer 2017 and will include television, radio, print, digital and social media advertising support.

ENERGY received TB/MBC approval on February 6, 2017 for an exemption from the competitive acquisition requirement under the *Procurement Directive on*

Advertising, Public and Media Relations, and Creative Communications Services for the development of the electricity cost reduction public education campaign. Through this, ENERGY acquired the services of Rain43, an Agency of Record under Advertising Review Board's corporate vendor of record arrangement for advertising, public and media relations, and communication services, to develop this public education campaign with an estimates maximum value of \$1,500,000.

As of July 20, 2015, PHD Canada is the Advertising Review Board's mandatory-use media planning and buying Agency of Record. In 2016-17, through Phase I, ENERGY has spent approximately \$1,000,000 on media planning and buying for radio and digital media. The cost of media space for television is substantially higher than radio; as such, ENERGY is forecasting to spend an additional \$2,500,000 in 2017-18.

This campaign is integral for demonstrating Ontario's commitment to lower energy costs for ratepayers through the new proposed electricity initiatives. This campaign could also open the Ministry to increased scrutiny as critics may conclude savings are too little or too late to help those suffering from what the media has deemed energy poverty. Public perception may be unchanged as emotional triggers to rising electricity prices and the constant stream of negative news by the media could overpower the campaign.

The Ministry has assessed the risks, and deems the benefits for running this campaign outweigh any risks of not doing so. ENERGY anticipates reaction from electricity consumers is to be generally positive with an awareness that changes to the electricity system have led to a reliable, cleaner system that is now more affordable.

In addition, the communications for GA refinancing, delivery electricity social programs and ICI expansion will be referenced in ongoing announcements related to Ontario's Fair Hydro Plan (OFHP) broadly, and as necessary targeted communications for specific stakeholder group can be developed.

For example, the Ministry has retained the OCC and the CME to undertake targeted stakeholder outreach on ICI and other cost saving energy programs/measures available to the commercial and industrial sectors in Ontario.

The Ministry will ensure that the social programs are communicated effectively to stakeholders and specific target audiences. The Ministry will leverage its agencies and its relationship with LDCs to ensure eligible consumers are aware of the programs.

Chiefs of Ontario (COO) will be a vital partner in communicating the benefits of the First Nations Delivery Credit.

The Ministry also believes there is opportunity for consultation on the design of the electricity bill, with a goal to refresh the regulatory framework to improve the value of the bill to the consumer across all LDCs. The Ministry proposes to convene with LDCs in July, once they've had sufficient time to implement the OFHP initiatives and prescribed messaging.

Changes of this nature will require more in-depth consultation with LDCs, as well as broader regulatory amendments to simplify the requirements, necessitating a longer period to implement. This refresh would also include opportunities to communicate OFHP savings in a more personalized and comprehensive manner. For example, each customer could receive a "personalized" message indicating how much they saved as a result of the plan.

Based on this feedback, the Ministry would aim to introduce regulatory amendments to simplify bill presentation and introduce dynamic OFHP messaging in the Fall 2017.

12.0 RECOMMENDATION

1) The Ministry of Energy is reporting back to the Treasury Board/Management Board of Cabinet (TB/MBC) on following:

- i. Implementation of Global Adjustment (GA) Refinancing;

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