MINISTRY OF ENERGY

TREASURY BOARD / MANAGEMENT BOARD of CABINET SUBMISSION

ONTARIO’S FAIR HYDRO PLAN – REPORT BACK

May 2017

WORKING DRAFT

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;

   ii. Delivery of Electricity Social Programs (i.e., Rural or Remote Rate Protection, Ontario Electricity Support Program and First Nations On-Reserve Delivery Credit); and

   iii. Expansion of Industrial Conservation Initiative (ICI).

2.0 PURPOSE OF REQUEST

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

The Ministry is also requesting TB/MBC approval for the creation of an operating asset in to facilitate equity injections to OPG.

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.

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 2, 2017 Cabinet Submission. **Note:** The Ministry is also preparing a number of supporting regulations;

- Received independent commentary/opinions/letters regarding the financing, accounting and legal requirements from E&Y (OPG), KPMG (IESO), TD Bank (OFA) and Blakes (ENERGY) (see attached); and

- Launched a third party research project to assist with implementation of GA refinancing.

- Developed comprehensive risk-based costing, including forecast models and sensitivity tests on key assumptions.

Commented [CD(1]: Placeholder

Tim, what does this look like in terms of content?

Is it going to be ready for today?

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

2. Social Programs:

To date, a number of electricity support programs are funded through the electricity rate-base. There is opportunity to provide support to a more targeted subset of customers who are disproportionately affected by increased electricity costs and to shift these costs to the tax base.

These customers include:

- **High Distribution Cost Customers:** Some customers in rural areas where the cost to distribute electricity is high can experience difficulty in reducing their electricity bill through conservation, particularly when reliant on electric heating.
- **Low-Income Customers:** Rising electricity costs make up a disproportionally large amount of the household expenditures for low-income households.
- **First Nation On-Reserve Customers:** On-Reserve First Nations customers experience challenges with energy affordability and are seeking to address historical grievances associated with electricity system infrastructure.

The proposed legislative amendments enable the creation or expansion of programs that provide meaningful rate relief to these customers.

Proposal

The Government is proposing to introduce legislation and regulatory changes for the enhanced electricity support programs which will shift costs from the rate base to the tax base, as well as establish the necessary frameworks to deliver these new or enhanced programs.

Rural or Remote Rate Protection

Rural or Remote Rate Protection (RRRP) mitigates some of the high costs of electricity distribution in rural or remote areas of the Province. It is a legacy program of the old Ontario Hydro and has existed in its current form since 2001.

The legislative proposal enables, through regulation, the transfer of the costs of funding the program for Hydro One's R2 customers from the rate-base to the tax-base for prescribed customers.

- R2 customers are those customers of Hydro One classified as living in the lowest density areas of the Province.

Distribution Rate Protection

While the RRRP program helps mitigate some of the higher distribution costs for Hydro One R2 customers, as well as certain customers served by Algoma Power, Hydro One Remote Communities and James Bay First Nation LDCs, there is an opportunity to provide further relief to consumers served by higher cost distribution cost LDCs.

Proposed legislation will enable tax-based funding to support distribution rate protection for prescribed residential customers of LDCs with high-cost distribution rates. If passed, the eight high-distribution cost LDCs whose customers are eligible customers will be prescribed in regulation. Residential customers of Algoma Power and Hydro One R2 customers would be eligible for additional relief as these LDCs are the highest cost distributors in the province (as well as six additional higher-distribution cost LDCs).

Proposed legislation enables the establishment of a maximum monthly base distribution charge for those prescribed customers. If the proposed legislation is passed, the mechanism to set this charge will be established in regulation.

On-Reserve First Nations Delivery Credit

On June 27, 2016, following discussions on Hydro One shares and rates at COO's All Chiefs Conference, the Minister of Energy issued a letter directing the OEB to prepare a report providing "advice on options for an appropriate electricity rate (or rate assistance) for on-reserve First Nations electricity consumers". The proposal is premised around the findings in the OEB Report submitted to the Ministry on December 29, 2016.

The program proposal involves the elimination of the delivery charge, or monthly service charge for those customers served by LDCs that do not have a delivery charge, for on-reserve customers prescribed in regulation.

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.

<u>Implementation</u>

Rural or Remote Rate Protection (RRRP)

Appropriated funds shall be used to offset the cost of the RRRP program for electricity consumed on or after July 1, 2017.

The implementation of the amended RRRP program (moving the majority of costs to the tax base) will require oversight of the money appropriated from the legislature by the Ministry of Finance (MOF).

The RRRP charge appears on the Tariff Sheet for each of the impacted LDCs and any change to the funding structure of the program does not require any additional implementation risks or efforts.

Distribution Rate Protection

Appropriated funds shall be used to offset the cost of providing distribution rate protection to prescribed residential distribution rate protected consumers based on electricity consumed on or after July 1, 2017.

LDCs and eligible customers would be prescribed in regulation, if the legislation is passed. Additionally, the Ontario Energy Board would be empowered by regulation to determine the rate at which affected LDCs would be harmonized.

The efforts required to implement the program will fall upon the impacted LDCs who will need to adjust their billing systems in order to carry out the program.

- The legislation contains transitional retroactive application of the provisions to offset any potential lapses in implementation and ensure that consumers receive the benefit following the July 1st effective date through to the final effective date of October 1st, 2017.

- The transitional retroactivity powers mitigate the risk of LDCs being unable to actualize the necessary changes to their billings systems in time for the July 1st roll out and provides the utilities an extra three months to sort out any billing system alterations.

On-Reserve First Nation Delivery Credit

A new regulation will need to be passed to set out the program particulars including eligibility for the program.

The LDCs will need to enter into communication plans in order to work with local First Nations Band Councils and to spread awareness of the delivery credit to all eligible consumers.

Ontario Electricity Support Program

A legislative amendment to the *Ontario Energy Board Act, 1998* will allow funding to shift from the rate base to the tax base. The amendments will be proclaimed into force at a later date when the OESP charges collected to date (which are being held in an IESO variance account) are depleted. Amendments to the OESP regulation (O.Reg. 314/15) will be needed to implement these legislative changes.

3. ICI Expansion:

Ontario is committed to providing competitive electricity rates for energy intensive consumers in the manufacturing sector while also promoting electricity conservation.

In January 2011, the Industrial Conservation Initiative (ICI) was announced to help large industrial electricity power users better manage their electricity costs while reducing electricity consumption during peak periods. Reducing peak demand increases the reliability of the electricity system, reduces greenhouse gas (GHG) emissions and helps defer the need to procure new resources.

Proposal

On March 2, 2017, as part of OFHP), the government announced plans to further reduce the ICI threshold from 1 megawatt (MW) to 500 kilowatts (kW) and to target more small manufacturing and industrial consumers.

- As of January 1, 2017, the regulatory amendments came into effect to make ICI available to electricity consumers with an average monthly peak demand greater than 1 MW. The lowering of the ICI threshold to 1MW and removal of sector restrictions was announced in the 2016 Speech from the Throne.

Implementation

Effective April 13, 2017, electricity consumers and market participants in the manufacturing and greenhouse sectors in Ontario with an average monthly peak demand of greater than 500 kW and less than or equal to 1 MW are eligible to opt-in to ICI. Billing for electricity consumers that opt-in to ICI begins July 1, 2017.

- Provisions were also provided to allow electricity consumers to continue their participation in ICI if their demand falls below the monthly peak demand threshold while participating in certain prescribed Conservation and Demand Management (CDM) programs and/or Ontario Climate Change Solutions Deployment Corporations (OCCSDC) programs and pilots.

In addition, the Ministry has retained the Ontario Chambers of Commerce (OCC) and the Canadian Manufacturing and Exporting (CME) to undertake targeted stakeholder outreach on ICI and other cost saving energy programs/measures available to the commercial and industrial sectors in Ontario.

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 that it has adjusted the Regulated Price Plan (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 proposed legislation to enable GA Refinancing that would account for the full impact (i.e., 25 per cent).

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 2, 2017 Cabinet Submission. **Note:** The Ministry is also preparing a number of supporting regulations;

- Received independent opinions regarding financing, accounting and legal requirements from E&Y (OPG), KPMG (IESO), TD Bank (OFA) and Blakes (ENERGY) (see attached); and

- Launched a third party research project to assist with implementation of GA refinancing.

- Developed comprehensive risk-based costing, including forecast models and sensitivity tests on key assumptions.

Commented [CD(2]: Placeholder

See comment above

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

Legislation

Proposed legislation to enable GA refinancing has been draft with input from third-party financers (i.e., dealers).

OPG plans to borrow a small portion of the 49% from the market. This amount has not yet been finalized, but could represent up to 5% of the total financing requirement.

The proposed legislation sets out that the province would provide assurances in the form of a narrow provincial guarantee to OPG and investors regarding the permanence of the GA Refinancing framework.

Commented [HS(3]: Tim, in addition to this paragraph, can we add in language from the Blakes deck that explains the assurances.

Despite the assurances provided in the legislation it is still possible that the full value of the Regulatory Asset may not be purchased.

[Placeholder comment for OFA/TD re financability]

OPG's Equity Financing

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.

Under the proposed legislation, the mechanisms to enable this right and transfer of rights are the "Regulatory Asset" and "Investment Asset".

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

- The Province will be expected to provide certain performance guarantees, indemnities and bond-purchase covenants.

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. To facilitate these ongoing equity injections, the Ministry of Energy, through the PRRT process received approvalfor the creation of an operating asset "OPG Share Purchase" in vote 2905 - 5. This approval is pending passage of the proposed legislation.

Through PRRT, the Ministry of Energy received approval for an expenditure increase of $1.1billion in 2017-18 within Vote 2905-5, which is based on the latest estimates by IESO, and provides flexibility to account for forecasting uncertainty.

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.

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 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).

Commented [KC4]: We have formal approval but TBS requested we include the following language

Commented [HS(5]: Scott does this sound consistent with what Ron is working on?

Commented [NS(6]: Yes. I have added one paragraph from his slide.

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, ESO 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

Commented [HS(7]: Tim, can we make sure this consistent with our Cab Sub.

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

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

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

The proposed legislation sets out that the 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 the accountant's emphasis on having OEB oversight in the establishment of the Regulatory Asset.

[Placeholder comment regarding E&Y and KPMG accounting commentary / opinion/ letter]

Legal

Commented [HS(8]: Paul, this a Placeholder for LSB input

2) Social Programs:

<u>Program Design</u>

Rural or Remote Rate Protection (RRRP)

The legacy RRRP program remains intact with no changes made to the amount of the rate protection or the eligible LDCs. The proposed legislation provides the authority for the government to prescribe classes of customers, customers or LDCs that would be funded through the tax-base rather than the rate-base.

If passed, the government proposes to identify Hydro One R2 customers, as having their RRRP funded through appropriated funds.

Distribution Rate Protection

New Distribution Rate Protection program, to complement the Rural or Remote Electricity Rate Protection (RRRP) program, would be established through proposed legislative amendments under the *Fair Hydro Act, 2017,* and the creation of consequential regulations. Eligible residential customers would have their monthly base distribution charges held to a maximum amount.

On-Reserve First Nations Delivery Credit

Eligible on-reserve customers will receive a 100% delivery credit or the elimination of their monthly service charge on their electricity bills. The eligibility requirements will be prescribed under regulation.

Ontario Electricity Support Program (OESP)

The OESP is an income-tested, application based program that lowers electricity costs of the most vulnerable consumers by a rebate directly on bills. The OESP is currently funded by the rate base.

OESP credits vary by income level and family size, and there are two credit scales that include:

- The basic program credit ranges from $30/month to $50/month.

- An enhanced credit that ranges from $45/month to $75/month for consumers that are either Indigenous, use electric heat or use certain electrically intensive medical devices.

Ontario's Fair Hydro Plan (OFHP) 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.

The proposed legislative changes will address the move to the tax base, and regulatory changes approved by Cabinet on April 10, 2017 will enable the expansion of the OESP effective May 1, 2017. Discussions are ongoing with the OEB and MCSS on aligning OESP delivery with other social assistance programs.

<u>Roles and Responsibilities</u>

Rural or Remote Rate Protection

The roles and responsibilities of the Board remain the same in terms of administering the legacy RRRP program. ENERGY will now be responsible for appropriating the funds from the legislature on an annual basis to cover the costs faced by those consumers or classes of consumers prescribed under regulation (namely Hydro One R2 customers).

Enhanced RRRP or Distribution Rate Protection

The Board would be empowered, by regulation, to set the maximum monthly base distribution charge, based on prescribed criteria.

ENERGY would once again need to appropriate money from the legislature to cover the costs of administering the program.

On-Reserve First Nations Delivery Credit

ENERGY would be responsible for appropriating the money from the legislature to cover the costs of administering the credit to on-reserve customers. In addition, ENERGY would need to work with LDCs, Chiefs of Ontario and Band Councils to ensure the program is delivered to all eligible consumers.

Ontario Electricity Support Program

The OEB will continue to the deliver the OESP under the current legislative framework until the variance account is depleted. When legislative changes to shift the program from the rate base to the tax base are proclaimed, the OEB will continue to administer the program, but certain decision making responsibilities and oversights will shift to the Minister of Energy.

MCSS will begin supporting OESP uptake by helping social assistance clients to apply to the OESP. Legislative and regulatory changes will enable this work.

The IESO will continue to manage payments to utilities, unit sub-meter providers, and the OEB in relation to OESP credit delivery and program administration costs. When legislative changes are proclaimed, IESO will begin reporting costs to the Ministry to support forecasting and audit.

3) ICI Expansion:

As part of OFHP, the government announced plans to further reduce the ICI threshold from 1 megawatt (MW) to 500 kilowatts (kW) and to target more small manufacturing and industrial consumers.

Effective April 13, 2017, electricity consumers and market participants in the manufacturing and greenhouse sectors (i.e., with North American Industry Classification Standard (NAICS) codes commencing with the digits "31", "32", "33", and “1114”) in Ontario with an average monthly peak demand of greater than 500 kW and less than or equal to 1 MW are eligible to opt-in to ICI. Billing for electricity consumers that opt-in to ICI begins July 1, 2017.

In addition, the Ministry has retained the OCC and the CME to undertake targeted stakeholder outreach.

The rate-base impact of expanding ICI to consumers in the manufacturing and greenhouse sectors is expected to be modest for non-ICI participants. **Note:** The extent of the impact will depend on the uptake in the newly expanded ICI. The Ministry of Energy 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 after July 2017.

4.0 BACKGROUND

<u>Decarbonizing and Modernize Ontario’s Energy System</u>

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.

The Ministry of Energy has taken a number of actions to lower electricity costs for all consumers by:

- Deferring investments in generation (e.g., new build nuclear), improving market efficiency (e.g., wind dispatch) and decreasing the cost of renewable procurements (e.g., Green Energy Investment Agreement (GEIA) renegotiation, decreasing Feed-In Tariff (FIT) prices; and

- Increasing cost effectiveness and improving efficiency by adopting new electricity market approaches (e.g., no new NUG contracting and demand response).

Following the 2016 Speech from the Throne, several actions were announced to further reduce electricity costs:

- As of January 1, 2017, Ontario is rebating an amount equal to the provincial portion of the HST to reduce eligible residential, small business and farm electricity bills by 8 per cent.

- Expanded support to eligible rural consumers by updating Rural or Remote Rate Protection (RRRP) with the additional relief, decreasing total electricity bills by an average of $45 each month when combined with the 8 per cent rebate.

- Expanding the Industrial Conservation Initiative (ICI) – up to one-third savings for participants.

- Suspending the LRP II and the Energy from Waste Standard Offer Program (EFWSOP) – up to $3.8 billion in savings.

- Limiting the Feed-In Tariff (FIT) 5 procurement target to 150 MW and suspending future FIT procurements – average annual savings of $15 million.

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

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;

- Details with respect to scope of provincial guarantee and supporting regulation; and

- Amendments to other acts (i.e., *Electricity Act* and *Ontario Energy Board)*.

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

Commented [HS(9]: Tim, can use the diagram from the current Cab Sub

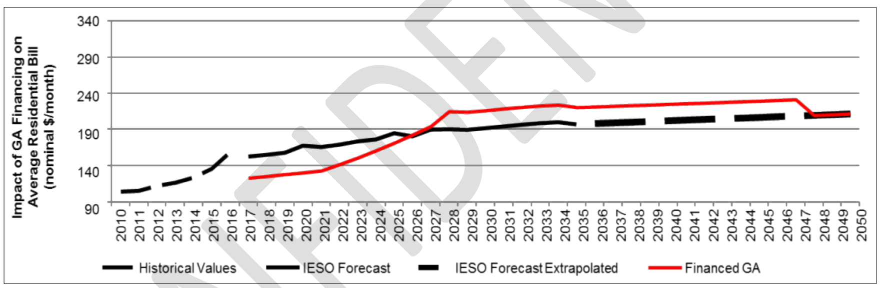
The diagram below outlines how the refinancing of GA would be implemented:

Multi-Year Profile of GA Refinancing / Specific Assumption **PLACEHOLDER**

Commented [ESP10]: Will add commentary regarding assumptions per cabinet deck.

Tim, Can we add in the commentary.

Can we also check in with TB on its analysis



GA Refinancing – Sensitivity Analysis **PLACEHOLDER**

In the Cabinet Minute the Ministry was directed to work with Treasury Board Secretariat and the Ministry of Finance on the development of a comprehensive risk-based costing, including forecast models and sensitivity tests on assumptions and financial estimates, for the electricity mitigation initiatives.

Commented [ESP11]: ESP will include additional analysis.

Tim, Can we add in the commentary.

Can we also check in with TB on its analysis

OPG's Financing Structure / Equity Financing

Commented [HS(12]: Scott, does the OPG diagram still work?

I think this section is fine.

Commented [NS(13]: Can we replace "OEFC" with "Province"? Otherwise I think it is fine

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.

Under the proposed legislation, the mechanisms to enable this right and transfer of rights are the "Regulatory Asset" and "Investment Asset".

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

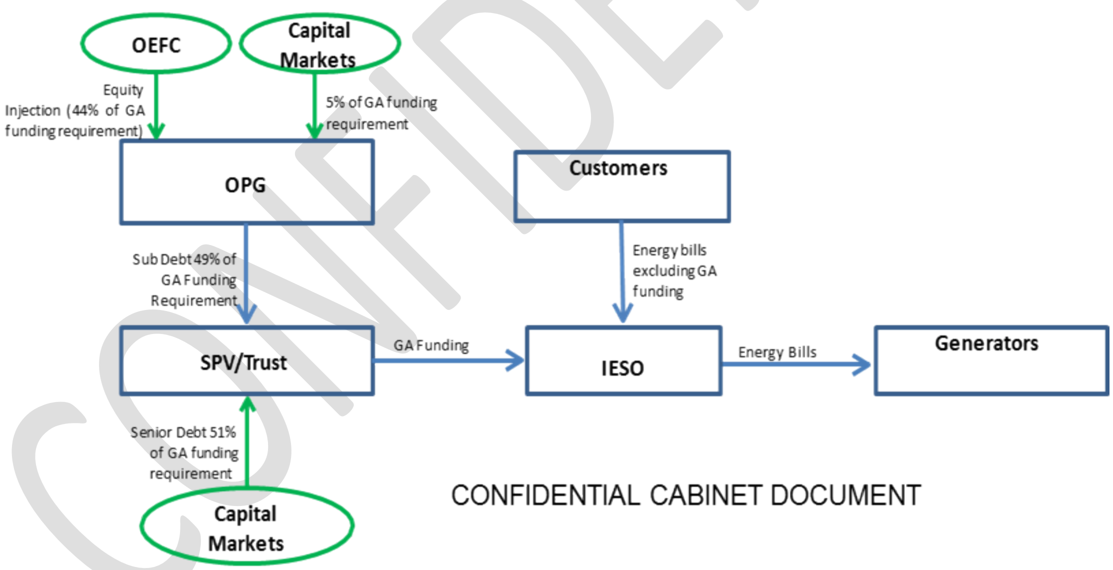
- The Province will be expected to provide certain performance guarantees, indemnities and bond-purchase covenants.

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.



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 less than half 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.

<u>OEB's Regulated Price Plan (RPP) – Overview</u>

On April 20, 2017, the 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).

<u>Social Program</u>

Rural or Remote Rate Protection (RRRRP)

Part of the program helps fund the costs of Hydro One customers classified into the "R2" residential rate class. There are approximately 335,000 R2 customers across the Province. These customers have some of the highest distribution costs in the Province.

- From 2001-2016 the program provided $125.4 million annually to help defray these costs.

- In the 2016 Speech from the Throne, this funding was expanded by $116.4M to a total of $241.9 million.

- As of Jan 2017 R2 customers receive $60.50/month off their distribution costs.

- These customers still have high distribution costs and are often faced with significantly higher than average bills.

The higher than average consumption patterns coupled with higher than average distribution rates has resulted in monthly bills many view as no longer affordable or equitable.

RRRP is currently funded by rate-payers. All IESO-grid connected consumers pay a charge of $0.0021 per kilowatt-hour to off-set the costs of delivering RRRP. For an average residential customer this amounts to ~$1.60 per month. This charge will be substantially reduced once the R2 portion of the RRRP program is funded through the tax-base, rather than rate payers.

Distribution Rate Protection (DRP)

RRRP is targeted to customers based on geographic and density-based criteria. Many customers, including those in rural areas, face higher than average distribution costs, but are not eligible to receive rate protection under RRRP.

Energy is proposing legislative amendments that will broaden rate protection by creating a new distribution rate protection program to complement the Rural or Remote Electricity Rate Protection program.

Distribution rate protection would be extended to eligible residential customers served by LDCs with the highest distribution costs. Roughly 800,000 customers would receive benefits from the broadened rate protection.

- Providing distribution rate protection to a broader number of consumers would help mitigate geographic-based differences in rates for the consumers who are most impacted and often see such differences as inequitable.

Mitigation for all electricity consumers would be provided by moving the existing RRRP program costs and the proposed enhancements from the electricity rate base to the tax-base.

On-Reserve First Nations Delivery Credit

On-Reserve First Nations customers experience challenges with energy affordability and are seeking to address historical grievances associated with electricity system infrastructure.

ENERGY has a number of Tables with the Chiefs of Ontario (COO) and First Nations that include the Energy Table to discuss policy issues, the Hydro One Negotiating Table to discuss Hydro One shares, and the Grievance Table.

The Grievance Table process was established at the request of COO as a means to avoid litigation to resolve historic grievances related to the energy sector and prevent these issues from impeding progress on broadening the ownership of Hydro One (H1).

The cost of electricity and delivery charges were identified as the prevailing grievance at the First Nations-Ontario Energy Table meeting in Timmins in 2016, and the Minister of Energy agreed to explore options for a First Nations Rate through the Grievance Table process.

Ontario Electricity Support Program (OESP)

The OESP launched on January 1, 2016. By the end of March 2017:

- Almost 190,000 have been enrolled in the program, which is approximately 1/3 of all potentially eligible low-income customers in Ontario.
- Over $60 million in credits have been provided to vulnerable consumers.
- 172 intake agencies have been mobilized to assist low income consumers to apply for the OESP.

<u>Industrial Conservation Initiative (ICI)</u>

Ontario is committed to providing competitive electricity rates for energy intensive consumers in the manufacturing sector while also promoting electricity conservation.

In January 2011, ICI was announced to help large industrial power users better manage their electricity costs while reducing electricity consumption during peak periods. Reducing peak demand increases the reliability of the electricity system, reduces greenhouse gas (GHG) emissions and helps defer the need to procure new resources.

Currently, ICI is available to electricity consumers who have an average monthly peak demand greater than 1 MW (i.e., Class A). Smaller electricity consumers – known as “Class B” consumers – are charged GA based on their total consumption regardless of when it occurs.

ICI provides a strong incentive for participating consumers to reduce their consumption during peak hours to reduce their cost. **Note:** ICI is administered by the Independently Electricity System Operator (IESO) and Local Distribution Companies (LDCs).

As of January 1, 2017, the regulatory amendments came into effect to make ICI available to electricity consumers with an average monthly peak demand greater than 1 MW. The lowering of the ICI threshold to 1MW and removal of sector restrictions was announced in the 2016 Speech From the Throne.

On March 2, 2017, as part of Ontario’s Fair Hydro Plan (OFHP), the government announced plans to further reduce the ICI threshold from 1 megawatt (MW) to 500 kilowatts (kW) and to target more small manufacturing and industrial consumers.

Effective April 13, 2017, electricity consumers and market participants in the manufacturing and greenhouse sectors in Ontario with an average monthly peak demand of greater than 500 kW and less than or equal to 1 MW are eligible to opt-in to ICI. Billing for electricity consumers that opt-in to ICI begins July 1, 2017.

- Provisions were also provided to allow electricity consumers to continue their participation in ICI if their demand falls below the monthly peak demand threshold while participating in certain prescribed Conservation and CDM programs and/or OCCSDC programs and pilots.

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.

The timeline for all of the social programs, with the exception of the OESP, is identical as the program implementation for the regulations that follow to be passed in unison for July 1, 2017.

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.

As part of the OFHP, the government also announced the expansion of ICI to enable greater participation from the manufacturing sectors in Ontario.

The April 2017 ICI amendments enabled new electricity consumer's time to opt in to the expanded program ahead of the next ICI billing period (i.e., July 1, 2017). **Note:** Under ICI, as set out in Ontario Regulation 429/04, eligible electricity consumers must opt in to the ICI program on or before June 15 of each calendar each year.

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.

2) Social Programs:

As approved in the TB/MBC submission of Mach 1, 2017 and confirmed in Vote-Item 2905-1, the financial impacts of the social programs for the period July 1 2017- March 31 2018 are as follows:

Program	2017-18 Budget
Rural or Remote Rate Protection	344,000,000
Ontario Electricity Support Program	140,000,000
On-Reserve First Nations Delivery Credit	15,000,000

The IESO manages a variance account for the OESP, which holds the difference between the amount of OESP charge collected from the rate base, and the amount of OESP paid out in the form of credits. The amount in the variance account is about $120 million as of March 1, 2017. These funds will be used to fund the OESP program until the variance account is depleted, at which point the transfer payment line will be used to finance the program costs. Due to the potential range in costs of the OESP, which will depend on program uptake and any costs associated with supporting increased participation, the set allocation is required despite the variance account.

ENERGY will report back to TB/MBC in fall 2017-18 with an update on out-year projections following analysis on rate applications before the Ontario Energy Board.

3) **ICI Expansion:**

Since ICI is funded through the electricity rate-based and not the provincial tax-base, ICI expansion will have no direct financial impact for the Province.

With respect to rate-base impacts, expanding ICI to consumers in the manufacturing and greenhouse sectors (i.e., between 500 kW and 1 MW) is expected to result in a modest increase on electricity bills for non-ICI participants starting in July 2017. For example, preliminary analysis estimates that the increase on a typical residential bill would by up to 0.66% or just over $1/month based on a 2016 bill of about $158.

Note: The extent of the non-ICI participant impact will depend on the uptake in the newly expanded ICI. The Ministry of Energy 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.

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

Table 2: Risk Assessment and Mitigation Strategy

Commented [HS(14]: Can we make sure this aligns with the Cab Sub

Risk	Likelihood (L/M/H)	Impact (L/M/H)	Mitigation Strategy
1) Global Adjustment (GA) Refinancing			
Maintaining OPG's Financial Viability / Capital Structure			• 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. • 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.
Securing Capital Markets Funding			• OPG will need to obtain a portion of the required funding from the capital

Commented [NS(15]: One add-in

Commented [HS(16]: Scott does this make sense?

Risk	Likelihood (L/M/H)	Impact (L/M/H)	Mitigation Strategy
			markets. • Proposed legislation to enable GA refinancing has been draft with input from third-party financers (i.e., dealers). Which has resulted in providing a "narrow" provincial guarantee and ensuring that debt holders have the right of action against a future government to recover the amount outstanding including interest, fees, expenses and any damages.
Managing Interest Cost Risks			• Proposed legislation has been draft with input from third-party financers (i.e., dealers). • OPG's Special Purpose Vehicle (SPV) / Trust is borrowing in its own 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			• Proposed legislation to provide for a "narrow" provincial guarantee.
Establishing 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.
Establishing OPG's Special Purpose Vehicle (SPV) / Trust			• Proposed legislation sets out provisions regarding the role of OPG in establishing the SPV and to assign it with powers regarding decision-

Commented [HS(17]: Tim, can we incorporated some of the language from the Blake's deck. It had some language re credit ratings.

Commented [HS(18]: Tim, can we add some language from the Blake's deck that deal with the scope of the assurances

Commented [HS(19]: Scott, do you think we need this item?

Commented [NS(20]: While this is one of the steps that is needed to facilitate the program, I don't think it fits as a risk.

Risk	Likelihood (L/M/H)	Impact (L/M/H)	Mitigation Strategy
			making, funding and ongoing operation. • Certain conditions must be met to ensure OPG's SPV/Trust is a stand-alone entity able to conduct business separately under a Trust agreement. • The Ministry also proposes to amend the *Electricity Act, 1998* to provide OPG with the authority to create "one or more subsidiaries, trusts or special purpose entities".
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 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.
2) Social Programs			
Social Program Implementation Delays	L	M	Work with LDCs; provide transitional provisions.
Social Program Cost Estimating	M	M	Work with Ontario Energy Board (OEB) to ensure access to data for regular forecasting.
3) Industrial Conservation Initiative (ICI) Expansion			

Commented [HS(21]: Paul, can you review this language. Might be too detailed.

Risk	Likelihood (L/M/H)	Impact (L/M/H)	Mitigation Strategy
Fairness	M	L	• The expansion of the ICI program include electricity consumers in the manufacturing and greenhouse sectors with average monthly peak demand greater than 500 kW and less than 1 MW will impact those consumers that remain outside the program (i.e., Class B and RPP electricity consumers). • Increases to electricity bills will occur for non-ICI participants to ensure full cost recovery in the electricity system. Note: the extent of the impact on other non-ICI participants would depend on the uptake in the newly expanded ICI, but is expected to be modest. • Restricting eligibility to the manufacturing and greenhouse sector helps to ensure that the expanded ICI is focused on those consumers which are most impacted by GA costs and associated economic competitiveness pressures from neighbouring jurisdictions.

Commented [HS(22]: Tim, can we elaborate on this point?

9.0 JURISDICTIONAL ANALYSIS

NTD – GA refinancing model on US

Commented [HS(23]: Tim, need to add a line or two.

Can likely use the March 1 Cab Sub for content

The Ministry conducted no jurisdictional analysis related to the expansion of social program funding as the structure of Ontario's electricity sector, and thus the delivery of these benefits, is unique.

The ICI program is unique to Ontario and the proposed expansion would not directly impact on other jurisdictions.

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

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.

12.0 RECOMMENDATION

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

    i. Global Adjustment (GA) Refinancing;

    ii. Delivery of Electricity Social Programs (i.e., Rural or Remote Rate Protection, Ontario Electricity Support Program and First Nations On-Reserve Delivery Credit); and

    iii. Industrial Conservation Expansion (ICI).