Electricity Sector Considerations

Confidential Advice to Cabinet

BRIEFING NOTE – OPTIONS FOR ADDITIONAL ELECTRICITY RATE MITIGATION FOR RESIDENTIAL CONSUMERS

ISSUE: What measures could be taken to reduce electricity bills for residential consumers?

KEY INFORMATION:

- Electricity bills for typical consumers have been reduced by the following measures:
  - Providing the 8 per cent Ontario Rebate for Electricity Consumers (OREC), introduced in January, 2017;
  - Shifting of cost recovery for electricity support programs from the rate-base to provincial tax-base; and
  - Refinancing of a portion of the Global Adjustment (GA).
- This note outlines five options to provide further bill reductions to consumers beyond the measures described above:
  1. Borrowing related to GA refinancing becomes the sole responsibility of the Ontario Financing Authority (OFA);
  2. Repaying the current GA refinancing debt amount (i.e., approximately $1.8 billion) becomes the responsibility of the provincial government and not ratepayers;
  3. Increasing the rebate that ratepayers receive through the Ontario Rebate for Electricity Consumers (OREC);
  4. Decreasing the Return on Equity (ROE) received by Local Distribution Companies (LDCs) through their Ontario Energy Board (OEB) approved distribution rates; and
  5. Canceling the first phase of the Large Renewable Procurement (LRP I).

OPTIONS:

1. *OFA Responsible for Financing of Borrowing for GA Refinancing:*

   - Option: Under this option, all borrowing related to GA refinancing would become the responsibility of the OFA. Note: OFA currently provides 44 per cent of the borrowing through equity injections to Ontario Power Generation (OPG). OPG provides a further 5 per cent of the debt that it obtains from capital markets. The remaining 51 per cent is financed by the Fair Hydro Trust (FHT) from capital markets.

- OPG earns a return on the 49 per cent that it lends to the FHT. This return is consolidated by the province through OPG's net income.

- OFA financing would result in lower interest cost on debt and avoid the interest and fees paid to OPG. Additional savings could be achieved by reducing administrative costs associated with GA refinancing that are currently recovered from ratepayers (e.g., third-party consulting, legal costs).

  - In March 2017, the Financial Accountability Officer (FAO) estimated that ratepayers would save $4 billion if the province financed the entire borrowing. Note: This figure is based on preliminary debt forecasts that pre-dated the introduction of OFHP and were much higher than current estimates. Additionally, the FAO only looked at the portion of the debt financed through capital markets and did not account for the higher rates earned by OPG on the equity injection.

- <u>Legislative / Regulation</u>: The *Ontario Fair Hydro Plan Act, 2017* and associated regulations set out the legal framework for GA refinancing (i.e., the methodology for bill setting and management of the deferred costs). Amendments to the Act and regulations would likely be required. For example:

  - Legislative change may be required to remove OPG from its role as financial services manager and move the current and future debt obligations to OFA.

  - Regulatory amendments would be required to ensure that the reduced interest was passed on to consumers as opposed to reducing total debt levels. Note: Only the first year of inflation has been included in the current regulations, so regulatory amendments will be required to set rates for future years.

  - Further legal analysis is required.

- <u>Fiscal:</u> Increase in provincial gross debt levels by about $11 billion at peak, in addition to the current estimate of about $9 billion in equity injections. Additionally, the decrease in OPG's net income would have an impact on the province's fiscal position. Further analysis on accounting treatment would also need to be considered. Note: If the savings were not immediately passed on to ratepayers the total interest and debt would go down, reducing pressure on the fiscal plan and ratepayer costs over the longer term.

- <u>Residential Bill:</u> Initial estimates suggest the impacts shown below on total costs and typical residential bills

Ratepayer Impacts (nominal)	Capped Period (2019-2021)	Post Cap, Life of Refinancing (2022-2047)
Ratepayer Savings ($M)	105.84	59.70
Savings for a typical residential consumer ($/750 kWh-month)	1.10	0.62

2. *Government Repays Current Balance of GA Refinancing Debt:*

- Option: Under this option, the province would become responsible for repaying the interest and principal amount of the first two debt offerings (i.e., approximately $4 billion) under GA refinancing instead of ratepayers.

  – The first two debt tranches are expected to come due in 2033 and 2038. Note: The payment of interest and principal on the subordinated debt (i.e., 49 per cent) would be made to OPG.

  – This option could be applied in conjunction with option 1 to provide further savings to ratepayers.

- Legislative / Regulation: Legislative and regulatory amendments are likely required to allow the province to step in and make the payments without fully taking over the responsibilities of the Fair Hydro Trust (FHT). The FHT may be required to act as a conduit for the payments as they issued the original debt. Note: Further legal analysis is required.

- Fiscal: Impact of approximately $110 million per year on average from 2019-2038 in interest and $1 billion in 2033 and $0.8 billion in 2038 for the principal.

- Residential Bill: The average annual impact for a typical residential consumer due to reduced interest is $1.16 per month and the impact of reduced principal payment in 2033 and 2038 are shown below.

Commented [SM(1]: Not clear. Is this prior to 2033?

Ratepayer Impact (nominal)	2033	2038
Typical Residential Monthly Bill Impact ($/750kWh)	$10.05	$7.85

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3. *Increase Ontario Rebate for Electricity Consumers (OREC) Rebate:*

- Option: Under this option, the OREC rebate would be increased to provide additional reductions on residential bills. Increasing the rebate would cost roughly $100 million for each percentage point increase. Note: The cost of the rebate would increase over time as the bills that the rebate is applied to rise.

- Legislative / Regulation: Regulatory amendments would be required to the GA refinancing regulations to ensure that the savings were passed on to electricity consumers as opposed to reducing total debt levels. Note: Only the first year of inflation has been included in the current GA refinancing regulations, so regulatory amendments will be required to set rates for future years. Further legal analysis is required.

- Fiscal: The current 8 per cent rebate costs the fiscal plan an estimated $800 million in 2017-18. The cost of an additional 5 per cent rebate would be about $700 million annually on average from 2018-2035.

- Residential Bill: The ratepayer impact of an additional 5 per cent rebate for a typical residential consumer between 2018 and 2035 would be an estimated average reduction of $8.06 per month.

4. *Reduce LDC ROE:*

- Option: The Ontario Energy Board (OEB) has set the return on equity for 2018 for Local Distribution Companies (LDCs) at 9.00 per cent. Under this option, the Minister of Energy would issue a directive to the Ontario Energy Board (OEB) to reduce the return on equity that the OEB allows as a cost of capital parameter.

  – Initial analysis suggests that every 0.5 percentage point reduction in LDC ROE would result in approximately $40 million in ratepayer savings, escalating over time as distributor equity grows.

- Legislative: There is existing authority under the *Ontario Energy Board Act, 1998* for the Minister to issue policy directives to the OEB.

- Fiscal: Restricting the ROE of LDCs would impact the revenue requirement of Hydro One, which could impact the dividend paid to the Province.

- Residential Bill: Lowering LDC ROE by 1 percentage point would lead to an average reduction in total system cost of approximately $125 million and approximately $0.65 per month on average for a typical residential electricity consumers. Note: This assumes that the savings are distributed equally among all distributors and consumers classes. All consumers that are distribution-connected would see saving under this option.

5. *Cancel LRP I:*

- Option: The first LRP procurement process (LRP I) began in 2014 and concluded in April 2016. The Independent Electricity System Operator (IESO) received 103 project proposals and ultimately executed 16 contracts for 454.885 megawatts (MW) of new wind, solar, and waterpower electricity generation capacity (the LRP Contracts). Projects under the LRP Contracts are at various stages of development. See Appendix B for further information.

- Legal:

- The LRP Contracts include "optional termination" provisions that permit IESO to terminate the agreements upon 180 days' written notice any time prior to the Commercial Operation Date of the affected project. Under the terms of Article 9.6(j) of the LRP Contracts, IESO would be obliged to compensate suppliers for their "pre-construction development costs", up to a specified limit.

- The nature and extent of IESO's payment obligation would depend on whether the supplier has achieved its Key Development Milestones (e.g., completion of any Impact Assessments, execution of any applicable Connection Cost Agreements or Connection Cost Recovery Agreements, documentation of any Renewable Energy Approval and any other permits and approvals necessary for construction, and declaration of secured financing sufficient to complete the project, including a copy of the Financial Model).

- Further analysis would be required to arrive at an estimate of the pre-construction development costs that IESO would be obliged to pay to suppliers in the event of a termination of the LRP Contracts.

- Pre-construction development costs include costs incurred for feasibility studies, obtaining site access rights, work towards environmental approvals, business development plans, negotiation of contracts for design, equipment, construction and financing, reasonable overhead expenses, and other reasonable costs incurred. The Pre Construction Liability Limits are:

    - Non-Rooftop Solar: $250,000 plus $10.00/kW of Contract Capacity;

    - Waterpower: $500,000 plus $20.00/kW of Contract Capacity; and

    - On-Shore Wind: $400,000 plus $2.00/kW of Contract Capacity.

- An assessment of legal and other considerations and risks associated with any termination of the LRP Contracts would also be required.

- <u>Fiscal</u>: Termination costs would be funded by the rate base. Consideration could be given to funding any termination costs through the tax base. In addition, to the extent there is any legal challenges to the province it could incur legal liabilities.

- <u>Residential Bill:</u> Analysis conducted by IESO in 2016 estimated residential bill savings of about $3 per month on average from 2019 to 2035. Savings escalate substantially over this timeframe (i.e., $11 per month in 2035). Note: GA refinancing would limit any decreases in the short term, however overall debt levels and bills during the repayment period would be reduced.

[Please add summary table]

APPENDIX A – LRP I PROJECTS

Qualified Applicant	Selected Proponent	Large Renewable Project	Renewable Fuel	Project capacity (MW_{AC})	Location (Project Communities)
2432243 Ontario Corp	FiniteLight LP	FiniteLight	Solar Photovoltaic (PV)	1.375	Prince Edward County
Bawitik Power Corporation W	Bawitik Power Corporation	Lock 25 Generating Station	Waterpower	3.000	Township of Selwyn
BluEarth Renewables Inc. ✓	Loyalist Solar LP	Loyalist Solar Project	Solar Photovoltaic (PV)	54.000	Township of Stone Mills
EDF EN Canada Development Inc. ✓	Barlow Energy Centre Limited Partnership	Barlow Solar Energy Centre	Solar Photovoltaic (PV)	10.000	Township of South Stormont and City of Cornwall
EDF EN Canada Development Inc. ✓	Pendleton Energy Centre Limited Partnership	Pendleton Solar Energy Centre	Solar Photovoltaic (PV)	12.000	Township of Alfred and Plantagenet
EDF EN Canada Development Inc. ✓	Romney Energy Centre Limited Partnership	Romney Wind Energy Centre	Wind (on-shore)	60.000	Municipality of Chatham-Kent and Town of Lakeshore
EDP Renewables Canada Ltd. TR	Nation Rise Wind Farm Limited Partnership	Nation Rise Wind Farm	Wind (on-shore)	100.000	Municipality of North Stormont
Hydroméga Services Inc. W	Trenton Lock 1 Hydro LP	Trenton Lock 1 Hydro Project	Waterpower	7.000	City of Quinte West
Invenergy LLC TR	LSRA Solar Energy Partnership	Lake Simcoe Regional Airport Solar Project	Solar Photovoltaic (PV)	6.750	Township of Oro-Medonte
Invenergy LLC S	Strong Breeze Wind Power Partnership	Strong Breeze Wind Project	Wind (on-shore)	57.500	Municipality of Dutton Dunwich
Peterborough Utilities Inc. W	Peterborough Utilities Buckhorn Hydro LP	Peterborough Utilities Buckhorn Hydro	Waterpower	2.500	Municipality of Trent Lakes and Township of Selwyn
Peterborough Utilities Inc. W	Peterborough Utilities Hydro 24 LP	Peterborough Utilities Dam 24 Hydro	Waterpower	3.000	Township of Selwyn
Renewable Energy Systems Canada Inc TR	Otter Creek Wind Farm Limited Partnership	Otter Creek Wind Farm Project	Wind (on-shore)	50.000	Municipality of Chatham-Kent
Renewable Energy Systems Canada Inc. S	Parc eolien Gauthier LP	Parc éolien Gauthier	Wind (on-shore)	32.000	Municipality of The Nation and Township of Champlain
SKY SOLAR (CANADA) LTD.	SKY SOLAR RYERSON LRP LIMITED PARTNERSHIP	SKY ONE	Solar Photovoltaic (PV)	11.760	Township of Ryerson
SunEdison Canadian Construction LP ✓	Nanticoke Solar LP	Nanticoke Solar	Solar Photovoltaic (PV)	44.000	Haldimand County

W	waterpower project – Class EA
[blank]	REA not submitted
S	REA submitted
TR	REA under technical review
✓	REA approved