Energy's Proposed Approach

1. Smoothing the global adjustment (GA) to provide significant and immediate rate relief through cost deferral of the GA:
    - Smoothing Mechanism / Options; and
    - Implementation approach.
2. Helping the most vulnerable by enhancing electricity support programs and shifting cost onto the tax-base:
    - Rural or Remote Electricity Rate Protection (RRRP) Enhancement (Delivery Charge Relief);
    - Ontario Electricity Support Program (OESP) Expansion;
    - LDC Affordability Fund; and
    - First Nations Rate.
3. Ongoing actives to bend the future cost curve of electricity focused on reducing utility costs and increasing competition through market mechanisms

Next Steps

<u>OPG</u>

1) OPG and Energy to develop a preliminary legislative framework describing the smoothing and recovery mechanism, including role for OEB (in consultation with the Board)

· May be helpful to seek input from 3rd parties (e.g. rating agencies, lenders)

2) OPG to provide a preliminary estimate of its capacity to assume additional liabilities

3) OPG to develop a proposed corporate and governance structure

4) OPG's external auditors to review these models and provide preliminary advice on OPG accounting

5) OPG to test interest from 3rd party lenders (preliminary, without specifics)

6) Controller's Office to review legislative model, corporate structure and OPG external audit advice to provide preliminary assessment of Provincial accounting for OPG under this new structure

7) Test Concept with Auditor General's Office (consider timing)

IESO

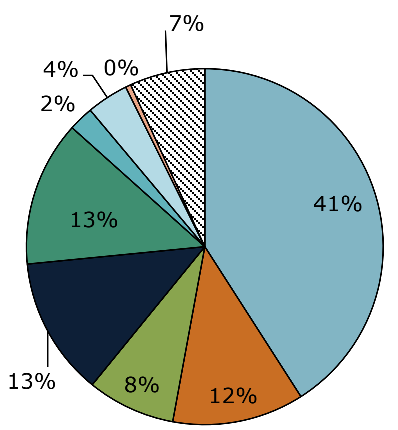
1. Draft the impact of this model on IESO and consider the legal changes required and the accounting implications.
2. Evaluate the transaction from a consolidated provincial perspective.

Decisions Sought

1. Confirm Global Adjustment (GA) smoothing option.
    - Option 1 (25% decrease); or
    - Option 2 (20% decrease).
2. Confirm enhancement of Rural or Remote Rate Protection (RRRP) approach.
    - Option 1: Enhance RRRP for Hydro One R1 and R2 customers; and
    - Option 2: Enhance RRRP and harmonize fixed distribution rate for Hydro One and other high distribution cost LDCs.
3. Confirm tax-base funding for enhancement to RRRP, Ontario Electricity Support Program (OESP) Expansion and First Nations Rate.
4. Confirm a one-time tax-base funding for LDC Affordability Fund.
5. Confirm actions to bend the future cost curve of electricity.

Global Adjustment

2016 GA Cost: $12.3 billion



	GA ($M)
Nuclear	5,053
Hydro	1,473
Natural Gas	985
Wind	1,552
Solar	1,630
Biomass, Landfill and Byproduct	278
Conservation	467
IEI Program	60
OEFC*	842

Fiscal Considerations:

Fiscal Impact ($M)		17-18	18-19	19-20	20-21
Legacy Rural or Remote Rate Protection (RRRP) (1)		126	130	133	136
RRRP 2016 – Speech from the Throne Expansion (1)		117	120	123	127
Accelerating Fixed Rates for Hydro One (2)		61	51	40	29
Harmonizing Fixed Rates for Hydro One and High Cost LDCs (3)		150	149	150	152
Ontario Electricity Support Program 50% Enhancement		178	239	290	334
First Nation Rate		20	20	20	20
Change in 8% Rebate (Option 1)		-138	-120	-171	-147
Change in 8% Rebate (Option 2)		-75	-56	-106	-86

<u>OPTIONS IN DETAIL</u>

GA Smoothing Options:

- The following table depicts the impacts of **Option 1 (25% decrease)**, for small businesses and homes only

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Average Monthly Residential Bill Impact pre-tax *($/month)*	-27.0	-26.9	-26.9	-34.3	-28.1	-23.5	-16.6	-25.2	-15.7	-7.5	-17.4	-12.4	-0.1	5.7	21.1	21.4	30.7	38.1	37.6	37.5	37.3	37.2	37.0	36.8	36.7	36.5	36.4	36.2	36.1	35.9	35.8	0.0
Total Accumulated Debt *($ billion)*	2.2	4.6	7.0	10.2	13.1	15.7	17.8	20.8	23.2	25.0	27.7	30.1	31.7	32.8	32.7	32.6	31.7	30.1	28.4	26.6	24.8	22.8	20.8	18.6	16.3	13.9	11.4	8.8	6.0	3.1	0.0	0.0
Total Change in Accumulated Debt *($ billion)*	2.2	2.3	2.4	3.2	2.8	2.6	2.2	3.0	2.4	1.8	2.7	2.4	1.6	1.1	-0.1	-0.1	-0.9	-1.6	-1.7	-1.8	-1.9	-2.0	-2.1	-2.2	-2.3	-2.4	-2.5	-2.6	-2.8	-2.9	-3.1	0.0

- The following table depicts the impacts of **Option 2 (20% decrease)**, for small businesses and homes only

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Average Monthly Residential Bill Impact pre-tax *($/month)*	-27.0	-26.9	-26.9	-34.3	-28.1	-23.5	-16.6	-25.2	-15.7	-7.5	-17.4	-12.4	-0.1	5.7	21.1	21.4	30.7	38.1	37.6	37.5	37.3	37.2	37.0	36.8	36.7	36.5	36.4	36.2	36.1	35.9	35.8	0.0
Total Accumulated Debt *($ billion)*	2.2	4.6	7.0	10.2	13.1	15.7	17.8	20.8	23.2	25.0	27.7	30.1	31.7	32.8	32.7	32.6	31.7	30.1	28.4	26.6	24.8	22.8	20.8	18.6	16.3	13.9	11.4	8.8	6.0	3.1	0.0	0.0
Total Change in Accumulated Debt *($ billion)*	2.2	2.3	2.4	3.2	2.8	2.6	2.2	3.0	2.4	1.8	2.7	2.4	1.6	1.1	-0.1	-0.1	-0.9	-1.6	-1.7	-1.8	-1.9	-2.0	-2.1	-2.2	-2.3	-2.4	-2.5	-2.6	-2.8	-2.9	-3.1	0.0

GA Smoothing Implementation: OPG

- OPG is position to administer GA Smoothing because:
  - OPG represents about one-third of GA costs and should have a role in smoothing. It is also well placed to forecast future GA expenses;
  - Currently, jointly managing $18 billion nuclear fund, therefore has infrastructure and expertise;
  - Regulated by OEB and OPG has experience with regulatory deferral and variance accounts; and
  - OPG borrows from Province, and from 3rd parties, allowing to access lowest cost financing option.
- In order to take on this incremental responsibility, OPG suggests it would need to establish a Holding Company/Subsidiary model in order to ring fence the liability.
- Further work is required to determine:
  - *Form of the recovery mechanism*: this will need to provide reasonable certainty to the lender, while providing flexibility to respond to changing interest rate and demand conditions;
  - *OPG's new corporate and governance structures*: the new subsidiary needs to be sufficiently ring fenced in order to protect OPG's existing business and enable 3rd party borrowing (if necessary); and
  - *OPG's capacity to hold the new liability*: There is a limit of incremental debt that OPG can assume before its long term viability, credit ratings and stand-alone financial sustainability become challenging.
- Accounting treatment and associated fiscal impacts of GA Smoothing will depend in part upon the details of these elements. Further work is required to make this assessment.

Delivery Charge Relief: Accelerating Fixed Rate Benefit through the Rural or Remote Rate Protection Program (RRRP), via tax base support

- Move all costs of the existing an enhanced RRRP from electricity customers to tax payers at a cost of ~$243M ($126M + $117M as shown in the fiscal table) in 2017-18, growing over time
- In addition consider the following expansions to the program, also funded via the tax base:

- Option 1: Hydro One Only
  - Accelerate move to a ceiling on delivery charges of no more than $65 per month for low density (R2) and $55 per month for medium density (R1) customers
  - Reflects decision by the Ontario Energy Board to move to fixed charges for distribution, but accelerates transition for those that will benefit (about 1/3 of Hydro One customers)
  - Focus savings on those customers with high electricity usage (e.g. electric heating)
  - Fiscal impact of $61M in 2017-18 (see fiscal table for details)

- Option 2: Hydro One + 7 high cost distributors (those with costs above Toronto Hydro)
  - Would establish a new ceiling for high cost distributors of $38 per month
  - In addition to reflecting OEB's decision to move to fixed charges, this establishes a new lower rate (funded via the tax base) that is set at approximately the average cost of delivery across the province
  - Would include customers in Parry Sound, Sioux Lookout, Chapleau, Innpower (Innisfil & South Barrie), Atikokan, Algoma, as well as Hydro One medium and low density
  - Fiscal impact of $150M in 2017-18 (see fiscal table for details)

Low Income Support: expanding the Ontario Electricity Support Program (OESP), via tax base support

- The OESP, an income-tested, application based program that lowers electricity costs of the most vulnerable consumers, provides a rebate directly on bills. There are two scales: one with basic credits, and an enhanced for Indigenous, electric heat and certain medical devices.
- OESP credits could be increased by 50% and the program can be enhanced to ensure program uptake is as close as possible to 100%
- Moving the program from the ratebase to taxbase and assuming higher uptake + enhancements results in an estimated fiscal impact of $178M in 2017-18, increasing to $334M by 2021 (see fiscal table)

Establishing a new LDC affordability Fund

- Some electricity customers who struggle to pay their electricity bills do not meet the definition of a low-income household and therefore are not eligible for the Home Assistance Program.
- Establishing an "Affordability Fund" for LDCs could provide a means to help struggling customers who do not qualify for low income programs and cannot upgrade their homes without financial assistance.
- Over time the Fund could help these customers get back on track with their bills and also save on disconnection costs; and
- The Fund would be targeted to customers on an as-needed basis (vs. widely marketed as an open-intake program).
- Amounts are scalable. For illustrative purposes, Energy suggests a $200M fund established in this fiscal year could reach between 15,000 and 65,000 customers, depending on measures and uptake

First Nations Rate funded via the tax base

- The Minister committed to consider options for addressing high on-reserve electricity costs at the Apr. 18, 2016 First Nations-Ontario Energy Table meeting and was also discussed during the Hydro One negotiations with the Chiefs of Ontario (COO)
- OEB was tasked with providing advice and presented a report that recommended:
    - Eliminate the delivery charge for all on-reserve First Nations residential customers and eliminate the monthly service charge for customers of licensed distributors which charge a bundled rate. The OEB estimates this would provide residential customers an average monthly benefit of $85 at a total annual cost of $13 to $20 million or 11 cents a month for a typical residential electricity consumer.
    - Automatically qualify on-reserve First Nations residential customers (~21,500 customers).
- A fiscal impact of $20M a year is estimated for this option

Electricity Rate Impacts:

Option 1: GA smoothing for homes and small businesses lowered **25%** (including 8% HST rebate and social programs moving to taxbase as described above:

Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	**163**	**172**	**175**	**178**	**189**	**187**
Total Bill (excludes HST)	145	153	155	158	168	165
Impact of GA Financing		-27	-27	-27	-34	-29
Impact of Tax-Basing Social Programs		-2	-2	-2	-3	-3
Subtotal		123	126	128	131	133
8% rebate		-10	-10	-10	-10	-11
HST		16	16	17	17	17
Revised Bill (includes HST)	**163**	**129**	**132**	**135**	**137**	**140**
Year-over-Year Change		-21%	2%	2%	2%	2%
Change from Forecast		**-25%**	**-25%**	**-24%**	**-28%**	**-25%**

Commercial & Small Industrial ($/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class B Total (excludes HST)	**160**	**165**	**160**	**162**	**173**	**169**
Class B Revised Total (excludes HST)	**160**	**162**	**157**	**159**	**170**	**166**
Year-over-Year Change		1%	-3%	1%	7%	-2%
Change from Forecast		-2%	-2%	-2%	-2%	-2%

Large Industrial ($/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class A Total (excludes HST)	**90**	**91**	**93**	**88**	**95**	**96**
Class A Revised Total (excludes HST)	**90**	**88**	**90**	**84**	**92**	**93**
Year-over-Year Change		-2%	2%	-6%	9%	1%
Change from Forecast		-4%	-4%	-4%	-4%	-4%

Option 2: GA smoothing for homes and small businesses lowered **20%** (including 8% HST rebate and social programs moving to taxbase as described above:

Residential (750 kWh/month)	Actual 2016	2017	2018	2019	2020	2021
Total Bill (includes HST)	**163**	**172**	**175**	**178**	**189**	**187**
Total Bill (excludes HST)	145	153	155	158	168	165
Impact of GA Financing		-19	-19	-18	-26	-21
Impact of Tax-Basing Social Programs		-2	-2	-2	-3	-3
Subtotal		131	134	137	139	142
8% rebate		-11	-11	-11	-11	-11
HST		17	17	18	18	18
Revised Bill (includes HST)	**163**	**138**	**141**	**144**	**146**	**149**
Year-over-Year Change		-16%	2%	2%	2%	2%
Change from Forecast		**-20%**	**-20%**	**-19%**	**-23%**	**-20%**

Commercial & Small Industrial ($/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class B Total (excludes HST)	**160**	**165**	**160**	**162**	**173**	**169**
Class B Revised Total (excludes HST)	**160**	**162**	**157**	**159**	**170**	**166**
Year-over-Year Change		1%	-3%	1%	7%	-2%
Change from Forecast		-2%	-2%	-2%	-2%	-2%

Large Industrial ($/MWh)	Actual 2016	2017	2018	2019	2020	2021
Class A Total (excludes HST)	**90**	**91**	**93**	**88**	**95**	**96**
Class A Revised Total (excludes HST)	**90**	**88**	**90**	**84**	**92**	**93**
Year-over-Year Change		-2%	2%	-6%	9%	1%
Change from Forecast		-4%	-4%	-4%	-4%	-4%