



Ontario Energy Board Commission de l'énergie de l'Ontario

> OEB's 5 Point Plan

Confidential Advice to Government

January 27, 2017

Mitigating Delivery: 5 Point Plan

This plan addresses the government's objectives, supports the direction the OEB has been pursuing with respect to distribution rates, largely maintains the recovery of costs from the electricity system, and is sustainable for the longer term

- **Implement fully fixed base delivery rates**– Complete move to fully fixed distribution rates this year for the residential class, yielding a stable base distribution charge for residential customers. Implement fully fixed retail transmission service rates this year, yielding a stable base delivery charge when coupled with a fixed base distribution rate. This would further enhance the benefit to high volume users (example electric heating).
- **Move losses out of delivery line** – would reduce delivery line overall and provide more transparency about distribution and transmission costs for customers.
- **Increase RRRP to harmonize H1 rural with urban** – Reduce costs for medium and low density customers to be in line with urban ones; do so through existing RRRP. Reaches a substantial majority of customers with high delivery charges. Funding for entire RRRP program could continue via rates or via tax base.
- **Mitigate commodity costs** – implement commodity reduction measures as determined.
- **Increase credits for OESP** – increase OESP credit for all eligibility categories; funding for the entire OESP program could continue to be via rates or can be via tax base.

Overview

- This deck presents average bill impacts at each step of the plan, building on the previous step so that the incremental impact of each component of the plan is shown
- Bill impacts are presented for the average customer in the province excluding Hydro One (weighted by customer numbers), Hydro One's R2 class, and Toronto Hydro
- Consumption levels presented at:
 - 250kWhs – this represents low volume customers and is approximately at the 10th percentile for most LDCs
 - 750kWhs – this is the average consumption level in the province
 - 1200kWhs – this represents the average for Hydro One R2 class
 - 2000 kWhs – this is representative of electrically heated customers
- Total bill impacts include HST based on 2016 levels for comparability

Average Customer

excluding Hydro One



Fixed Delivery Rates (Ontario Weighted Average)

DELIVERY CHARGE

(Distribution and Transmission)

Ontario Weighted Average	250	750	1200	2000
Current	\$ 27.90	\$ 41.92	\$ 54.54	\$ 76.97
Step 1: Fixed Rates	\$ 38.58	\$ 40.04	\$ 41.36	\$ 43.71

TOTAL BILL

Ontario Weighted Average	250	750	1200	2000
Current	\$ 65.00	\$ 147.77	\$ 222.26	\$354.70
Step 1: Fixed Rates	\$ 77.06	\$ 145.65	\$ 207.38	\$317.12

- Weighted average delivery charge will be \$40 following transition
- Each LDC will have a different delivery charge based on their cost structure
- Delivery charges across the province will range from \$29 to \$68 (excluding Hydro One)
- Impact on delivery decreases as customer usage increases which benefits electrically heated customers
- Approximately 430k customers would fall into the low volume (up to 300 kWh) category but average total bill at this level is only about \$65 before transition

Notes:

- Most LDCs would have transitioned fully for Dx rates by 2019 (13 LDCs by 2020 and 2 LDCs by 2023)
- No impact on overall delivery cost – transition to fully fixed rates is revenue neutral
- There can be other minor temporary adjustments to delivery that will need to be addressed

Removal of Line Losses from Delivery

(Ontario Weighted Average)

DELIVERY CHARGE

(Distribution and Transmission)

Ontario Weighted Average	250	750	1200	2000
Current	\$ 27.90	\$ 41.92	\$ 54.54	\$ 76.97
Step 1: Fixed Rates	\$ 38.58	\$ 40.04	\$ 41.36	\$ 43.71
Step 2: Removal of Losses	\$ 37.46	\$ 36.69	\$ 35.99	\$ 34.75

TOTAL BILL

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Step 2: Removal of Losses	\$ 77.06	\$ 145.65	\$ 207.38	\$317.12

- Total bill is not impacted by movement of losses from delivery to commodity line
- Low volume customers are still paying more delivery at this stage but mitigation of moving to fixed rates has begun
- All other customers at the other consumption levels are now paying less than their current delivery charges
- Delivery charge cannot be fixed across all consumption levels unless line losses are moved elsewhere on the bill

Increase RRRP_(Ontario Weighted Average)

DELIVERY CHARGE

(Distribution and Transmission)

Ontario Weighted Average	250	750	1200	2000
Current	\$ 27.90	\$ 41.92	\$ 54.54	\$ 76.97
Step 1: Fixed Rates	\$ 38.58	\$ 40.04	\$ 41.36	\$ 43.71
Step 2: Removal of Losses	\$ 37.46	\$ 36.69	\$ 35.99	\$ 34.75
Step 3: Harmonize Hydro One Residential Class	\$ 37.46	\$ 36.69	\$ 35.99	\$ 34.75

TOTAL BILL

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Step 1: Fixed Rates	\$ 77.06	\$ 145.65	\$ 207.38	\$317.12
Step 2: Removal of Losses	\$ 77.06	\$ 145.65	\$ 207.38	\$317.12
Step 3: Harmonize Hydro One Residential Class	\$ 77.57	\$ 147.19	\$ 209.84	\$321.23

- The OEB's proposal is to increase the RRRP benefit for Hydro One's rural customers
- All customers in the province pay for the RRRP benefit
 - The incremental rate for harmonizing Hydro One's R1 and R2 classes to Hydro One's urban (UR) class is approximately \$1.50 per month for the average customer
 - This is applied to the regulatory line of the bill and shows up here on the new total bill in step 3
 - The incremental benefit to Hydro One customers in total is \$235M - approximately \$70M will be paid by the residential class and the remaining \$165M from by the other classes

Mitigate Commodity (Ontario Weighted Average)

TOTAL BILL

Ontario Weighted Average	250	750	1200	2000
Current	\$ 65.00	\$ 147.77	\$ 222.26	\$354.70
Step 1: Fixed Rates	\$ 77.06	\$ 145.65	\$ 207.38	\$317.12
Step 2: Removal of Losses	\$ 77.06	\$ 145.65	\$ 207.38	\$317.12
Step 3: Harmonize Hydro One Residential Class	\$ 77.57	\$ 147.19	\$ 209.84	\$321.23
Step 4: 10% Reduction in Commodity	\$ 74.30	\$ 137.37	\$ 194.13	\$295.04

- Commodity rates reduction
- OEB has not been involved in discussions on mitigating commodity
- To demonstrate bill impacts, a 10% reduction on commodity was used
 - From: Off Peak @ 8.7cents/kWh, Mid-peak @13.2 cents/kWh, On-Peak @18 cents/kwh
 - To: Off Peak @ 7.8 cents/kWh, Mid-peak @11.9 cents/kWh, On-Peak @16.2 cents/kwh

Example (Toronto Hydro)

TOTAL BILL

Toronto Hydro	250	750	1200	2000
Current	\$ 74.29	\$ 158.20	\$ 233.71	\$367.96
Step 1: Fixed Rates	\$ 86.38	\$ 153.95	\$ 214.76	\$322.86
Step 2: Removal of Losses	\$ 86.38	\$ 153.95	\$ 214.76	\$322.86
Step 3: Harmonize Hydro One Residential Class	\$ 86.90	\$ 155.49	\$ 217.22	\$326.96
Step 4: 10% Reduction in Commodity	\$ 83.63	\$ 145.69	\$ 201.55	\$300.84

Toronto Hydro	250	750	1200	2000
Current Delivery Charge	\$ 36.13	\$ 51.16	\$ 64.69	\$ 88.74
New Delivery Charge	\$ 45.79	\$ 44.26	\$ 42.89	\$ 40.45

- Average delivery charge will be \$44 following transition to fixed charges and moving of line losses
- Approximately 90k customers would fall into the low volume (up to 300 kWh) category but average total bill at this level is only about \$74 before transition
- Toronto Hydro would have transitioned to fully fixed distribution rates by 2020
- No Toronto Hydro customers receive the RRRP benefit

Hydro One



Harmonizing Hydro One Residential

- Hydro One has three residential classes
 - R2 is the lowest density and would have higher delivery rates than the provincial average
 - There is also an R1 class for medium density
 - As of January 1, 2017 R2 customers are eligible for rural rate assistance @ \$60.50 /month
- The OEB's plan involves increasing RRRP assistance to harmonize R1 and R2 customer charges to the urban (UR) level
- This will assist with the delivery impact at the low volume level after transitioning to fully fixed rates
 - The transition to fully fixed rates alone would have considerably more impact than for the average customer in the province because Hydro One's acceleration to fully fixed rates is more aggressive (8 years down to 2 years as opposed to 4 years down to 2 years for most LDCs)
 - About 13k customers would fall into the low volume (up to 300 kWh) category for R2 and the average total bill at this level is only about \$75 before transition
- The impact is neutralized as consumption approaches the 1200 kWh level which is the R2 average consumption level

Harmonizing Hydro One Residential

DELIVERY CHARGE (Distribution and Transmission)

Hydro One R2	250	750	1200	2000
Current	\$ 37.18	\$ 67.59	\$ 94.95	\$143.60
Step 1: Fixed Rates	\$ 79.97	\$ 85.82	\$ 91.08	\$100.44
Step 2: Removal of Losses	\$ 77.04	\$ 77.04	\$ 77.04	\$ 77.04
Step 3: Harmonize Hydro One Residential Class	\$ 48.50	\$ 48.50	\$ 48.50	\$ 48.50

TOTAL BILL

Hydro One R2	250	750	1200	2000
Current	\$ 75.61	\$ 177.14	\$ 268.53	\$430.99
Step 1: Fixed Rates	\$ 123.95	\$ 197.74	\$ 264.15	\$382.22
Step 2: Removal of Losses	\$ 123.95	\$ 197.74	\$ 264.15	\$382.22
Step 3: Harmonize Hydro One Residential Class	\$ 92.24	\$ 167.13	\$ 234.52	\$354.33

- The RRRP funding for Hydro One is increased to the point where Hydro One's R1 and R2 customers are paying the same distribution rates as the urban (UR) class
- Decrease in total delivery costs for Hydro One R1 and R2: ~\$235M
- The R2 example represents a further 38% (or \$29) reduction to the delivery charge for low volume customers thus significantly mitigating the impact of the fixed rate transition
- Any mitigation on commodity would further reduce the total bill

Tax Funding Scenario

for Rural or Remote Electricity Rate Protection (RRRP) and
Ontario Electricity Support Program (OESP)



OESP and RRRP Funding via Tax Base

Rural or Remote Electricity Rate Protection (RRRP)

- Current Cost \$280M
- Harmonize Hydro One Residential - Cost increases to \$515M

OESP

- Current cost \$160M based on forecast

Total

- Note that all customers pay for these programs. Moving the total cost to taxes would benefit all customers.
- \$675M moved to taxes = \$4.36 per month for average residential customer or \$11.64 per month for electric heat customer (\$440M based on current funding)
- Could move only the residential portion of the costs to taxes (roughly 35% or \$235M)

OESP and RRRP Funding

TOTAL BILL

(Rate Based funding for RRRP and OESP)

Ontario Weighted Average	250	750	1200	2000
Current	\$ 65.00	\$ 147.77	\$ 222.26	\$354.70
Step 1: Fixed Rates	\$ 77.06	\$ 145.65	\$ 207.38	\$317.12
Step 2: Removal of Losses	\$ 77.06	\$ 145.65	\$ 207.38	\$317.12
Step 3: Harmonize Hydro One Residential Class	\$ 77.57	\$ 147.19	\$ 209.84	\$321.23
Step 4: 10% Reduction in Commodity	\$ 74.30	\$ 137.37	\$ 194.13	\$295.04

TOTAL BILL

(Taxed Based funding for RRRP and OESP)

Ontario Weighted Average	250	750	1200	2000
Current	\$ 65.00	\$ 147.77	\$ 222.26	\$354.70
Step 1: Fixed Rates	\$ 77.06	\$ 145.65	\$ 207.38	\$317.12
Step 2: Removal of Losses	\$ 77.06	\$ 145.65	\$ 207.38	\$317.12
Step 3: Harmonize Hydro One Residential Class (RRRP and OESP = \$0)	\$ 76.12	\$ 142.83	\$ 202.86	\$309.59
Step 4: 10% Reduction in Commodity	\$ 72.85	\$ 133.01	\$ 187.15	\$283.41

Low Income Assistance



Increase OESP

- The OESP provides credits for low income customers
- Work is underway to aggressively reach customers who have not yet signed up
- Credits could be increased by 50% for all classes within the current funding envelope
- Alternative: provide greater increase in enhanced category for electrically heated customers

Example: Increase Credits for OESP (by 50%)

Current Credits								Proposed Increased Credits (+50%)									
Household Income		Number of People Living in the Household						Household Income		Number of People Living in the Household							
		1	2	3	4	5	6			7 +	1	2	3	4	5	6	7 +
\$ 28,000 or less		\$30	\$30	\$34	\$38	\$42	\$50	\$50	\$ 28,000 or less		\$45	\$45	\$51	\$57	\$63	\$75	\$75
\$ 28,001	\$ 39,000			\$30	\$34	\$38	\$42	\$50	\$ 28,001	\$ 39,000			\$45	\$51	\$57	\$63	\$75
\$ 39,001	\$ 48,000					\$30	\$34	\$38	\$ 39,001	\$ 48,000					\$45	\$51	\$57
\$ 48,001	\$ 52,000							\$30	\$ 48,001	\$ 52,000							\$45
Current Enhanced Credits								Proposed Increased Enhanced Credits (+50%)									
Household Income		Number of People Living in the Household						Household Income		Number of People Living in the Household							
		1	2	3	4	5	6			7 +	1	2	3	4	5	6	7 +
\$ 28,000 or less		\$45	\$45	\$50	\$55	\$60	\$75	\$75	\$ 28,000 or less		\$68	\$68	\$75	\$83	\$90	\$113	\$113
\$ 28,001	\$ 39,000			\$45	\$50	\$55	\$60	\$75	\$ 28,001	\$ 39,000			\$68	\$75	\$83	\$90	\$113
\$ 39,001	\$ 48,000					\$45	\$50	\$55	\$ 39,001	\$ 48,000					\$68	\$75	\$83
\$ 48,001	\$ 52,000							\$45	\$ 48,001	\$ 52,000							\$68

Increase OESP_(Ontario Weighted Average)

TOTAL BILL

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Current	\$ 65.00	\$ 147.77	\$ 222.26	\$354.70
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Step 4: 10% Reduction in Commodity	\$ 74.30	\$ 137.37	\$ 194.13	\$295.04
With Current OESP Credits	\$ 41.71	\$ 111.30	\$ 158.92	\$270.26
Step 5: Increase Credits for OESP	\$ 26.71	\$ 96.30	\$ 133.50	\$244.84

- Rate Funded Option
- OESP credits increased by 50%, but OESP rate that all customers pay remains unchanged
- Bill presentation above reflects minimum credits available
- This approach will provide an additional \$30M benefit to low income customers with no increase to existing rates
- There will be similar impacts for Hydro One customers

Implementation

- While the accelerated move to fixed delivery rates can be performed within the OEB's existing responsibilities, other elements of the plan will require enabling regulation changes:
 - Moving line losses from the delivery line will require amendment of the regulation covering bill presentment, as well as collaboration with Measurement Canada on the appropriate approach.
 - Enhancement to the RRRP to reduce Hydro One bills will require amendment to the corresponding regulation.
- While LDCs will be able to implement proposed billing changes, the relocation of line losses elsewhere on the bill is likely to require time.