



Regulated Price Plan Prices and the Global Adjustment Modifier for the Period

May 1, 2018 to April 30, 2019

Ontario Energy Board

April 19, 2018

Executive Summary

The *Fair Hydro Act, 2017* (FHA), which received Royal Assent on June 1, 2017, put in place a number of measures to implement the Fair Hydro Plan that was announced by the government on March 2, 2017. Schedule 1 to the FHA – the *Ontario Fair Hydro Plan Act, 2017* (OFHP Act) – established the framework under which eligible consumers’ electricity bills were reduced effective July 1, 2017, and by which bill increases will, through adjustments to the commodity price, be held to the rate of inflation starting in May 2018. Schedule 2 to the new Act contains amendments to the *Ontario Energy Board Act, 1998* (OEB Act) regarding a number of electricity-related programs that further mitigate electricity bills for certain classes of consumers.

Under the OFHP Act, the initial electricity bill reduction and the rate of inflation ceiling on bill increases are to be achieved principally through the commodity price. For eligible consumers that pay Regulated Price Plan (RPP) prices set by the Ontario Energy Board (OEB), electricity bill mitigation is implemented through RPP prices. For consumers that are eligible for electricity bill relief under the OFHP Act but are not paying RPP prices, electricity bill mitigation is implemented through a reduction in the Global Adjustment charges that they would otherwise pay (the GA Modifier).

This is the second time that the OEB is setting RPP prices and the GA Modifier under the OFHP Act. The RPP prices and GA Modifier determined by the OEB for the July 1, 2017 to April 30, 2018 period were set out in the OEB’s *Regulated Price Plan Prices and the Global Adjustment Modifier for the Period July 1, 2017 to April 30, 2018* report issued on June 22, 2017 (June 2017 RPP Report).

Based on the methodology as set out in the OFHP Act and supporting regulation, the RPP prices and GA Modifier that will be in effect between May 1, 2018 and April 30, 2019 have been set by the OEB as follows:

Table 1: RPP Prices and GA Modifier: May 1, 2018 to April 30, 2019

Time-of-Use RPP Prices	Off-Peak	Mid-Peak	On-Peak	Average Price
Price per kWh	6.5¢	9.4¢	13.2¢	8.2¢
% of TOU Consumption	65%	17%	18%	
Tiered RPP Prices	Tier 1	Tier 2	Average Price	
Price per kWh	7.7¢	8.9¢	8.2¢	
% of Tiered Consumption	57%	43%		
GA Modifier				
GA Modifier per MWh				-\$44.38

This report describes the methodology that the OEB has followed to determine the new RPP prices and GA Modifier set out in Table 1, by reference to the relevant requirements of the OFHP Act and supporting regulation. The methodology is different from the one that applied for the July 1, 2017 to April 30, 2018 period.

1. New RPP Prices

A. Overview of the legislative framework

Under the OFHP Act, the OEB must set new RPP prices that will apply between May 1, 2018 and April 30, 2019. These prices are to be set under section 11 of the OFHP Act using the methodology detailed in section 5 of Ontario Regulation 195/17 (Fair Adjustment under Part II of the Act) (OFHP Regulation).

The OFHP Act and OFHP Regulation require a comparative exercise. For the July 1, 2017 to April 30, 2018 period, RPP prices were set to achieve a 25% total bill reduction for a “hypothetical regulated rate consumer” (referred to in this report as the proxy customer) relative to what RPP prices would have been on May 1, 2017, without any regard to the forecast impact of the OFHP Act. For the May 1, 2018 to April 30, 2019 period, prices are to be set such that the proxy customer’s bill increases by the rate of inflation relative to what it was on July 1, 2017. The RPP prices that result from this exercise will apply to all RPP consumers.

The OFHP Regulation prescribes important elements of the methodology to be used by the OEB in setting RPP prices, as further described in greater detail in the following sections of this report:

- i. The attributes of the proxy customer, including that the customer is a residential service class customer of Toronto Hydro-Electric System Limited (Toronto Hydro) paying time-of-use (TOU) RPP prices.
- ii. The attributes of three total invoice amounts:
 - a. “Total Invoice Amount A”, representing an electricity bill (Invoice A) for the proxy customer based on what RPP prices would otherwise have been on May 1, 2017 (used in setting RPP prices for the July 1, 2017 to April 30, 2018 period);
 - b. “Total Invoice Amount B”, representing an electricity bill (Invoice B) for the proxy customer based on the RPP prices set by the OEB effective July 1, 2017 to achieve the initial 25% reduction; and
 - c. “Total Invoice Amount C”, representing an electricity bill (Invoice C) for the proxy customer based on what RPP prices need to be to achieve the rate of inflation increase.
- iii. The description of the total invoice amounts makes it clear that any financial assistance under the *Ontario Rebate for Electricity Consumers Act, 2016* (ORECA) is to be taken into account when determining “Total Invoice Amount B” and “Total Invoice Amount C”.
- iv. How the rate of inflation is to be determined.

B. The proxy customer

As described in the OFHP Regulation, the proxy customer is a Toronto Hydro residential service class customer paying RPP TOU prices who uses 750 kWh in a month and has a TOU consumption profile equal to the long-term aggregate RPP TOU pool (65% of consumption in off-peak periods, 17% in mid-peak periods, and 18% in on-peak periods) used by the OEB to set RPP TOU prices.

C. The components of Invoice A, Invoice B and Invoice C

As set out in the OFHP Regulation, Invoice A, Invoice B and Invoice C are comprised of the invoice amounts shown in Table 2. Invoice A is not used in determining RPP prices for the May 1, 2018 to April 30, 2019 period but is included in Table 2 for continuity.

Table 2: Components of Invoice A, Invoice B and Invoice C for the Proxy Customer

Components ¹	Invoice A	Invoice B	Invoice C
i. Electricity	RPP prices that would have been effective May 1, 2017, if determined by the OEB in the normal course and without taking into account any forecasted impact of the OFHP Act	RPP prices set by the OEB effective July 1, 2017	New RPP prices set by the OEB to be effective May 1, 2018
ii. Delivery	Rates and charges for the proxy customer as set out in Toronto Hydro's rate order in effect May 1, 2017	Rates and charges for the proxy customer as set out in Toronto Hydro's rate order in effect May 1, 2017	Rates and charges for the proxy customer as set out in Toronto Hydro's rate order in effect May 1, 2018
iii. Regulatory	Rates and charges for the proxy customer as set out in Toronto Hydro's rate order in effect May 1, 2017, other than charges for the Ontario Electricity Support Program and the Rural or Remote Electricity Rate Protection (RRRP) program which are to be based on Toronto Hydro's rate order in effect on April 30, 2017	Rates and charges for the proxy customer as set out in Toronto Hydro's rate order in effect May 1, 2017, other than the RRRP charge. The RRRP charge for the proxy customer as set out in the OEB's rate order in effect July 1, 2017 ²	Rates and charges for the proxy customer as set out in Toronto Hydro's rate order in effect May 1, 2018
iv. 8% ORECA Rebate	Not applied	Applied	Applied
v. HST	Applied to items (i) to (iii)	Applied to items (i) to (iii)	Applied to items (i) to (iii)

¹ Section 1(5) of the OFHP Regulation provides that the following types of amounts are to be excluded from Invoices A, B and C: (i) the balance of any amounts carried forward from previous invoices; (ii) penalties or interest; (iii) charges that do not relate to the consumption of electricity; (iv) any fixed monthly service charge payable by a microFIT generation facility; (v) any specific service charges or retail service charges; and (vi) HST on any of (i) to (v).

Total	Total Invoice Amount A	Total Invoice Amount B, which must be 25% less than Total Invoice Amount A	Total Invoice Amount C, which must be higher than Total Invoice Amount B by the rate of inflation

As set out in the June 2017 RPP Report, Invoice A largely represented the electricity bill that would have been received by the proxy customer in the normal course for electricity consumed on May 1, 2017, without consideration of any measures under the OFHP Act. Total Invoice Amount A was calculated to be \$161.61, inclusive of HST. To achieve the 25% reduction required by the OFHP Act, RPP prices were set by the OEB such that Total Invoice Amount B was as close as feasible to \$121.21 (this being 25% less than \$161.61). Based on the RPP prices set by the OEB effective July 1, 2017, Total Invoice Amount B is \$120.92, inclusive of HST.

D. Setting RPP TOU prices for Invoice C

The OFHP Regulation specifies that the RPP prices for the May 1, 2018 to April 30, 2019 period are to be set such that Total Invoice Amount C is higher than Total Invoice Amount B by the rate of inflation. The first step is therefore to determine the rate of inflation.

The OFHP Regulation defines the rate of inflation as “the percentage change between (a) the value of the Ontario Consumer Price Index for the 12-month period immediately preceding the 12-month period described in clause (b), and (b) the value of the Ontario Consumer Price Index for the 12-month period ending on the last day of February immediately preceding the day on which the determination of the Board under clause 11 (1) (a) of the Act takes effect”. For the purposes of setting prices for the May 1, 2018 to April 30, 2019 period, the 12-month period referred to in (a) is March 2016 through February 2017 and the 12-month period referred to in (b) is March 2017 through February 2018. The “Ontario Consumer Price Index” is defined as meaning, for any 12-month period, the Consumer Price Index for Ontario (All-items) as reported monthly by Statistics Canada, averaged over the 12-month period.

Table 3 below shows the monthly Ontario Consumer Price Index (CPI) for March 2016 through February 2018. The average CPI for the 12-month period ending February 2018 (the period described in (b) above) was 132.3, and the average CPI for the preceding 12-month period ending February 2017 (the period described in (a) above) was 130.2. The result is that the rate of inflation, for the purposes of setting RPP prices effective May 1, 2018, is 1.63%.

² A new RRRP charge effective July 1, 2017 was set by Decision and Order dated June 22, 2017 (EB-2017-0234), and is currently still in effect.

RPP prices are therefore being set by the OEB such that Total Invoice Amount C is as close as feasible to \$122.88 (this being 1.63% greater than \$120.92).

Table 3: Monthly Ontario Consumer Price Index (March 2016 - February 2018)³

Month	Ontario Consumer Price Index	Month	Ontario Consumer Price Index
Mar 2016	129.0	Mar 2017	131.4
Apr 2016	129.6	Apr 2017	132.0
May 2016	130.1	May 2017	131.9
Jun 2016	130.4	Jun 2017	132.1
Jul 2016	130.3	Jul 2017	131.9
Aug 2016	129.9	Aug 2017	131.8
Sep 2016	130.1	Sep 2017	132.3
Oct 2016	130.6	Oct 2017	132.3
Nov 2016	130.2	Nov 2017	132.7
Dec 2016	130.0	Dec 2017	132.0
Jan 2017	130.8	Jan 2018	133.2
Feb 2017	131.2	Feb 2018	134.0
Average	130.2	Average	132.3

The next step is to account for the impact of the HST and the 8% ORECA rebate that yields a pre-tax subtotal for Invoice C of \$117.03 as shown on line 9 of Table 4.

The next step is to account for delivery charges, other than the cost of losses, and regulatory charges. As shown in Lines 5-8 in Table 4 below, regulatory charges total \$3.28 for both Invoice B and Invoice C. However, the distribution and transmission charges applicable to the Toronto Hydro proxy customer (not including the cost of losses) have increased from \$47.94 (based on the rate order in effect on May 1, 2017 used for Invoice B) to \$49.90 (based on the rate order in effect on May 1, 2018 used for Invoice C). The electricity line cost and the cost of losses must therefore total as close as feasible to \$63.85 (this being the subtotal of \$117.03 minus \$3.28 for regulatory charges and minus \$49.90 for transmission and distribution charges).

³ <https://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/cpis01g-eng.htm>

Table 4: Total Invoice Amount B and Target Invoice Amount C

		Total Invoice Amount B	Target Invoice Amount C
Electricity			
1	Off-peak	\$31.69	TO BE DETERMINED
2	Mid-peak	\$12.11	
3	On-peak	\$17.82	
Delivery			
4	Cost of losses	\$2.32	
5	Distribution and Transmission	\$47.94	\$49.90
Regulatory			
6	OESP	\$0.00	\$0.00
7	RRRP	\$0.23	\$0.23
8	Other	\$3.05	\$3.05
9	Subtotal	\$115.16	\$117.03
10	HST	\$14.97	\$15.21
11	8% Rebate	-\$9.21	-\$9.36
12	Total	\$120.92	\$122.88

Accordingly, new RPP prices have been set such that the total charges on lines 1-4 in Table 4 provide, as close as is feasible, a pre-tax reduction of \$0.09 to Invoice C relative to Invoice B for the proxy customer given the prescribed consumption profile for that customer. The resulting TOU RPP prices are shown in Table 5, and their application to Invoice C is shown in Table 6.

Table 5: Time-of-Use RPP Rates to Achieve Invoice Amount C

	Off-Peak	Mid-Peak	On-Peak	Average Price
Price per kWh	6.5¢	9.4¢	13.2¢	8.2¢
% of TOU Consumption	65%	17%	18%	

Table 6: Total Invoice Amounts B and C for the proxy customer (\$)

		Total Invoice Amount B	Target Invoice Amount C
	Electricity		
1	Off-peak	\$31.69	\$31.69
2	Mid-peak	\$12.11	\$11.99
3	On-peak	\$17.82	\$17.82
	Delivery		
4	Cost of losses	\$2.32	\$2.31
5	Distribution and Transmission	\$47.94	\$49.90
	Regulatory		
6	OESP	\$0.00	\$0.00
7	RRRP	\$0.23	\$0.23
8	Other	\$3.05	\$3.05
9	Subtotal	\$115.16	\$116.98
10	HST	\$14.97	\$15.21
11	8% Rebate	-\$9.21	-\$9.36
12	Total	\$120.92	\$122.83

The new RPP TOU prices shown in Table 5 maintain the overall on-, mid- and off-peak price ratios that pre-date the OFHP Act. Furthermore, this approach continues to provide customers with opportunities and incentives to reduce their peak demand and shift consumption to off-peak periods, consistent with policy objectives.

When applied to the proxy customer's bill using the prescribed TOU consumption profile and Toronto Hydro's OEB-approved loss factor, the resulting electricity line cost is \$61.49 and the cost of losses is \$2.31, as shown on lines 1-3 and line 4, respectively, in Table 6. The resulting Total Invoice Amount C (\$122.83) is slightly lower (by \$0.05) than the target amount of \$122.88 that would have achieved a precise rate of inflation increase.

These TOU prices apply to the time of use periods defined in Appendix A to this report.

E. Tiered prices

Nearly all RPP residential customers and many small business customers pay TOU prices. However, a comparatively small number of RPP residential customers have tiered pricing because their electricity use is not billed using a smart meter, and the same is also true of some RPP small business customers. Approximately 57% of the consumption of these customers is forecast to be in Tier 1, and 43% in Tier 2⁴.

⁴ See the OEB's April 19, 2018 *Regulated Price Plan Supply Cost Report: May 1, 2018 to April 30, 2019*

RPP tiered prices are set such that the weighted average price will come as close as possible to the average supply cost for RPP consumers (RPA), based on the forecast ratio of Tier 1 to Tier 2 consumption, and maintaining a 15-17% difference between Tier 1 and Tier 2 prices. This difference aligns with the ratio between the upper and lower tier prices that were set out in regulation before the OEB started to set RPP prices (i.e., the ratio between 4.7 and 5.5 cents per kWh). As shown in Table 5, the new RPP TOU prices reflect an RPA of 8.2 cents per kWh overall. Using these design criteria, an RPA of 8.2 cents per kWh yields the following tiered prices:

- Tier 1 price: 7.7¢/kWh
- Tier 2 price: 8.9¢/kWh

These tiered prices apply to the tiers defined in Appendix A of this report.

2. The GA Modifier

A. Overview of the legislative framework

The OFHP Act provides bill mitigation to all customers that are “specified customers” as defined in the OFHP Act. In addition to customers that are eligible for and paying RPP prices, “specified customers” include:

- customers that are eligible for the RPP, but have opted out for a retail contract or for market-based pricing; and
- customers that are not eligible for the RPP but are eligible for the 8% ORECA rebate.

Because these customers are not paying RPP prices, a different mechanism is required to provide them with bill relief under the OFHP Act.

Unlike RPP customers, whose share of the GA is included in their RPP prices, these customers pay their share of the GA separately based on the GA (or the GA rate) that is calculated monthly by the Independent Electricity System Operator (IESO). Under the OFHP Regulation, these customers receive bill relief in the form of a reduction to the GA charges that they would otherwise pay. To that end, the OEB is required to set an amount – the GA Modifier – that electricity distributors and others will apply to reduce the GA payable by these customers.

As set out in the OFHP Regulation, for the period May 1, 2018 to April 30, 2019 the GA Modifier is to be set by the OEB as a dollar per megawatt-hour amount that represents the difference between:

- the RPP prices that would have been effective May 1, 2018, if determined by the OEB under section 79.16(1)(b) of the *Ontario Energy Board Act, 1998* without taking into account any forecasted impact of the OFHP Act; and
- the new RPP prices set by the OEB under the OFHP Act (in other words, the RPP prices applicable to Invoice C).

B. Determining the GA Modifier

Using the methodology applicable to the setting of RPP prices under section 79.16 of the *Ontario Energy Board Act, 1998*, the OEB has calculated that the average cost of supply for RPP consumers absent the consideration of the Fair Hydro Plan is \$126.37/MWh for the period May 1, 2018 to April 30, 2019. This average cost yields RPP TOU prices of 10.0, 14.6 and 20.3 cents per kilowatt-hour for off-, mid- and on-peak prices, respectively.⁵

As shown in Table 7, the difference in the resulting electricity price as between the two sets of RPP prices is \$33.28 for a customer using 750 kWh in a billing period. The OFHP Regulation requires that this

⁵ See the OEB’s April 19, 2018 *Regulated Price Plan Supply Cost Report: May 1, 2018 to April 30, 2019*.

difference be presented as a dollar per megawatt-hour (1,000 kWh) amount. This yields a value of \$44.38 (\$33.28/0.75) per megawatt-hour, as also shown in Table 7. The GA modifier that will be in effect between May 1, 2018, and April 30, 2019 is therefore -\$44.38/MWh.

Table 7: GA Modifier Calculation

	Electricity Cost without FHP	Electricity Cost in Invoice C	Change
Electricity Charges (\$/Month)	\$94.77 ⁶	\$61.49	-\$33.28
GA Modifier (\$/MWh)			-\$44.38

⁶ Calculated using the RPP TOU prices that would have been effective on May 1, 2018 if they had been determined under section 79.16 of the *Ontario Energy Board Act, 1998*, as set out in the OEB's *Regulated Price Plan Supply Cost Report: May 1, 2018 to April 30, 2019*.

Appendix A

A. *Time of Use Prices*

Consumers with eligible time-of-use (or “smart”) meters that can determine when electricity is consumed during the day will pay under a time-of-use price structure. The prices for this plan are based on three time-of-use periods per weekday. These periods are referred to as Off-Peak, Mid-Peak, and On-Peak.

TOU pricing periods are:

1. Off-Peak period:
 - Winter and summer weekdays: 7 p.m. to midnight and midnight to 7 a.m.
 - Winter and summer weekends and holidays⁷: 24 hours (all day)
2. Mid-Peak period
 - Summer weekdays (May 1 to October 31): 7 a.m. to 11 a.m. and 5 p.m. to 7 p.m.
 - Winter weekdays (November 1 to April 30): 11 a.m. to 5 p.m.
3. On-Peak period
 - Summer weekdays: 11 a.m. to 5 p.m.
 - Winter weekdays: 7 a.m. to 11 a.m. and 5 p.m. to 7 p.m.

B. *Tiered Pricing*

RPP consumers that are not on TOU pricing pay prices in two tiers; one price for monthly consumption up to a tier threshold and a higher price for consumption over the threshold. The threshold for residential consumers changes twice a year on a seasonal basis as follows:

- 600 kWh per month during the summer season (May 1 to October 31)
- 1000 kWh per month during the winter season (November 1 to April 30).

The threshold for non-residential RPP consumers remains constant at 750 kWh per month for the entire year.

⁷ For the purpose of RPP TOU pricing, a “holiday” means the following days: New Year’s Day, Family Day, Good Friday, Christmas Day, Boxing Day, Victoria Day, Canada Day, Labour Day, Thanksgiving Day, and the Civic Holiday. When any holiday falls on a weekend (Saturday or Sunday), the next weekday following (that is not also a holiday) is to be treated as the holiday for RPP TOU pricing purposes.