EXHIBIT 8 – RATE DESIGN

2021 Cost of Service

Halton Hills Hydro Inc.
EB-2020-0026

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8.2 RATE DESIGN

8.2.1 - OVERVIEW OF CURRENT RATES

This Exhibit documents the calculation of HHHI's proposed distribution rates by rate class for the 2021 Test Year, based on the rate design as proposed in this Exhibit.

HHHI applied for distribution rate adjustments pursuant to the IRM process. HHHI's current 2020 were approved on April 16, 2020 as part of the proceeding EB-2019-0039. The existing rate schedule is presented in Appendix 8-2.

In its April 16, 2020 decision, the Ontario Energy Board ("OEB" or "Board") found that HHHI's rate application was filed in compliance with Chapter 3 of the Board's Filing Requirements for Transmission and Distribution Applications (the "Filing Requirements"), which outlines the application filing requirements for Incentive Rate-setting Mechanism ("IRM") applications based on the policies in the Reports. HHHI's rates were approved by the Board and rendered effective May 1, 2020, remain in effect until new rates are approved.

The following matters were addressed in the decision:

- Rates were adjusted by a price escalator less a productivity factor less the stretch factor. The Board established the price escalator to be 2.00%, the productivity factor to be 0.00% and the stretch factor to be 0.00%; the resulting price cap index adjustment for HHHI is 2.00%.
- Other matters addressed in the decision include; Retail Transmission Service Rates; Wholesale Market Service Rate; Rural or Remote Rate Protection Charge; Smart Meter Entity Charge; Specific Service, MicroFit, and Retail Service Charges.

HHHI has determined its total service revenue requirement to be $17,045,865. The total revenue offsets in the amount of $1,293,382 reduces HHHI's total service revenue requirement to a base revenue requirement of $15,752,482 which is used to determine the proposed distribution rates. The base revenue requirement is derived from HHHI's capital and operating spending forecasts, weather normalized usage, forecasted customer counts, and regulated return on rate base. The revenue requirement is summarized in Table 1 - Calculation of Base Revenue Requirement below:

Table 1 - Calculation of Base Revenue Requirement

Description	**Amount**
OM&A Expenses (including Property Tax and LEAP)	$7,737,808
Amortization Expenses	3,611,342
Total Distribution Expenses	**11,349,150**
Regulated Return On Capital	5,696,715
PILs	-
Service Revenue Requirement	**17,045,865**
Less: Revenue Offset	1,293,382
Base Revenue Requirement	**$ 15,752,482**

The outstanding base revenue requirement is allocated to the various rate classes as outlined in Exhibit 7 – Cost Allocation. The following Table 2 - Proposed Apportionment of Base Revenue to Rate Classes outlines the allocation of the base revenue requirement to the rate classes.

Table 2 - Proposed Apportionment of Base Revenue to Rate Classes

Rate Class	**Proposed Base Revenue**
Residential	$9,292,387
General Service less than 50 kW	1,899,419
General Service 50 to 999 kW	2,952,052
General Service 1,000 to 4,999 kW	1,333,596
Sentinel Lights	47,966
Streetlighting	161,526
Unmetered Scattered Load	65,536
Total	**$15,752,482**

Table 3 - Distribution Revenues at Current Rates – 2021 Volumes below summarizes these revenue projections, showing the proportions attributable to fixed (monthly service) charges ("MSC") and variable (distribution volumetric) charges. HHHI notes that it's residential rates are fixed.[1]

Table 3 - Distribution Revenues at Current Rates – 2021 Volumes[2]

2020 Rates at 2021 Load

	Test Year Projected Revenue from Existing Variable Charges							
Customer Class Name	**Variable Distribution Rate**	**per**	**2021 Test Year Volume**	**Gross Variable Revenue**	**Transform. Allowance Rate**	**Transform. Allowance kW's**	**Transform. Allowance $'s**	**Net Variable Revenue**
Residential	$ -	kWh	207,178,634	$ -	$ -	$ -	$ -	$ -
General Service < 50 kW	0.0106	kWh	46,722,885	495,263	-	-	-	495,263
General Service 50 to 999 kW	3.9942	kW	371,084	1,482,183	0.60	107,413	64,448	1,417,735
General Service 1,000 to 4,999 kW	3.5931	kW	168,373	604,980	0.60	207,107	124,264	480,716
Sentinel Lights	37.1725	kW	680	25,268	-	-	-	25,268
Street Lighting	1.6071	kW	3,105	4,990	-	-	-	4,990
Unmetered Scattered Load	0.0056	kWh	962,029	5,387	-	-	-	5,387
Total Variable Revenue				**$ 2,618,071**			**$ 188,712**	**$ 2,429,359**

2020 Rates at 2021 Load

	Test Year Projected Revenue from Existing Fixed & Variable Charges							
Customer Class Name	**Fixed Rate**	**Customers (Connections)**	**Fixed Charge Revenue**	**Variable Revenue**	**TOTAL**	**% Fixed Revenue**	**% Variable Revenue**	**% Total Revenue**
Residential	$ 27.34	249,090	$ 6,810,124	$ -	$ 6,810,123.7	86.20%	0.00%	65.93%
General Service < 50 kW	29.38	22,359	656,908.0	495,263	1,152,171	8.31%	20.39%	11.15%
General Service 50 to 999 kW	89.89	2,628	236,230.9	1,417,735	1,653,966	2.99%	58.36%	16.01%
General Service 1,000 to 4,999 kW	192.10	108	20,746.8	480,716	501,463	0.26%	19.79%	4.85%
Sentinel Lights	9.80	2,100	20,580.0	25,268	45,848	0.26%	1.04%	0.44%
Street Lighting	2.38	57,996	138,030.5	4,990	143,020	1.75%	0.21%	1.38%
Unmetered Scattered Load	8.25	2,196	18,117.0	5,387	23,504	0.23%	0.22%	0.23%
Total Fixed Revenue			**$ 7,900,737**	**$ 2,429,359**	**$ 10,330,095**	**100.00%**	**100.00%**	**100.00%**

[1] Applicants that are still transitioning to fully fixed residential rates should refer to the approach to implementation of the policy, including mitigation expectations, was described in a letter from the OEB published on July 16, 2015

[2] The following is to be provided in relation to the fixed/variable proportion of proposed rates:
-Current F/V with supporting info
-Proposed F/V proportion with explanation for any changes (billing determinants from proposed load forecast)
-Table comparing current and proposed monthly fixed charges with the floor and ceiling as in cost allocation study
Analysis must be net of rate adders, funding adders, and rate riders

Table 4 - Customer Classes, which follows the Revenues from Existing Fixed and Variable Charges, shows the current customer classes. HHHI is not proposing any changes to its customer classes at this time.

Table 4 - Customer Classes

Customer Class Name	**Existing**	**Proposed**	**Status**	**MSC Metric**	**Usage Metric**
Residential	YES	YES	Continued	Customer	kWh
General Service < 50 kW	YES	YES	Continued	Customer	kWh
General Service 50 to 999 kW	YES	YES	Continued	Customer	kW
General Service 1,000 to 4999 kW	YES	YES	Continued	Customer	kW
Unmetered Scattered Load	YES	YES	Continued	Connection	kWh
Sentinel Lighting	YES	YES	Continued	Connection	KW
Street Lighting	YES	YES	Continued	Connection	kW

8.2.2 - RATE DESIGN

The fixed revenue at existing rates is determined by applying the 2020 approved monthly service charges for HHHI to the forecasted number of customers. The variable revenue at existing rates is calculated by applying the 2020 approved distribution volumetric charge, excluding rate riders and transformer allowance, to the forecasted volumes. This information is used to determine the current split between fixed and variable distribution revenue by rate class for 2021, which is outlined in Table 5 - Current Fixed and Variable Split.

Table 5 - Current Fixed and Variable Split

Rate Class	**2021 Fixed Revenue Based on 2020 Approved Rates**	**2021 Variable Revenue Based on 2020 Approved Rates**	**Total 2021 Revenue Based 2020 Approved Rates**	**Fixed Revenue Proportion**	**Variable Revenue Proportion**
Residential	$6,810,124	$-	$6,810,124	100.00%	0.00%
General Service less than 50 kW	656,908	495,263	1,152,171	57.01%	42.99%
General Service 50 to 999 kW	236,231	1,417,735	1,653,966	14.28%	85.72%
General Service 1,000 to 4,999 kW	20,747	480,716	501,463	4.14%	95.86%
Sentinel Lights	20,580	25,268	45,848	44.89%	55.11%
Streetlighting	138,030	4,990	143,020	96.51%	3.49%
Unmetered Scattered Load	18,117	5,387	23,504	77.08%	22.92%
Total	**$7,900,737**	**$2,429,359**	**$10,330,095**		

PROPOSED MONTHLY SERVICE CHARGE

With the exception of Residential, HHHI proposes to maintain the fixed/variable proportions assumed in the current rates to design the proposed monthly service charges.

Residential Customer Class – Transition to Monthly Fixed Rate

On April 2, 2015, the OEB released the *Report of the Board: A New Rate Design for Electricity Residential Customers* (EB-2012-0410) and determined that residential distribution rates would move to a fully-fixed monthly charge over a four (4) year period. This transition process required that the fixed charge be increased gradually while the volumetric charge is reduced slowly, so that the customer rate impact and the distributors Residential class revenue remains neutral. In HHHI's 2016 Cost of Service Application (EB-2015-0074), HHHI received approval to transition the Residential rate to a fully-fixed rate over a four (4) year period, commencing with the May 1, 2016 rates.

For HHHI, 2019 represented the fourth and final year of the transition to a fully fixed monthly service charge. As such, the proposed 2021 distribution rate for the Residential rate class will be charged on a fully fixed basis.

The OEB has established that, when assessing the bill impacts associated with changes in the cost of distribution service, a utility shall evaluate the total bill impact for a Residential customer at the distributor's 10th consumption percentile. For purposes of Bill Impacts, HHHI has utilized 305 kWhs average monthly consumption, representing the 10th percentile amounts.

EMBEDDED DISTRIBUTORS

HHHI is a host distributor to Hydro One Networks Inc. ("HONI"). HHHI does not have an existing Embedded Distributor rate class and HHHI is not requesting an Embedded Distributor rate class in this application.

HHHI is proposing to continue billing HONI in the General Service 1,000 to 4,999 kW class. HHHI has notified HONI of the decision to continue billing in the General Service 1,000 to 4,999 kW rate class. Table 6 - Proposed Monthly Service Charge outlines the proposed monthly service charge by rate class for HHHI.

Table 6 - Proposed Monthly Service Charge

Rate Class	Total Base Revenue Requirement	Fixed Revenue Proportion	Fixed Revenue	Annualized Customer/ Connections	Proposed Monthly Service Charge
Residential	$9,292,386	100.0%	$9,292,386	249,090	$37.31
General Service less than 50 kW	$1,899,419	57.0%	$1,082,950	22,359	$48.43
General Service 50 to 999 kW	$2,952,052	14.3%	$421,632	2,628	$160.44
General Service 1,000 to 4,999 kW	$1,333,596	4.1%	$55,174	108	$510.87
Sentinel Lights	$47,965	44.9%	$21,530	2,100	$10.25
Streetlghting	$161,526	96.5%	$155,890	57,996	$2.69
Unmetered Scattered Load	$65,536	77.1%	$50,514	2,196	$23.00
Total	**$15,752,482**		**$11,080,080**		

For comparison purposes, the following provides the current and proposed monthly service charge by rate class as well as monthly service charge information from the cost allocation model.

Table 7 - Monthly Service Charge Comparison provides the current and proposed monthly service charge by rate class as well as monthly service charge information from the cost allocation model.

Table 7 - Monthly Service Charge Comparison

Rate Class	Current (2020) Monthly Service Charge	Proposed 2021 Monthly Service Charge	Minimum System with PLCC Adjustment (Ceiling Fixed Charge from Cost Allocation Model)
Residential	$27.34	$37.31	$24.08
General Service less than 50 kW	$29.38	$48.43	$24.59
General Service 50 to 999 kW	$89.89	$160.44	$127.63
General Service 1,000 to 4,999 kW	$192.10	$510.87	$376.58
Sentinel Lighting	$9.80	$10.25	$23.18
Street Lighting	$2.38	$2.69	$2.58
Unmetered Scattered Load	$8.25	$23.00	$28.98

PROPOSED VOLUMETRIC CHARGES

The variable distribution charge is calculated by dividing the variable distribution portion of the base revenue requirement by the appropriate 2021 Test Year usage, kWh or kW, as the class charge determinant. The following Table 8 - Proposed Distribution Volumetric Charge provides HHHI's calculation of its proposed variable distribution charges for the 2021 Test Year.

Table 8 - Proposed Distribution Volumetric Charge

Rate Class	**Total Base Revenue Requirement**	**Variable Revenue Proportion**	**Variable Revenue**	**Annualized kWh or kW as required**	**Unit of Measure**	**Proposed Distribution Volumetric Charge before Transformer Allowance**
Residential	$9,292,387	0.0%	$-	207,178,634	$/kWh	$0.0000
General Service less than 50 kW	$1,899,419	43.0%	$816,469	46,722,885	$/kWh	$0.0175
General Service 50 to 999 kW	$2,952,052	85.7%	$2,530,420	371,084	$/kW	$6.8190
General Service 1,000 to 4,999 kW	$1,333,596	95.9%	$1,278,422	168,373	$/kW	$7.5928
Sentinel Lighting	$47,966	55.1%	$26,435	680	$/kW	$38.8900
Street Lighting	$161,526	3.5%	$5,635	3,105	$/kW	$1.8150
Unmetered Scattered Load	$65,536	22.9%	$15,021	962,029	$/kWh	$0.0156
Total	**$15,752,482**		**$4,672,402**			

PROPOSED TRANSFORMER ALLOWANCE

Currently, HHHI provides a Transformer Allowance to those customers that own their transformation facilities. HHHI proposes to maintain the current approved transformer ownership allowance of $(0.60) per kW. The Transformer Allowance is intended to reflect the costs to a distributor for providing step down transformation facilities to the customer's utilization voltage level. Since the distributor provides electricity at utilization voltage, the cost of this transformation is captured in and recovered through the distribution rates. Therefore, when a customer provides its own step down transformation from primary to secondary, the customer should receive a credit of these costs already included in the distribution rates.

The amount of Transformer Allowance expected to be provided to the customers in the General Service 50 to 999 kW and the General Service 1,000 to 4,999 kW classes that own their transformers has been included as a separate credit of $(0.60) per kW to be applied only to those customers who own their transformer.

PROPOSED DISTRIBUTION RATES[3]

The following Table 9 - Proposed Distribution Rates – Fixed and Volumetric, sets out HHHI's proposed electricity distribution rates based on the foregoing calculations, including adjustments for the recovery of transformer allowance. These rates are consistent with those calculated in Tab 13 of the Revenue Requirement Work Form ("RRWF").

Table 9 - Proposed Distribution Rates – Fixed and Volumetric

Rate Class	**Proposed Monthly Service Charge**	**Unit of Measure**	**Proposed Distribution Volumetric Charge including Transformer Allowance**
Residential	$37.31	$/kWh	$0.0000
General Service less than 50 kW	$48.43	$/kWh	$0.0175
General Service 50 to 999 kW	$160.44	$/kW	$6.9927
General Service 1,000 to 4,999 kW	$510.87	$/kW	$8.3308
Sentinel Lighting	$10.25	$/kW	$38.8900
Street Lighting	$2.69	$/kW	$1.8150
Unmetered Scattered Load	$23.00	$/kWh	$0.0156

[3] Monthly fixed charges - 2 decimal places; variable charges - 4 decimal places

STANDBY/CAPACITY RESERVE CHARGE

HHHI was approached by a customer (Customer 1 as referred to in Exhibit 3) who is installing a PSUP - Combined Heat and Power ("CHP") CDM program in 2020. The CHP will reduce the customer's demand. The customer has requested that HHHI retains stand-by capacity.

With reference to the OEB Staff *Report to the Board - Rate Design for Commercial and Industrial Electricity Customers - Rates to Support an Evolving Energy Sector* (EB-2015-0043) ("Evolving Energy Sector Report")(Appendix 8-5), HHHI is proposing the below calculated Stand-by / Capacity Reserve Charge for Customer 1 based on a CHP faceplate capacity of 1,200 kW and the Capacity Factor of 65% (Table 6, page 43 of the Evolving Energy Sector Report). HHHI understands this charge may change pending the final decision on 2021 rates.

Table 10 - Calculation of Customer 1 Stand-by / Capacity Reserve Charge

Proposed monthly Stand-by / Capacity Reserve Charge	
Faceplate Capacity (kW)	1,200
CHP (full operation) Capacity Factor	65%
Monthly Reserve Capacity (kW)	780
Proposed Volumetric Charge for General Service 1,000 to 4,999 kW ($/kW)	$7.5928
Proposed Monthly Stand-by / CRC	**$ 5,922.38**

STANDBY DISTRIBUTION SERVICE – TARIFF SHEET WORDING

This classification applies to an account with load displacement facilities that contracts with the distributor to provide standby power when its load displacement facilities are not in operation. The level of the billing demand will be agreed to by the distributor and the customer, based on detailed manufacturer information/documentation such as name-plate rating of the load displacement facility.

Monthly Rates and Charges

Delivery Component Standby Charge - the charge is based on the applicable General Service 50 to 999 kW or General Service 1,000 to 4,999 kW Distribution Volumetric Charge applied to the contracted amount (e.g. nameplate rating of generation facility multiplied by Capacity Factor).

8.2.3 - RETAIL TRANSMISSION SERVICE RATES (RTSR)

Electricity distributors are charged for transmission costs at the wholesale level and subsequently pass these charges on to their distribution customers through the RTSRs. Variance accounts are used to capture timing differences and differences in the rate that a distributor pays for wholesale transmission service compared to the retail rate that the distributor is authorized to charge when billing its customers.

HHHI completed its 2021 proposed RTSR in accordance with the *Guideline G-2008-0001: Electricity Distribution Retail Transmission Service Rates*, October 22, 2008 (and any subsequent updates). The RTSR model provided by the Board is being filed in conjunction with this application. [4]

HHHI currently pays for transmission service to both the IESO and to Hydro One Networks Inc. ("HONI"). These costs are then passed on to HHHI's customers through Board-approved rates specific to HHHI. The utility receives primary supply from four (4) locations as follows:

- Three-phase three-wire 44 kV sub-transmission – HHHI has three (3) feeder positions (designated 42M23, 42M25 and 42M28) from the HONI owned Pleasant Transformer Station;
- Three-phase three-wire 44 kV sub-transmission – HHHI shares a feeder position with Milton Hydro and Guelph Hydro (73M4) that emanates from the HONI owned Fergus Transformer Station;
- Three-phase four-wire 16/27.6Y kV distribution – HHHI has three (3) feeder positions (designated 41M21, 41M29 and 41M30) from the HONI owned Halton Transformer Station; and
- Three-phase four-wire 16/27.6 kV distribution – HHHI has two (2) active feeder positions (1M2 and 1M5) with provisions for a total of eight (8) feeders from the HHHI owned Halton Hills MTS1.

[4] MFR - Retail Transmission Service Rate Work Form - PDF and Excel

HHHI has completed the Board's "2021_RTSR_Workform" using the current 2020 Uniform Transmission Rates. HHHI understands that the RTSR model will be updated with the 2021 rates upon approved by the Board. A pdf version of the RTSR Workform is provided in Appendix 8-1 and a live Excel formatted version has been filed electronically with this Application. The proposed 2021 RTSR rates are shown in Table 11 - Proposed 2021 RTSR Charges below.

Table 11 - Proposed 2021 RTSR Charges[5]

Rate Class	**Unit**	**Proposed 2021 RTSR Charges**	
		Network	**Connection**
Residential - Time of Use	kWh	0.0071	0.0059
General Service Less Than 50 kW	kWh	0.0062	0.0055
General Service 50 to 999 kW	kW	2.6986	2.3110
General Service 1,000 to 4,999 kW	kW	2.6986	2.3110
Sentinel Lighting	kW	1.9252	1.6636
Street Lighting	kW	1.9163	1.6298
Unmetered Scattered Load	kWh	0.0062	0.0055

Regulatory Charges

With the exception of the evidence provided above, HHHI is not applying for a rate related to regulatory charges other than the generic rate set by the OEB.[6]

[5] MFR - RTSR information must be consistent with working capital allowance calculation
[6] If applying for a rate other than the generic rate set by the OEB, distributors must provide justification as to why their specific circumstances would warrant a different rate, in addition to a detailed derivation of their proposed rate

1 **Table 12 - Billed Amounts under existing and proposed RTSR rates[7]**

Transmission - Network

		2020			2021		
Customer							
Class Name		**Volume**	**Rate**	**Amount**	**Volume**	**Rate**	**Amount**
Residential	kWh	216,696,500	0.0072	$ 1,560,215	215,465,779	0.0071	$ 1,529,807
General Service < 50 kW	kWh	49,862,174	0.0063	314,132	48,591,800	0.0062	301,269
General Service 50 to 999 kW	kW	403,448	2.7559	1,111,862	371,084	2.6986	1,001,407
General Service 1,000 to 4,999 kW	kW	182,575	2.7559	503,158	168,373	2.6986	454,371
Unmetered Scattered Load	kWh	1,015,903	0.0063	6,400	1,000,511	0.0062	6,203
Sentinel Lights	kW	718	1.9661	1,411	680	1.9252	1,309
Streetlighting	kW	3,279	1.957	6,416	3,105	1.9163	5,950
TOTAL				**$ 3,503,594**			**$ 3,300,315**

Transmission - Connection

		2020			2021		
Customer							
Class Name		**Volume**	**Rate**	**Amount**	**Volume**	**Rate**	**Amount**
Residential	kWh	216,696,500	0.0061	$ 1,321,849	215,465,779	0.0059	$ 1,271,248
General Service < 50 kW	kWh	49,862,174	0.0057	284,214	48,591,800	0.0055	267,255
General Service 50 to 999 kW	kW	403,448	2.3835	961,618	371,084	2.3110	857,575
General Service 1,000 to 4,999 kW	kW	182,575	2.3835	435,167	168,373	2.3110	389,110
Unmetered Scattered Load	kWh	1,015,903	0.0057	5,791	1,000,511	0.0055	5,503
Sentinel Lights	kW	718	1.7158	1,232	680	1.6636	1,131
Streetlighting	kW	3,279	1.6809	5,511	3,105	1.6298	5,060
TOTAL				**$ 3,015,381**			**$ 2,796,881**

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[7] The following is to be provided in relation to the fixed/variable proportion of proposed rates:
-Current F/V with supporting info
-Proposed F/V proportion with explanation for any changes (billing determinants from proposed load forecast)
-Table comparing current and proposed monthly fixed charges with the floor and ceiling as in cost allocation study
Analysis must be net of rate adders, funding adders, and rate riders

8.2.4 - RETAIL SERVICE CHARGES

On November 29, 2018, the OEB issued the *Report of the Ontario Energy Board: Energy Retailer Service Charges* (the "Report") setting out the conclusions of the OEB following its review of energy retailer service charges for electricity and natural gas distributors. Following the issuance of the Report, the OEB issued a Decision and Rate Order on February 14, 2019 approving generic energy retailer service charges effective May 1, 2019 for all rate-regulated electricity distributors and establishing a notice of switch letter charge for both rate-regulated electricity and natural gas distributors. One of the findings of the Report was that energy retailer service charges would be adjusted annually commencing on January 1, 2020 based on the OEB's inflation factor. HHHI understands and accepts that the Retailer Service Charges will be updated with the 2021 rates once approved by the Board. For the purposes of providing a complete 2021 Proposed Tariff of Rates and Charges, HHHI has utilized the current 2020 Retailer Service Charges as issued by the OEB Decision and Rate Order dated November 28, 2019 in proceeding EB-2019-0280 and shown in HHI has forecasted its retail services revenues based on the updated charges and include the costs of providing retail services in revenue requirement. Further details regarding the use of the variance account is presented in Exhibit 9.

Table 13 - Retail Service Charges. [8]

[8] MRF - If proposing changes to Retail Service Charges or introduction of new rates and charges - evidence of consultation and notice

HHI has forecasted its retail services revenues based on the updated charges and include the costs of providing retail services in revenue requirement. Further details regarding the use of the variance account is presented in Exhibit 9.[9]

Table 13 - Retail Service Charges

Description	**Rate**	
One-time charge, per retailer, to establish the service agreement between the distributor and the retailer	$	102.00
Monthly Fixed Charge, per retailer	$	40.80
Monthly Variable Charge, per customer, per retailer	$/cust.	1.02
Distributor-consolidated billing monthly charge, per customer, per retailer	$/cust.	0.61
Retailer-consolidated billing monthly credit, per customer, per retailer	$/cust.	(0.61)
Service Transaction Requests (STR)		
Request fee, per request, applied to the requesting party	$	0.51
Processing fee, per request, applied to the requesting party	$	1.02
Request for customer information as outlined in Section 10.6.3 and Chapter 11 of the Retail		
Settlement Code directly to retailers and customers, if not delivered electronically through the		
Electronic Business Transaction (EBT) system, applied to the requesting party		
Up to twice a year		no charge
More than twice a year, per request (plus incremental delivery costs)	$	4.08
Notice of switch letter charge	$	2.04

8.2.5 - WHOLESALE MARKET SERVICE RATE

On December 17, 2019 the Board issued a Decision with Reasons and Rate Order (EB-2019-0278) establishing that the Wholesale Market Service ("WMS") used by rate-regulated distributors to bill their customers shall be $0.0030 per kilowatt-hour, effective January 1, 2020. For Class B customers, a Capacity Based Recovery ("CBR") component of $0.0004 per kilowatt-hour would be added to the WMS rate for a total of $0.0034 per kilowatt-hour. This unit rate shall apply to a customer's metered

[9] MFR - Distributors that are still using the Retail Service Costs Variance Accounts (RCVAs) will dispose of the balances and the RCVAs will be eliminated. Distributors should forecast retail services revenues based on the updated charges and include the costs of providing retail services in revenue requirement

energy consumption adjusted by the distributor's OEB-approved Total Loss Factor. For Class A customers, distributors shall bill the actual CBR costs to Class A customers in proportion to their contribution to peak. HHHI understands that the WMS and CBR rate may be updated with the 2021 rates if changed by the OEB.

The Standard Supply Service Charge is set by the OEB as an administrative fee payable by customers who purchase electricity directly from their distributor. HHHI proposes no change to the Standard Supply Service Charge of $0.25 per standard supply customer per month.[10]

[10] MFR - Wholesale Market Service Rate - reflect current approved rate in application or justify otherwise.

1 **Table 14 - Pass-thru revenues for Wholesale Market Service Rate (including CBR)**

		2020			2021		
Customer			rate ($/kWh):	0.0034		rate ($/kWh):	0.0034
Class Name		Volume		Amount	Volume		Amount
Residential	kWh	216,696,500	0.0034	$ 736,768	215,465,779	0.0034	$ 732,584
General Service < 50 kW	kWh	49,862,174	0.0034	169,531	48,591,800	0.0034	165,212
General Service 50 to 999 kW	kWh	144,562,269	0.0034	491,512	138,274,228	0.0034	470,132
General Service 1,000 to 4,999 kW	kWh	76,191,079	0.0034	259,050	73,134,892	0.0034	248,659
Unmetered Scattered Load	kWh	1,015,903	0.0034	3,454	1,000,511	0.0034	3,402
Sentinel Lighting	kWh	265,984	0.0034	904	261,954	0.0034	891
Street Lighting	kWh	1,034,462	0.0034	3,517	1,018,788	0.0034	3,464
TOTAL		**489,628,370**		**$ 1,664,736**	**477,747,952**		**$1,624,343**

8.2.6 - RURAL OR REMOTE RATE PLAN;

On December 17, 2019, the Board issued a Decision with Reasons and Rate Order (EB-2019-0278) establishing that the Rural or Remote Rate Protection (RRRP) charge used by rate-regulated distributors to bill their customers shall be $0.0005 per kilowatt-hour for electricity consumed on or after January 1, 2020. This unit rate shall apply to a customer's metered energy consumption adjusted by the distributor's OEB-approved Total Loss Factor. HHHI understands that the RRRP rate may be updated with the 2021 rates if changed by the OEB.

Table 15 - Pass-thru revenues from RRRP

		2020			2021		
Customer			**rate ($/kWh):**	**0.0005**		**rate ($/kWh):**	**0.0005**
Class Name		**Volume**		**Amount**	**Volume**		**Amount**
Residential	kWh	216,696,500	0.0005	$ 108,348	215,465,779	0.0005	$ 107,733
General Service < 50 kW	kWh	49,862,174	0.0005	24,931	48,591,800	0.0005	24,296
General Service 50 to 999 kW	kWh	144,562,269	0.0005	72,281	138,274,228	0.0005	69,137
General Service 1,000 to 4,999 kW	kWh	76,191,079	0.0005	38,096	73,134,892	0.0005	36,567
Unmetered Scattered Load	kWh	1,015,903	0.0005	508	1,000,511	0.0005	500
Sentinel Lighting	kWh	265,984	0.0005	133	261,954	0.0005	131
Street Lighting	kWh	1,034,462	0.0005	517	1,018,788	0.0005	509
TOTAL		**489,628,370**		**$ 244,814**	**477,747,952**		**$238,874.0**

8.2.7 - SMART METERING CHARGE

On March 1, 2018, the Board approved the application by the Independent Electricity System Operator ("IESO"), in its capacity as the Smart Metering Entity ("SME"), for a smart metering charge ("SMC") for the 2018-2022 period (EB-2017-0290). This decision approved the SMC to be levied and collected by the IESO in its capacity as the SME, effective January 1, 2018. The new SMC is $0.57 per smart meter per month, a reduction from the previous SMC of $0.79 per smart meter per month.[11]

Table 16 - Pass-thru revenues from SME

			2020			2021	
Customer			**rate ($/kWh):**	**0.57**		**rate ($/kWh):**	**0.57**
Class Name		**Customers**		**Amount**	**Customers**		**Amount**
Residential	kWh	20,663	0.57	$ 139,172	20,663	0.57	$ 139,172
General Service < 50 kW	kWh	1,850	0.57	11,605	1,850	0.57	11,605
TOTAL		**22,513**		**$ 150,777**	**22,513**		**$ 150,777**

[11] MFR - Distributor must follow accounting guidance provided on March 23, 2018

8.2.8 - SPECIFIC SERVICE CHARGES

HHHI is not proposing any changes to the retail and the specific service charges in this Application and as shown in HHHI's 2020 IRM Tariff of Rates and Charges in the Decision and Rate Order issued by the OEB in proceeding EB-2019-0039 on April 16, 2020 with the exception of the item listed below.

Wireline Pole Attachment Charges

On March 22, 2018, following a consultation process with distributors, telecommunications and cable carriers, and ratepayers, the OEB issued its *Report on Wireline Pole Attachment Charges*, updating the OEB's approach to wireline pole attachments which had been unchanged since 2005. The OEB determined that it was in the public interest to set a province-wide wireline pole attachment charge for LDCs without a distributor specific charge. The charge increased to $43.63 effective January 1, 2019 and would be adjusted annually based on the OEB's inflation factor commencing on January 1, 2020. HHHI understands and accepts that the Wireline Pole Attachment Charges will be updated with the 2021 rates once approved by the Board. For the purposes of providing a complete 2021 Proposed Tariff of Rates and Charges, HHHI has utilized the current 2020 Wireline Pole Attachment Charges as provided in the cover letter issued by the OEB in its Decision and Rate Order dated November 28, 2019 in proceeding EB-2019-0280 in the amount of $44.50 per attacher per year per pole. HHHI is not requesting a HHHI specific Wireline Pole Attachment Charge and as such, no Pole Attachment Work Form has been included in this application. The proposed 2021 Specific Service Charges are shown in Table 17 – Proposed Specific Service Charges.[12][13]

HHHI has not Identified any proposed changes that will have a material impact on customers, including charges that may affect a discrete group.[14]

[12] MFR - Record the excess incremental revenue as of September 1, 2018 until the effective date of its rebased rates in a new variance account related to pole attachment charge
[13] MFR – N/A Distributors applying for an LDC-specific pole attachment charge must file:
[14] MFR - Identification in the Application Summary all proposed changes that will have a material impact on customers, including charges that may affect a discrete group

HHHI does not have any rates and charges in Conditions of Service that do not appear on tariff sheet. [15]

HHHI confirms that revenue from SSCs, including the OEB deemed inflation is included in the Operating Revenue evidence in Exhibit 3[16]

[15] MFR - Identification of any rates and charges in Conditions of Service that do not appear on tariff sheet. Explain nature of costs, provide schedule outlining revenues or capital contributions recovered from these rates from last OEB-approved year to 2019 and the revenue forecasted for the bridge and test years. A proposal and explanation as to whether these charges should be included on tariff sheet

[16] MFR - Ensure revenue from SSCs corresponds with Operating Revenue evidenc

Table 17 – Proposed Specific Service Charges[17]

Customer Administration		**Rate**
Arrears certificate	$	15.00
Statement of account	$	15.00
Pulling post dated cheques	$	15.00
Duplicate invoices for previous billing	$	15.00
Request for other billing information	$	15.00
Easement Letter	$	15.00
Income tax letter	$	15.00
Notification charge	$	15.00
Account history	$	15.00
Credit reference/credit check (plus credit agency costs)	$	15.00
Returned Cheque (plus bank charges)	$	15.00
Charge to certify cheque	$	15.00
Legal letter charge	$	15.00
Account set up charge/change of occupancy charge (plus credit agency costs if applicable)	$	30.00
Special meter reads	$	30.00
Meter dispute charge plus Measurement Canada fees (if meter found correct)	$	30.00
Non-Payment of Account		**Rate**
Late Payment - per month	%	1.50
Late Payment - per annum	%	19.56
Reconnect at Meter - during regular hours	$	65.00
Reconnect at Meter - after regular hours	$	185.00
Reconnect at Pole - during regular hours	$	185.00
Reconnect at Pole - after regular hours	$	415.00
Other		**Rate**
Service call - customer owned equipment	$	30.00
Service call - after regular hours	$	165.00
Temporary service install & remove - overhead - no transformer	$	500.00
Temporary service install & remove - underground - no transformer	$	300.00
Temporary service install & remove - overhead - with transformer	$	1,000.00
Specific charge for access to the power poles - $/pole/year	$	44.50
(with the exception of wireless attachments)		
Interval meter charge	$	20.00

[17] MFR - Specific Service Charge description/purpose/reason for new and revised SSC; calculations to support charges

8.2.9 - LOW VOLTAGE SERVICE RATES

Table 18 – Historical Low Voltage Volumes and Charges below shows the actual Low Voltage costs for the last three (3) historical years and the forecasted 2020 Bridge Year and 2021 Test Year costs. HHHI has used 2019 volumes at current 2020 rates to forecast the Low Voltage costs for 2020 and 2021.

Table 18 – Historical Low Voltage Volumes and Charges[18][19]

Year	Billed Demand (kW)	Low Voltage Invoicing from HONI ($)	Variance from Previous Year (kW)	Variance from Previous Year ($)
2017	853,280	1,058,638		
2018	927,228	1,147,049	73,948	88,411
2019	837,321	1,533,078	(89,907)	386,029
2020 forecast	837,321	2,028,261	0	495,183
2021 forecast	837,321	2,028,261	-	-

Year over Year Variance Analysis

2018 actual versus 2017 actual – The $88,411 increase in 2018 over 2017 was related to an increase in billed demand. HHHI would also note that the large increase in demand from 2018 to 2017 was mainly related to a request by HONI to move load from one feeder to another for maintenance that resulted in double peak load billing.

2019 actual versus 2018 actual – The $386,029 increase between 2019 and 2018 is directly related to a substantial rate increase by HONI for sub-transmission rates, effective July 1, 2019.

2020 Forecast versus 2019 actual – HHHI is forecasting a low voltage expense of $2,028,261 in 2020. The variance of $495,183 includes six (6) additional months of the increased 2019 rates effective July 1, 2019 and an additional, smaller increase to rates in 2020.

[18] Support for forecast LV, e.g. Hydro One Sub-Transmission charges
[19] Low Voltage Cost (historical, bridge, test), variances and explanations for substantive changes

<u>2021 Forecast versus 2020 Forecast</u> - HHHI is forecasting a low voltage expense of $2,028,260 in 2021. The forecast has been estimated by applying the current approved 2020 sub-transmission rates to the 2019 actual billed demand. HHHI is not expecting any further significant changes between 2020 and 2025 forecasted demands or rates.

Forecasted low voltage charges of $2,028,260 for 2021 have been allocated to each rate class based on the proportion of proposed retail transmission connection revenue collected from each class.

The low voltage expense has been estimated by applying the proposed 2021 low voltage rates to the 2021 proposed load forecast billed kWh and kW by applicable rate class.

The billing determinants, allocation of charges and proposed 2021 Low Voltage rates are provided in Table 19 – Proposed 2021 Low Voltage Rates .

Table 19 – Proposed 2021 Low Voltage Rates [20][21][22]

Rate Class	Retail TX Connection Rates		Billing Determinants		Allocation of Low Voltage Charges			Low Voltage Charge Rates	
	Per kWh	Per kW	Annualized kWh or kW	Unit of Measure	Retail Tx Connection Revenue - Basis for Allocation ($)	Allocation Percentages	Allocated $	Low Voltage Rates / kWh	Low Voltage Rates / kW
Residential	$0.0059		207,178,634	$/kWh	$1,222,354	44.65%	$905,664	$0.0044	
General Service less than 50 kW	$0.0055		46,722,885	$/kWh	$256,976	9.39%	$190,398	$0.0041	
General Service 50 to 999 kW		$2.3110	371,084	$/kW	$857,575	31.33%	$635,393		$1.7123
General Service 1,000 to 4,999 kW		$2.3110	168,373	$/kW	$389,110	14.21%	$288,298		$1.7123
Sentinel Lighting		$1.6636	680	$/kW	$1,131	0.04%	$838		$1.2326
Street Lighting		$1.6298	3,105	$/kW	$5,059	0.18%	$3,749		$1.2075
Unmetered Scattered Load	$0.0055		962,029	$/kWh	$5,290	0.19%	$3,920	$0.0041	
Total					**$2,737,496**	**100.00%**	**$2,028,260**		

[20] MFR - Forecast of LV cost, sum of host distributors charges
[21] MFR - Proposed LV rates by customer class
[22] Allocation of LV cost to customer classes (typically proportional to Tx connection revenue)

8.2.10 - LOSS ADJUSTMENT FACTORS

HHHI has calculated the total loss factor to be applied to customers' consumption based on the average wholesale and retail kWh for the years 2015 to 2019. The calculations consistent with calculations provided in Board Appendix 2-R shown in Table 21 – OEB Appendix 2-R Calculation of Proposed Loss Factor below.

SUPPLY FACILITY LOSS FACTOR

The Supply Facility Loss Factor ("SFLF") is used to calculate the total loss factor. The SFLF calculation represents the amount of energy lost on the supply to HHHI and is calculated on measured quantities between transformer stations and wholesale meter points. As an embedded distributor, five (5) of HHHI's nine (9) feeders have a HONI loss factor of 3.4% and two (2) feeders have a loss factor of 0.6%. The remaining two (2) feeders are located at the HHHI owned MTS1 and thus, is not included in the weighted calculation. The SFLF is a weighted average of 1.02600 as shown in Table 20 – Weighted Supply Facility Loss Factor Average.[23]

Table 20 – Weighted Supply Facility Loss Factor Average

Feeder	**SFLF**
Pleasant A	0.03400
Pleasant B	0.03400
Pleasant C	0.03400
Crewson	0.03400
Halton A	0.03400
Halton B	0.00600
Halton C	0.00600
Weighted Average	0.02600
SFLF	**1.02600**

[23] MFR - Statement as to whether LDC is embedded including whether fully or partially

DISTRIBUTION LOSS FACTOR

The Distribution Loss Factor ("DLF") is used to calculate the total loss factor. The DLF calculation represents the amount of energy lost between the HHHI supply points and HHHI customers. HHHI's five (5) year average DLF of 1.0136, including the effects of Distributed Generation, is shown in Table 21 – OEB Appendix 2-R Calculation of Proposed Loss Factor.

Table 21 – OEB Appendix 2-R Calculation of Proposed Loss Factor[24]

		Historical Years					5-Year Average
		2015	**2016**	**2017**	**2018**	**2019**	
	Losses Within Distributor's System						
A(1)	"Wholesale" kWh delivered to distributor (higher value)	533,813,769	526,701,336	500,433,348	520,181,401	513,132,840	518,852,539
A(2)	"Wholesale" kWh delivered to distributor (lower value)	520,395,181	513,458,896	487,853,407	507,097,511	500,222,040	505,805,407
B	Portion of "Wholesale" kWh delivered to distributor for its Large Use Customer(s)	-	-	-	-	-	-
C	Net "Wholesale" kWh delivered to distributor = **A(2) - B**	520,395,181	513,458,896	487,853,407	507,097,511	500,222,040	505,805,407
D	"Retail" kWh delivered by distributor	512,279,689	505,220,809	483,076,156	500,061,363	494,417,598	499,011,123
E	Portion of "Retail" kWh delivered by distributor to its Large Use Customer(s)	-	-	-	-	-	-
F	Net "Retail" kWh delivered by distributor = **D - E**	512,279,689	505,220,809	483,076,156	500,061,363	494,417,598	499,011,123
G	Loss Factor in Distributor's system = **C / F**	1.0158	1.0163	1.0099	1.0141	1.0117	1.0136
	Losses Upstream of Distributor's System						
H	Supply Facilities Loss Factor	1.0260	1.0260	1.0260	1.0260	1.0260	1.0260
	Total Losses						
I	Total Loss Factor = **G x H**	1.0423	1.0427	1.0361	1.0404	1.0380	1.0400

[24] MFR - 3-5 years of historical loss factor data - Completed Appendix 2-R

TOTAL LOSS FACTOR

HHHI has calculated a proposed 2021 Total Loss Factor using a DLF of 1.0136 and a SFLF of 1.0260 based on the average wholesale kWhs, retail kWh and Distributed Generation for the five (5) historical years of 2015 to 2019. As a result of this calculation, HHHI is proposing a 2021 Total Loss Factor of 4.00% for Secondary Metered Customers less than 5,000 kW and 2.96% for Primary Metered Customers less than 5,000 kW.

Further to HHHI's strategic objective for Competitive Rates, this calculated Total Loss Factor is a decrease from the current Board approved Total Loss Factor of 1.056 (EB-2015-0074).

Table 22 – Total Loss Factor for Secondary and Primary Customers

Total Loss Factors	
Supply Facility Loss Factor	1.0260
Distribution Loss Factor	
Distribution Loss Factor - Secondary Metered Customer <5,000kW	1.0136
Distribution Loss Factor -Primary Metered Customer <5,000kW	1.0035
Total Loss Factors	
Distribution Loss Factor - Secondary Metered Customer <5,000kW	1.0400
Distribution Loss Factor -Primary Metered Customer <5,000kW	1.0296

Materiality Analysis on Distribution Losses

HHHI's five (5) year average Total Loss Factor is less than 5%. Pursuant to the Filing Requirements, as the Distribution Loss Factor is less than 5%, HHHI is not required to provide an explanation of, or justification for, its loss adjustment factor. [25][26]. HHHI was not directed to conduct a line loss study in its last Cost of Service [27] however, HHHI has continued to reduce its losses. [28]

[25] MFR - Proposed SFLF and Total Loss Factor for test year
[26] MFR - Explanation of SFLF if not standard
[27] MFR - Study of losses if required by previous decision
[28] MFR - If proposed loss factor >5%, explanation and action plan to reduce losses going forward

8.2.11 - REVENUE RECONCILIATION[29]

Table 23 –Revenue Reconciliation shows detailed calculations of revenue per rate class under current rates and proposed rates by customer class, and a detailed reconciliation of rate class revenue and other revenue to total revenue requirement.

[29] MFR- Calculations of revenue per class under current and proposed rates; reconciliation of rate class revenue and other revenue to total revenue requirement

Table 23 –Revenue Reconciliation[30]

Rate Class	Customers/ Connections	Average Number of Customers/ Connections	2021 Test Year kWh	2021Test Year kW	Monthly Service Charge	Volumetric Rate	Revenue at Proposed Rates	Revenue Requirement by Class	Transformer Allowance	Total	Difference
Residential	Customer	20,758	207,178,634		$37.31	$ -	$9,293,552	$9,292,387		$9,292,387	$(1,165)
General Service less than 50 kW	Customer	1,863	46,722,885		48.43	0.0175	1,899,316	1,899,419		1,899,419	103
General Service 50 to 999 kW	Customer	219		371,084	160.44	6.9927	3,016,504	2,952,052	64,448	3,016,500	(4)
General Service 1,000 to 4,999 kW	Customer	9		168,373	510.49	8.3308	1,457,819	1,333,596	124,264	1,457,861	42
Sentinel Lighting	Customer	175		680	10.25	38.8900	47,960	47,966		47,966	6
Street Lighting	Connections	4,833		3,105	2.69	1.8150	161,644	161,526		161,526	(118)
Unmetered Scattered Load	Connections	183	962,029		23.00	0.0156	65,529	65,536		65,536	7
Total							$15,942,325	$15,752,482	$188,712	$15,941,194	$(1,130)

[30] MFR - Completed RRWF - Sheet 13 - rates and charges entered on this sheet should be rounded to the same decimal places as tariff

8.2.12 - TARIFF OF RATES AND CHARGES

The current Tariff of Rates and Charges are based on the current Board Approved 2020 IRM Rate Order dated April 16, 2020 (EB-2019-0039) and included in Appendix 8-2 of this Exhibit.

HHHI has prepared the proposed 2021 Tariff of Rate and Charges consistent with the current definition of rate classes and the current terms and Conditions of Service that have been maintained in this Application. For the proposed Tariff of Rates and Charges please see Appendix 8-3, which are also contained in the Board's "2021_Tariff_Schedule_and_Bill Impact_Model" excel. This model is filed as "Halton_2021_Tariff_Schedule_Model_".[31]

8.2.13 – CONDITIONS OF SERVICE

HHHI's Conditions of Service is current as of August 2020 and is available on the HHHI website (https://haltonhillshydro.com). Since last filing a Cost of Service, HHHI has revised its Condition of Service in 2018, 2019 and 2020. Changes made to the Conditions of Service were to provide clarification for customers related to various requirements, reflect OEB Customer Service Rules and provincial legislative changes, align with relevant Code revisions and address load displacement requirements. The Conditions of Service contains a change history at the end of the document.

There are no rates or charges listed in the Conditions of Service that are not on HHHI's Tariff of Rates and Charges. The Conditions of Service will be updated as a result of this Application for the proposed Standby/Capacity Reserve Charge. [32]

[31] MFR - Current and proposed Tariff of Rates and Charges filed in the Tariff Schedule/Bill Impacts Model - each change must be explained and supported in the appropriate section of the application
[32] MFR - Explanation of changes to terms and conditions of service if changes affect application of rates

8.2.14 - BILL IMPACT INFORMATION

Section 2.8.13 of the Minimum Filing Requirements state that distributors must provide bill impacts, including the impact for residential customers at the distributor's 10th consumption percentile. In other words, 10% of a distributor's residential customers consume at or less than this level of consumption on a monthly basis. In HHHI's case, the 10% percentile was calculated in the following manner;

- The utility produced a report which included Residential Customer Number and their Monthly Consumptions.
- The report filtered out customers that had less than 12 months of consumption.
- The report was then sorted by lowest to highest consumption.
- The utility then calculates the 10th percentile by taking 10% of the customer count (or number of records in the report).
- The utility then found the record corresponding to this customer's consumption became the "ceiling" for the lowest 10th percentile.
- The 10th percentile was determined to be 305 kWh.[33]

A list of bill impact scenarios is presented over the next several pages, with actual bill impacts following the table. [34]

Bill impacts are provided for typical customers and consumption levels for a range of consumption levels relevant to the service territory. HHHI notes that it does not have any customers with unique consumption and demand patterns where HHHI needs to show a typical impact and provide an explanation.[35] The impacts are shown using the HHHI's EB-2019-0039 current approved and the

[33] MFR - For distributors still in the process of moving to fully fixed residential rates - evaluation of bill impact for residential customer at 10th consumption percentile. Describe methodology for determination of 10th consumption percentile. File mitigation plan for whole residential class if impact >10% for these customers.
[34] MFR - Impact of changes resulting from the as-filed application on representative samples of end-users (i.e. volume, % rate change and revenue). Commodity and regulatory charges held constant
[35] MFR - If applicable, for certain classes where one or more customers have unique consumption and demand patterns, the distributor must show a typical impact and provide an explanation

proposed 2021 Cost of Service distribution rates, including rate riders for the recovery of deferral and variance accounts discussed in Exhibit 9.

The utility's proposed bill impacts are presented in Appendix 8-4 of this Exhibit. [36] [37]

[36] MFR - Completed Tariff Schedule and Bill Impacts Model. Bill impacts must identify existing rates, proposed changes to rates, and detailed bill impacts (including % change in distribution excluding pass through costs - Sub-Total A, % change in distribution - Sub-Total B, % change in delivery - Sub-Total C, and $ change in total bill).
[37] MFR - Rates and charges input in the tariff schedule and Bill Impacts Model rounded to the decimal places as shown on the existing tariff

Table 24 – Bill Impact Scenarios[38]

RATE CLASSES / CATEGORIES (eg: Residential TOU, Residential Retailer)	Units		Sub-Total A $	Sub-Total A %	Sub-Total B $	Sub-Total B %	Sub-Total C $	Sub-Total C %	Total Bill $	Total Bill %
RESIDENTIAL SERVICE CLASSIFICATION - RPP	750	kwh	$7.32	23.1%	$7.14	18.1%	$6.75	13.5%	$5.44	4.5%
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION - RPP	2,000	kwh	$24.94	42.5%	$27.86	35.6%	$26.85	25.9%	$21.70	7.3%
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION - Non-RPP (Other)	500	kw	$1,238.77	51.2%	-$105.93	(3.6%)	-$170.83	(3.1%)	-$870.12	(1.7%)
GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION - Non-RPP (Other)	2,500	kw	$10,707.25	100.7%	$3,149.25	23.8%	$3,149.25	23.8%	$260.86	0.1%
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION - RPP	150	kwh	$0.09	4.2%	$0.30	8.0%	$0.22	4.0%	$0.17	0.8%
SENTINEL LIGHTING SERVICE CLASSIFICATION - RPP	1	kw	-$5.70	(12.8%)	-$6.85	(13.7%)	-$6.94	(12.9%)	-$5.67	(5.0%)
STREET LIGHTING SERVICE CLASSIFICATION - Non-RPP (Other)	251	kw	$1,485.99	12.4%	$544.79	4.5%	$521.75	4.0%	$395.76	1.4%
STANDBY POWER SERVICE CLASSIFICATION -										
RESIDENTIAL SERVICE CLASSIFICATION - RPP	305	kwh	$7.32	23.1%	$7.25	20.6%	$7.09	18.0%	$5.74	8.8%
RESIDENTIAL SERVICE CLASSIFICATION - RPP	1,000	kwh	$7.32	23.1%	$7.08	16.9%	$6.55	11.7%	$5.27	3.5%
RESIDENTIAL SERVICE CLASSIFICATION - RPP	5,000	kwh	$7.32	23.1%	$6.11	7.6%	$3.49	2.3%	$2.58	0.4%
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION - RPP	1,100	kwh	$20.26	42.6%	$21.86	37.3%	$21.31	29.4%	$17.25	9.8%
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION - RPP	5,000	kwh	$40.54	42.4%	$47.83	33.3%	$45.31	21.9%	$36.54	5.2%
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION - RPP	15,000	kwh	$92.54	42.3%	$145.04	56.9%	$137.48	30.9%	$86.01	4.2%
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION - Non-RPP (Other)	60	kw	$198.52	52.0%	$159.50	35.9%	$151.72	20.1%	$93.57	3.6%
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION - Non-RPP (Other)	750	kw	$1,829.82	51.2%	-$232.91	(5.3%)	-$330.26	(4.0%)	-$1,403.75	(1.8%)
GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION - Non-RPP (Other)	2,000	kw	$8,623.70	100.9%	$4,341.30	40.8%	$4,341.30	40.8%	$2,844.55	1.9%
GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION - Non-RPP (Other)	4,000	kw	$16,957.90	100.5%	$2,093.10	9.9%	$2,093.10	9.9%	-$3,818.16	(0.9%)
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION - RPP	160	kw	$434.94	51.5%	$658.46	65.0%	$637.69	34.8%	$556.58	4.3%

Subtotal A: represents the distributor's fixed and variable charges
Subtotal B: represents Subtotal A plus low voltage charges and deferral and variance rate riders
Subtotal C: represents Subtotal B network connection and transmission charge
Total Bill impacts includes Subtotal C and administrative charges, pass-through charges, commodity and taxes.

[38] Bill impacts provided for typical customers and consumption levels. Must provide residential 750 kWh, residential at the lowest 10th percentile and GS<50 2,000 kWh. Bill impacts must be provided for a range of consumption levels relevant to the service territory.

8.2.15 - RATE MITIGATION/FOREGONE REVENUES

Neither a rate plan nor a mitigation plan is required as all of HHHI’s bill impacts for fall below the 10% threshold. [39]

A Rate Harmonization Plan is not required in this case.[40]

[39] MFR - Mitigation plan if total bill increase for any customer class is >10% including: specification of class and magnitude of increase, description of mitigation measures, justification, revised impact calculation. The Tariff Schedule and Bill Impacts Model must reflect any mitigation plan proposed.
[40] MFR - Rate Harmonization Plans, if applicable - including impact analysis

APPENDICES

APPENDIX 8-1: 2021 RETAIL TRANSMISSION SERVICE RATE WORK FORM

APPENDIX 8-2: 2020 TARIFF OF RATES AND CHARGES

APPENDIX 8-3: PROPOSED 2021 TARIFF OF RATES AND CHARGES

APPENDIX 8-4: PROPOSED 2021 BILL IMPACTS

APPENDIX 8-5: REPORT TO THE BOARD – RATE DESIGN FOR COMMERCIAL AND INDUSTRIAL ELECTRICITY CUSTOMERS

APPENDIX 8-1: 2021 RETAIL TRANSMISSION SERVICE RATE WORK FORM

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2021 RTSR Workform for Electricity Distributors

Drop-down lists are shaded blue; Input cells are shaded green.

Utility Name	Halton Hills Hydro Inc.
Assigned EB Number	EB-2020-0026
Name and Title of Contact	David J. Smelsky, Chief Financial Officer
Phone Number	519-853-3700 ext 208
Email Address	dsmelsky@haltonhillshydro.com
Last COS Re-based Year	**2016**

While this model has been provided in Excel format and is required to be filed with the applications, the onus remains on the applicant to ensure the accuracy of the data and the results.

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Rate Class	Rate Description	Unit	Rate	Non-Loss Adjusted Metered kWh	Non-Loss Adjusted Metered kW	Applicable Loss Factor *eg: (1.0325)*	Loss Adjusted Billed kWh
RESIDENTIAL SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kWh	0.0072	202,110,918	0	1.0399	210,175,144
RESIDENTIAL SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kWh	0.0061	202,110,918	0	1.0399	210,175,144
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kWh	0.0063	50,654,668	0	1.0399	52,675,789
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kWh	0.0057	50,654,668	0	1.0399	52,675,789
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kW	2.7559	150,365,345	418,610		0
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	2.3835	150,365,345	418,610		0
GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kW	2.7559	88,636,119	219,091		0
GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	2.3835	88,636,119	219,091		0
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kWh	0.0063	962,029	0	1.0399	1,000,414
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kWh	0.0057	962,029	0	1.0399	1,000,414
SENTINEL LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kW	1.9661	251,879	680		0
SENTINEL LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	1.7158	251,879	680		0
STREET LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kW	1.9570	979,604	3,105		0
STREET LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	1.6809	979,604	3,105		0

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Uniform Transmission Rates	Unit	2019 (Jan. 1-June 30)	2019 (July 1 - Dec. 31)	2020	2021
Rate Description		**Rate**		**Rate**	**Rate**
Network Service Rate	kW	$ 3.71	$ 3.83	$ 3.92	$ 3.92
Line Connection Service Rate	kW	$ 0.94	$ 0.96	$ 0.97	$ 0.97
Transformation Connection Service Rate	kW	$ 2.25	$ 2.30	$ 2.33	$ 2.33

Hydro One Sub-Transmission Rates	Unit	2019 (Jan. 1-June 30)	2019 (July 1 - Dec. 31)	2020	2021
Rate Description		**Rate**		**Rate**	**Rate**
Network Service Rate	kW	$ 3.1942	$ 3.2915	$ 3.3980	$ 3.3980
Line Connection Service Rate	kW	$ 0.7710	$ 0.7877	$ 0.8045	$ 0.8045
Transformation Connection Service Rate	kW	$ 1.7493	$ 1.9755	$ 2.0194	$ 2.0194
Both Line and Transformation Connection Service Rate	kW	$ 2.5203	$ 2.7632	$ 2.8239	$ 2.8239

If needed, add extra host here. (I)	Unit	2019 (Jan. 1-June 30)	2019 (July 1 - Dec. 31)	2020	2021
Rate Description		**Rate**		**Rate**	**Rate**
Network Service Rate	kW				
Line Connection Service Rate	kW				
Transformation Connection Service Rate	kW				
Both Line and Transformation Connection Service Rate	kW	$	-	$ -	$ -

If needed, add extra host here. (II)	Unit	2019 (Jan. 1-June 30)	2019 (July 1 - Dec. 31)	2020	2021
Rate Description		**Rate**		**Rate**	**Rate**
Network Service Rate	kW				
Line Connection Service Rate	kW				
Transformation Connection Service Rate	kW				
Both Line and Transformation Connection Service Rate	kW	$	-	$ -	$ -

		Historical 2019	Current 2020	Forecast 2021
Low Voltage Switchgear Credit (if applicable, enter as a negative value)	$			

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In the green shaded cells, enter billing detail for wholesale transmission for the same reporting period as the billing determinants on Sheet "3. RRR Data". For Hydro One Sub-transmission Rates, if you are charged a combined Line and Transformation Connection rate, please ensure that both the Line Connection and Transformation Connection columns are completed. If any of the Hydro One Sub-transmission rates (column E, I and M) are highlighted in red, please double check the billing data entered in "Units Billed" and "Amount" columns. The highlighted rates do not match the Hydro One Sub-transmission rates approved for that time period. If data has been entered correctly, please provide explanation for the

IESO	Network			Line Connection			Transformation Connection			Total Connection
Month	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January	18,038	$3.7100	66,921	19,339	$0.9400	18,179	19,339	$2.2500	43,513	$ 61,691
February	17,600	$3.7100	65,296	17,683	$0.9400	16,622	17,683	$2.2500	39,787	$ 56,409
March	10,037	$3.7100	37,237	12,186	$0.9400	11,455	12,186	$2.2500	27,419	$ 38,873
April	12,496	$3.7100	46,360	13,352	$0.9400	12,551	13,352	$2.2500	30,042	$ 42,593
May	19,411	$3.7100	72,015	21,333	$0.9400	20,053	12,958	$2.2500	29,156	$ 49,209
June	16,191	$3.7100	60,070	16,786	$0.9400	15,779	16,785	$2.2500	37,767	$ 53,545
July	16,887	$3.8300	64,675	17,824	$0.9600	17,111	17,621	$2.3000	40,529	$ 57,640
August	17,384	$3.8300	66,581	17,399	$0.9600	16,703	17,307	$2.3000	39,806	$ 56,509
September	15,597	$3.8300	59,737	16,047	$0.9600	15,405	15,950	$2.3000	36,685	$ 52,090
October	11,934	$3.8300	45,707	14,040	$0.9600	13,478	13,911	$2.3000	31,995	$ 45,474
November	12,506	$3.8300	47,898	14,622	$0.9600	14,037	14,487	$2.3000	33,320	$ 47,357
December	16,043	$3.8300	61,445	18,645	$0.9600	17,899	16,592	$2.3000	38,162	$ 56,061
Total	184,124	$ 3.77	$ 693,942	199,256	$ 0.95	$ 189,272	188,171	$ 2.28	$ 428,179	$ 617,451

Hydro One	Network			Line Connection			Transformation Connection			Total Connection
Month	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January	73,305	$3.1942	$ 234,149	74,200	$0.7710	$ 57,208	74,200	$1.7493	$ 129,797	$ 187,005
February	67,451	$3.1942	$ 215,452	67,830	$0.7710	$ 52,297	67,830	$1.7493	$ 118,655	$ 170,951
March	66,595	$3.1942	$ 212,718	68,233	$0.7710	$ 52,608	68,233	$1.7493	$ 119,360	$ 171,968
April	57,081	$3.1942	$ 182,327	59,965	$0.7710	$ 46,233	59,965	$1.7493	$ 104,897	$ 151,130
May	57,945	$3.1942	$ 185,088	59,933	$0.7710	$ 46,211	59,936	$1.7493	$ 104,846	$ 151,056
June	76,138	$3.1942	$ 243,201	77,012	$0.7710	$ 59,376	77,012	$1.7493	$ 134,717	$ 194,094
July	82,920	$3.2915	$ 272,931	83,861	$0.7877	$ 66,057	83,861	$1.9755	$ 165,667	$ 231,724
August	81,130	$3.2915	$ 267,038	81,332	$0.7877	$ 64,065	81,332	$1.9755	$ 160,671	$ 224,736
September	70,073	$3.2915	$ 230,645	72,991	$0.7877	$ 57,495	72,991	$1.9755	$ 144,194	$ 201,690
October	61,231	$3.2915	$ 201,543	62,490	$0.7877	$ 49,223	62,490	$1.9755	$ 123,449	$ 172,672
November	65,309	$3.2915	$ 214,965	66,025	$0.7877	$ 52,008	66,025	$1.9755	$ 130,433	$ 182,441
December	70,517	$3.2915	$ 232,108	71,753	$0.7877	$ 56,520	71,753	$1.9755	$ 141,748	$ 198,267
Total	829,695	$ 3.24	$ 2,692,165	845,624	$ 0.78	$ 659,301	845,627	$ 1.87	$ 1,578,434	$ 2,237,735

Add Extra Host Here (I) (if needed)	Network			Line Connection			Transformation Connection			Total Connection
Month	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January		$0.0000			$0.0000			$0.0000		$ -
February		$0.0000			$0.0000			$0.0000		$ -
March		$0.0000			$0.0000			$0.0000		$ -
April		$0.0000			$0.0000			$0.0000		$ -
May		$0.0000			$0.0000			$0.0000		$ -
June		$0.0000			$0.0000			$0.0000		$ -
July		$0.0000			$0.0000			$0.0000		$ -
August		$0.0000			$0.0000			$0.0000		$ -
September		$0.0000			$0.0000			$0.0000		$ -
October		$0.0000			$0.0000			$0.0000		$ -
November		$0.0000			$0.0000			$0.0000		$ -
December		$0.0000			$0.0000			$0.0000		$ -
Total	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -

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In the green shaded cells, enter billing detail for wholesale transmission for the same reporting period as the billing determinants on Sheet "3. RRR Data". For Hydro One Sub-transmission Rates, if you are charged a combined Line and Transformation Connection rate, please ensure that both the Line Connection and Transformation Connection columns are completed. If any of the Hydro One Sub-transmission rates (column E, I and M) are highlighted in red, please double check the billing data entered in "Units Billed" and "Amount" columns. The highlighted rates do not match the Hydro One Sub-transmission rates approved for that time period. If data has been entered correctly, please provide explanation for the

Add Extra Host Here (II) (if needed)	Network			Line Connection			Transformation Connection			Total Connection
Month	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January		$0.0000			$0.0000			$0.0000		$ -
February		$0.0000			$0.0000			$0.0000		$ -
March		$0.0000			$0.0000			$0.0000		$ -
April		$0.0000			$0.0000			$0.0000		$ -
May		$0.0000			$0.0000			$0.0000		$ -
June		$0.0000			$0.0000			$0.0000		$ -
July		$0.0000			$0.0000			$0.0000		$ -
August		$0.0000			$0.0000			$0.0000		$ -
September		$0.0000			$0.0000			$0.0000		$ -
October		$0.0000			$0.0000			$0.0000		$ -
November		$0.0000			$0.0000			$0.0000		$ -
December		$0.0000			$0.0000			$0.0000		$ -
Total	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -

Total	Network			Line Connection			Transformation Connection			Total Connection
Month	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January	91,343	$3.2961	$ 301,070	93,539	$0.8059	$ 75,387	93,539	$1.8528	$ 173,310	$ 248,697
February	85,051	$3.3009	$ 280,748	85,513	$0.8059	$ 68,919	85,513	$1.8528	$ 158,441	$ 227,360
March	76,632	$3.2618	$ 249,955	80,419	$0.7966	$ 64,063	80,419	$1.8252	$ 146,779	$ 210,841
April	69,577	$3.2868	$ 228,687	73,317	$0.8018	$ 58,784	73,317	$1.8405	$ 134,939	$ 193,723
May	77,356	$3.3236	$ 257,103	81,266	$0.8154	$ 66,264	72,894	$1.8383	$ 134,001	$ 200,265
June	92,330	$3.2847	$ 303,272	93,798	$0.8012	$ 75,155	93,797	$1.8389	$ 172,484	$ 247,639
July	99,806	$3.3826	$ 337,606	101,685	$0.8179	$ 83,168	101,482	$2.0318	$ 206,196	$ 289,364
August	98,514	$3.3865	$ 333,619	98,731	$0.8181	$ 80,768	98,639	$2.0324	$ 200,477	$ 281,245
September	85,670	$3.3895	$ 290,382	89,038	$0.8188	$ 72,900	88,941	$2.0337	$ 180,879	$ 253,780
October	73,165	$3.3793	$ 247,250	76,530	$0.8193	$ 62,702	76,401	$2.0346	$ 155,444	$ 218,145
November	77,815	$3.3780	$ 262,863	80,647	$0.8189	$ 66,045	80,512	$2.0339	$ 163,753	$ 229,799
December	86,560	$3.3913	$ 293,552	90,398	$0.8232	$ 74,419	88,345	$2.0364	$ 179,909	$ 254,328
Total	1,013,819	$ 3.34	$ 3,386,107	1,044,880	$ 0.81	$ 848,573	1,033,799	$ 1.94	$ 2,006,613	$ 2,855,186

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The purpose of this sheet is to calculate the expected billing when current 2020 Uniform Transmission Rates and Hydro One Sub-transmission Rates are applied against historical 2019 transmission units.

IESO	Network			Line Connection			Transformation Connection			Total Connection
Month	**Units Billed**	**Rate**	**Amount**	**Units Billed**	**Rate**	**Amount**	**Units Billed**	**Rate**	**Amount**	**Amount**
January	18,038	$ 3.9200	$ 70,709	19,339	$ 0.9700	$ 18,759	19,339	$ 2.3300	$ 45,060	$ 63,819
February	17,600	$ 3.9200	$ 68,992	17,683	$ 0.9700	$ 17,153	17,683	$ 2.3300	$ 41,201	$ 58,354
March	10,037	$ 3.9200	$ 39,345	12,186	$ 0.9700	$ 11,820	12,186	$ 2.3300	$ 28,393	$ 40,214
April	12,496	$ 3.9200	$ 48,984	13,352	$ 0.9700	$ 12,951	13,352	$ 2.3300	$ 31,110	$ 44,062
May	19,411	$ 3.9200	$ 76,091	21,333	$ 0.9700	$ 20,693	12,958	$ 2.3300	$ 30,192	$ 50,885
June	16,191	$ 3.9200	$ 63,471	16,786	$ 0.9700	$ 16,282	16,785	$ 2.3300	$ 39,109	$ 55,392
July	16,887	$ 3.9200	$ 66,195	17,824	$ 0.9700	$ 17,289	17,621	$ 2.3300	$ 41,057	$ 58,347
August	17,384	$ 3.9200	$ 68,145	17,399	$ 0.9700	$ 16,877	17,307	$ 2.3300	$ 40,325	$ 57,202
September	15,597	$ 3.9200	$ 61,140	16,047	$ 0.9700	$ 15,566	15,950	$ 2.3300	$ 37,164	$ 52,729
October	11,934	$ 3.9200	$ 46,781	14,040	$ 0.9700	$ 13,619	13,911	$ 2.3300	$ 32,413	$ 46,031
November	12,506	$ 3.9200	$ 49,024	14,622	$ 0.9700	$ 14,183	14,487	$ 2.3300	$ 33,755	$ 47,938
December	16,043	$ 3.9200	$ 62,889	18,645	$ 0.9700	$ 18,086	16,592	$ 2.3300	$ 38,659	$ 56,745
Total	184,124	$ 3.92	$ 721,766	199,256	$ 0.97	$ 193,278	188,171	$ 2.33	$ 438,439	$ 631,717

Hydro One	Network			Line Connection			Transformation Connection			Total Connection
Month	**Units Billed**	**Rate**	**Amount**	**Units Billed**	**Rate**	**Amount**	**Units Billed**	**Rate**	**Amount**	**Amount**
January	73,305	$ 3.3980	$ 249,089	74,200	$ 0.8045	$ 59,694	74,200	$ 2.0194	$ 149,839	$ 209,532
February	67,451	$ 3.3980	$ 229,198	67,830	$ 0.8045	$ 54,569	67,830	$ 2.0194	$ 136,975	$ 191,544
March	66,595	$ 3.3980	$ 226,290	68,233	$ 0.8045	$ 54,894	68,233	$ 2.0194	$ 137,790	$ 192,684
April	57,081	$ 3.3980	$ 193,960	59,965	$ 0.8045	$ 48,242	59,965	$ 2.0194	$ 121,093	$ 169,335
May	57,945	$ 3.3980	$ 196,897	59,933	$ 0.8045	$ 48,216	59,936	$ 2.0194	$ 121,035	$ 169,251
June	76,138	$ 3.3980	$ 258,718	77,012	$ 0.8045	$ 61,956	77,012	$ 2.0194	$ 155,518	$ 217,475
July	82,920	$ 3.3980	$ 281,761	83,861	$ 0.8045	$ 67,466	83,861	$ 2.0194	$ 169,349	$ 236,815
August	81,130	$ 3.3980	$ 275,679	81,332	$ 0.8045	$ 65,431	81,332	$ 2.0194	$ 164,241	$ 229,673
September	70,073	$ 3.3980	$ 238,108	72,991	$ 0.8045	$ 58,722	72,991	$ 2.0194	$ 147,399	$ 206,120
October	61,231	$ 3.3980	$ 208,064	62,490	$ 0.8045	$ 50,273	62,490	$ 2.0194	$ 126,192	$ 176,465
November	65,309	$ 3.3980	$ 221,921	66,025	$ 0.8045	$ 53,117	66,025	$ 2.0194	$ 133,332	$ 186,449
December	70,517	$ 3.3980	$ 239,618	71,753	$ 0.8045	$ 57,725	71,753	$ 2.0194	$ 144,898	$ 202,623
Total	829,695	$ 3.40	$ 2,819,303	845,624	$ 0.80	$ 680,305	845,627	$ 2.02	$ 1,707,660	$ 2,387,965

Add Extra Host Here (I)	Network			Line Connection			Transformation Connection			Total Connection
Month	**Units Billed**	**Rate**	**Amount**	**Units Billed**	**Rate**	**Amount**	**Units Billed**	**Rate**	**Amount**	**Amount**
January	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
February	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
March	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
April	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
May	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
June	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
July	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
August	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
September	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
October	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
November	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
December	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
Total	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -

Add Extra Host Here (II)	Network			Line Connection			Transformation Connection			Total Connection
Month	**Units Billed**	**Rate**	**Amount**	**Units Billed**	**Rate**	**Amount**	**Units Billed**	**Rate**	**Amount**	**Amount**
January	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
February	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
March	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
April	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
May	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
June	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
July	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
August	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
September	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
October	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
November	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
December	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
Total	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -

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2021 RTSR Workform for Electricity Distributors

The purpose of this sheet is to calculate the expected billing when current 2020 Uniform Transmission Rates and Hydro One Sub-transmission Rates are applied against historical 2019 transmission units.

Total	Network			Line Connection			Transformation Connection			Total Connection
Month	**Units Billed**	**Rate**	**Amount**	**Units Billed**	**Rate**	**Amount**	**Units Billed**	**Rate**	**Amount**	**Amount**
January	91,343	$3.50	$ 319,798	93,539	$0.84	$ 78,452	93,539	$2.08	$ 194,899	$ 273,351
February	85,051	$3.51	$ 298,190	85,513	$0.84	$ 71,722	85,513	$2.08	$ 178,177	$ 249,898
March	76,632	$3.47	$ 265,635	80,419	$0.83	$ 66,714	80,419	$2.07	$ 166,183	$ 232,897
April	69,577	$3.49	$ 242,944	73,317	$0.83	$ 61,193	73,317	$2.08	$ 152,203	$ 213,397
May	77,356	$3.53	$ 272,989	81,266	$0.85	$ 68,909	72,894	$2.07	$ 151,227	$ 220,136
June	92,330	$3.49	$ 322,189	93,798	$0.83	$ 78,238	93,797	$2.07	$ 194,628	$ 272,866
July	99,806	$3.49	$ 347,957	101,685	$0.83	$ 84,755	101,482	$2.07	$ 210,406	$ 295,161
August	98,514	$3.49	$ 343,824	98,731	$0.83	$ 82,308	98,639	$2.07	$ 204,567	$ 286,875
September	85,670	$3.49	$ 299,248	89,038	$0.83	$ 74,287	88,941	$2.08	$ 184,562	$ 258,849
October	73,165	$3.48	$ 254,845	76,530	$0.83	$ 63,892	76,401	$2.08	$ 158,605	$ 222,496
November	77,815	$3.48	$ 270,944	80,647	$0.83	$ 67,301	80,512	$2.08	$ 167,086	$ 234,387
December	86,560	$3.49	$ 302,506	90,398	$0.84	$ 75,811	88,345	$2.08	$ 183,557	$ 259,368
Total	1,013,819	$ 3.49	$ 3,541,069	1,044,880	$ 0.84	$ 873,583	1,033,799	$ 2.08	$ 2,146,099	$ 3,019,682

Ontario Energy Board

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2021 RTSR Workform for Electricity Distributors

The purpose of this sheet is to calculate the expected billing when forecasted 2021 Uniform Transmission Rates and Hydro One Sub-transmission Rates are applied against historical 2019 transmission units.

IESO	Network			Line Connection			Transformation Connection			Total Connection
Month	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January	18,038	$ 3.9200	$ 70,709	19,339	$ 0.9700	$ 18,759	19,339	$ 2.3300	$ 45,060	$ 63,819
February	17,600	$ 3.9200	$ 68,992	17,683	$ 0.9700	$ 17,153	17,683	$ 2.3300	$ 41,201	$ 58,354
March	10,037	$ 3.9200	$ 39,345	12,186	$ 0.9700	$ 11,820	12,186	$ 2.3300	$ 28,393	$ 40,214
April	12,496	$ 3.9200	$ 48,984	13,352	$ 0.9700	$ 12,951	13,352	$ 2.3300	$ 31,110	$ 44,062
May	19,411	$ 3.9200	$ 76,091	21,333	$ 0.9700	$ 20,693	12,958	$ 2.3300	$ 30,192	$ 50,885
June	16,191	$ 3.9200	$ 63,471	16,786	$ 0.9700	$ 16,282	16,785	$ 2.3300	$ 39,109	$ 55,392
July	16,887	$ 3.9200	$ 66,195	17,824	$ 0.9700	$ 17,289	17,621	$ 2.3300	$ 41,057	$ 58,347
August	17,384	$ 3.9200	$ 68,145	17,399	$ 0.9700	$ 16,877	17,307	$ 2.3300	$ 40,325	$ 57,202
September	15,597	$ 3.9200	$ 61,140	16,047	$ 0.9700	$ 15,566	15,950	$ 2.3300	$ 37,164	$ 52,729
October	11,934	$ 3.9200	$ 46,781	14,040	$ 0.9700	$ 13,619	13,911	$ 2.3300	$ 32,413	$ 46,031
November	12,506	$ 3.9200	$ 49,024	14,622	$ 0.9700	$ 14,183	14,487	$ 2.3300	$ 33,755	$ 47,938
December	16,043	$ 3.9200	$ 62,889	18,645	$ 0.9700	$ 18,086	16,592	$ 2.3300	$ 38,659	$ 56,745
Total	184,124	$ 3.92	$ 721,766	199,256	$ 0.97	$ 193,278	188,171	$ 2.33	$ 438,439	$ 631,717

Hydro One	Network			Line Connection			Transformation Connection			Total Connection
Month	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January	73,305	$ 3.3980	$ 249,089	74,200	$ 0.8045	$ 59,694	74,200	$ 2.0194	$ 149,839	$ 209,532
February	67,451	$ 3.3980	$ 229,198	67,830	$ 0.8045	$ 54,569	67,830	$ 2.0194	$ 136,975	$ 191,544
March	66,595	$ 3.3980	$ 226,290	68,233	$ 0.8045	$ 54,894	68,233	$ 2.0194	$ 137,790	$ 192,684
April	57,081	$ 3.3980	$ 193,960	59,965	$ 0.8045	$ 48,242	59,965	$ 2.0194	$ 121,093	$ 169,335
May	57,945	$ 3.3980	$ 196,897	59,933	$ 0.8045	$ 48,216	59,936	$ 2.0194	$ 121,035	$ 169,251
June	76,138	$ 3.3980	$ 258,718	77,012	$ 0.8045	$ 61,956	77,012	$ 2.0194	$ 155,518	$ 217,475
July	82,920	$ 3.3980	$ 281,761	83,861	$ 0.8045	$ 67,466	83,861	$ 2.0194	$ 169,349	$ 236,815
August	81,130	$ 3.3980	$ 275,679	81,332	$ 0.8045	$ 65,431	81,332	$ 2.0194	$ 164,241	$ 229,673
September	70,073	$ 3.3980	$ 238,108	72,991	$ 0.8045	$ 58,722	72,991	$ 2.0194	$ 147,399	$ 206,120
October	61,231	$ 3.3980	$ 208,064	62,490	$ 0.8045	$ 50,273	62,490	$ 2.0194	$ 126,192	$ 176,465
November	65,309	$ 3.3980	$ 221,921	66,025	$ 0.8045	$ 53,117	66,025	$ 2.0194	$ 133,332	$ 186,449
December	70,517	$ 3.3980	$ 239,618	71,753	$ 0.8045	$ 57,725	71,753	$ 2.0194	$ 144,898	$ 202,623
Total	829,695	$ 3.40	$ 2,819,303	845,624	$ 0.80	$ 680,305	845,627	$ 2.02	$ 1,707,660	$ 2,387,965

Add Extra Host Here (I)	Network			Line Connection			Transformation Connection			Total Connection
Month	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
February	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
March	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
April	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
May	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
June	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
July	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
August	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
September	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
October	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
November	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
December	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
Total	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -

Add Extra Host Here (II)	Network			Line Connection			Transformation Connection			Total Connection
Month	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
February	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
March	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
April	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
May	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
June	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
July	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
August	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
September	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
October	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
November	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
December	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -
Total	-	$ -	$ -	-	$ -	$ -	-	$ -	$ -	$ -

Ontario Energy Board

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2021 RTSR Workform for Electricity Distributors

The purpose of this sheet is to calculate the expected billing when forecasted 2021 Uniform Transmission Rates and Hydro One Sub-transmission Rates are applied against historical 2019 transmission units.

Total	Network			Line Connection			Transformation Connection			Total Connection
Month	**Units Billed**	**Rate**	**Amount**	**Units Billed**	**Rate**	**Amount**	**Units Billed**	**Rate**	**Amount**	**Amount**
January	91,343	$ 3.50	319,798	93,539	$ 0.84	78,452	93,539	$ 2.08	194,899	$ 273,351
February	85,051	$ 3.51	298,190	85,513	$ 0.84	71,722	85,513	$ 2.08	178,177	$ 249,898
March	76,632	$ 3.47	265,635	80,419	$ 0.83	66,714	80,419	$ 2.07	166,183	$ 232,897
April	69,577	$ 3.49	242,944	73,317	$ 0.83	61,193	73,317	$ 2.08	152,203	$ 213,397
May	77,356	$ 3.53	272,989	81,266	$ 0.85	68,909	72,894	$ 2.07	151,227	$ 220,136
June	92,330	$ 3.49	322,189	93,798	$ 0.83	78,238	93,797	$ 2.07	194,628	$ 272,866
July	99,806	$ 3.49	347,957	101,685	$ 0.83	84,755	101,482	$ 2.07	210,406	$ 295,161
August	98,514	$ 3.49	343,824	98,731	$ 0.83	82,308	98,639	$ 2.07	204,567	$ 286,875
September	85,670	$ 3.49	299,248	89,038	$ 0.83	74,287	88,941	$ 2.08	184,562	$ 258,849
October	73,165	$ 3.48	254,845	76,530	$ 0.83	63,892	76,401	$ 2.08	158,605	$ 222,496
November	77,815	$ 3.48	270,944	80,647	$ 0.83	67,301	80,512	$ 2.08	167,086	$ 234,387
December	86,560	$ 3.49	302,506	90,398	$ 0.84	75,811	88,345	$ 2.08	183,557	$ 259,368
Total	1,013,819	$ 3.49	$ 3,541,069	1,044,880	$ 0.84	$ 873,583	1,033,799	$ 2.08	$ 2,146,099	$ 3,019,682

Low Voltage Switchgear Credit (if applicable)	$ -
Total including deduction for Low Voltage Switchgear Credit	$ 3,019,682

2021 RTSR Workform for Electricity Distributors

The purpose of this sheet is to re-align the current RTS Network Rates to recover current wholesale network costs.

Rate Class	Rate Description	Unit	Current RTSR-Network	Loss Adjusted Billed kWh	Billed kW	Billed Amount	Billed Amount %	Current Wholesale Billing	Adjusted RTSR Network
RESIDENTIAL SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kWh	0.0072	210,175,144	0	1,513,261	41.8%	1,481,790	0.0071
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kWh	0.0063	52,675,789	0	331,857	9.2%	324,956	0.0062
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kW	2.7559	0	418,610	1,153,647	31.9%	1,129,655	2.6986
GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kW	2.7559	0	219,091	603,793	16.7%	591,236	2.6986
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kWh	0.0063	1,000,414	0	6,303	0.2%	6,172	0.0062
SENTINEL LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kW	1.9661	0	680	1,337	0.0%	1,309	1.9252
STREET LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kW	1.9570	0	3,105	6,076	0.2%	5,950	1.9163

The purpose of this table is to re-align the current RTS Connection Rates to recover current wholesale connection costs.

Rate Class	Rate Description	Unit	Current RTSR-Connection	Loss Adjusted Billed kWh	Billed kW	Billed Amount	Billed Amount %	Current Wholesale Billing	Adjusted RTSR-Connection
RESIDENTIAL SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kWh	0.0061	210,175,144	0	1,282,068	41.2%	1,243,089	0.0059
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kWh	0.0057	52,675,789	0	300,252	9.6%	291,123	0.0055
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	2.3835	0	418,610	997,757	32.0%	967,422	2.3110
GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	2.3835	0	219,091	522,203	16.8%	506,327	2.3110
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kWh	0.0057	1,000,414	0	5,702	0.2%	5,529	0.0055
SENTINEL LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	1.7158	0	680	1,167	0.0%	1,131	1.6636
STREET LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	1.6809	0	3,105	5,219	0.2%	5,061	1.6298

The purpose of this table is to update the re-aligned RTS Network Rates to recover future wholesale network costs.

Rate Class	Rate Description	Unit	Adjusted RTSR-Network	Loss Adjusted Billed kWh	Billed kW	Billed Amount	Billed Amount %	Forecast Wholesale Billing	Proposed RTSR-Network
RESIDENTIAL SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kWh	0.0071	210,175,144	0	1,481,790	41.8%	1,481,790	**0.0071**
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kWh	0.0062	52,675,789	0	324,956	9.2%	324,956	**0.0062**
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kW	2.6986	0	418,610	1,129,655	31.9%	1,129,655	**2.6986**
GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kW	2.6986	0	219,091	591,236	16.7%	591,236	**2.6986**
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kWh	0.0062	1,000,414	0	6,172	0.2%	6,172	**0.0062**
SENTINEL LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kW	1.9252	0	680	1,309	0.0%	1,309	**1.9252**
STREET LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Network Service Rate	$/kW	1.9163	0	3,105	5,950	0.2%	5,950	**1.9163**

The purpose of this table is to update the re-aligned RTS Connection Rates to recover future wholesale connection costs.

Rate Class	Rate Description	Unit	Adjusted RTSR-Connection	Loss Adjusted Billed kWh	Billed kW	Billed Amount	Billed Amount %	Forecast Wholesale Billing	Proposed RTSR-Connection
RESIDENTIAL SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kWh	0.0059	210,175,144	0	1,243,089	41.2%	1,243,089	**0.0059**
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kWh	0.0055	52,675,789	0	291,123	9.6%	291,123	**0.0055**
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	2.3110	0	418,610	967,422	32.0%	967,422	**2.3110**
GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	2.3110	0	219,091	506,327	16.8%	506,327	**2.3110**
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kWh	0.0055	1,000,414	0	5,529	0.2%	5,529	**0.0055**
SENTINEL LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	1.6636	0	680	1,131	0.0%	1,131	**1.6636**
STREET LIGHTING SERVICE CLASSIFICATION	Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	1.6298	0	3,105	5,061	0.2%	5,061	**1.6298**

APPENDIX 8-2: 2020 TARIFF OF RATES AND CHARGES

Schedule A

To Decision and Rate Order

Tariff of Rates and Charges

OEB File No: EB-2019-0039

DATED: April 16, 2020

Halton Hills Hydro Inc.
TARIFF OF RATES AND CHARGES
Effective and Implementation Date May 1, 2020
This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2019-0039

RESIDENTIAL SERVICE CLASSIFICATION

This classification applies to an account taking electricity at 750 volts or less where the electricity is used exclusively in a separate metered living accommodation. Customers shall be residing in single-dwelling units that consist of a detached house or one unit of a semi-detached, duplex, triplex or quadruplex house, with a residential zoning. Separately metered dwellings within a town house complex or apartment building also qualify as residential customers. The customer will be supplied at one service entrance only. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES - Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge	$	27.34
Rate Rider for Recovery of Incremental Capital (2019) - in effect until the effective date of the next cost of service based Rate Order	$	4.31
Smart Metering Entity Charge - effective until December 31, 2022	$	0.57
Low Voltage Service Rate	$/kWh	0.0026
Retail Transmission Rate - Network Service Rate	$/kWh	0.0072
Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kWh	0.0061

MONTHLY RATES AND CHARGES - Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR	$/kWh	0.0030
Capacity Based Recovery (CBR) - Applicable for Class B Customers	$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	$/kWh	0.0005
Standard Supply Service - Administrative Charge (if applicable)	$	0.25

Halton Hills Hydro Inc.

TARIFF OF RATES AND CHARGES

Effective and Implementation Date May 1, 2020

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2019-0039

GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION

This classification applies to a non-residential account taking electricity at 750 volts or less whose average monthly maximum demand is less than, or is forecast to be less than, 50 kW. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES - Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge	$	29.38
Rate Rider for Recovery of Incremental Capital (2019) - in effect until the effective date of the next cost of service based Rate Order	$	4.66
Smart Metering Entity Charge - effective until December 31, 2022	$	0.57
Distribution Volumetric Rate	$/kWh	0.0106
Low Voltage Service Rate	$/kWh	0.0024
Rate Rider for Recovery of Incremental Capital (2019) - in effect until the effective date of the next cost of service based Rate Order	$/kWh	0.0017
Retail Transmission Rate - Network Service Rate	$/kWh	0.0063
Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kWh	0.0057

MONTHLY RATES AND CHARGES - Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR	$/kWh	0.0030
Capacity Based Recovery (CBR) - Applicable for Class B Customers	$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	$/kWh	0.0005
Standard Supply Service - Administrative Charge (if applicable)	$	0.25

Halton Hills Hydro Inc.
TARIFF OF RATES AND CHARGES
Effective and Implementation Date May 1, 2020
This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2019-0039

GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION

This classification applies to a non-residential customer with an average peak demand equal to or greater than 50 kW over the past twelve months, or is forecast to be equal to or greater than 50 kW, but less than 1,000 kW. For a new customer without prior billing history, the peak demand will be based on 90% of the proposed capacity or installed transformer. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES - Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

If included in the following listing of monthly rates and charges, the rate rider for the disposition of WMS - Sub-account CBR Class B is not applicable to wholesale market participants (WMP), customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In addition, this rate rider is applicable to all new Class B customers.

If included in the following listing of monthly rates and charges, the rate rider for the disposition of Global Adjustment is only applicable to non-RPP Class B customers. It is not applicable to WMP, customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In addition, this rate rider is applicable to all new non-RPP Class B customers.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

Billing demands are established at the greater of 100% of the kW, or 90% of the kVA amounts with the exception of the Retail Transmission Rate-Network Service Rate, which is billed on a $/kW basis only.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge	$	89.89
Rate Rider for Recovery of Incremental Capital (2019) - in effect until the effective date of the next cost of service based Rate Order	$	14.28
Distribution Volumetric Rate	$/kW	3.9942
Low Voltage Service Rate	$/kW	1.0483
Rate Rider for Recovery of Incremental Capital (2019) - in effect until the effective date of the next cost of service based Rate Order	$/kW	0.6343
Retail Transmission Rate - Network Service Rate	$/kW	2.7559
Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	2.3835

Halton Hills Hydro Inc.
TARIFF OF RATES AND CHARGES
Effective and Implementation Date May 1, 2020
This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2019-0039

MONTHLY RATES AND CHARGES - Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR	$/kWh	0.0030
Capacity Based Recovery (CBR) - Applicable for Class B Customers	$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	$/kWh	0.0005
Standard Supply Service - Administrative Charge (if applicable)	$	0.25

Halton Hills Hydro Inc.
TARIFF OF RATES AND CHARGES
Effective and Implementation Date May 1, 2020
This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2019-0039

GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION

This classification applies to a non-residential customer with an average peak demand equal to or greater than 1,000 kW over the past twelve months, or is forecast to be equal to or greater than 1,000 kW, but less than 5,000 kW. For a new customer without prior billing history, the peak demand will be based on 90% of the installed transformer. Class A and Class B consumers are defined in accordance with O.Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES - Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

If included in the following listing of monthly rates and charges, the rate rider for the disposition of WMS - Sub-account CBR Class B is not applicable to wholesale market participants (WMP), customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In addition, this rate rider is applicable to all new Class B customers.

If included in the following listing of monthly rates and charges, the rate rider for the disposition of Global Adjustment is only applicable to non-RPP Class B customers. It is not applicable to WMP, customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In addition, this rate rider is applicable to all new non-RPP Class B customers.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

Billing demands are established at the greater of 100% of the kW, or 90% of the kVA amounts with the exception of the Retail Transmission Rate-Network Service Rate, which is billed on a $/kW basis only.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge	$	192.10
Rate Rider for Recovery of Incremental Capital (2019) - in effect until the effective date of the next cost of service based Rate Order	$	30.51
Distribution Volumetric Rate	$/kW	3.5931
Low Voltage Service Rate	$/kW	1.0483
Rate Rider for Recovery of Incremental Capital (2019) - in effect until the effective date of the next cost of service based Rate Order	$/kW	0.5706
Retail Transmission Rate - Network Service Rate	$/kW	2.7559
Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	2.3835

Halton Hills Hydro Inc.
TARIFF OF RATES AND CHARGES
Effective and Implementation Date May 1, 2020
This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2019-0039

MONTHLY RATES AND CHARGES - Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR	$/kWh	0.0030
Capacity Based Recovery (CBR) - Applicable for Class B Customers	$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	$/kWh	0.0005
Standard Supply Service - Administrative Charge (if applicable)	$	0.25

Halton Hills Hydro Inc.
TARIFF OF RATES AND CHARGES
Effective and Implementation Date May 1, 2020
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EB-2019-0039

UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION

This classification applies to an account taking electricity at 750 volts or less whose average monthly maximum demand is less than, or is forecast to be less than, 50 kW and the consumption is unmetered. Such connections include cable TV power packs, bus shelters, telephone booths, traffic lights, pedestrian X-Walk signals/beacons, railway crossings, etc. The level of the consumption will be agreed to by the distributor and the customer, based on detailed manufacturer information/documentation with regard to electrical consumption of the unmetered load or periodic monitoring of actual consumption. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES - Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge (per connection)	$	8.25
Rate Rider for Recovery of Incremental Capital (2019) - in effect until the effective date of the next cost of service based Rate Order	$	1.31
Distribution Volumetric Rate	$/kWh	0.0056
Low Voltage Service Rate	$/kWh	0.0024
Rate Rider for Recovery of Incremental Capital (2019) - in effect until the effective date of the next cost of service based Rate Order	$/kWh	0.0009
Retail Transmission Rate - Network Service Rate	$/kWh	0.0063
Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kWh	0.0057

MONTHLY RATES AND CHARGES - Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR	$/kWh	0.0030
Capacity Based Recovery (CBR) - Applicable for Class B Customers	$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	$/kWh	0.0005
Standard Supply Service - Administrative Charge (if applicable)	$	0.25

Halton Hills Hydro Inc.
TARIFF OF RATES AND CHARGES
Effective and Implementation Date May 1, 2020
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EB-2019-0039

SENTINEL LIGHTING SERVICE CLASSIFICATION

This classification refers to accounts that are an unmetered lighting load supplied to a sentinel light. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES - Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge (per connection)	$	9.80
Rate Rider for Recovery of Incremental Capital (2019) - in effect until the effective date of the next cost of service based Rate Order	$	1.56
Distribution Volumetric Rate	$/kW	37.1725
Low Voltage Service Rate	$/kW	0.7547
Rate Rider for Recovery of Incremental Capital (2019) - in effect until the effective date of the next cost of service based Rate Order	$/kW	5.9034
Retail Transmission Rate - Network Service Rate	$/kW	1.9661
Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	1.7158

MONTHLY RATES AND CHARGES - Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR	$/kWh	0.0030
Capacity Based Recovery (CBR) - Applicable for Class B Customers	$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	$/kWh	0.0005
Standard Supply Service - Administrative Charge (if applicable)	$	0.25

Halton Hills Hydro Inc.

TARIFF OF RATES AND CHARGES

Effective and Implementation Date May 1, 2020

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2019-0039

STREET LIGHTING SERVICE CLASSIFICATION

All services supplied to street lighting equipment owned by or operated for the Municipality, the Region or the Province of Ontario shall be classified as Street Lighting Service. Street Lighting plant, facilities, or equipment owned by the customer are subject to the Electrical Safety Authority (ESA) requirements and Halton Hills Hydro specifications. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES - Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge (per connection)	$	2.38
Rate Rider for Recovery of Incremental Capital (2019) - in effect until the effective date of the next cost of service based Rate Order	$	0.38
Distribution Volumetric Rate	$/kW	1.6071
Low Voltage Service Rate	$/kW	0.7393
Rate Rider for Recovery of Incremental Capital (2019) - in effect until the effective date of the next cost of service based Rate Order	$/kW	0.2552
Retail Transmission Rate - Network Service Rate	$/kW	1.9570
Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	1.6809

MONTHLY RATES AND CHARGES - Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR	$/kWh	0.0030
Capacity Based Recovery (CBR) - Applicable for Class B Customers	$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	$/kWh	0.0005
Standard Supply Service - Administrative Charge (if applicable)	$	0.25

Halton Hills Hydro Inc.

TARIFF OF RATES AND CHARGES

Effective and Implementation Date May 1, 2020

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EB-2019-0039

microFIT SERVICE CLASSIFICATION

This classification applies to an electricity generation facility contracted under the Independent Electricity System Operator's microFIT program and connected to the distributor's distribution system. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge	$	4.55

ALLOWANCES

Transformer Allowance for Ownership - per kW of billing demand/month	$/kW	(0.60)
Primary Metering Allowance for Transformer Losses - applied to measured demand & energy	%	(1.00)

Halton Hills Hydro Inc.
TARIFF OF RATES AND CHARGES
Effective and Implementation Date May 1, 2020
This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2019-0039

SPECIFIC SERVICE CHARGES

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

Customer Administration

Arrears certificate	$	15.00
Statement of account	$	15.00
Pulling post dated cheques	$	15.00
Duplicate invoices for previous billing	$	15.00
Request for other billing information	$	15.00
Easement letter	$	15.00
Income tax letter	$	15.00
Notification charge	$	15.00
Account history	$	15.00
Credit reference/credit check (plus credit agency costs)	$	15.00
Returned cheque (plus bank charges)	$	15.00
Charge to certify cheque	$	15.00
Legal letter charge	$	15.00
Account set up charge/change of occupancy charge (plus credit agency costs if applicable)	$	30.00
Special meter reads	$	30.00
Meter dispute charge plus Measurement Canada fees (if meter found correct)	$	30.00

Non-Payment of Account

Late Payment - per month (effective annual rate 19.56% per annum or 0.04896% compounded daily rate)	%	1.50
Reconnection at meter - during regular hours	$	65.00
Reconnection at meter - after regular hours	$	185.00
Reconnection at pole - during regular hours	$	185.00
Reconnection at pole - after regular hours	$	415.00

Other

Service call - customer owned equipment	$	30.00
Service call - after regular hours	$	165.00
Temporary service install & remove - overhead - no transformer	$	500.00
Temporary service install & remove - underground - no transformer	$	300.00
Temporary service install & remove - overhead - with transformer	$	1,000.00
Specific charge for access to the power poles - $/pole/year (with the exception of wireless attachments)	$	44.50
Interval meter charge	$	20.00

Halton Hills Hydro Inc.
TARIFF OF RATES AND CHARGES
Effective and Implementation Date May 1, 2020
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EB-2019-0039

RETAIL SERVICE CHARGES (if applicable)

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

Retail Service Charges refer to services provided by a distributor to retailers or customers related to the supply of competitive electricity.

One-time charge, per retailer, to establish the service agreement between the distributor and the retailer	$	102.00
Monthly Fixed Charge, per retailer	$	40.80
Monthly Variable Charge, per customer, per retailer	$/cust.	1.02
Distributor-consolidated billing monthly charge, per customer, per retailer	$/cust.	0.61
Retailer-consolidated billing monthly credit, per customer, per retailer	$/cust.	(0.61)
Service Transaction Requests (STR)		
Request fee, per request, applied to the requesting party	$	0.51
Processing fee, per request, applied to the requesting party	$	1.02
Request for customer information as outlined in Section 10.6.3 and Chapter 11 of the Retail Settlement Code directly to retailers and customers, if not delivered electronically through the Electronic Business Transaction (EBT) system, applied to the requesting party		
Up to twice a year		no charge
More than twice a year, per request (plus incremental delivery costs)	$	4.08
Notice of switch letter charge, per letter (unless the distributor has opted out of applying the charge as per the Ontario Energy Board's Decision and Order EB-2015-0304, issued on February 14, 2019)	$	2.04

LOSS FACTORS

If the distributor is not capable of prorating changed loss factors jointly with distribution rates, the revised loss factors will be implemented upon the first subsequent billing for each billing cycle.

Total Loss Factor - Secondary Metered Customer < 5,000 kW	1.0560
Total Loss Factor - Primary Metered Customer < 5,000 kW	1.0455

APPENDIX 8-3: PROPOSED 2021 TARIFF OF RATES AND CHARGES

Halton Hills Hydro Inc.
TARIFF OF RATES AND CHARGES
Effective and Implementation Date May 1, 2021
This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2020-0026

RESIDENTIAL SERVICE CLASSIFICATION

This classification applies to an account taking electricity at 750 volts or less where the electricity is used exclusively in a separate metered living accommodation. Customers shall be residing in single-dwelling units that consist of a detached house or one unit of a semi-detached, duplex, triplex or quadruplex house, with a residential zoning. Separately metered dwellings within a town house complex or apartment building also qualify as residential customers. The customer will be supplied at one service entrance only. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES - Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge	$	37.23
Rate Rider for ICM True-up (fixed) - effective until April 30, 2023	$	0.14
Rate Rider for Disposition of Group 1 Deferral/Variance Accounts (2021) - effective until April 30, 2023	$	0.49
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2021) - effective until April 30, 2023	$	0.76
Rate Rider for Lost Revenue Recovery (LRAM) - effective until April 30, 2023	$	0.35
Smart Metering Entity Charge - effective until December 31, 2022	$	0.57
Low Voltage Service Rate	$/kWh	0.0044
Rate Rider for Disposition of Global Adjustment Account (2021) - Applicable only for Non-RPP Customers - effective until April 30, 2023	$/kWh	(0.0063)
Retail Transmission Rate - Network Service Rate	$/kWh	0.0071
Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kWh	0.0059

MONTHLY RATES AND CHARGES - Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR	$/kWh	0.0030
Capacity Based Recovery (CBR) - Applicable for Class B Customers	$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	$/kWh	0.0005
Standard Supply Service - Administrative Charge (if applicable)	$	0.25

Halton Hills Hydro Inc.

TARIFF OF RATES AND CHARGES

Effective and Implementation Date May 1, 2021

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2020-0026

GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION

This classification applies to a non-residential account taking electricity at 750 volts or less whose average monthly maximum demand is less than, or is forecast to be less than, 50 kW. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES - Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge	$	48.43
Rate Rider for ICM True-up (fixed) - effective until April 30, 2023	$	0.15
Smart Metering Entity Charge - effective until December 31, 2022	$	0.57
Distribution Volumetric Rate	$/kWh	0.0175
Low Voltage Service Rate	$/kWh	0.0041
Rate Rider for Lost Revenue Recovery (LRAM) - effective until April 30, 2023	$/kWh	0.0012
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2021) - effective until April 30, 2023	$/kWh	0.0011
Rate Rider for Disposition of Global Adjustment Account (2021) - Applicable only for Non-RPP Customers - effective until April 30, 2023	$/kWh	(0.0063)
Rate Rider for Disposition of Group 1 Deferral/Variance Accounts (2021) - effective until April 30, 2023	$/kWh	0.0006
Rate Rider for ICM True-up (volumetric) - effective until April 30, 2023	$/kWh	0.0001
Retail Transmission Rate - Network Service Rate	$/kWh	0.0062
Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kWh	0.0055

MONTHLY RATES AND CHARGES - Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR	$/kWh	0.0030
Capacity Based Recovery (CBR) - Applicable for Class B Customers	$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	$/kWh	0.0005
Standard Supply Service - Administrative Charge (if applicable)	$	0.25

Halton Hills Hydro Inc.

TARIFF OF RATES AND CHARGES

Effective and Implementation Date May 1, 2021

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approved schedules of Rates, Charges and Loss Factors

EB-2020-0026

GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION

This classification applies to a non-residential customer with an average peak demand equal to or greater than 50 kW over the past twelve months, or is forecast to be equal to or greater than 50 kW, but less than 1,000 kW. For a new customer without prior billing history, the peak demand will be based on 90% of the proposed capacity or installed transformer. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES - Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

If included in the following listing of monthly rates and charges, the rate rider for the disposition of WMS - Sub-account CBR Class B is not applicable to wholesale market participants (WMP), customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In addition, this rate rider is applicable to all new Class B customers.

If included in the following listing of monthly rates and charges, the rate rider for the disposition of Global Adjustment is only applicable to non-RPP Class B customers. It is not applicable to WMP, customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In addition, this rate rider is applicable to all new non-RPP Class B customers.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

Billing demands are established at the greater of 100% of the kW, or 90% of the kVA amounts with the exception of the Retail Transmission Rate-Network Service Rate, which is billed on a $/kW basis only.

Halton Hills Hydro Inc.

TARIFF OF RATES AND CHARGES

Effective and Implementation Date May 1, 2021

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EB-2020-0026

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge	$	160.44
Rate Rider for ICM True-up (fixed) - effective until April 30, 2023	$	0.40
Distribution Volumetric Rate	$/kW	6.9927
Low Voltage Service Rate	$/kW	1.7123
Rate Rider for Disposition of Deferral/Variance Accounts Applicable only for Non-Wholesale Market Participants - effective until April 30, 2023	$/kW	0.1199
Rate Rider for Lost Revenue Recovery (LRAM) - effective until April 30, 2023	$/kW	0.0527
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2021) - effective until April 30, 2023	$/kW	0.4750
Rate Rider for Disposition of Global Adjustment Account (2021) - Applicable only for Non-RPP Customers - effective until April 30, 2023	$/kWh	(0.0063)
Rate Rider for Disposition of Group 1 Deferral/Variance Accounts (2021) - effective until April 30, 2023	$/kW	0.1157
Rate Rider for ICM True-up (volumetric) - effective until April 30, 2023	$/kW	0.0224
Retail Transmission Rate - Network Service Rate	$/kW	2.6986
Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	2.3110

MONTHLY RATES AND CHARGES - Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR	$/kWh	0.0030
Capacity Based Recovery (CBR) - Applicable for Class B Customers	$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	$/kWh	0.0005
Standard Supply Service - Administrative Charge (if applicable)	$	0.25

Halton Hills Hydro Inc.

TARIFF OF RATES AND CHARGES

Effective and Implementation Date May 1, 2021

This schedule supersedes and replaces all previously approved schedules of Rates, Charges and Loss Factors

EB-2020-0026

GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION

This classification applies to a non-residential customer with an average peak demand equal to or greater than 1,000 kW over the past twelve months, or is forecast to be equal to or greater than 1,000 kW, but less than 5,000 kW. For a new customer without prior billing history, the peak demand will be based on 90% of the installed transformer. Class A and Class B consumers are defined in accordance with O.Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES - Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

If included in the following listing of monthly rates and charges, the rate rider for the disposition of WMS - Sub-account CBR Class B is not applicable to wholesale market participants (WMP), customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In addition, this rate rider is applicable to all new Class B customers.

If included in the following listing of monthly rates and charges, the rate rider for the disposition of Global Adjustment is only applicable to non-RPP Class B customers. It is not applicable to WMP, customers that transitioned between Class A and Class B during the variance account accumulation period, or to customers that were in Class A for the entire period. Customers who transitioned are to be charged or refunded their share of the variance disposed through customer specific billing adjustments. This rate rider is to be consistently applied for the entire period to the sunset date of the rate rider. In addition, this rate rider is applicable to all new non-RPP Class B customers.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

Billing demands are established at the greater of 100% of the kW, or 90% of the kVA amounts with the exception of the Retail Transmission Rate-Network Service Rate, which is billed on a $/kW basis only.

Halton Hills Hydro Inc.

TARIFF OF RATES AND CHARGES

Effective and Implementation Date May 1, 2021

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MONTHLY RATES AND CHARGES - Delivery Component

Service Charge	$	510.87
Rate Rider for ICM True-up (fixed) - effective until April 30, 2023	$	1.24
Distribution Volumetric Rate	$/kW	8.3308
Low Voltage Service Rate	$/kW	1.0483
Rate Rider for Lost Revenue Recovery (LRAM) - effective until April 30, 2023	$/kW	0.1066
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2021) - effective until April 30, 2023	$/kW	0.5968
Rate Rider for Disposition of Global Adjustment Account (2021) - Applicable only for Non-RPP Customers - effective until April 30, 2023	$/kWh	(0.0063)
Rate Rider for Disposition of Group 1 Deferral/Variance Accounts (2021) - effective until April 30, 2023	$/kW	0.2759
Rate Rider for ICM True-up (volumetric) - effective until April 30, 2023	$/kW	0.0295
Retail Transmission Rate - Network Service Rate	$/kW	2.6986
Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	2.3110

MONTHLY RATES AND CHARGES - Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR	$/kWh	0.0030
Capacity Based Recovery (CBR) - Applicable for Class B Customers	$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	$/kWh	0.0005
Standard Supply Service - Administrative Charge (if applicable)	$	0.25

Halton Hills Hydro Inc.
TARIFF OF RATES AND CHARGES
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EB-2020-0026

UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION

This classification applies to an account taking electricity at 750 volts or less whose average monthly maximum demand is less than, or is forecast to be less than, 50 kW and the consumption is unmetered. Such connections include cable TV power packs, bus shelters, telephone booths, traffic lights, pedestrian X-Walk signals/beacons, railway crossings, etc. The level of the consumption will be agreed to by the distributor and the customer, based on detailed manufacturer information/documentation with regard to electrical consumption of the unmetered load or periodic monitoring of actual consumption. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES - Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge (per connection)	$	23.00
Rate Rider for ICM True-up (fixed) - effective until April 30, 2023	$	0.04
Distribution Volumetric Rate	$/kWh	0.0156
Low Voltage Service Rate	$/kWh	0.0041
Rate Rider for Lost Revenue Recovery (LRAM) - effective until April 30, 2023	$/kWh	0.0000
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2021) - effective until April 30, 2023	$/kWh	0.0010
Rate Rider for Disposition of Global Adjustment Account (2021) - Applicable only for Non-RPP Customers - effective until April 30, 2023	$/kWh	(0.0063)
Rate Rider for Disposition of Group 1 Deferral/Variance Accounts (2021) - effective until April 30, 2023	$/kWh	0.0007
Retail Transmission Rate - Network Service Rate	$/kWh	0.0062
Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kWh	0.0055

MONTHLY RATES AND CHARGES - Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR	$/kWh	0.0030
Capacity Based Recovery (CBR) - Applicable for Class B Customers	$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	$/kWh	0.0005
Standard Supply Service - Administrative Charge (if applicable)	$	0.25

Halton Hills Hydro Inc.
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EB-2020-0026

SENTINEL LIGHTING SERVICE CLASSIFICATION

This classification refers to accounts that are an unmetered lighting load supplied to a sentinel light. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor’s Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor’s Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES - Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge (per connection)	$	10.25
Rate Rider for ICM True-up (fixed) - effective until April 30, 2023	$	0.05
Distribution Volumetric Rate	$/kW	38.8900
Low Voltage Service Rate	$/kW	1.2326
Rate Rider for Lost Revenue Recovery (LRAM) - effective until April 30, 2023	$/kW	0.0000
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2021) - effective until April 30, 2023	$/kW	(0.7494)
Rate Rider for Disposition of Global Adjustment Account (2021) - Applicable only for Non-RPP Customers - effective until April 30, 2023	$/kWh	(0.0063)
Rate Rider for Disposition of Group 1 Deferral/Variance Accounts (2021) - effective until April 30, 2023	$/kW	0.2447
Rate Rider for ICM True-up (volumetric) - effective until April 30, 2023	$/kW	0.2027
Retail Transmission Rate - Network Service Rate	$/kW	1.9252
Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	1.6636

MONTHLY RATES AND CHARGES - Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR	$/kWh	0.0030
Capacity Based Recovery (CBR) - Applicable for Class B Customers	$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	$/kWh	0.0005
Standard Supply Service - Administrative Charge (if applicable)	$	0.25

Halton Hills Hydro Inc.
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EB-2020-0026

STREET LIGHTING SERVICE CLASSIFICATION

All services supplied to street lighting equipment owned by or operated for the Municipality, the Region or the Province of Ontario shall be classified as Street Lighting Service. Street Lighting plant, facilities, or equipment owned by the customer are subject to the Electrical Safety Authority (ESA) requirements and Halton Hills Hydro specifications. Class B consumers are defined in accordance with O. Reg. 429/04. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable. In addition, the charges in the MONTHLY RATES AND CHARGES - Regulatory Component of this schedule do not apply to a customer that is an embedded wholesale market participant.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge (per connection)	$	2.69
Rate Rider for ICM True-up (fixed) - effective until April 30, 2023	$	0.01
Distribution Volumetric Rate	$/kW	1.8150
Low Voltage Service Rate	$/kW	1.2075
Rate Rider for Lost Revenue Recovery (LRAM) - effective until April 30, 2023	$/kW	(1.5512)
Rate Rider for Disposition of Group 2 Deferral/Variance Accounts (2021) - effective until April 30, 2023	$/kW	(0.5236)
Rate Rider for Disposition of Global Adjustment Account (2021) - Applicable only for Non-RPP Customers - effective until April 30, 2023	$/kWh	(0.0063)
Rate Rider for Disposition of Group 1 Deferral/Variance Accounts (2021) - effective until April 30, 2023	$/kW	0.2084
Rate Rider for ICM True-up (volumetric) - effective until April 30, 2023	$/kWh	0.0086
Retail Transmission Rate - Network Service Rate	$/kW	1.9163
Retail Transmission Rate - Line and Transformation Connection Service Rate	$/kW	1.6298

MONTHLY RATES AND CHARGES - Regulatory Component

Wholesale Market Service Rate (WMS) - not including CBR	$/kWh	0.0030
Capacity Based Recovery (CBR) - Applicable for Class B Customers	$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	$/kWh	0.0005
Standard Supply Service - Administrative Charge (if applicable)	$	0.25

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microFIT SERVICE CLASSIFICATION

This classification applies to an electricity generation facility contracted under the Independent Electricity System Operator's microFIT program and connected to the distributor's distribution system. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge	$	4.55

ALLOWANCES

Transformer Allowance for Ownership - per kW of billing demand/month	$/kW	(0.60)
Primary Metering Allowance for Transformer Losses - applied to measured demand & energy	%	(1.00)

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SPECIFIC SERVICE CHARGES

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

Customer Administration		
Arrears certificate	$	15.00
Statement of account	$	15.00
Pulling post dated cheques	$	15.00
Duplicate invoices for previous billing	$	15.00
Request for other billing information	$	15.00
Easement Letter	$	15.00
Income tax letter	$	15.00
Notification charge	$	15.00
Account history	$	15.00
Credit reference/credit check (plus credit agency costs)	$	15.00
Returned Cheque (plus bank charges)	$	15.00
Charge to certify cheque	$	15.00
Legal letter charge	$	15.00
Account set up charge/change of occupancy charge (plus credit agency costs if applicable)	$	30.00
Special meter reads	$	30.00
Meter dispute charge plus Measurement Canada fees (if meter found correct)	$	30.00
Non-Payment of Account (see Note below)		
Late Payment - per month		
(effective annual rate 19.56% per annum or 0.04896% compounded daily rate)	%	1.50
Reconnection at Meter - during regular hours	$	65.00
Reconnection at Meter - after regular hours	$	185.00
Reconnection at Pole - during regular hours	$	185.00
Reconnection at Pole - after regular hours	$	415.00
Other		
Service call - customer owned equipment	$	30.00
Service call - after regular hours	$	165.00
Temporary service install & remove - overhead - no transformer	$	500.00
Temporary service install & remove - underground - no transformer	$	300.00
Temporary service install & remove - overhead - with transformer	$	1,000.00
Specific charge for access to the power poles - $/pole/year	$	44.50
(with the exception of wireless attachments)		
Interval meter charge	$	20.00

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RETAIL SERVICE CHARGES (if applicable)

APPLICATION

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, which may be applicable to the administration of this schedule.

No rates and charges for the distribution of electricity and charges to meet the costs of any work or service done or furnished for the purpose of the distribution of electricity shall be made except as permitted by this schedule, unless required by the Distributor's Licence or a Code or Order of the Ontario Energy Board, and amendments thereto as approved by the Ontario Energy Board, or as specified herein.

Unless specifically noted, this schedule does not contain any charges for the electricity commodity, be it under the Regulated Price Plan, a contract with a retailer or the wholesale market price, as applicable.

It should be noted that this schedule does not list any charges, assessments or credits that are required by law to be invoiced by a distributor and that are not subject to Ontario Energy Board approval, such as the Global Adjustment and the HST.

Retail Service Charges refer to services provided by a distributor to retailers or customers related to the supply of competitive electricity.

One-time charge, per retailer, to establish the service agreement between the distributor and the retailer	$	104.04
Monthly Fixed Charge, per retailer	$	41.62
Monthly Variable Charge, per customer, per retailer	$/cust.	1.04
Distributor-consolidated billing monthly charge, per customer, per retailer	$/cust.	0.62
Retailer-consolidated billing monthly credit, per customer, per retailer	$/cust.	(0.62)
Service Transaction Requests (STR)		
Request fee, per request, applied to the requesting party	$	0.52
Processing fee, per request, applied to the requesting party	$	1.04
Request for customer information as outlined in Section 10.6.3 and Chapter 11 of the Retail Settlement Code directly to retailers and customers, if not delivered electronically through the Electronic Business Transaction (EBT) system, applied to the requesting party		
Up to twice a year		no charge
More than twice a year, per request (plus incremental delivery costs)	$	4.16
Notice of switch letter charge, per letter (unless the distributor has opted out of applying the charge as per the Ontario Energy Board's Decision and Order EB-2015-0304, issued on February 14, 2019)	$	2.08

LOSS FACTORS

If the distributor is not capable of prorating changed loss factors jointly with distribution rates, the revised loss factors will be implemented upon the first subsequent billing for each billing cycle.

Total Loss Factor - Secondary Metered Customer < 5,000 kW	1.04
Total Loss Factor - Primary Metered Customer < 5,000 kW	1.0296

APPENDIX 8-4: PROPOSED 2021 BILL IMPACTS

Ontario Energy Board

Tariff Schedule and Bill Impacts Model

(2021 Cost of Service Filers)

The bill comparisons below must be provided for typical customers and consumption levels. Bill impacts must be provided for residential customers consuming 750 kWh per month and general service customers consuming 2,000 kWh per month and having a monthly demand of less than 50 kW. Include bill comparisons for Non-RPP (retailer) as well. **To assess the combined effects of the shift to fixed rates and other bill impacts associated with changes in the cost of distribution service, applicants are to include a total bill impact for a residential customer at the distributor's 10th consumption percentile (In other words, 10% of a distributor's residential customers consume at or less than this level of consumption on a monthly basis). Refer to section 3.2.3 of the Chapter 3 Filing Requirements For Electricity Distribution Rate Applications.**

For certain classes where one or more customers have unique consumption and demand patterns and which may be significantly impacted by the proposed rate changes, the distributor must show a typical comparison, and provide an explanation.

Note:
1. For those classes that are not eligible for the RPP price, the weighted average price including Class B GA through end of May 2017 of $0.1101/kWh (IESO's Monthly Market Report for May 2017, page 22) has been used to represent the cost of power. For those classes on a retailer contract, applicants should enter the contract price (plus GA) for a more accurate estimate. Changes to the cost of power can be made directly on the bill impact table for the specific class.
2. Please enter the applicable billing determinant (e.g. number of connections or devices) to be applied to the monthly service charge for unmetered rate classes in column N. If the monthly service charge is applied on a per customer basis, enter the number "1". Distributors should provide the number of connections or devices reflective of a typical customer in each class.

Note that cells with the highlighted color shown to the left indicate quantities that are loss adjusted.

Table 1

RATE CLASSES / CATEGORIES *(eg: Residential TOU, Residential Retailer)*	**Units**	**RPP? Non-RPP Retailer? Non-RPP Other?**	**Current Loss Factor** (eg: 1.0351)	**Proposed Loss Factor**	**Consumption (kWh)**	**Demand kW (if applicable)**	RTSR **Demand or Demand-Interval?**	**Billing Determinant Applied to Fixed Charge for Unmetered Classes (e.g. # of devices/connections).**
RESIDENTIAL SERVICE CLASSIFICATION	kwh	RPP	1.0560	1.04	750		CONSUMPTION	
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	kwh	RPP	1.0560	1.04	2,000		CONSUMPTION	
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION	kw	Non-RPP (Other)	1.0560	1.04	328,500	500	DEMAND	
GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION	kw	Non-RPP (Other)	1.0560	1.04	1,600,000	2,500	EMAND - INTERVAL	
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION	kwh	RPP	1.0560	1.04	150		CONSUMPTION	
SENTINEL LIGHTING SERVICE CLASSIFICATION	kw	RPP	1.0560	1.04	650	1	DEMAND	
STREET LIGHTING SERVICE CLASSIFICATION	kw	Non-RPP (Other)	1.0560	1.04	94,033	251	DEMAND	4,833
STANDBY POWER SERVICE CLASSIFICATION								
RESIDENTIAL SERVICE CLASSIFICATION	kwh	RPP	1.0560	1.04	305		CONSUMPTION	
RESIDENTIAL SERVICE CLASSIFICATION	kwh	RPP	1.0560	1.04	1,000		CONSUMPTION	
RESIDENTIAL SERVICE CLASSIFICATION	kwh	RPP	1.0560	1.04	5,000		CONSUMPTION	
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	kwh	RPP	1.0560	1.04	1,100		CONSUMPTION	
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	kwh	RPP	1.0560	1.04	5,000		CONSUMPTION	
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	kwh	RPP	1.0560	1.04	15,000		CONSUMPTION	
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION	kw	Non-RPP (Other)	1.0560	1.04	20,000	60	DEMAND	
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION	kw	Non-RPP (Other)	1.0560	1.04	500,000	750	DEMAND	
GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION	kw	Non-RPP (Other)	1.0560	1.04	1,000,000	2,000	EMAND - INTERVAL	
GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION	kw	Non-RPP (Other)	1.0560	1.04	3,000,000	4,000	EMAND - INTERVAL	
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION	kw	RPP	1.0560	1.04	69,000	160	DEMAND	
Add additional scenarios if required			1.0560	1.04				

Table 2

RATE CLASSES / CATEGORIES *(eg: Residential TOU, Residential Retailer)*	Units	Sub-Total						Total	
		A		B		C		Total Bill	
		$	%	$	%	$	%	$	%
RESIDENTIAL SERVICE CLASSIFICATION - RPP	kwh	$ 7.32	23.1%	$ 7.14	18.1%	$ 6.75	13.5%	$ 5.44	4.5%
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION - RPP	kwh	$ 24.94	42.5%	$ 27.86	35.6%	$ 26.85	25.9%	$ 21.70	7.3%
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION - Non-RPP (Other)	kw	$ 1,238.77	51.2%	$ (105.93)	-3.6%	$ (170.83)	-3.1%	$ (870.12)	-1.7%
GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION - Non-RPP (Other)	kw	$ 10,707.25	100.7%	$ 3,149.25	23.8%	$ 3,149.25	23.8%	$ 260.86	0.1%
UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION - RPP	kwh	$ 0.09	4.2%	$ 0.30	8.0%	$ 0.22	4.0%	$ 0.17	0.8%
SENTINEL LIGHTING SERVICE CLASSIFICATION - RPP	kw	$ (5.70)	-12.8%	$ (6.85)	-13.7%	$ (6.94)	-12.9%	$ (5.67)	-5.0%
STREET LIGHTING SERVICE CLASSIFICATION - Non-RPP (Other)	kw	$ 1,485.99	12.4%	$ 544.79	4.5%	$ 521.75	4.0%	$ 395.76	1.4%
STANDBY POWER SERVICE CLASSIFICATION -									
RESIDENTIAL SERVICE CLASSIFICATION - RPP	kwh	$ 7.32	23.1%	$ 7.25	20.6%	$ 7.09	18.0%	$ 5.74	8.8%
RESIDENTIAL SERVICE CLASSIFICATION - RPP	kwh	$ 7.32	23.1%	$ 7.08	16.9%	$ 6.55	11.7%	$ 5.27	3.5%
RESIDENTIAL SERVICE CLASSIFICATION - RPP	kwh	$ 7.32	23.1%	$ 6.11	7.6%	$ 3.49	2.3%	$ 2.58	0.4%
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION - RPP	kwh	$ 20.26	42.6%	$ 21.86	37.3%	$ 21.31	29.4%	$ 17.25	9.8%
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION - RPP	kwh	$ 40.54	42.4%	$ 47.83	33.3%	$ 45.31	21.9%	$ 36.54	5.2%
GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION - RPP	kwh	$ 92.54	42.3%	$ 145.04	56.9%	$ 137.48	30.9%	$ 86.01	4.2%
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION - Non-RPP (Other)	kw	$ 198.52	52.0%	$ 159.50	35.9%	$ 151.72	20.1%	$ 93.57	3.6%
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION - Non-RPP (Other)	kw	$ 1,829.82	51.2%	$ (232.91)	-5.3%	$ (330.26)	-4.0%	$ (1,403.75)	-1.8%
GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION - Non-RPP (Other)	kw	$ 8,623.70	100.9%	$ 4,341.30	40.8%	$ 4,341.30	40.8%	$ 2,844.55	1.9%
GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION - Non-RPP (Other)	kw	$ 16,957.90	100.5%	$ 2,093.10	9.9%	$ 2,093.10	9.9%	$ (3,818.16)	-0.9%
GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION - RPP	kw	$ 434.94	51.5%	$ 658.46	65.0%	$ 637.69	34.8%	$ 556.58	4.3%

Customer Class:	RESIDENTIAL SERVICE CLASSIFICATION
RPP / Non-RPP:	RPP
Consumption	**750** kWh
Demand	**-** kW
Current Loss Factor	**1.0560**
Proposed/Approved Loss Factor	**1.0400**

	Current OEB-Approved			**Proposed**			**Impact**	
	Rate ($)	**Volume**	**Charge ($)**	**Rate ($)**	**Volume**	**Charge ($)**	**$ Change**	**% Change**
Monthly Service Charge	$ 27.34	1	$ 27.34	$ 37.23	1	$ 37.23	$ 9.89	36.17%
Distribution Volumetric Rate	$ -	750	$ -	$ -	750	$ -	$ -	
Fixed Rate Riders	$ 4.31	1	$ 4.31	$ 1.74	1	$ 1.74	$ (2.57)	-59.63%
Volumetric Rate Riders	$ -	750	$ -	$ -	750	$ -	$ -	
Sub-Total A (excluding pass through)			**$ 31.65**			**$ 38.97**	**$ 7.32**	**23.13%**
Line Losses on Cost of Power	$ 0.1276	42	$ 5.36	$ 0.1276	30	$ 3.83	$ (1.53)	-28.57%
Total Deferral/Variance Account Rate Riders	$ -	750	$ -	$ -	750	$ -	$ -	
CBR Class B Rate Riders	$ -	750	$ -	$ -	750	$ -	$ -	
GA Rate Riders	$ -	750	$ -	$ -	750	$ -	$ -	
Low Voltage Service Charge	$ 0.0026	750	$ 1.95	$ 0.0044	750	$ 3.30	$ 1.35	69.23%
Smart Meter Entity Charge (if applicable)	$ 0.57	1	$ 0.57	$ 0.57	1	$ 0.57	$ -	0.00%
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		750	$ -	$ -	750	$ -	$ -	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 39.53**			**$ 46.67**	**$ 7.14**	**18.06%**
RTSR - Network	$ 0.0072	792	$ 5.70	$ 0.0071	780	$ 5.54	$ (0.16)	-2.88%
RTSR - Connection and/or Line and Transformation Connection	$ 0.0061	792	$ 4.83	$ 0.0059	780	$ 4.60	$ (0.23)	-4.74%
Sub-Total C - Delivery (including Sub-Total B)			**$ 50.06**			**$ 56.81**	**$ 6.75**	**13.47%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	792	$ 2.69	$ 0.0034	780	$ 2.65	$ (0.04)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	792	$ 0.40	$ 0.0005	780	$ 0.39	$ (0.01)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
TOU - Off Peak	$ 0.1010	488	$ 49.24	$ 0.1010	488	$ 49.24	$ -	0.00%
TOU - Mid Peak	$ 0.1440	128	$ 18.36	$ 0.1440	128	$ 18.36	$ -	0.00%
TOU - On Peak	$ 0.2080	135	$ 28.08	$ 0.2080	135	$ 28.08	$ -	0.00%
Total Bill on TOU (before Taxes)			**$ 149.08**			**$ 155.78**	**$ 6.70**	**4.49%**
HST	13%		$ 19.38	13%		$ 20.25	$ 0.87	4.49%
Ontario Electricity Rebate	31.8%		$ (47.41)	31.8%		$ (49.54)	$ (2.13)	
Total Bill on TOU			**$ 121.05**			**$ 126.49**	**$ 5.44**	**4.49%**

In the manager's summary, discuss the reaso

Customer Class:	GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION
RPP / Non-RPP:	RPP
Consumption	2,000 kWh
Demand	- kW
Current Loss Factor	1.0560
Proposed/Approved Loss Factor	1.0400

	Current OEB-Approved			**Proposed**			**Impact**	
	Rate ($)	**Volume**	**Charge ($)**	**Rate ($)**	**Volume**	**Charge ($)**	**$ Change**	**% Change**
Monthly Service Charge	$ 29.38	1	$ 29.38	$ 48.43	1	$ 48.43	$ 19.05	64.84%
Distribution Volumetric Rate	$ 0.0106	2000	$ 21.20	$ 0.0175	2000	$ 35.00	$ 13.80	65.09%
Fixed Rate Riders	$ 4.66	1	$ 4.66	$ 0.15	1	$ 0.15	$ (4.51)	-96.78%
Volumetric Rate Riders	$ 0.0017	2000	$ 3.40	$ -	2000	$ -	$ (3.40)	-100.00%
Sub-Total A (excluding pass through)			**$ 58.64**			**$ 83.58**	**$ 24.94**	**42.53%**
Line Losses on Cost of Power	$ 0.1276	112	$ 14.29	$ 0.1276	80	$ 10.21	$ (4.08)	-28.57%
Total Deferral/Variance Account Rate Riders	$ -	2,000	$ -	$ 0.0017	2,000	$ 3.40	$ 3.40	
CBR Class B Rate Riders	$ -	2,000	$ -	$ -	2,000	$ -	$ -	
GA Rate Riders	$ -	2,000	$ -	$ -	2,000	$ -	$ -	
Low Voltage Service Charge	$ 0.0024	2,000	$ 4.80	$ 0.0041	2,000	$ 8.20	$ 3.40	70.83%
Smart Meter Entity Charge (if applicable)	$ 0.57	1	$ 0.57	$ 0.57	1	$ 0.57	$ -	0.00%
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		2,000	$ -	$ 0.0001	2,000	$ 0.20	$ 0.20	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 78.30**			**$ 106.16**	**$ 27.86**	**35.58%**
RTSR - Network	$ 0.0063	2,112	$ 13.31	$ 0.0062	2,080	$ 12.90	$ (0.41)	-3.08%
RTSR - Connection and/or Line and Transformation Connection	$ 0.0057	2,112	$ 12.04	$ 0.0055	2,080	$ 11.44	$ (0.60)	-4.97%
Sub-Total C - Delivery (including Sub-Total B)			**$ 103.64**			**$ 130.49**	**$ 26.85**	**25.91%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	2,112	$ 7.18	$ 0.0034	2,080	$ 7.07	$ (0.11)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	2,112	$ 1.06	$ 0.0005	2,080	$ 1.04	$ (0.02)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
TOU - Off Peak	$ 0.1010	1,300	$ 131.30	$ 0.1010	1,300	$ 131.30	$ -	0.00%
TOU - Mid Peak	$ 0.1440	340	$ 48.96	$ 0.1440	340	$ 48.96	$ -	0.00%
TOU - On Peak	$ 0.2080	360	$ 74.88	$ 0.2080	360	$ 74.88	$ -	0.00%
Total Bill on TOU (before Taxes)			**$ 367.27**			**$ 393.99**	**$ 26.72**	**7.28%**
HST	13%		$ 47.74	13%		$ 51.22	$ 3.47	7.28%
Ontario Electricity Rebate	31.8%		$ (116.79)	31.8%		$ (125.29)	$ (8.50)	
Total Bill on TOU			**$ 298.22**			**$ 319.92**	**$ 21.70**	**7.28%**

In the manager's summary, discuss the reaso

Customer Class:	**GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION**
RPP / Non-RPP:	**Non-RPP (Other)**
Consumption	**328,500 kWh**
Demand	**500 kW**
Current Loss Factor	**1.0560**
Proposed/Approved Loss Factor	**1.0400**

	Current OEB-Approved			Proposed			Impact	
	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	$ 89.89	1	$ 89.89	$ 160.44	1	$ 160.44	$ 70.55	78.48%
Distribution Volumetric Rate	$ 3.9942	500	$ 1,997.10	$ 6.9927	500	$ 3,496.35	$ 1,499.25	75.07%
Fixed Rate Riders	$ 14.28	1	$ 14.28	$ 0.40	1	$ 0.40	$ (13.88)	-97.20%
Volumetric Rate Riders	$ 0.6343	500	$ 317.15	$ -	500	$ -	$ (317.15)	-100.00%
Sub-Total A (excluding pass through)			**$ 2,418.42**			**$ 3,657.19**	**$ 1,238.77**	**51.22%**
Line Losses on Cost of Power	$ -	-	$ -	$ -	-	$ -	$ -	
Total Deferral/Variance Account Rate Riders	$ -	500	$ -	$ 0.7106	500	$ 355.30	$ 355.30	
CBR Class B Rate Riders	$ -	500	$ -	$ -	500	$ -	$ -	
GA Rate Riders	$ -	328,500	$ -	$ (0.0063)	328,500	$ (2,069.55)	$ (2,069.55)	
Low Voltage Service Charge	$ 1.0483	500	$ 524.15	$ 1.7123	500	$ 856.15	$ 332.00	63.34%
Smart Meter Entity Charge (if applicable)	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		500	$ -	$ 0.0751	500	$ 37.55	$ 37.55	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 2,942.57**			**$ 2,836.64**	**$ (105.93)**	**-3.60%**
RTSR - Network	$ 2.7559	500	$ 1,377.95	$ 2.6986	500	$ 1,349.30	$ (28.65)	-2.08%
RTSR - Connection and/or Line and Transformation Connection	$ 2.3835	500	$ 1,191.75	$ 2.3110	500	$ 1,155.50	$ (36.25)	-3.04%
Sub-Total C - Delivery (including Sub-Total B)			**$ 5,512.27**			**$ 5,341.44**	**$ (170.83)**	**-3.10%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	346,896	$ 1,179.45	$ 0.0034	341,640	$ 1,161.58	$ (17.87)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	346,896	$ 173.45	$ 0.0005	341,640	$ 170.82	$ (2.63)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
Average IESO Wholesale Market Price	$ 0.1101	346,896	$ 38,193.25	$ 0.1101	341,640	$ 37,614.56	$ (578.69)	-1.52%
Total Bill on Average IESO Wholesale Market Price			**$ 45,058.66**			**$ 44,288.65**	**$ (770.01)**	**-1.71%**
HST	13%		$ 5,857.63	13%		$ 5,757.52	$ (100.10)	-1.71%
Ontario Electricity Rebate	31.8%		$ -	31.8%		$ -		
Total Bill on Average IESO Wholesale Market Price			**$ 50,916.29**			**$ 50,046.17**	**$ (870.12)**	**-1.71%**

Customer Class:	**GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION**
RPP / Non-RPP:	**Non-RPP (Other)**
Consumption	**1,600,000 kWh**
Demand	**2,500 kW**
Current Loss Factor	**1.0560**
Proposed/Approved Loss Factor	**1.0400**

	Current OEB-Approved			**Proposed**			**Impact**	
	Rate ($)	**Volume**	**Charge ($)**	**Rate ($)**	**Volume**	**Charge ($)**	**$ Change**	**% Change**
Monthly Service Charge	$ 192.10	1	$ 192.10	$ 510.87	1	$ 510.87	$ 318.77	165.94%
Distribution Volumetric Rate	$ 3.5931	2500	$ 8,982.75	$ 8.3308	2500	$ 20,827.00	$ 11,844.25	131.86%
Fixed Rate Riders	$ 30.51	1	$ 30.51	$ 1.24	1	$ 1.24	$ (29.27)	-95.94%
Volumetric Rate Riders	$ 0.5706	2500	$ 1,426.50	$ -	2500	$ -	$ (1,426.50)	-100.00%
Sub-Total A (excluding pass through)			**$ 10,631.86**			**$ 21,339.11**	**$ 10,707.25**	**100.71%**
Line Losses on Cost of Power	$ -	-	$ -	$ -	-	$ -	$ -	
Total Deferral/Variance Account Rate Riders	$ -	2,500	$ -	$ 0.8727	2,500	$ 2,181.75	$ 2,181.75	
CBR Class B Rate Riders	$ -	2,500	$ -	$ -	2,500	$ -	$ -	
GA Rate Riders	$ -	1,600,000	$ -	$ (0.0063)	1,600,000	$ (10,080.00)	$ (10,080.00)	
Low Voltage Service Charge	$ 1.0483	2,500	$ 2,620.75	$ 1.0483	2,500	$ 2,620.75	$ -	0.00%
Smart Meter Entity Charge (if applicable)	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		2,500	$ -	$ 0.1361	2,500	$ 340.25	$ 340.25	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 13,252.61**			**$ 16,401.86**	**$ 3,149.25**	**23.76%**
RTSR - Network	$ -	2,500	$ -	$ -	2,500	$ -	$ -	
RTSR - Connection and/or Line and Transformation Connection	$ -	2,500	$ -	$ -	2,500	$ -	$ -	
Sub-Total C - Delivery (including Sub-Total B)			**$ 13,252.61**			**$ 16,401.86**	**$ 3,149.25**	**23.76%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	1,689,600	$ 5,744.64	$ 0.0034	1,664,000	$ 5,657.60	$ (87.04)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	1,689,600	$ 844.80	$ 0.0005	1,664,000	$ 832.00	$ (12.80)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
Average IESO Wholesale Market Price	$ 0.1101	1,689,600	$ 186,024.96	$ 0.1101	1,664,000	$ 183,206.40	$ (2,818.56)	-1.52%
Total Bill on Average IESO Wholesale Market Price			**$ 205,867.26**			**$ 206,098.11**	**$ 230.85**	**0.11%**
HST	13%		$ 26,762.74	13%		$ 26,792.75	$ 30.01	0.11%
Ontario Electricity Rebate	31.8%		$ -	31.8%		$ -		
Total Bill on Average IESO Wholesale Market Price			**$ 232,630.00**			**$ 232,890.86**	**$ 260.86**	**0.11%**

Customer Class:	**UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION**
RPP / Non-RPP:	**RPP**
Consumption	**150** kWh
Demand	**-** kW
Current Loss Factor	**1.0560**
Proposed/Approved Loss Factor	**1.0400**

	Current OEB-Approved			**Proposed**			**Impact**	
	Rate ($)	**Volume**	**Charge ($)**	**Rate ($)**	**Volume**	**Charge ($)**	**$ Change**	**% Change**
Monthly Service Charge	$ 8.25		$ -	$ 23.00	0	$ -	$ -	
Distribution Volumetric Rate	$ 0.0056	150	$ 0.84	$ 0.0156	150	$ 2.34	$ 1.50	178.57%
Fixed Rate Riders	$ 1.31	1	$ 1.31	$ 0.04	1	$ 0.04	$ (1.27)	-96.95%
Volumetric Rate Riders	$ 0.0009	150	$ 0.14	$ -	150	$ -	$ (0.14)	-100.00%
Sub-Total A (excluding pass through)			**$ 2.29**			**$ 2.38**	**$ 0.09**	**4.16%**
Line Losses on Cost of Power	$ 0.1276	8	$ 1.07	$ 0.1276	6	$ 0.77	$ (0.31)	-28.57%
Total Deferral/Variance Account Rate Riders	$ -	150	$ -	$ 0.0017	150	$ 0.26	$ 0.26	
CBR Class B Rate Riders	$ -	150	$ -	$ -	150	$ -	$ -	
GA Rate Riders	$ -	150	$ -	$ -	150	$ -	$ -	
Low Voltage Service Charge	$ 0.0024	150	$ 0.36	$ 0.0041	150	$ 0.62	$ 0.26	70.83%
Smart Meter Entity Charge (if applicable)	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		150	$ -	$ -	150	$ -	$ -	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 3.72**			**$ 4.02**	**$ 0.30**	**8.04%**
RTSR - Network	$ 0.0063	158	$ 1.00	$ 0.0062	156	$ 0.97	$ (0.03)	-3.08%
RTSR - Connection and/or Line and Transformation Connection	$ 0.0057	158	$ 0.90	$ 0.0055	156	$ 0.86	$ (0.04)	-4.97%
Sub-Total C - Delivery (including Sub-Total B)			**$ 5.62**			**$ 5.84**	**$ 0.22**	**3.97%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	158	$ 0.54	$ 0.0034	156	$ 0.53	$ (0.01)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	158	$ 0.08	$ 0.0005	156	$ 0.08	$ (0.00)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
TOU - Off Peak	$ 0.1010	98	$ 9.85	$ 0.1010	98	$ 9.85	$ -	0.00%
TOU - Mid Peak	$ 0.1440	26	$ 3.67	$ 0.1440	26	$ 3.67	$ -	0.00%
TOU - On Peak	$ 0.2080	27	$ 5.62	$ 0.2080	27	$ 5.62	$ -	0.00%
Total Bill on TOU (before Taxes)			**$ 25.62**			**$ 25.83**	**$ 0.21**	**0.83%**
HST	13%		$ 3.33	13%		$ 3.36	$ 0.03	0.83%
Ontario Electricity Rebate	31.8%		$ (8.15)	31.8%		$ (8.22)	$ (0.07)	
Total Bill on TOU			**$ 20.80**			**$ 20.98**	**$ 0.17**	**0.83%**

In the manager's summary, discuss the reaso

Customer Class:	SENTINEL LIGHTING SERVICE CLASSIFICATION
RPP / Non-RPP:	RPP
Consumption	650 kWh
Demand	1 kW
Current Loss Factor	1.0560
Proposed/Approved Loss Factor	1.0400

	Current OEB-Approved			Proposed			Impact	
	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	$ 9.80		$ -	$ 10.25	0	$ -	$ -	
Distribution Volumetric Rate	$ 37.1725	1	$ 37.17	$ 38.8900	1	$ 38.89	$ 1.72	4.62%
Fixed Rate Riders	$ 1.56	1	$ 1.56	$ 0.05	1	$ 0.05	$ (1.51)	-96.79%
Volumetric Rate Riders	$ 5.9034	1	$ 5.90	$ -	1	$ -	$ (5.90)	-100.00%
Sub-Total A (excluding pass through)			**$ 44.64**			**$ 38.94**	**$ (5.70)**	**-12.76%**
Line Losses on Cost of Power	$ 0.1276	36	$ 4.64	$ 0.1276	26	$ 3.32	$ (1.33)	-28.57%
Total Deferral/Variance Account Rate Riders	$ -	1	$ -	$ (0.5047)	1	$ (0.50)	$ (0.50)	
CBR Class B Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
GA Rate Riders	$ -	650	$ -	$ -	650	$ -	$ -	
Low Voltage Service Charge	$ 0.7547	1	$ 0.75	$ 1.2326	1	$ 1.23	$ 0.48	63.32%
Smart Meter Entity Charge (if applicable)	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		1	$ -	$ 0.2027	1	$ 0.20	$ 0.20	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 50.03**			**$ 43.19**	**$ (6.85)**	**-13.68%**
RTSR - Network	$ 1.9661	1	$ 1.97	$ 1.9252	1	$ 1.93	$ (0.04)	-2.08%
RTSR - Connection and/or Line and Transformation Connection	$ 1.7158	1	$ 1.72	$ 1.6636	1	$ 1.66	$ (0.05)	-3.04%
Sub-Total C - Delivery (including Sub-Total B)			**$ 53.72**			**$ 46.78**	**$ (6.94)**	**-12.92%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	686	$ 2.33	$ 0.0034	676	$ 2.30	$ (0.04)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	686	$ 0.34	$ 0.0005	676	$ 0.34	$ (0.01)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
TOU - Off Peak	$ 0.1010	423	$ 42.67	$ 0.1010	423	$ 42.67	$ -	0.00%
TOU - Mid Peak	$ 0.1440	111	$ 15.91	$ 0.1440	111	$ 15.91	$ -	0.00%
TOU - On Peak	$ 0.2080	117	$ 24.34	$ 0.2080	117	$ 24.34	$ -	0.00%
Total Bill on TOU (before Taxes)			**$ 139.56**			**$ 132.58**	**$ (6.98)**	**-5.00%**
HST	13%		$ 18.14	13%		$ 17.24	$ (0.91)	-5.00%
Ontario Electricity Rebate	31.8%		$ (44.38)	31.8%		$ (42.16)	$ 2.22	
Total Bill on TOU			**$ 113.33**			**$ 107.66**	**$ (5.67)**	**-5.00%**

Customer Class:	STREET LIGHTING SERVICE CLASSIFICATION	
RPP / Non-RPP:	Non-RPP (Other)	
Consumption	94,033	kWh
Demand	251	kW
Current Loss Factor	1.0560	
Proposed/Approved Loss Factor	1.0400	

	Current OEB-Approved			Proposed			Impact	
	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	$ 2.38	4833	$ 11,502.54	$ 2.69	4833	$ 13,000.77	$ 1,498.23	13.03%
Distribution Volumetric Rate	$ 1.6071	251	$ 403.38	$ 1.8150	251	$ 455.57	$ 52.18	12.94%
Fixed Rate Riders	$ 0.38	1	$ 0.38	$ 0.01	1	$ 0.01	$ (0.37)	-97.37%
Volumetric Rate Riders	$ 0.2552	251	$ 64.06	$ -	251	$ -	$ (64.06)	-100.00%
Sub-Total A (excluding pass through)			**$ 11,970.36**			**$ 13,456.35**	**$ 1,485.99**	**12.41%**
Line Losses on Cost of Power	$ -	-	$ -	$ -	-	$ -	$ -	
Total Deferral/Variance Account Rate Riders	$ -	251	$ -	$ (0.3152)	251	$ (79.12)	$ (79.12)	
CBR Class B Rate Riders	$ -	251	$ -	$ -	251	$ -	$ -	
GA Rate Riders	$ -	94,033	$ -	$ (0.0063)	94,033	$ (592.41)	$ (592.41)	
Low Voltage Service Charge	$ 0.7393	251	$ 185.56	$ 1.2075	251	$ 303.08	$ 117.52	63.33%
Smart Meter Entity Charge (if applicable)	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		251	$ -	$ (1.5426)	251	$ (387.19)	$ (387.19)	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 12,155.92**			**$ 12,700.71**	**$ 544.79**	**4.48%**
RTSR - Network	$ 1.9570	251	$ 491.21	$ 1.9163	251	$ 480.99	$ (10.22)	-2.08%
RTSR - Connection and/or Line and Transformation Connection	$ 1.6809	251	$ 421.91	$ 1.6298	251	$ 409.08	$ (12.83)	-3.04%
Sub-Total C - Delivery (including Sub-Total B)			**$ 13,069.03**			**$ 13,590.78**	**$ 521.75**	**3.99%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	99,299	$ 337.62	$ 0.0034	97,794	$ 332.50	$ (5.12)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	99,299	$ 49.65	$ 0.0005	97,794	$ 48.90	$ (0.75)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
Average IESO Wholesale Market Price	$ 0.1101	99,299	$ 10,932.80	$ 0.1101	97,794	$ 10,767.15	$ (165.65)	-1.52%
Total Bill on Average IESO Wholesale Market Price			**$ 24,389.35**			**$ 24,739.59**	**$ 350.23**	**1.44%**
HST	13%		$ 3,170.62	13%		$ 3,216.15	$ 45.53	1.44%
Ontario Electricity Rebate	31.8%		$ -	31.8%		$ -		
Total Bill on Average IESO Wholesale Market Price			**$ 27,559.97**			**$ 27,955.73**	**$ 395.76**	**1.44%**

Customer Class:	RESIDENTIAL SERVICE CLASSIFICATION
RPP / Non-RPP:	RPP
Consumption	305 kWh
Demand	- kW
Current Loss Factor	1.0560
Proposed/Approved Loss Factor	1.0400

	Current OEB-Approved			Proposed			Impact	
	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	$ 27.34	1	$ 27.34	$ 37.23	1	$ 37.23	$ 9.89	36.17%
Distribution Volumetric Rate	$ -	305	$ -	$ -	305	$ -	$ -	
Fixed Rate Riders	$ 4.31	1	$ 4.31	$ 1.74	1	$ 1.74	$ (2.57)	-59.63%
Volumetric Rate Riders	$ -	305	$ -	$ -	305	$ -	$ -	
Sub-Total A (excluding pass through)			**$ 31.65**			**$ 38.97**	**$ 7.32**	**23.13%**
Line Losses on Cost of Power	$ 0.1276	17	$ 2.18	$ 0.1276	12	$ 1.56	$ (0.62)	-28.57%
Total Deferral/Variance Account Rate Riders	$ -	305	$ -	$ -	305	$ -	$ -	
CBR Class B Rate Riders	$ -	305	$ -	$ -	305	$ -	$ -	
GA Rate Riders	$ -	305	$ -	$ -	305	$ -	$ -	
Low Voltage Service Charge	$ 0.0026	305	$ 0.79	$ 0.0044	305	$ 1.34	$ 0.55	69.23%
Smart Meter Entity Charge (if applicable)	$ 0.57	1	$ 0.57	$ 0.57	1	$ 0.57	$ -	0.00%
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		305	$ -	$ -	305	$ -	$ -	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 35.19**			**$ 42.44**	**$ 7.25**	**20.59%**
RTSR - Network	$ 0.0072	322	$ 2.32	$ 0.0071	317	$ 2.25	$ (0.07)	-2.88%
RTSR - Connection and/or Line and Transformation Connection	$ 0.0061	322	$ 1.96	$ 0.0059	317	$ 1.87	$ (0.09)	-4.74%
Sub-Total C - Delivery (including Sub-Total B)			**$ 39.48**			**$ 46.56**	**$ 7.09**	**17.95%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	322	$ 1.10	$ 0.0034	317	$ 1.08	$ (0.02)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	322	$ 0.16	$ 0.0005	317	$ 0.16	$ (0.00)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
TOU - Off Peak	$ 0.1010	198	$ 20.02	$ 0.1010	198	$ 20.02	$ -	0.00%
TOU - Mid Peak	$ 0.1440	52	$ 7.47	$ 0.1440	52	$ 7.47	$ -	0.00%
TOU - On Peak	$ 0.2080	55	$ 11.42	$ 0.2080	55	$ 11.42	$ -	0.00%
Total Bill on TOU (before Taxes)			**$ 79.89**			**$ 86.96**	**$ 7.07**	**8.85%**
HST	13%		$ 10.39	13%		$ 11.30	$ 0.92	8.85%
Ontario Electricity Rebate	31.8%		$ (25.41)	31.8%		$ (27.65)	$ (2.25)	
Total Bill on TOU			**$ 64.87**			**$ 70.61**	**$ 5.74**	**8.85%**

In the manager's summary, discuss the reaso

Customer Class:	RESIDENTIAL SERVICE CLASSIFICATION
RPP / Non-RPP:	RPP
Consumption	1,000 kWh
Demand	- kW
Current Loss Factor	1.0560
Proposed/Approved Loss Factor	1.0400

	Current OEB-Approved			Proposed			Impact	
	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	$ 27.34	1	$ 27.34	$ 37.23	1	$ 37.23	$ 9.89	36.17%
Distribution Volumetric Rate	$ -	1000	$ -	$ -	1000	$ -	$ -	
Fixed Rate Riders	$ 4.31	1	$ 4.31	$ 1.74	1	$ 1.74	$ (2.57)	-59.63%
Volumetric Rate Riders	$ -	1000	$ -	$ -	1000	$ -	$ -	
Sub-Total A (excluding pass through)			**$ 31.65**			**$ 38.97**	**$ 7.32**	**23.13%**
Line Losses on Cost of Power	$ 0.1276	56	$ 7.14	$ 0.1276	40	$ 5.10	$ (2.04)	-28.57%
Total Deferral/Variance Account Rate Riders	$ -	1,000	$ -	$ -	1,000	$ -	$ -	
CBR Class B Rate Riders	$ -	1,000	$ -	$ -	1,000	$ -	$ -	
GA Rate Riders	$ -	1,000	$ -	$ -	1,000	$ -	$ -	
Low Voltage Service Charge	$ 0.0026	1,000	$ 2.60	$ 0.0044	1,000	$ 4.40	$ 1.80	69.23%
Smart Meter Entity Charge (if applicable)	$ 0.57	1	$ 0.57	$ 0.57	1	$ 0.57	$ -	0.00%
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		1,000	$ -	$ -	1,000	$ -	$ -	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 41.96**			**$ 49.04**	**$ 7.08**	**16.87%**
RTSR - Network	$ 0.0072	1,056	$ 7.60	$ 0.0071	1,040	$ 7.38	$ (0.22)	-2.88%
RTSR - Connection and/or Line and Transformation Connection	$ 0.0061	1,056	$ 6.44	$ 0.0059	1,040	$ 6.14	$ (0.31)	-4.74%
Sub-Total C - Delivery (including Sub-Total B)			**$ 56.01**			**$ 62.56**	**$ 6.55**	**11.70%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	1,056	$ 3.59	$ 0.0034	1,040	$ 3.54	$ (0.05)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	1,056	$ 0.53	$ 0.0005	1,040	$ 0.52	$ (0.01)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
TOU - Off Peak	$ 0.1010	650	$ 65.65	$ 0.1010	650	$ 65.65	$ -	0.00%
TOU - Mid Peak	$ 0.1440	170	$ 24.48	$ 0.1440	170	$ 24.48	$ -	0.00%
TOU - On Peak	$ 0.2080	180	$ 37.44	$ 0.2080	180	$ 37.44	$ -	0.00%
Total Bill on TOU (before Taxes)			**$ 187.95**			**$ 194.44**	**$ 6.49**	**3.45%**
HST	13%		$ 24.43	13%		$ 25.28	$ 0.84	3.45%
Ontario Electricity Rebate	31.8%		$ (59.77)	31.8%		$ (61.83)	$ (2.06)	
Total Bill on TOU			**$ 152.61**			**$ 157.88**	**$ 5.27**	**3.45%**

In the manager's summary, discuss the reaso

Customer Class:	RESIDENTIAL SERVICE CLASSIFICATION
RPP / Non-RPP:	RPP
Consumption	**5,000** kWh
Demand	**-** kW
Current Loss Factor	**1.0560**
Proposed/Approved Loss Factor	**1.0400**

	Current OEB-Approved			Proposed			Impact	
	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	$ 27.34	1	$ 27.34	$ 37.23	1	$ 37.23	$ 9.89	36.17%
Distribution Volumetric Rate	$ -	5000	$ -	$ -	5000	$ -	$ -	
Fixed Rate Riders	$ 4.31	1	$ 4.31	$ 1.74	1	$ 1.74	$ (2.57)	-59.63%
Volumetric Rate Riders	$ -	5000	$ -	$ -	5000	$ -	$ -	
Sub-Total A (excluding pass through)			**$ 31.65**			**$ 38.97**	**$ 7.32**	**23.13%**
Line Losses on Cost of Power	$ 0.1276	280	$ 35.72	$ 0.1276	200	$ 25.51	$ (10.21)	-28.57%
Total Deferral/Variance Account Rate Riders	$ -	5,000	$ -	$ -	5,000	$ -	$ -	
CBR Class B Rate Riders	$ -	5,000	$ -	$ -	5,000	$ -	$ -	
GA Rate Riders	$ -	5,000	$ -	$ -	5,000	$ -	$ -	
Low Voltage Service Charge	$ 0.0026	5,000	$ 13.00	$ 0.0044	5,000	$ 22.00	$ 9.00	69.23%
Smart Meter Entity Charge (if applicable)	$ 0.57	1	$ 0.57	$ 0.57	1	$ 0.57	$ -	0.00%
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		5,000	$ -	$ -	5,000	$ -	$ -	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 80.94**			**$ 87.05**	**$ 6.11**	**7.55%**
RTSR - Network	$ 0.0072	5,280	$ 38.02	$ 0.0071	5,200	$ 36.92	$ (1.10)	-2.88%
RTSR - Connection and/or Line and Transformation Connection	$ 0.0061	5,280	$ 32.21	$ 0.0059	5,200	$ 30.68	$ (1.53)	-4.74%
Sub-Total C - Delivery (including Sub-Total B)			**$ 151.16**			**$ 154.65**	**$ 3.49**	**2.31%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	5,280	$ 17.95	$ 0.0034	5,200	$ 17.68	$ (0.27)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	5,280	$ 2.64	$ 0.0005	5,200	$ 2.60	$ (0.04)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
TOU - Off Peak	$ 0.1010	3,250	$ 328.25	$ 0.1010	3,250	$ 328.25	$ -	0.00%
TOU - Mid Peak	$ 0.1440	850	$ 122.40	$ 0.1440	850	$ 122.40	$ -	0.00%
TOU - On Peak	$ 0.2080	900	$ 187.20	$ 0.2080	900	$ 187.20	$ -	0.00%
Total Bill on TOU (before Taxes)			**$ 809.86**			**$ 813.03**	**$ 3.18**	**0.39%**
HST	13%		$ 105.28	13%		$ 105.69	$ 0.41	0.39%
Ontario Electricity Rebate	31.8%		$ (257.53)	31.8%		$ (258.54)	$ (1.01)	
Total Bill on TOU			**$ 657.60**			**$ 660.18**	**$ 2.58**	**0.39%**

In the manager's summary, discuss the reaso

Customer Class:	**GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION**
RPP / Non-RPP:	**RPP**
Consumption	**1,100 kWh**
Demand	**- kW**
Current Loss Factor	**1.0560**
Proposed/Approved Loss Factor	**1.0400**

	Current OEB-Approved			**Proposed**			**Impact**	
	Rate ($)	**Volume**	**Charge ($)**	**Rate ($)**	**Volume**	**Charge ($)**	**$ Change**	**% Change**
Monthly Service Charge	$ 29.38	1	$ 29.38	$ 48.43	1	$ 48.43	$ 19.05	64.84%
Distribution Volumetric Rate	$ 0.0106	1100	$ 11.66	$ 0.0175	1100	$ 19.25	$ 7.59	65.09%
Fixed Rate Riders	$ 4.66	1	$ 4.66	$ 0.15	1	$ 0.15	$ (4.51)	-96.78%
Volumetric Rate Riders	$ 0.0017	1100	$ 1.87	$ -	1100	$ -	$ (1.87)	-100.00%
Sub-Total A (excluding pass through)			**$ 47.57**			**$ 67.83**	**$ 20.26**	**42.59%**
Line Losses on Cost of Power	$ 0.1276	62	$ 7.86	$ 0.1276	44	$ 5.61	$ (2.25)	-28.57%
Total Deferral/Variance Account Rate Riders	$ -	1,100	$ -	$ 0.0017	1,100	$ 1.87	$ 1.87	
CBR Class B Rate Riders	$ -	1,100	$ -	$ -	1,100	$ -	$ -	
GA Rate Riders	$ -	1,100	$ -	$ -	1,100	$ -	$ -	
Low Voltage Service Charge	$ 0.0024	1,100	$ 2.64	$ 0.0041	1,100	$ 4.51	$ 1.87	70.83%
Smart Meter Entity Charge (if applicable)	$ 0.57	1	$ 0.57	$ 0.57	1	$ 0.57	$ -	0.00%
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		1,100	$ -	$ 0.0001	1,100	$ 0.11	$ 0.11	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 58.64**			**$ 80.50**	**$ 21.86**	**37.29%**
RTSR - Network	$ 0.0063	1,162	$ 7.32	$ 0.0062	1,144	$ 7.09	$ (0.23)	-3.08%
RTSR - Connection and/or Line and Transformation Connection	$ 0.0057	1,162	$ 6.62	$ 0.0055	1,144	$ 6.29	$ (0.33)	-4.97%
Sub-Total C - Delivery (including Sub-Total B)			**$ 72.58**			**$ 93.89**	**$ 21.31**	**29.36%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	1,162	$ 3.95	$ 0.0034	1,144	$ 3.89	$ (0.06)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	1,162	$ 0.58	$ 0.0005	1,144	$ 0.57	$ (0.01)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
TOU - Off Peak	$ 0.1010	715	$ 72.22	$ 0.1010	715	$ 72.22	$ -	0.00%
TOU - Mid Peak	$ 0.1440	187	$ 26.93	$ 0.1440	187	$ 26.93	$ -	0.00%
TOU - On Peak	$ 0.2080	198	$ 41.18	$ 0.2080	198	$ 41.18	$ -	0.00%
Total Bill on TOU (before Taxes)			**$ 217.68**			**$ 238.93**	**$ 21.24**	**9.76%**
HST	13%		$ 28.30	13%		$ 31.06	$ 2.76	9.76%
Ontario Electricity Rebate	31.8%		$ (69.22)	31.8%		$ (75.98)	$ (6.75)	
Total Bill on TOU			**$ 176.76**			**$ 194.01**	**$ 17.25**	**9.76%**

In the manager's summary, discuss the reaso

Customer Class:	GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION	
RPP / Non-RPP:	RPP	
Consumption	5,000	kWh
Demand	-	kW
Current Loss Factor	1.0560	
Proposed/Approved Loss Factor	1.0400	

	Current OEB-Approved			Proposed			Impact	
	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	$ 29.38	1	$ 29.38	$ 48.43	1	$ 48.43	$ 19.05	64.84%
Distribution Volumetric Rate	$ 0.0106	5000	$ 53.00	$ 0.0175	5000	$ 87.50	$ 34.50	65.09%
Fixed Rate Riders	$ 4.66	1	$ 4.66	$ 0.15	1	$ 0.15	$ (4.51)	-96.78%
Volumetric Rate Riders	$ 0.0017	5000	$ 8.50	$ -	5000	$ -	$ (8.50)	-100.00%
Sub-Total A (excluding pass through)			**$ 95.54**			**$ 136.08**	**$ 40.54**	**42.43%**
Line Losses on Cost of Power	$ 0.1276	280	$ 35.72	$ 0.1276	200	$ 25.51	$ (10.21)	-28.57%
Total Deferral/Variance Account Rate Riders	$ -	5,000	$ -	$ 0.0017	5,000	$ 8.50	$ 8.50	
CBR Class B Rate Riders	$ -	5,000	$ -	$ -	5,000	$ -	$ -	
GA Rate Riders	$ -	5,000	$ -	$ -	5,000	$ -	$ -	
Low Voltage Service Charge	$ 0.0024	5,000	$ 12.00	$ 0.0041	5,000	$ 20.50	$ 8.50	70.83%
Smart Meter Entity Charge (if applicable)	$ 0.57	1	$ 0.57	$ 0.57	1	$ 0.57	$ -	0.00%
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		5,000	$ -	$ 0.0001	5,000	$ 0.50	$ 0.50	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 143.83**			**$ 191.66**	**$ 47.83**	**33.26%**
RTSR - Network	$ 0.0063	5,280	$ 33.26	$ 0.0062	5,200	$ 32.24	$ (1.02)	-3.08%
RTSR - Connection and/or Line and Transformation Connection	$ 0.0057	5,280	$ 30.10	$ 0.0055	5,200	$ 28.60	$ (1.50)	-4.97%
Sub-Total C - Delivery (including Sub-Total B)			**$ 207.19**			**$ 252.50**	**$ 45.31**	**21.87%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	5,280	$ 17.95	$ 0.0034	5,200	$ 17.68	$ (0.27)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	5,280	$ 2.64	$ 0.0005	5,200	$ 2.60	$ (0.04)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
TOU - Off Peak	$ 0.1010	3,250	$ 328.25	$ 0.1010	3,250	$ 328.25	$ -	0.00%
TOU - Mid Peak	$ 0.1440	850	$ 122.40	$ 0.1440	850	$ 122.40	$ -	0.00%
TOU - On Peak	$ 0.2080	900	$ 187.20	$ 0.2080	900	$ 187.20	$ -	0.00%
Total Bill on TOU (before Taxes)			**$ 865.88**			**$ 910.88**	**$ 45.00**	**5.20%**
HST	13%		$ 112.56	13%		$ 118.41	$ 5.85	5.20%
Ontario Electricity Rebate	31.8%		$ (275.35)	31.8%		$ (289.66)	$ (14.31)	
Total Bill on TOU			**$ 703.10**			**$ 739.64**	**$ 36.54**	**5.20%**

In the manager's summary, discuss the reaso

Customer Class:	**GENERAL SERVICE LESS THAN 50 KW SERVICE CLASSIFICATION**
RPP / Non-RPP:	**RPP**
Consumption	**15,000** kWh
Demand	**-** kW
Current Loss Factor	**1.0560**
Proposed/Approved Loss Factor	**1.0400**

	Current OEB-Approved			Proposed			Impact	
	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	$ 29.38	1	$ 29.38	$ 48.43	1	$ 48.43	$ 19.05	64.84%
Distribution Volumetric Rate	$ 0.0106	15000	$ 159.00	$ 0.0175	15000	$ 262.50	$ 103.50	65.09%
Fixed Rate Riders	$ 4.66	1	$ 4.66	$ 0.15	1	$ 0.15	$ (4.51)	-96.78%
Volumetric Rate Riders	$ 0.0017	15000	$ 25.50	$ -	15000	$ -	$ (25.50)	-100.00%
Sub-Total A (excluding pass through)			**$ 218.54**			**$ 311.08**	**$ 92.54**	**42.34%**
Line Losses on Cost of Power	$ -	-	$ -	$ -	-	$ -	$ -	
Total Deferral/Variance Account Rate Riders	$ -	15,000	$ -	$ 0.0017	15,000	$ 25.50	$ 25.50	
CBR Class B Rate Riders	$ -	15,000	$ -	$ -	15,000	$ -	$ -	
GA Rate Riders	$ -	15,000	$ -	$ -	15,000	$ -	$ -	
Low Voltage Service Charge	$ 0.0024	15,000	$ 36.00	$ 0.0041	15,000	$ 61.50	$ 25.50	70.83%
Smart Meter Entity Charge (if applicable)	$ 0.57	1	$ 0.57	$ 0.57	1	$ 0.57	$ -	0.00%
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		15,000	$ -	$ 0.0001	15,000	$ 1.50	$ 1.50	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 255.11**			**$ 400.15**	**$ 145.04**	**56.85%**
RTSR - Network	$ 0.0063	15,840	$ 99.79	$ 0.0062	15,600	$ 96.72	$ (3.07)	-3.08%
RTSR - Connection and/or Line and Transformation Connection	$ 0.0057	15,840	$ 90.29	$ 0.0055	15,600	$ 85.80	$ (4.49)	-4.97%
Sub-Total C - Delivery (including Sub-Total B)			**$ 445.19**			**$ 582.67**	**$ 137.48**	**30.88%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	15,840	$ 53.86	$ 0.0034	15,600	$ 53.04	$ (0.82)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	15,840	$ 7.92	$ 0.0005	15,600	$ 7.80	$ (0.12)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
TOU - Off Peak	$ 0.1010	10,296	$ 1,039.90	$ 0.1010	10,140	$ 1,024.14	$ (15.76)	-1.52%
TOU - Mid Peak	$ 0.1440	2,693	$ 387.76	$ 0.1440	2,652	$ 381.89	$ (5.88)	-1.52%
TOU - On Peak	$ 0.2080	2,851	$ 593.05	$ 0.2080	2,808	$ 584.06	$ (8.99)	-1.52%
Total Bill on TOU (before Taxes)			**$ 2,527.92**			**$ 2,633.85**	**$ 105.93**	**4.19%**
HST	13%		$ 328.63	13%		$ 342.40	$ 13.77	4.19%
Ontario Electricity Rebate	31.8%		$ (803.88)	31.8%		$ (837.56)	$ (33.68)	
Total Bill on TOU			**$ 2,052.67**			**$ 2,138.69**	**$ 86.01**	**4.19%**

In the manager's summary, discuss the reaso

Customer Class:	**GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION**
RPP / Non-RPP:	**Non-RPP (Other)**
Consumption	**20,000** kWh
Demand	**60** kW
Current Loss Factor	**1.0560**
Proposed/Approved Loss Factor	**1.0400**

	Current OEB-Approved			**Proposed**			**Impact**	
	Rate ($)	**Volume**	**Charge ($)**	**Rate ($)**	**Volume**	**Charge ($)**	**$ Change**	**% Change**
Monthly Service Charge	$ 89.89	1	$ 89.89	$ 160.44	1	$ 160.44	$ 70.55	78.48%
Distribution Volumetric Rate	$ 3.9942	60	$ 239.65	$ 6.9927	60	$ 419.56	$ 179.91	75.07%
Fixed Rate Riders	$ 14.28	1	$ 14.28	$ 0.40	1	$ 0.40	$ (13.88)	-97.20%
Volumetric Rate Riders	$ 0.6343	60	$ 38.06	$ -	60	$ -	$ (38.06)	-100.00%
Sub-Total A (excluding pass through)			**$ 381.88**			**$ 580.40**	**$ 198.52**	**51.99%**
Line Losses on Cost of Power	$ -	-	$ -	$ -	-	$ -	$ -	
Total Deferral/Variance Account Rate Riders	$ -	60	$ -	$ 0.7106	60	$ 42.64	$ 42.64	
CBR Class B Rate Riders	$ -	60	$ -	$ -	60	$ -	$ -	
GA Rate Riders	$ -	20,000	$ -	$ (0.0063)	20,000	$ (126.00)	$ (126.00)	
Low Voltage Service Charge	$ 1.0483	60	$ 62.90	$ 1.7123	60	$ 102.74	$ 39.84	63.34%
Smart Meter Entity Charge (if applicable)	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		60	$ -	$ 0.0751	60	$ 4.51	$ 4.51	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 444.78**			**$ 604.28**	**$ 159.50**	**35.86%**
RTSR - Network	$ 2.7559	60	$ 165.35	$ 2.6986	60	$ 161.92	$ (3.44)	-2.08%
RTSR - Connection and/or Line and Transformation Connection	$ 2.3835	60	$ 143.01	$ 2.3110	60	$ 138.66	$ (4.35)	-3.04%
Sub-Total C - Delivery (including Sub-Total B)			**$ 753.14**			**$ 904.86**	**$ 151.72**	**20.14%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	21,120	$ 71.81	$ 0.0034	20,800	$ 70.72	$ (1.09)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	21,120	$ 10.56	$ 0.0005	20,800	$ 10.40	$ (0.16)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
Average IESO Wholesale Market Price	$ 0.1101	21,120	$ 2,325.31	$ 0.1101	20,800	$ 2,290.08	$ (35.23)	-1.52%
Total Bill on Average IESO Wholesale Market Price			**$ 3,161.07**			**$ 3,276.31**	**$ 115.24**	**3.65%**
HST	13%		$ 410.94	13%		$ 425.92	$ 14.98	3.65%
Ontario Electricity Rebate	31.8%		$ (1,005.22)	31.8%		$ (1,041.87)		
Total Bill on Average IESO Wholesale Market Price			**$ 2,566.79**			**$ 2,660.36**	**$ 93.57**	**3.65%**

Customer Class:	**GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION**
RPP / Non-RPP:	**Non-RPP (Other)**
Consumption	**500,000 kWh**
Demand	**750 kW**
Current Loss Factor	**1.0560**
Proposed/Approved Loss Factor	**1.0400**

	Current OEB-Approved			**Proposed**			**Impact**	
	Rate ($)	**Volume**	**Charge ($)**	**Rate ($)**	**Volume**	**Charge ($)**	**$ Change**	**% Change**
Monthly Service Charge	$ 89.89	1	$ 89.89	$ 160.44	1	$ 160.44	$ 70.55	78.48%
Distribution Volumetric Rate	$ 3.9942	750	$ 2,995.65	$ 6.9927	750	$ 5,244.53	$ 2,248.88	75.07%
Fixed Rate Riders	$ 14.28	1	$ 14.28	$ 0.40	1	$ 0.40	$ (13.88)	-97.20%
Volumetric Rate Riders	$ 0.6343	750	$ 475.73	$ -	750	$ -	$ (475.73)	-100.00%
Sub-Total A (excluding pass through)			**$ 3,575.55**			**$ 5,405.37**	**$ 1,829.82**	**51.18%**
Line Losses on Cost of Power	$ -	-	$ -	$ -	-	$ -	$ -	
Total Deferral/Variance Account Rate Riders	$ -	750	$ -	$ 0.7106	750	$ 532.95	$ 532.95	
CBR Class B Rate Riders	$ -	750	$ -	$ -	750	$ -	$ -	
GA Rate Riders	$ -	500,000	$ -	$ (0.0063)	500,000	$ (3,150.00)	$ (3,150.00)	
Low Voltage Service Charge	$ 1.0483	750	$ 786.23	$ 1.7123	750	$ 1,284.23	$ 498.00	63.34%
Smart Meter Entity Charge (if applicable)	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		750	$ -	$ 0.0751	750	$ 56.33	$ 56.33	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 4,361.77**			**$ 4,128.87**	**$ (232.91)**	**-5.34%**
RTSR - Network	$ 2.7559	750	$ 2,066.93	$ 2.6986	750	$ 2,023.95	$ (42.98)	-2.08%
RTSR - Connection and/or Line and Transformation Connection	$ 2.3835	750	$ 1,787.63	$ 2.3110	750	$ 1,733.25	$ (54.38)	-3.04%
Sub-Total C - Delivery (including Sub-Total B)			**$ 8,216.32**			**$ 7,886.07**	**$ (330.26)**	**-4.02%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	528,000	$ 1,795.20	$ 0.0034	520,000	$ 1,768.00	$ (27.20)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	528,000	$ 264.00	$ 0.0005	520,000	$ 260.00	$ (4.00)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
Average IESO Wholesale Market Price	$ 0.1101	528,000	$ 58,132.80	$ 0.1101	520,000	$ 57,252.00	$ (880.80)	-1.52%
Total Bill on Average IESO Wholesale Market Price			**$ 68,408.57**			**$ 67,166.32**	**$ (1,242.26)**	**-1.82%**
HST	13%		$ 8,893.11	13%		$ 8,731.62	$ (161.49)	-1.82%
Ontario Electricity Rebate	31.8%		$ -	31.8%		$ -		
Total Bill on Average IESO Wholesale Market Price			**$ 77,301.68**			**$ 75,897.94**	**$ (1,403.75)**	**-1.82%**

Customer Class:	GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION
RPP / Non-RPP:	Non-RPP (Other)
Consumption	1,000,000 kWh
Demand	2,000 kW
Current Loss Factor	1.0560
Proposed/Approved Loss Factor	1.0400

	Current OEB-Approved			Proposed			Impact	
	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	$ 192.10	1	$ 192.10	$ 510.87	1	$ 510.87	$ 318.77	165.94%
Distribution Volumetric Rate	$ 3.5931	2000	$ 7,186.20	$ 8.3308	2000	$ 16,661.60	$ 9,475.40	131.86%
Fixed Rate Riders	$ 30.51	1	$ 30.51	$ 1.24	1	$ 1.24	$ (29.27)	-95.94%
Volumetric Rate Riders	$ 0.5706	2000	$ 1,141.20	$ -	2000	$ -	$ (1,141.20)	-100.00%
Sub-Total A (excluding pass through)			**$ 8,550.01**			**$ 17,173.71**	**$ 8,623.70**	**100.86%**
Line Losses on Cost of Power	$ -	-	$ -	$ -	-	$ -	$ -	
Total Deferral/Variance Account Rate Riders	$ -	2,000	$ -	$ 0.8727	2,000	$ 1,745.40	$ 1,745.40	
CBR Class B Rate Riders	$ -	2,000	$ -	$ -	2,000	$ -	$ -	
GA Rate Riders	$ -	1,000,000	$ -	$ (0.0063)	1,000,000	$ (6,300.00)	$ (6,300.00)	
Low Voltage Service Charge	$ 1.0483	2,000	$ 2,096.60	$ 1.0483	2,000	$ 2,096.60	$ -	0.00%
Smart Meter Entity Charge (if applicable)	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		2,000	$ -	$ 0.1361	2,000	$ 272.20	$ 272.20	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 10,646.61**			**$ 14,987.91**	**$ 4,341.30**	**40.78%**
RTSR - Network	$ -	2,000	$ -	$ -	2,000	$ -	$ -	
RTSR - Connection and/or Line and Transformation Connection	$ -	2,000	$ -	$ -	2,000	$ -	$ -	
Sub-Total C - Delivery (including Sub-Total B)			**$ 10,646.61**			**$ 14,987.91**	**$ 4,341.30**	**40.78%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	1,056,000	$ 3,590.40	$ 0.0034	1,040,000	$ 3,536.00	$ (54.40)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	1,056,000	$ 528.00	$ 0.0005	1,040,000	$ 520.00	$ (8.00)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
Average IESO Wholesale Market Price	$ 0.1101	1,056,000	$ 116,265.60	$ 0.1101	1,040,000	$ 114,504.00	$ (1,761.60)	-1.52%
Total Bill on Average IESO Wholesale Market Price			**$ 131,030.86**			**$ 133,548.16**	**$ 2,517.30**	**1.92%**
HST	13%		$ 17,034.01	13%		$ 17,361.26	$ 327.25	1.92%
Ontario Electricity Rebate	31.8%		$ -	31.8%		$ -		
Total Bill on Average IESO Wholesale Market Price			**$ 148,064.87**			**$ 150,909.42**	**$ 2,844.55**	**1.92%**

Customer Class:	**GENERAL SERVICE 1,000 TO 4,999 KW SERVICE CLASSIFICATION**
RPP / Non-RPP:	**Non-RPP (Other)**
Consumption	**3,000,000 kWh**
Demand	**4,000 kW**
Current Loss Factor	**1.0560**
Proposed/Approved Loss Factor	**1.0400**

	Current OEB-Approved			**Proposed**			**Impact**	
	Rate ($)	**Volume**	**Charge ($)**	**Rate ($)**	**Volume**	**Charge ($)**	**$ Change**	**% Change**
Monthly Service Charge	$ 192.10	1	$ 192.10	$ 510.87	1	$ 510.87	$ 318.77	165.94%
Distribution Volumetric Rate	$ 3.5931	4000	$ 14,372.40	$ 8.3308	4000	$ 33,323.20	$ 18,950.80	131.86%
Fixed Rate Riders	$ 30.51	1	$ 30.51	$ 1.24	1	$ 1.24	$ (29.27)	-95.94%
Volumetric Rate Riders	$ 0.5706	4000	$ 2,282.40	$ -	4000	$ -	$ (2,282.40)	-100.00%
Sub-Total A (excluding pass through)			**$ 16,877.41**			**$ 33,835.31**	**$ 16,957.90**	**100.48%**
Line Losses on Cost of Power	$ -	-	$ -	$ -	-	$ -	$ -	
Total Deferral/Variance Account Rate Riders	$ -	4,000	$ -	$ 0.8727	4,000	$ 3,490.80	$ 3,490.80	
CBR Class B Rate Riders	$ -	4,000	$ -	$ -	4,000	$ -	$ -	
GA Rate Riders	$ -	3,000,000	$ -	$ (0.0063)	3,000,000	$ (18,900.00)	$ (18,900.00)	
Low Voltage Service Charge	$ 1.0483	4,000	$ 4,193.20	$ 1.0483	4,000	$ 4,193.20	$ -	0.00%
Smart Meter Entity Charge (if applicable)	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Fixed Rate Riders	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Volumetric Rate Riders		4,000	$ -	$ 0.1361	4,000	$ 544.40	$ 544.40	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 21,070.61**			**$ 23,163.71**	**$ 2,093.10**	**9.93%**
RTSR - Network	$ -	4,000	$ -	$ -	4,000	$ -	$ -	
RTSR - Connection and/or Line and Transformation Connection	$ -	4,000	$ -	$ -	4,000	$ -	$ -	
Sub-Total C - Delivery (including Sub-Total B)			**$ 21,070.61**			**$ 23,163.71**	**$ 2,093.10**	**9.93%**
Wholesale Market Service Charge (WMSC)	$ 0.0034	3,168,000	$ 10,771.20	$ 0.0034	3,120,000	$ 10,608.00	$ (163.20)	-1.52%
Rural and Remote Rate Protection (RRRP)	$ 0.0005	3,168,000	$ 1,584.00	$ 0.0005	3,120,000	$ 1,560.00	$ (24.00)	-1.52%
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
Average IESO Wholesale Market Price	$ 0.1101	3,168,000	$ 348,796.80	$ 0.1101	3,120,000	$ 343,512.00	$ (5,284.80)	-1.52%
Total Bill on Average IESO Wholesale Market Price			**$ 382,222.86**			**$ 378,843.96**	**$ (3,378.90)**	**-0.88%**
HST	13%		$ 49,688.97	13%		$ 49,249.71	$ (439.26)	-0.88%
Ontario Electricity Rebate	31.8%		$ -	31.8%		$ -		
Total Bill on Average IESO Wholesale Market Price			**$ 431,911.83**			**$ 428,093.67**	**$ (3,818.16)**	**-0.88%**

Customer Class:	GENERAL SERVICE 50 TO 999 KW SERVICE CLASSIFICATION	
RPP / Non-RPP:	RPP	
Consumption	**69,000**	**kWh**
Demand	**160**	**kW**
Current Loss Factor	**1.0560**	
Proposed/Approved Loss Factor	**1.0400**	

	Current OEB-Approved			Proposed			Impact	
	Rate ($)	**Volume**	**Charge ($)**	**Rate ($)**	**Volume**	**Charge ($)**	**$ Change**	**% Change**
Monthly Service Charge	**$ 89.89**	1	$ 89.89	**$ 160.44**	**1**	**$ 160.44**	$ 70.55	78.48%
Distribution Volumetric Rate	**$ 3.9942**	160	$ 639.07	**$ 6.9927**	**160**	**$ 1,118.83**	$ 479.76	75.07%
Fixed Rate Riders	**$ 14.28**	1	$ 14.28	**$ 0.40**	**1**	**$ 0.40**	$ (13.88)	-97.20%
Volumetric Rate Riders	**$ 0.6343**	160	$ 101.49	**$ -**	**160**	**$ -**	$ (101.49)	-100.00%
Sub-Total A (excluding pass through)			**$ 844.73**			**$ 1,279.67**	**$ 434.94**	**51.49%**
Line Losses on Cost of Power	**$ -**	-	$ -	**$ -**	**-**	**$ -**	$ -	
Total Deferral/Variance Account Rate Riders	**$ -**	160	$ -	**$ 0.7106**	**160**	**$ 113.70**	$ 113.70	
CBR Class B Rate Riders	**$ -**	160	$ -	**$ -**	**160**	**$ -**	$ -	
GA Rate Riders	**$ -**	69,000	$ -	**$ -**	**69,000**	**$ -**	$ -	
Low Voltage Service Charge	**$ 1.0483**	160	$ 167.73	**$ 1.7123**	**160**	**$ 273.97**	$ 106.24	63.34%
Smart Meter Entity Charge (if applicable)	**$ -**	1	$ -	**$ -**	**1**	**$ -**	$ -	
Additional Fixed Rate Riders	**$ -**	1	$ -	**$ -**	**1**	**$ -**	$ -	
Additional Volumetric Rate Riders		160	$ -	**$ 0.0224**	**160**	**$ 3.58**	$ 3.58	
Sub-Total B - Distribution (includes Sub-Total A)			**$ 1,012.46**			**$ 1,670.92**	**$ 658.46**	**65.04%**
RTSR - Network	**$ 2.7559**	160	$ 440.94	**$ 2.6986**	**160**	**$ 431.78**	$ (9.17)	-2.08%
RTSR - Connection and/or Line and Transformation Connection	**$ 2.3835**	160	$ 381.36	**$ 2.3110**	**160**	**$ 369.76**	$ (11.60)	-3.04%
Sub-Total C - Delivery (including Sub-Total B)			**$ 1,834.76**			**$ 2,472.46**	**$ 637.69**	**34.76%**
Wholesale Market Service Charge (WMSC)	**$ 0.0034**	72,864	$ 247.74	**$ 0.0034**	**71,760**	**$ 243.98**	$ (3.75)	-1.52%
Rural and Remote Rate Protection (RRRP)	**$ 0.0005**	72,864	$ 36.43	**$ 0.0005**	**71,760**	**$ 35.88**	$ (0.55)	-1.52%
Standard Supply Service Charge	**$ 0.25**	1	$ 0.25	**$ 0.25**	**1**	**$ 0.25**	$ -	0.00%
TOU - Off Peak	**$ 0.1010**	47,362	$ 4,783.52	**$ 0.1010**	**46,644**	**$ 4,711.04**	$ (72.48)	-1.52%
TOU - Mid Peak	**$ 0.1440**	12,387	$ 1,783.71	**$ 0.1440**	**12,199**	**$ 1,756.68**	$ (27.03)	-1.52%
TOU - On Peak	**$ 0.2080**	13,116	$ 2,728.03	**$ 0.2080**	**12,917**	**$ 2,686.69**	$ (41.33)	-1.52%
Total Bill on TOU (before Taxes)			**$ 11,414.44**			**$ 11,906.99**	**$ 492.55**	**4.32%**
HST	13%		$ 1,483.88	13%		$ 1,547.91	$ 64.03	4.32%
Ontario Electricity Rebate	31.8%		$ -	31.8%		$ -	$ -	
Total Bill on TOU			**$ 12,898.32**			**$ 13,454.90**	**$ 556.58**	**4.32%**

Customer Class:	Add additional scenarios if required
RPP / Non-RPP:	
Consumption	kWh
Demand	kW
Current Loss Factor	
Proposed/Approved Loss Factor	

	Current OEB-Approved			Proposed			Impact	
	Rate ($)	**Volume**	**Charge ($)**	**Rate ($)**	**Volume**	**Charge ($)**	**$ Change**	**% Change**
Monthly Service Charge		1	$ -		1	$ -	$ -	
Distribution Volumetric Rate		0	$ -		0	$ -	$ -	
Fixed Rate Riders		1	$ -		1	$ -	$ -	
Volumetric Rate Riders		0	$ -		0	$ -	$ -	
Sub-Total A (excluding pass through)			**$ -**			**$ -**	**$ -**	
Line Losses on Cost of Power	$ 0.1101	-	$ -	$ 0.1101	-	$ -	$ -	
Total Deferral/Variance Account Rate Riders		-	$ -		-	$ -	$ -	
CBR Class B Rate Riders		-	$ -		-	$ -	$ -	
GA Rate Riders		-	$ -		-	$ -	$ -	
Low Voltage Service Charge		-	$ -		-	$ -	$ -	
Smart Meter Entity Charge (if applicable)	$ -	1	$ -	$ -	1	$ -	$ -	
Additional Fixed Rate Riders		1	$ -		1	$ -	$ -	
Additional Volumetric Rate Riders		-	$ -		-	$ -	$ -	
Sub-Total B - Distribution (includes Sub-Total A)			**$ -**			**$ -**	**$ -**	
RTSR - Network		-	$ -		-	$ -	$ -	
RTSR - Connection and/or Line and Transformation Connection		-	$ -		-	$ -	$ -	
Sub-Total C - Delivery (including Sub-Total B)			**$ -**			**$ -**	**$ -**	
Wholesale Market Service Charge (WMSC)	$ 0.0034	-	$ -	$ 0.0034	-	$ -	$ -	
Rural and Remote Rate Protection (RRRP)	$ 0.0005	-	$ -	$ 0.0005	-	$ -	$ -	
Standard Supply Service Charge	$ 0.25	1	$ 0.25	$ 0.25	1	$ 0.25	$ -	0.00%
TOU - Off Peak	$ 0.1010	-	$ -	$ 0.1010	-	$ -	$ -	
TOU - Mid Peak	$ 0.1440	-	$ -	$ 0.1440	-	$ -	$ -	
TOU - On Peak	$ 0.2080	-	$ -	$ 0.2080	-	$ -	$ -	
Non-RPP Retailer Avg. Price	$ 0.1101	-	$ -	$ 0.1101	-	$ -	$ -	
Average IESO Wholesale Market Price	$ 0.1101	-	$ -	$ 0.1101	-	$ -	$ -	
Total Bill on TOU (before Taxes)			**$ 0.25**			**$ 0.25**	**$ -**	**0.00%**
HST	13%		$ 0.03	13%		$ 0.03	$ -	0.00%
Ontario Electricity Rebate	31.8%		$ -	31.8%		$ -	$ -	
Total Bill on TOU			**$ 0.28**			**$ 0.28**	**$ -**	**0.00%**
Total Bill on Non-RPP Avg. Price			**$ 0.25**			**$ 0.25**	**$ -**	**0.00%**
HST	13%		$ 0.03	13%		$ 0.03	$ -	0.00%
Ontario Electricity Rebate	31.8%		$ -	31.8%		$ -		
Total Bill on Non-RPP Avg. Price			**$ 0.28**			**$ 0.28**	**$ -**	**0.00%**
Total Bill on Average IESO Wholesale Market Price			**$ 0.25**			**$ 0.25**	**$ -**	**0.00%**
HST	13%		$ 0.03	13%		$ 0.03	$ -	0.00%
Ontario Electricity Rebate	31.8%		$ -	31.8%		$ -		
Total Bill on Average IESO Wholesale Market Price			**$ 0.28**			**$ 0.28**	**$ -**	**0.00%**

APPENDIX 8-5: REPORT TO THE BOARD – RATE DESIGN FOR COMMERCIAL AND INDUSTRIAL ELECTRICITY CUSTOMERS

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

February 21, 2019

Staff Report to the Board

Rate Design for Commercial and Industrial Electricity Customers

Rates to Support an Evolving Energy Sector

EB-2015-0043

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A. Rate Design for Commercial and Industrial Customers

A.1 – Introduction

In response to the changing landscape and customer expectations, a new electricity rate design is needed to enable more customer choice in investments and technology while ensuring that reliability of the electricity distribution system is maintained. Customer behavior and use of the grid is changing. Their dependence on, and relationship with the distribution grid varies greatly and is increasing in complexity. Traditional consumers continue to draw electricity from the grid to power their operations. Active customers are trying to reduce their bill by managing the amount or timing of their use through behaviours and technology. Advanced customers may expect the grid to supplement their self-generation, to provide backup power, to provide 'storage-like' support, or to deliver their produced electricity to other customers depending on price. The direct impact of these new, emergent uses and expectations of the grid is related to the size and number of customers that change their use of the system. The distribution network is necessary to serve the needs of all of these customers, whether traditional users or those selecting new technologies which rely on the system.

The rate design adopted for distribution service needs to reflect the value of the system while reflecting and encouraging sound economic choices, including investments by distributors necessary to maintain reliability. In response to this ongoing evolution and the challenges it presents, the OEB launched a policy initiative in 2013 to consider the redesign of distribution rates.

On April 3, 2015, the OEB released its policy, A New Distribution Rate Design for Residential Electricity Customers[1] (the April Report). The policy on residential rates in the April Report emphasized simplicity and increasing customer understanding of the fixed nature of the distribution service. The policy recognizes that customers primarily value connection to distribution services and the essential service of billing. The OEB's general policy for distribution rate design outlined in the report is to better reflect the relationship between distributor costs and service to customers by increasing the amount of revenue collected through the fixed rate, and reducing the amount of revenue collected through the usage rate The OEB started this process by a gradual move to

[1] EB-2012-0410 Board Policy April 2015

fully-fixed distribution rates for residential customers, a process that is now nearly complete..

Built to meet the instantaneous needs of all connected customers, there are few costs in the distribution system that change with the energy that flows through the grid. Distribution assets are designed to deliver power reliably and have by their nature long service lives and largely fixed costs. However, where needs are changing or assets are approaching the end of their useful life, distributors have opportunities to address customers' emergent expectations through system plans in ways that can lower costs for all customers.

Under the current rate design, a customer that lowers its consumption also reduces its volumetric charge. This can lead to the customer not paying the cost of system assets that it may still need as a result of its technology choice or that were built specifically for them. This shifts risk and costs unfairly to other customers.

The current rate design of fixed and volumetric charges does not align well with the changing use, expectations and value to some customers. It can lead to uneconomic decisions by the customer and shifting of costs to more traditional customers who are either unable to, or choose not to, adopt new technologies.

In the April Report, the OEB stated that its goal is to equip customers with the information and the tools they need to make informed choices about how they use energy and:

- Enable customers to leverage new technologies, including self-generation using renewable resources
- Help customers manage their bills through conservation
- Help customers better understand the value of electricity service

On May 28, 2015, the OEB announced[2] the next stage in its redesign of distribution rates with a focus on commercial and industrial customers. The OEB identified as key objectives for the redesign along with the ones enumerated in the April 2015 Report:

- To support innovation for customers given the evolution of supply
    - o Customers' ability to leverage new technology
    - o Customers' ability to manage their bill through conservation
    - o Customers' understanding of the value of connection

[2] EB-2015-0043 May 2015 Announcement Letter

- To increase efficiency
  - To maximize use of the current system
  - To optimize investment for long-term cost containment

- To stabilize distribution revenue
  - To enable technology changes
  - To support conservation
  - To facilitate investment planning

In order to develop rate design options that would meet these objectives and address consumers' interests, OEB staff consulted with a wide group of stakeholders between May 2015 and March 2016. An OEB Staff Discussion Paper[3] (the Staff Discussion Paper) was issued March 31, 2016 setting out a number of options for redesigning electricity distribution rates for non-residential consumers.

In December 2018, the OEB released its Strategic Blueprint: Keeping Pace with an Evolving Energy Sector[4], the OEB's strategic direction through 2022. The Strategic Blueprint notes the previous work done on residential distribution rates and stresses both incenting utilities to focus on long-term value for money and least-cost solutions, and rates that support the efficient use of infrastructure and enable greater customer choice and control. The OEB stated that it would achieve this goal by continuing the redesign of the electricity distributor rates to give all customers a better signal regarding the cost of delivery.

This OEB Staff Report to the Board (the Report) provides OEB staff's recommendations and proposals for proposed commercial and industrial rate design changes. These recommendations have been developed through an extensive process of consultations with affected consumer groups, data gathering and analysis, all of which is detailed below. The recommendations consider the implementation matters related to the recommended changes and in particular propose mitigation strategies to ensure the reasonableness of bill changes.

In developing these recommendations, staff has been guided by the objectives set out in the *Ontario Energy Board Act, 1998,* the OEB's Strategic Blueprint and the May 2015 letter.

[3] EB-2015-0043 Staff Discussion Paper - Rate Design for Commercial and Industrial Electricity Customers: Aligning the Interests of Customers and Distributors
[4] OEB Strategic Blueprint 2017-2022

A.2 – Developing Staff's Recommendations

The OEB described the initial consultation for the general service part of the project in May 28, 2015 suggesting that the metering available for these customers gave a much bigger opportunity for using price signals for both optimizing the use of the system and focussing on long-term cost drivers for investment and cost containment.

Staff received 19 written responses on the Staff Discussion Paper issued in March 2016. These comments provided stakeholder insight into the merits of each option and aided staff in refining the potential designs, narrowing the range of options for further study. Following the review of the comments, staff engaged in further data gathering and analysis to develop a set of proposed rate designs that could be further discussed with customers in these classes.

Based on the comments and research, OEB staff continued with analysis on proposals that seemed to have some stakeholder support and would meet the objectives set out by the OEB. These are represented in the Navigant report attached as Appendix B and the materials presented by staff in consultation in 2016 and 2017. Navigant looked at data for low-volume general service customers for an appropriate group that would be comparable to residential customers to consider fixing the distribution charge for that group. As was done for residential customers, a mock tariff was developed and sample rate impacts were assessed. A sensitivity analysis of each scenario was undertaken to better understand what kind of cost shifting from active customers to more traditional customers would result from conservation and distributed generation.

Stakeholder Engagement on Staff Proposals

Staff also commissioned Ipsos Public Affairs to undertake a qualitative analysis[5] of small business customers in Ontario to give a better understanding of who they are, what types of businesses they operate, and how they use electricity in their businesses. This survey was intended to help staff understand what each of the proposals would mean for this group. The Ipsos survey suggested that small business consumers are less price sensitive and, like residential customers, could benefit from a more stable, predictable bill.

[5] The report from Ipsos on the survey is available on the OEB's website in conjunction with this Report.

OEB staff took the analysis results[6] to direct consultation with customers from September through November 2017. The purpose of the discussions was to describe OEB staff's proposals and identify possible implementation issues.

Staff reached out to those most affected either as individual customers or customer groups in order to further understand the effects of these proposed changes. Staff met with representatives of customer associations who might be affected by the change in rate design including the School Energy Coalition, and the Association of Major Power Consumers in Ontario. Staff engaged directly with customers including meetings with the Canadian Manufacturers & Exporters Standing Committee on Energy, the Association of Major Power Consumers in Ontario's Board of Directors, and the Combined Heat and Power consortium of the Association of Power Producers of Ontario. Staff also presented two webinars for the members of the Canadian Federation of Independent Business and met with groups that are relatively new to the OEB's processes including members of the Ontario Association of Physical Plant Administrators and representatives for Energy Storage Ontario. Staff also met with distributors through the Electricity Distributors Association and Coalition of Large Distributors to discuss potential implementation issues.

Stakeholder input from these consultations resulted in further data gathering, research and analysis that has informed revised proposals and recommendations that are laid out in this Report.

A.3 – Structure of this Paper

Section B of this paper, provides, a description of the current basis for rates, explanation of the changes in the way electricity distribution systems are operating and a brief summary of OEB staff's recommendations for new rate design for the non-residential rate classes.

Section C provides details of the current rate design and explains the recommended rate design changes for the existing *general service 50kW and under* of demand class (GS<50kW).

[6] Staff Proposals Presentation for Consultation

Section D provides details of the current rate design and explains the recommendations for rate design for the *general service with 50kW and over of demand* class and the *Intermediate* and *Large* customer classes.

Appendix A contains a collection of OEB staff analyses that are meant to provide a deeper understanding of how customers within the general service less than 50 kW distribution rate class behave. This appendix also describes the various datasets that were provided to the OEB by select distributors that allowed modelling of options and impacts to assist the OEB in its policy direction

Appendix B is a report by Navigant Consulting on work commissioned by the OEB. Navigation developed mock tariffs from staff's proposals and did impact analysis on the customer data. They also prepared sensitivity analysis on the impacts of conservation and distributed generation.

B. BACKGROUND

B.1 – Changing Landscape of the Electricity Grid Use

As discussed in the Introduction, customer behavior and use of the grid is changing. As suggested in a recent McKinsey Report[7] on disruptive technology, it is expected that, over a very short timeframe, distributed solutions will become more competitive with grid-supplied energy. Customers are looking to distributed energy resources (DERs) to lower their costs and increase flexibility. DERs include distributed generation to replace grid supplied power, storage to allow arbitrage of commodity costs and guarantee supply, and implementing demand response or conservation measures to increase efficiency and reduce overall consumption and demand.

Figure 1[8] shows the decline in transmission-connected demand over the past decade in Ontario. The successive graphs show a general decline in grid-supplied power. Some of that is a decline in load but it is also a result of an increase in distribution-connected generation. The decline in early morning demand is a result of increased wind. The decrease in morning demand and steepness of the afternoon increase is typical of systems with imbedded solar power.

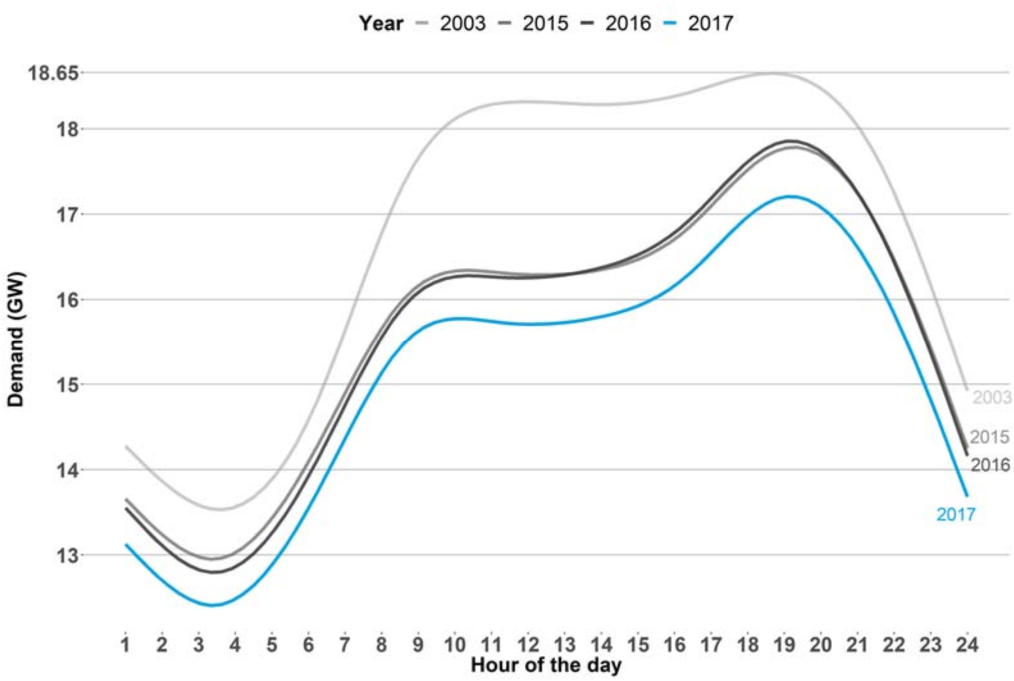

Figure 1: Average daily provincial transmission connected demand over time

[7] [Disruptive Technologies: Advances that will transform life, business, and the global economy]
[8] Data source is IESO.

Grid connection is expected to provide not only energy to meet customer requirements, but provide back up supply, for customers with DERs, when those resources are off line. In the case of renewable energy, the grid may also be expected to 'store' excess energy generated, to be consumed at a later date under a net metering arrangement.

Customers have expectations for service from their distribution company that go far beyond energy delivery. These expectations require the distributor to not only maintain adequate system capacity, but also to increase the flexibility of the distribution system to further enable customer choice and innovation. While most local distribution systems have some capacity in providing services, incremental investments are expected to be required to meet the evolving nature of use of the grid. One of the principles of rate design is that the customers who benefit from investments should pay for the benefits, such as flexibility.

This unique combination of needs, expectations, customer behaviours, and end-of-life asset conditions can lead to symbiotic arrangements for the benefits of specific customers and the distributor's entire customer base. When planned appropriately, it can deliver value at a lower cost. Generation and / or storage on the customer's premises benefits the customer by reducing the commodity bill and increasing resiliency since self-generation can provide power when supply from the grid is not possible. It also has benefits to the provincial gird such as; reducing losses and site specific benefits such as voltage support. Freeing capacity by effectively reducing site load can benefit the system by delaying the need for investment or allowing other loads to connect to lines that are nearing capacity.

The existing rate design results in a customer that lowers its consumption reducing its volumetric distribution charge. This leads to the customer not paying the cost of system assets that it may still rely on as a result of its technology choice or decisions about consumption. This shifts risk and system costs on to other customers.

The distribution system was built to meet the instantaneous needs of all connected customers and there are few costs in the distribution system that change with the energy that flows through the grid. The costs of most distribution assets are largely fixed due to the type of investment and their relatively long-lived nature. These assets are designed to deliver power reliably. However, where needs are changing or assets are approaching the end of their useful life, distributors have opportunities to address customers' emergent expectations through system plans in ways that can lower costs for all customers.

The current rate design of fixed and volumetric charges does not align well with the changing use, expectations and value to some customers. It can lead to uneconomic decisions by the customer and shifting of costs to more traditional customers who are either unable to, or choose not to, adopt new technologies.

B.2 – Basis for Current Rate Designs

Rate design is about how a distributor collects money, not about how its revenue requirement is set. The OEB approves the revenue requirement that each Ontario distributor uses to provide service including to operate and maintain its system and to invest in new lines and equipment. Ultimately in whatever policy is finally decided, the OEB will ensure that the change from one rate design to a new one will be revenue neutral. New rate design policies will not change the revenue requirement or class allocations that are approved as a result of a proceeding for any distributor. However, as with any change, the approach used to determine the value and the cost to each customer means that some customers will pay less each month and some will pay more.

The current approach and historic rate design for commercial and industrial customers was established in 1999 for market opening. It was a typical fixed/variable rate design that had been in place for many years prior to market opening when the price reflected an all in electricity cost. Fundamentally, this was founded upon the basis that grid supplied energy was the primary source of power and thus could be used to measure and estimate the relative value of a customer’s use of the grid.

These rate designs were developed based on cost causality and had reflected an all in cost of electricity. A cost allocation study identified cost drivers that were customer related, demand related, or energy related. A customer charge (or fixed charge) recovered customer-related costs including a portion of minimum system costs. Demand charges recovered demand-related costs both coincident and individual. Customer and demand related costs are the primary drivers of distribution system costs. Energy charges were set to recover energy-related costs. Energy-related costs are primarily based on commodity and are not further discussed here.

For the GS<50kW rate class, meters that measured demand were previously too costly to install. Less expensive energy meters were installed and in order to approximate demand, assumed load profiles were used to map demand in kW into consumption in kWh. This assumed that all general service customers had approximately the same load shape. It also assumed that increases in consumption were linear with increases in demand (i.e. increased consumption increased maximum demand). On average this resulted in a fair determination of costs to customers. However, in specific outlier instances, some customers are billed more than they should while others received a bill lower than the cost causality principle would expect.

B.3 – Current Classes of Customers

Distribution customers are primarily grouped into classes based on the demand they put on the grid. The only class that is dependant on end use is residential.

Residential customer class. This class is by far the most numerous. Individually, they have a limited impact on the size of the grid. They are connected to the secondary voltage system[9] of the distributor and share this part of the system with GS less than 50kW class. The fixed-rate design changes made in EB-2012-0410 have been almost entirely implemented with 2019 rates.

General Service less than 50kW of demand class. There are minor variations in the way that Ontario distributors define the GS<50kW class. However, typically this classification refers to a non-residential account taking electricity at 750 volts or less whose monthly peak demand is less than or expected to be less than 50 kW. The voltage shows that they are connected to the secondary system with the residential customers.

The small commercial class includes customers such as bulk metered multi-residential units of up to 6 apartments or townhouses, most farms that have 3-phase service, and small retail outlets without significant electric equipment load. This may include corner stores depending on the amount of refrigeration and restaurants depending on the fuel for cooking and water heating.

[9] Electric power distribution is the final stage in the delivery of electric power; it carries electricity from the transmission system to individual consumers. Distribution substations connect to the transmission system and lower the transmission voltage to medium voltage ranging between 2 kV and 35 kV with the use of transformers. Primary distribution lines carry this medium voltage power to distribution transformers located near the customer's premises. Distribution transformers again lower the voltage to the utilization voltage used by lighting, industrial equipment or household appliances. Often several customers are supplied from one transformer through secondary distribution lines. Commercial and residential customers are connected to the secondary distribution lines through overhead service wires or underground service cables. Customers demanding a much larger amount of power may be connected directly to the primary distribution level or the sub-transmission level.

General Service greater than 50kW of demand class. GS≥50kW customers are typically connected to the higher voltage system. These customers are the most diverse of any class with draws from 50 kW up to whatever other rate class the distributor has. All distributors have an upper limit to this class even if they do not currently have any Large customers. Some distributors[10] do not have an Intermediate or Large class of customers so this class represents all of their commercial customers over 50 kW. This class will include multi-residential buildings that are bulk metered, livestock intensive or greenhouse farming, larger retail and big box stores, and smaller industry like a print shop or metal forming.

Intermediate and Large Customers Classes. Not every distributor has Intermediate customers. The boundary is generally set between 1500kW and 3000kW.

Not every distributor has Large customers. Those that do fairly consistently define the class as follows:

> This classification applies to an account whose average monthly maximum demand used for billing purposes[11] is equal to or greater than or is forecast to be greater than 5,000 kW.

A Large customer might be an office/retail complex, a hospital complex, or university campus. Some might be large industrial customers like a steel mill or car plant but these might also be connected directly to the transmission system.

B.4 – Proposed New Rate Designs to Support the Sector

The recommended rate designs for the different non-residential classes set out in this Report are the result of the extensive analysis and consultation that OEB staff has conducted following the issuance and receipt of comments on the March 2016 staff paper, including, targeted, face-to-face consultations in 2017.

Staff believes these new rate designs for the commercial and industrial rate classes will meet the OEB's objectives for rate design of supporting innovation for customers, increasing efficiency of the system, and helping distributors invest in their systems.

[10] Hydro One Networks Inc. has classes called: Urban General Service Demand Billed, General Service Demand Billed, Distributed Generation and Sub Transmission classes.
[11] "Demand used for billing purposes" is the greater of the actual demand or 90% of the kVA to take into account the extra costs to the system imposed by poor power factor.

The recommended rate designs will in staff's view:

- support innovation for customers by
    - ensuring all commercial and industrial customers of every class can reduce their bill through conservation of the commodity,
    - allowing some customers to reduce their bill through lowering overall demand through conservation, and
    - allowing customers who do not have the opportunity to reduce their bill through lowering demand to benefit from a simpler, more predictable bill.

The recommended rate designs will increase efficiency of the system by encouraging economic decisions regarding investment in distributed energy resources. The designs will ensure that customers who install distributed energy resources do not shift costs to other customers and maintain fairness in the recovery of costs of maintaining a reliable and flexible distribution system.

The recommended rate designs will facilitate investments to modernize the grid in a paced and prioritized manner that will support customer choice and efficiency.

The brief descriptions and Table 1 below summarize OEB staff's recommendations for the proposed rate design for each customer group. Chapters 3 and 4 discuss them in more detail.

General Service under 50kW customers: Because of the significant diversity in this rate class, the recommended design involves splitting the GS<50kW class into a GS<10kW group and GS 10 to <50kW group

> **GS< 10kW customers** are similar to residential customers in how they use the distribution system. Staff is recommending moving to a fixed distribution rate similar to residential rates. These customers will see a more stable, predicable bill that reflects the value to them of connection to the grid. Customers can leverage new technologies and manage costs through conservation.
>
> **GS 10kW to less than 50kW customers** would see a rate based on the maximum consumption in a single hour over the billing period (kWh/h). The change would increase the link between the bill and the impact of their demand on system capacity requirements. The proposed rate design enables these customers to seek approaches to reduce their bill through adoption of demand management technology or distributed generation including net metering).

General Service over 50kW customers would see no change to the underlying rate structure. Staff is recommending that customers installing distributed generation would be subject to a new new capacity reserve charge (CRC). The CRC would ensure that they continue to pay for capacity that is maintained in the system to serve them.

Large customers would see no change to the underlying rate structure but would see the new CRC described above. Large customers who adopt new technology such as batteries would also have the ability to choose a level of service that suits their needs and reflects the value of the connection to them.

Table 1: Summary of Proposed Rate Design Changes

Class	Current Rate Design	Proposed Rate Design
General Service Less than 10 kW		Monthly Service Charge (fully fixed – average cost)
General Service 10 to less than 50kW		Monthly Service Charge + demand charge (per kW)
General Service 50kW and Over		Monthly Service Charge + demand charge (per kW) + Capacity Reserve Charge
Large (over 5000 kW)	Monthly Service Charge + demand charge (per kVA)	Monthly Service Charge + demand charge (per kVA) + Capacity Reserve Charge • Emergency Backup • Maintenance • Bypass

C. GENERAL SERVICE LESS THAN 50kW OF DEMAND CLASS

C.1 – Customers

The small commercial class includes customers such as small retail outlets, offices, bulk metered multi-residential units of up to 6 apartments or townhouses and most farms. For the typical[12] customer, the distribution charge represents 11 to 42% of the total bill. The median is 37%.[13] We heard from distributor groups that many customers in this group are tenants and have limited ability to make decisions about equipment and investments. It is therefore less likely that they will invest in distributed generation or other types of DERs to lower their bills, however they will invest to manage commodity costs through conservation programs.

Compared to residential customers, these customers have much greater variety in their load profiles: how much energy they use and when. Some customers have a very flat load profile where their energy use is fairly constant over 24 hours and 7 days. Other customers have spikier use as equipment turns on and off over the course of a day. Load factor, the average load divided by the maximum load over a specified period, is a measure of those spikes.

OEB staff analysed the data of 103,000 customers across 5 distributors to understand the load shapes of customers in the less than 50kW class. Figure 2 below groups customers by their load shape rather than their absolute demand. A customer whose demand peaks at 1 kW with the same profile as a customer at 15 kW will be grouped together. So customers with the A profile have a load factor close to 1 and customers with the C profile have a much lower load factor.

[12] 2000 kWh/month is a typical GS<50 customer.
[13] The median is the value separating the higher half of a data sample from the lower half.

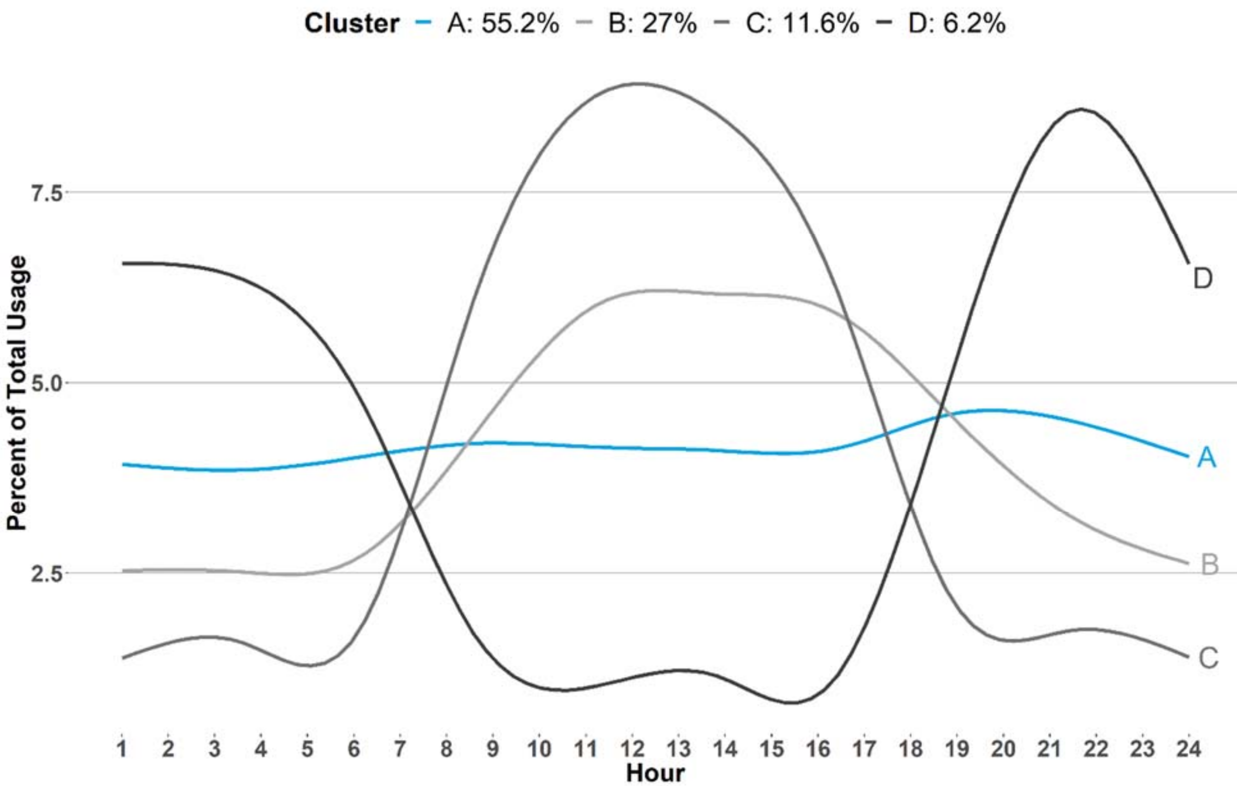

Figure 2: Generalized Load Profiles for GS<50[14]

The graph shows that over half of GS≤50 customers already have a relatively flat use profile. About another quarter use energy primarily during the day. The balance have off-peak demand profiles.

GS<50kW customers have experience with time dependent commodity prices. Although 80% of small and medium sized businesses[15] indicated that the price they paid was the most important electricity issue for them, only about a quarter of them were aware that they were on TOU pricing for the commodity. Of those, only one third indicated that they had taken action to shift usage to off-peak times. Most small businesses suggested that they could not shift use because of their business hours. E.g. a retail outlet that is open from 10am to 6pm regardless of electricity prices.

The biggest group of customers (Group A) has a relatively flat profile: they use the same amount of energy on peak and off. The customers who have peakier demand

[14] Christophe Genolini, Xavier Alacoque, Marianne Sentenac, Catherine Arnaud (2015). kml and kml3d: R Packages to Cluster Longitudinal Data. Journal of Statistical Software, 65(4), 1-34. URL http://www.jstatsoft.org/v65/i04/

[15] See BEWorks and IPSOS Reid research released on Nov 16, 2015 in support of the RPP Roadmap at RPP Roadmap | Ontario Energy Board

(Groups C and D) may not be able to shift any more use to off peak periods. Many business customers have indicated that their ability to shift use is limited. Retail stores and restaurants have little control over their open hours and busy times. The combination of the IESO provincial curve in Figure 1 and the OEB RPP roadmap research cited above, suggest that the customers who have peak use have a lot of peak use but may not be willing or able to change.

The OEB is in the process of developing new Time of Use commodity rates[16] for these customers that will help them focus on bill reductions through reducing and shifting use. The OEB has developed a five-point plan to redesign the RPP to respond to policy objectives, improve system efficiency, and give consumers greater control. One of the major elements of the Roadmap is implementation of pilots for new pricing mechanics and non-price mechanisms. The pilots will provide the OEB with the information necessary to design new tools for customers to manage their electricity usage and provide for increased system efficiency. As part of this plan, the OEB will undertake a comprehensive revamping of the RPP that will make incremental changes over the course of the plan. This staged approach will provide consumers with adequate time to understand and adapt to any changes in the TOU pricing structure and any rate design changes.

C.2 – Current Design

Currently, customers in the general service less than 50kW of demand class are charged for distribution service on a fixed and variable basis. They have a fixed monthly service charge (MSC) and a variable charge that is based on their consumption over the month in kWh. As described earlier in Section B.2, consumption was used as a proxy for demand since meters capable of measuring demand as well as consumption were not justified based on the total billing for each small customer. It was assumed that each additional kWh was being added on the same load profile and driving maximum kW.

Distribution charge = Monthly Service Charge ($)
+ Consumption rate ($/kWh) x Monthly Consumption (kWh)

Under the current rate design, a customer with a flat load profile (line A in Figure 2 above) but the same consumption as someone with a higher demand profile (line B in Figure 2) would pay the same amount for distribution. However, the cost to the system

[16] Ibid.

to serve customer B is higher. Customers like A were to a certain extent subsidizing customers like B. Given the metering available to the class, that was unavoidable.

C.3 – Proposed New Rate Design Approach to the Under 50kW class

Comments on the Staff Discussion Paper proposed splitting the GS<50 kW class into two groups. The suggestion was that the smallest group would be made of customers with under 10 kW of maximum demand. These would be analogous to residential customers. They would typically be served at the very lowest voltages and have single phase service. Most would be traditional customers for whom electricity service and costs are not a main focus of their business. Like residential customers, they might benefit from a more stable and predictable bill and can focus on conservation of the commodity as a means a more practical means of managing costs.

The second group would be those at and above 10kW of demand to less than 50 kW (GS 10 to 50kW). These would typically still be served from the secondary system but might be at slightly higher voltages or have 3 phase service to accommodate their higher demand. The Ipsos qualitative study suggested that these customers might be slightly more knowledgeable about their energy use although it is still not a focus of their business.

In the Staff Discussion Paper, staff had proposed a 3-part distribution charge made up of a monthly service charge and 2 demand charges (one measured during a time dependent peak period and one non-coincident, ‘anytime’ measurement). In the written comments, several stakeholders agreed that such a rate structure was highly cost reflective. However, they questioned the ability of customers who were currently billed on a consumption basis to understand it or effectively respond to it. Staff now consider that moving these customers from a consumption charge to a single non-coincident demand charge is a step toward both making their rate more cost reflective to inform them about the nature of the system and the value of their connection. They can also reduce their bill by reducing and shifting the timing of their consumption of the commodity. The focus on efficiency will allow them to directly reduce their costs.

C.4 – Proposed New Rate Design for General Service Under 10 kW

The smallest general service customers are comparable to residential customers in their use of the system. These customers are generally connected on the lowest voltage system.

The OEB chose a fully fixed distribution rate for residential customers to provide certain benefits. Staff believes that those benefits also apply to these small commercial customers. It will provide a more stable, predictable bill for customers for whom electricity use is not top of mind. It is a fairer way to bill customers who essentially receive the same benefit from the system – that of a reliable connection. And it will recover the costs of providing distribution service while preventing the shifting of costs from advanced customers to active and traditional customers.

Smaller customers are more focused on technology and behaviours that help them reduce their overall bill by saving energy. However their changes in consumption are not likely to impact distribution system costs as they are unlikely to make large investments in DERs or other technology or equipment given the high cost of those investments. This view is based on the input we received from the very small customers that energy costs are not a significant component of their overall business costs. The proposed rate design allows them to focus on energy conservation to manage cost while ensuring that each customer is paying their share of the costs for a reliable distribution service. The fixed rate will also help customers understand the fixed nature of the assets that are serving them, achieving the objective of providing better information to customers about their service.

In our analysis as shown in Figures 3 and 4 below, the average maximum monthly demand[17] for residential customers is 5.3 kW and for GS<10 kW customers is 3.9 kW. In each of the plots below, each grey dot represents a customer's maximum demand for the month. The black lines represent average maximum demand for all customers that month. Half of all customers that month had an average maximum demand between the two red lines.

[17] The data supplied by participating distributors was hourly consumption data. The measure here is consumption over an hour which is one measure of demand.

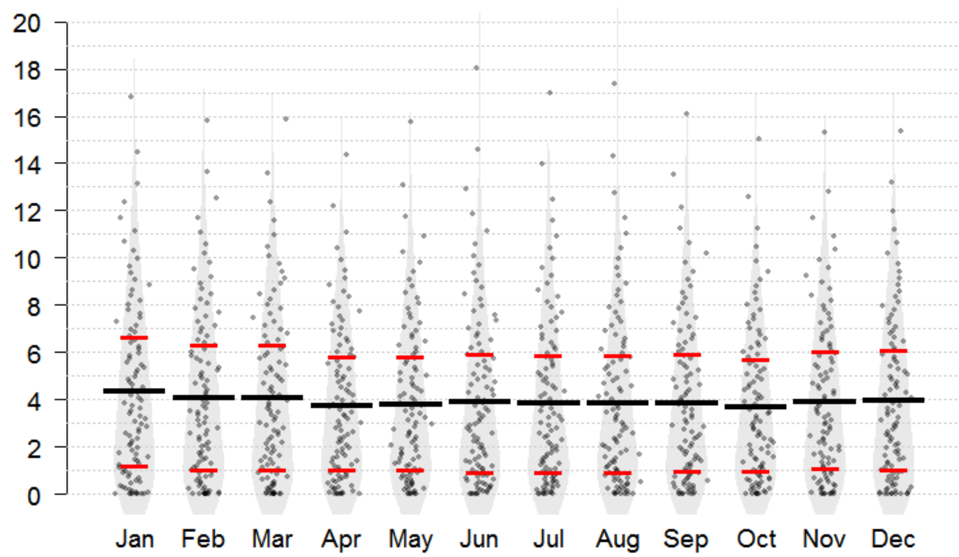

Figure 3: Monthly GS<10 Peak Demand

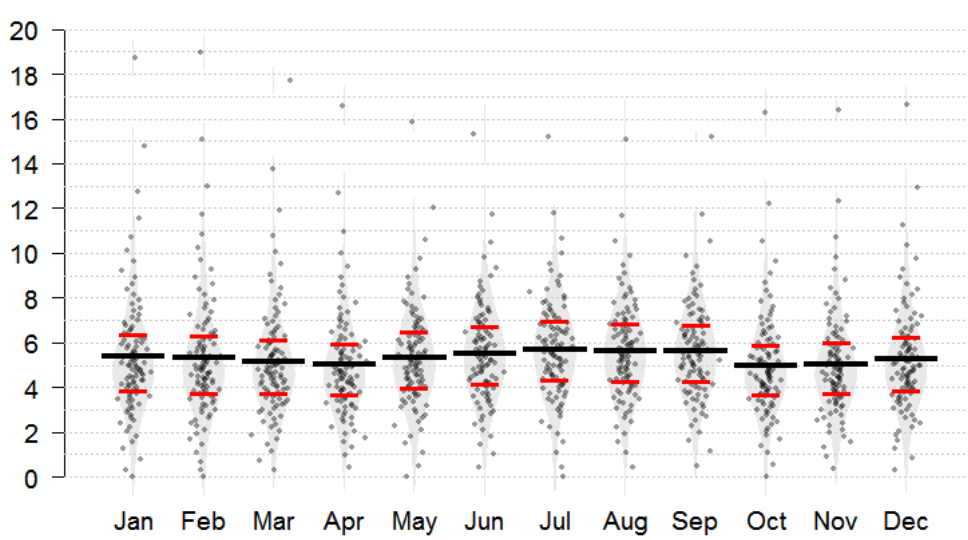

Figure 4: Monthly Residential Peak Demand

Distribution charge = Monthly Service Charge ($)
(average cost for the subclass)

Staff proposes that all distributors should move to a fully-fixed rate for general service customers with a maximum demand of 10 kW and under. Staff further proposes that the tariff sheet definition of these customers be based on the average of the highest hourly consumption in one billing month in a calendar year and the highest hourly consumption in the two months on either side of that peak month (for a total of 5 months). This approach to making a change in class definitions has been adopted by the OEB before.[18] The OEB "chose the 5 month period as a significant, sustained period during which a customer's usage would reflect the assets needed to meet its requirements. To do otherwise would result in other customers subsidizing seasonal customers." It also avoids a customer being classified according to a single month that is not indicative of general use. The intent was to avoid classifying a customer based on a single high demand month which could be an aberration. Rules on reclassification of customers are detailed in section 2.5 of the Distribution System Code.

OEB staff is recommending the fixed charge be determined based on the costs that are allocated to the subclass divided by the number of customers. For a discussion of allocation issues for implementation see section C.6. We developed a sample mock tariff for each of the distributors who provided customer profiles based on their customers and their revenue requirements. For a listing of the mock tariffs that were developed and used for bill impact studies, see Appendix B.

During our consultation, a distributor representative suggested that instead of using 10 kW as the boundary between the two new classes, we use 2000 kWh per month. Based on our research, if this approach were adopted, most of the customers with extremely high impacts would be moved into the lower consumption class. They would still see a bill increase because of their low use but it would not be as large. The advantage of this approach is that it would mitigate increases for some customers. The disadvantage is that it would not be moving to align the rate design with the cost drivers related to the value of the connection, i.e. peaky customers would not be paying for the demand that they put on the system.

[18] EB-2007-0722 Notice of Amendments to the Distribution System Code for Customer Reclassification

Mitigating Customer Impacts

The OEB has a policy of mitigating rate and bill impacts as a result of changes in rate design. The OEB implemented its residential rate design policy over four years to provide customers the opportunity to adapt to the changes and make changes in the way they consumed. In considering recommendations for rate design for the GS<10kW customers, OEB staff have undertaken analysis and modelled potential bill impacts as well as mitigation strategies. The following sets out the results of the modelling and our proposed mitigation strategy. The analysis presented here is intended to be illustrative. From the customer data and existing tariffs used for analysis, staff cannot predict the exact bill changes that would emerge for any particular customer. This would depend on the implementation of the policy to an individual distributor through its rate application.

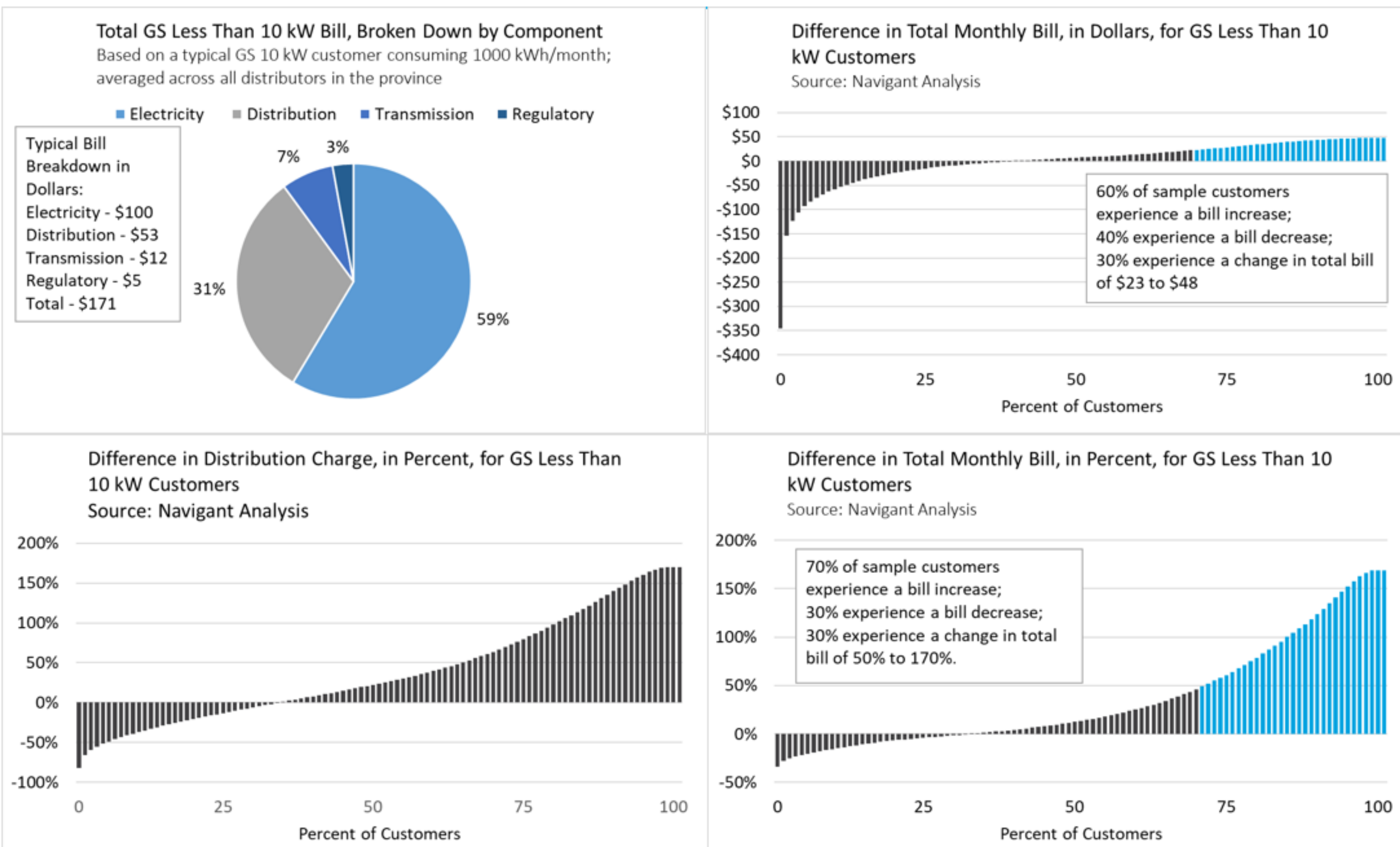

Figure 5: Analysis of Customer Impacts for the GS<10kW Group

Based on the customer data that staff have received from a subset of distributors, the average bill for this customer group is $171 per month, but can vary from $140 to $224 per month, depending on the distributor that serves them. For the customers in our data set, the distribution charge is 17 to 45% of their total bill. The median is 30%. The basis of the rate design changes are designed to be revenue neutral, i.e. the average customer will not see a change to their bill from distribution charges.

Customers with a higher than average consumption will see a distribution charge decrease. Customers with a lower than average use will see a distribution charge increase. Table 2 shows how customers in this lowest volume group would be impacted. The very low users with higher bill impacts in Table 2 tend to have high capacity demands on the system i.e. they have very peaky use. As discussed earlier the distribution system is driven by the capacity requirements of its customers, not the energy needs. These high peak demand low energy use customers' cost to the system is similar to other customers with the same demand but who may use much more energy and are currently paying a much higher share of the distribution system costs. Ultimately, a change to the rate design should result in all customers paying their fair share of the distribution costs instead of there continuing to be a level of spreading costs in the class that results in some customers being subsidized by others.

Ipsos did a qualitative research project on small business pricing for OEB staff. In-depth interviews with a small number[19] of representative customers suggested that they are relatively insensitive to price changes in electricity. This is usually because the electricity bill is a relatively low part of their overall operating costs. Nevertheless, staff proposes a rate mitigation strategy similar to the one used for residential customers to transition to the new rate design. The intent is to make sure that any bill increases as a result of this policy are manageable for the customer. The changes to residential rate were implemented over 4 years to keep monthly increases under $5 per month. The changes as a percentage of bill for these customers will be slightly more because the overall bills are larger.

The table below shows total bill changes[20] for groups of customers.

[19] Ipsos conducted in-depth interviews with 13 business customers under 50 kW.
[20] These total bill calculations who the estimated change to the customer's total bill (commodity + distribution + transmission) based on the estimated change to the distributor charge. More complete analysis is available in Appendix A.

Table 2: Representative Percentile Changes in Customer Total Bills for GS<10kW Customers

Distributor	Decrease	Increase less than 20%	Increase more than 20%
Orangeville Hydro	35%	55%	10% (average ~$11 per month)
Powerstream	35%	50%	15% (~$12)
Toronto Hydro	35%	30%	35% (~$24)
HONI UGe	35%	30%	35% (~$20)
HONI GSe	30%	15%	55% (~$35)

As discussed above, the customers that see a bill increase have lower than average consumption. Those with a large bill increase are very low users. Under the proposed fully-fixed rate design approximately 55% of HONI GSe <10kW customers in the data set are expected to experience a total bill increase greater than 20%. Given this result of the proposed new rate design, staff undertook a further examination of the sample data for HONI GSe customers and identified that the average consumption per month is much lower than the sample from other distributors; 1,858 kWh compared to 2,407 kWh. Also, a large proportion of HONI GSe customers (approximately 9%) consume less than 50 kWh (exceptionally low consumption). Only 2.5% of customers of all other distributors combined consume below 50 kWh per month. Figures 6 and 7 show how many customers fall in a particular consumption range.[21]

[21] For clarity only the first 50% of the same data is shown.

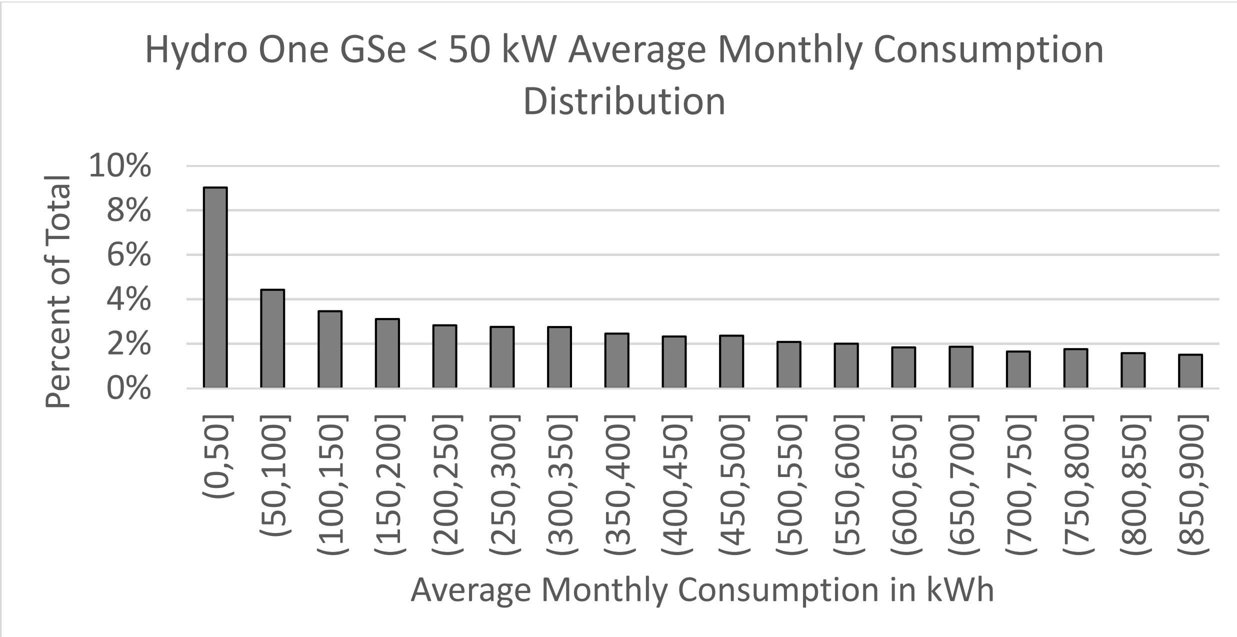

Figure 6: Average Monthly Consumption for HONI GS<50kW customers

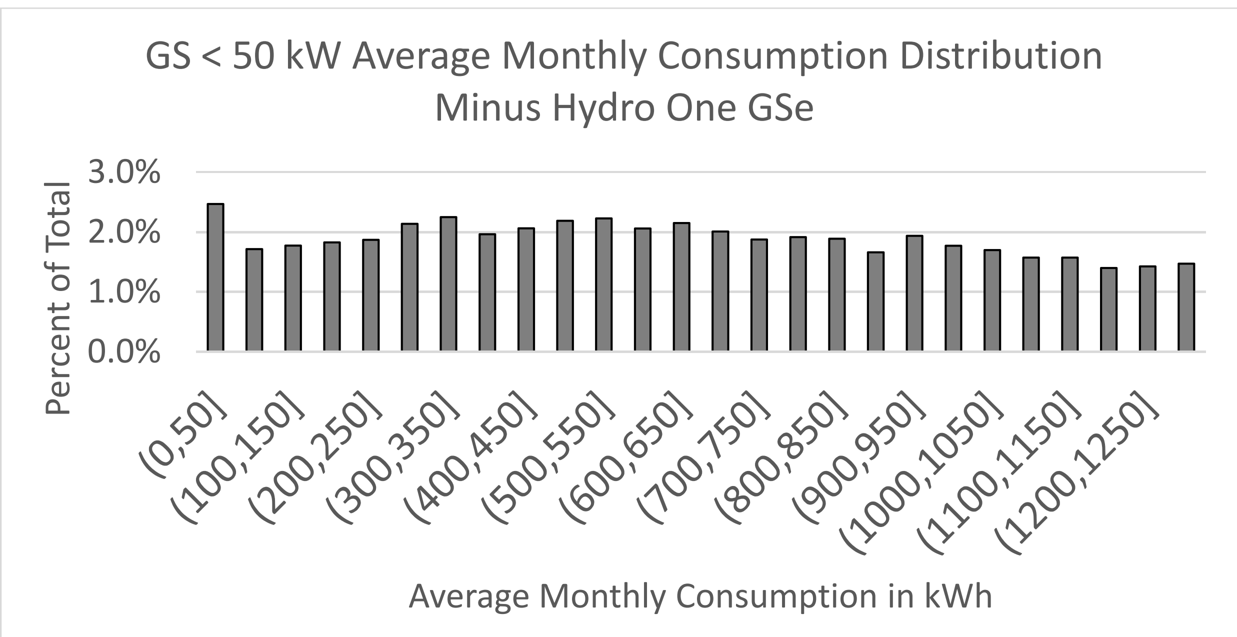

Figure 7: Average Monthly Consumption for All Other Distributors GS<50kW customers

In addition, low volume HONI GSe customers experience the biggest change, compared to other sample distribution customers, from fixed/variable split to fully-fixed distribution rate because of the current low monthly charge[22]. These impacts can be mitigated through careful implementation in a way similar to that done for residential rate changes. Staff's proposed mitigation strategy is to gradually reduce the monthly consumption rate while correspondingly increasing the fixed monthly service charge. That is, each year the $/kWh (monthly) charge decreases and the MSC increases to try to recover the same amount of revenue. Staff propose that this be done over 5 years. Customers who are identified as having high bill changes can be targeted for conservation programs or helped to make changes that will help lower overall costs.

C.5 – Proposed New Rate Design for General Service 10 to 50kW

Staff is proposing moving these customers from a consumption charge to a single non-coincident demand charge as a step toward both making their rate more cost reflective and providing better information regarding the value of their connection. This will bring them in line with GS>50kW and Large customers in being billed according to the cost driver.

Distribution charge = Monthly Service Charge ($)
+ demand rate ($/kWh/h) x highest hourly consumption in the billing period (kWh/h)

Staff is proposing that the billing determinant for the proposed GS 10 to 50kW class should be defined as maximum consumption over an hour interval during the billing period (kWh/h).

[22] Our mock tariff resulted in change from a $28 monthly service charge and $.056 variable rate to a $75.50 monthly fixed charge. For a HONI GSe customer consuming between 0 and 50 kWh a month this represents a $47.5 to $44.7 increase in total bill.

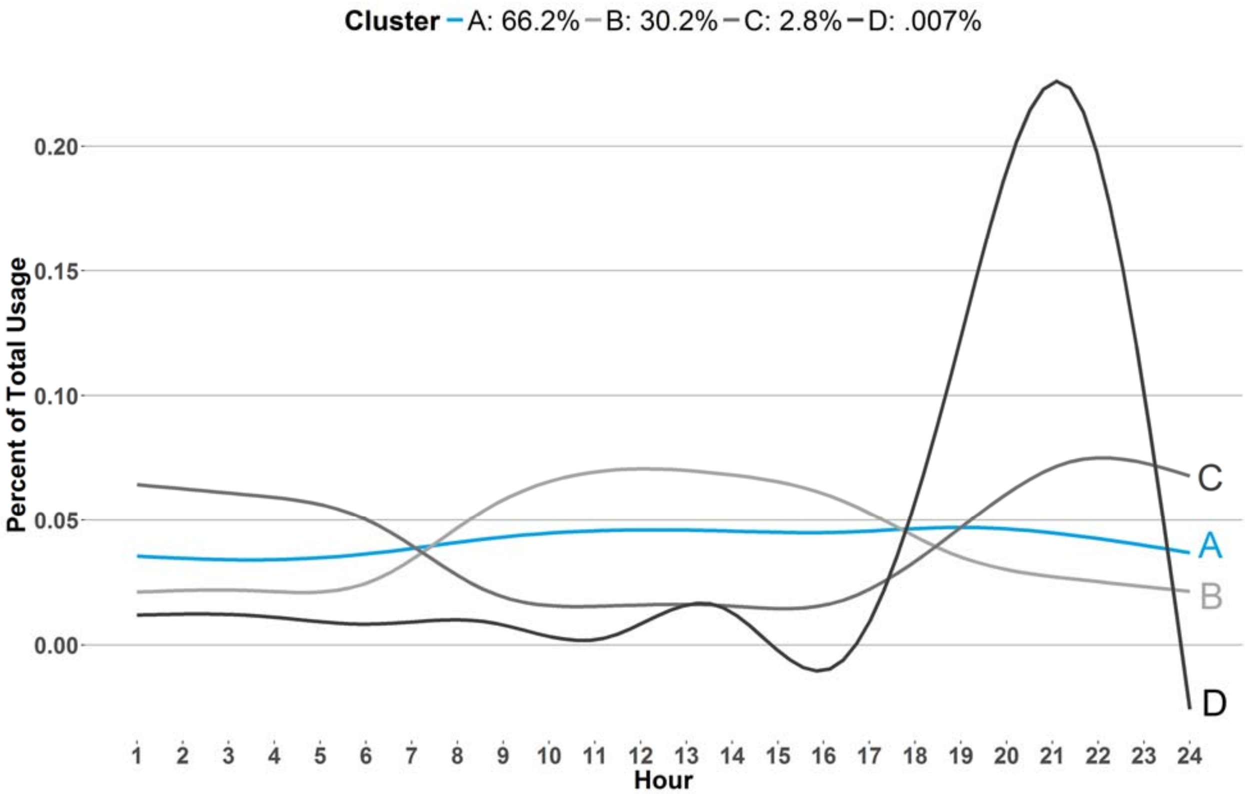

Figure 8: Grouping plot of load profiles for customers in the GS 10 to 50kW group

This rate class is made up of a number of different kinds of customers. This group is still relatively unlikely to install distributed generation due to the low focus on electricity bills and lower rate of ownership of their premises. As seen in Figure 8 above [the grouping plot], they all use the system in different ways. Under the current rate design, a customer with a flat load profile (line A in Figure 8 above) but the same consumption as someone with a higher demand profile (line B in Figure 8) and extremely peaky customers (line D in Figure 8) would pay the same amount for distribution. However, the cost to the system to serve customers B and D is higher. To some extent, customers like A are subsidizing customers like B and D. Until now, a meter that could measure demand has been cost prohibitive for this group. They have been billed on monthly consumption (kWh) as a proxy for billing them on the more cost reflective measure of demand. Now, all GS<50 kW customers have a smart meter capable of providing an hourly consumption measurement (kWh/h) as a measure of instantaneous demand on the system. Moving to an hourly demand charge from a monthly consumption charge will make the charge fairer by being more cost reflective. In other words this makes the charge fairer for all customers in this group while still allowing customers to make choices relying on the flexibility of the distribution system.

Staff believe that the proposal for this group satisfies the objectives set out by the OEB. Customers will have the ability to use innovative technology to manage their bill. The interests of the customer and the distributor are linked in that the customer has an incentive to reduce demand through conservation, efficiency, or distributed energy technology which will, in turn, reduce the need for investment by the distributor. By building this greater efficiency into their system planning, the distributor can right-size the system and contain long-term costs.

The proposed change in the rate design for this group will better reflect the value and cost causality relationship between the customer use/reliance on the distribution system and the cost to ensure that the distribution system is available for the customer.

All customers under 50kW have a smart meter. The smart meter does not measure an instantaneous demand but rather the consumption over an hour. The IESO has confirmed to OEB staff that the Smart Meter Entity will be able to provide this billing determinant to the distributors for these customers. Before implementation, the operational processes of both the MDMR and the distributors CIS systems will have to be synched to ensure that the request and response are compatible. In other words, the MDMR and the CIS systems of the distributors will have to be tested to make sure that the correct parameter is being sent and that the information flows smoothly.

Currently, customers who are reclassified from under 50kW to over 50 kW see a large bill increase due to a discontinuity in the current rate structure. One of the goals of this project is to lessen the existing boundary issue at 50 kW. The move to an hourly-consumption-based rate will help as it will eliminate the situation where a customer with a low load factor has been paying a low monthly consumption bill but begins to pay a higher demand bill when switched to the GS≥50 class. Under the proposed new rate design, the customer will already be paying according to an approximation of demand.

Mitigating Customer Impacts

The 10-50 kW group of customers are diverse types of businesses, and have vastly different consumption patterns over the day, month and year, as well as the timing of their peak demand. As a result, their current distribution related charges vary significantly. Rate design changes to better align their use of the system to the costs that are being caused by their use are less easily determined, without greater understanding of each circumstance. The proposed rate design changes are designed to be revenue neutral for the distributor, and the average customer based on consumption and demand would not see a change to their distribution charges.

However, since the basis for the rate design is to change from volumetric to demand (peak), each customer will experience a difference. A customer with higher consumption but a flatter profile will see a decrease and a customer with lower use but higher demand will see an increase. The high use, or peaky, customer would be expected to engage in demand management through DERs or other technology.

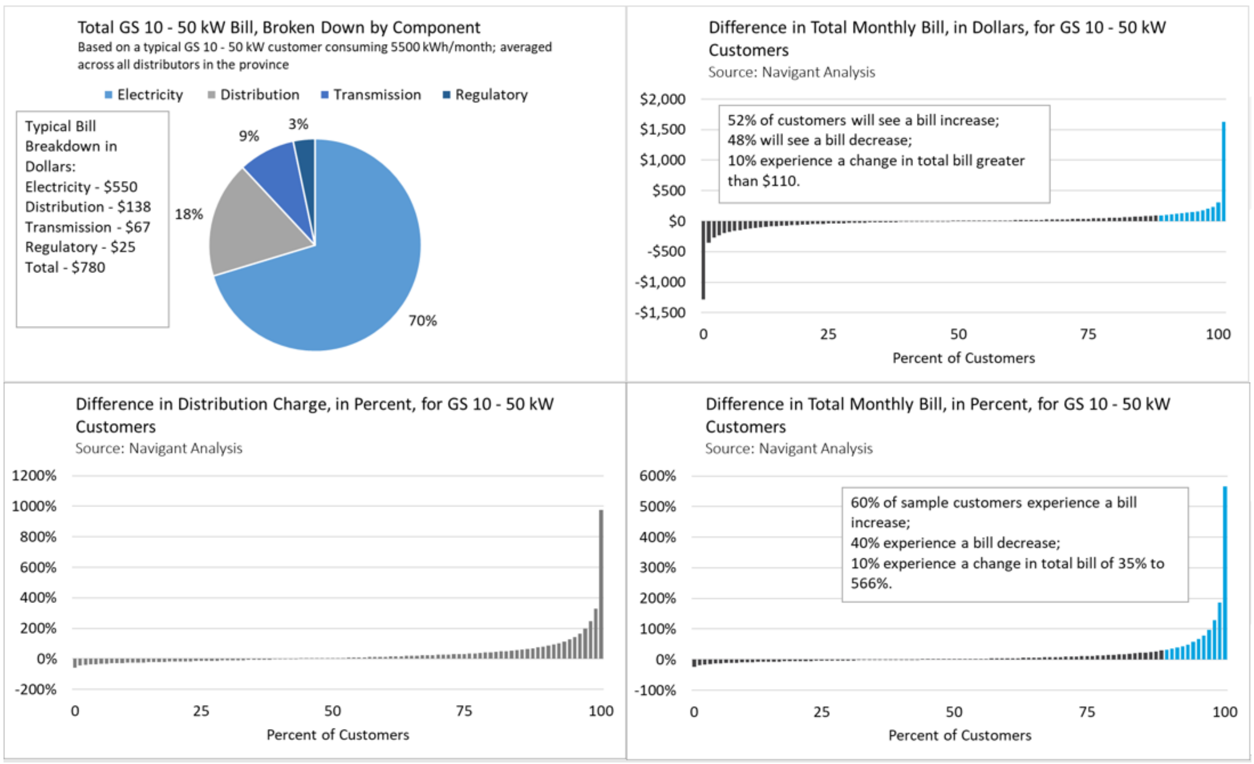

Figure 9: Analysis of Customer Impacts for the GS 10 to 50kW Group

Appendix A includes an examination of characteristics for GS 10 to 50 customers that show the most impact from our mock tariffs. Those with very large increases (the bar on the extreme right of the graphs in Figure 9) are very few in number and with unusual use patterns. Analysis concludes that customers that have a large change in total bill in dollars are not similar to customers that have a large change in total bill by percentage.

OEB staff is proposing a rate mitigation strategy to make any bill increases as a result of this policy more manageable for the customer, similar to the proposals for the under 10kW class. Staff's proposed mitigation strategy is to gradually reduce the monthly consumption rate while correspondingly increasing the hourly consumption rate. i.e. each year the $/kWh (monthly) charge decreases and the $/kWh/h (maximum hour) increases to try to recover the same amount of revenue. Customers who are identified as having high bill changes can be targeted for conservation programs or helped to make changes that will help lower overall costs.

Customers in this class can control their own bill by lessening their maximum hourly consumption and thereby their demand on the system through conservation, efficiency, demand control or installation of generation. They can also lower their bill by managing the amount and timing of their consumption of the commodity.

The table below shows total bill[23] changes for groups of customers from our analysis.

Table 3: Representative Percentile changes in customer total bills

Distributor	Decrease	Increase less than 20%	Increase more than 20%
Orangeville Hydro	40%	40%	5% (average ~$50 per month)
Powerstream	50%	45%	5% (~$50)
Toronto Hydro	50%	40%	12% (~$90)
HONI UGe	50%	40%	10% (~$114)
HONI GSe	40%	35%	25% (~$120)

The customers with higher bill impacts in Table 3 tend to have very low energy consumption but very high capacity demands on the system i.e. they have very peaky use. As discussed earlier the distribution system is driven by the capacity requirements

[23] Including distribution charges and RPP commodity charges.

of its customers, not the energy needs. These high peak demand low energy use customers' cost to the system is similar to other customers with the same demand but who may use much more energy and are currently paying a much higher share of the distribution system costs. Ultimately, a change to the rate design should result in all customers paying a fair share for the cost of maintaining a reliable distribution system instead of there continuing to be a level of spreading the costs across all customers in the class leading to that results in peaky users being subsidized by others.

To better understand the bill impacts, staff were interested in the types of businesses who would see increases or decreases. The customer data provided by distributors for analysis did not include any information on business types. However, the US Department of Energy has created typical electricity use profiles for several business sectors and premise sizes in different parts of the country. In an attempt to further understand the impacts that the recommended rate design changes would have on customers, OEB staff ran the DOE profiles of several typical businesses through our mock tariffs. We used businesses where the typical profile was less than 50 kW and the files for businesses theoretically located in northern states. The profiles used were for: small office, quick-service restaurant, and mid-rise apartment, located in New York; Pennsylvania, Michigan, Ohio, Vermont, Maine, Massachusetts, Connecticut, Rhode Island, and New Jersey. In all cases, these business types saw average bill decreases from our mock tariffs varying from 2.6% to 7%.

Table 3: US Department of Energy Constructed Electricity Profiles for Businesses

Customer type	Average hourly demand in kw	Average monthly maximum demand in kw	Average monthly consumption in kwh	Average bill change in %
Small office	7.3	14.9	5,341	-2.6
Quick-service restaurant	21.5	31.5	15,738	-7
Mid-rise apartment	25.9	48.8	18,911	-4

Looking at the Ontario data for all customers, the bill impacts for a small number of customers are quite high on a percentage basis. Analysis shows these outlier customers to be substantially above average in the ratio of hourly consumption to monthly consumption. That is, they are very low users with exceptionally peaky requirements. They have low use and have consequently been paying a low distribution service bill. However, they have a higher impact on the network and capacity has been built into the system to ensure that their needs are met. It is not clear what these customers are doing to have this unusual profile. They do not conform to any of the DOE profiles for common businesses. They would benefit the most from conservation or distributed energy resource programs to reduce their maximum demand in relation to their consumption. Distributors could potentially identify them from billing and smart meter data and target them for conservation programs to help mitigate bill increases.

C.6 – Implementation Issues for GS < 50 kW

Staff is proposing that the changes in the GS<50kW class take place without changes to the cost allocation studies currently in use. A discussion of the incorporation of already planned changes to the cost allocations is discussed immediately below. To keep the new rates revenue neutral, there should be a calculation of the expected revenues under the existing rate structure and the new designs would be set to collect that amount.

The GS<10kW fixed rate would based on the amount of revenue from the class divided by the number of customers.

During an IRM period, revenues are increased by a percentage based on inflation, performance, and capital spending. The amount of revenue to be collected from the GS <10kW class can be increased from the previous year by whatever the increase appropriate to the GS< 50 class is determined to be.

One step in setting rates is allocating the costs of running a distribution system among the classes of customers that are served. An amount of the costs of building and maintaining the system is allocated to each class according to their share of the total demand. The rates for each class are set to recover allocated costs.

In consultation, stakeholders raised the issue of whether these new customer groups would be full classes or subclasses. As subclasses, the costs allocated to the group would be split according to the current revenue derived from each group. As full classes, a cost allocation study would have to be done before the change could be made.

Proceeding with subclasses would make implementation faster. However, allocating costs to full classes prior to making the change would be more cost reflective. Given the changes that have already been occurring in the way the customers use the distribution system, staff is proposing to move quickly to address the cross-subsidization and minimize any further impacts on customers. The OEB has already announced a requirement[24] that all distributors must update load profiles for all classes. These load profiles should make use of more detailed up to date information available from actual customer meters. [25] Staff propose that the GS<50kW class be split into subclasses as soon as possible after the rate design policy decision and that distributors create full class profiles and divide them into classes when they update all their class load profiles as required by the new guidelines. Some distributors who have updated load profiles already or who have robust load forecasting could possibly make full classes earlier.

[24] Filing Requirements for Electricity Distribution Rate Applications issued July 12, 2018
[25] Ibid section 2.7.1

D. GENERAL SERVICE 50kW and OVER, INTERMEDIATE & LARGE CUSTOMER CLASSES

The approach to the GS≥50kW, all Intermediate classes and the Large customer classes is essentially the same. For the purposes of this paper, we will discuss them together and identify any differences between the customer classes where appropriate.

D.1 – Customers

GS≥50kW customers are typically connected to the higher voltage system. These customers are the most diverse of any class with draws from 50 kW up to whatever other rate class the distributor has. All distributors have an upper limit to this class even if they do not currently have any Large customers. For these customers, the distribution charge represents between 2.8 and 20% of the total bill. The median is 7%. Some distributors[26] do not have an Intermediate or Large class of customers so this class represents all of their commercial customers over 50 kW. This class will include multi-residential buildings that are bulk metered, livestock intensive or greenhouse farming, larger retail and big box stores, and smaller industry like a print shop or metal forming.

Not every distributor has an Intermediate customer class. The boundary is generally set at 3000kW. For some, the boundary is at 1500 kW.

Not every distributor has Large customers. Those that do fairly consistently define the class as follows:

> This classification applies to an account whose average monthly maximum demand used for billing purposes[27] is equal to or greater than, or is forecast to be greater than, 5,000 kW.

A Large customer might be an office/retail complex, a hospital complex, or university campus. Industrial customers such as an automotive plant would also be a large customer. For these customers, the distribution charge represents between 2 and 11% of the total bill. The median is 5%.

[26] Hydro One Networks Inc. has classes called: Urban General Service Demand Billed, General Service Demand Billed, Distributed Generation and Sub Transmission classes.
[27] "Demand used for billing purposes" is the greater of the actual demand or 90% of the kVA to take into account the extra costs to the system imposed by poor power factor.

D.2 – Current Designs

The current rate design for GS≥50kW is a fixed Monthly Service Charge and a variable rate based on the maximum monthly kW regardless of when it occurs (non-coincident peak or NCP).

Distribution charge = Monthly Service Charge ($)
+ demand charge ($/kW) x maximum monthly demand (kW)

Large customers are billed a fixed monthly service charge and a variable rate based on apparent power (kVA) as a proxy for the demand on the system. Large customers are typically billed on kVA to take into account whether or not the distributor has to install special equipment to manage power quality in order to serve them. The OEB does not propose to change the definition of “billing demand” for the Large class of customer.

Distribution charge = Monthly Service Charge ($)
+ real demand charge ($/kVA) x maximum monthly real demand (kVA)

These rates are based on good rate design principles and are cost reflective of fixed and demand charges.

Current Standby Rates

Current Standby Rates were developed for load displacement generators. Load displacement generators are generally not treated as generators because they are not expected to inject electricity into the system. Net metered generators are expected to inject electricity to the system at some times while drawing from the grid at others, effectively using the grid as a virtual storage battery. They may impose new costs on the system because of the way that the generator operates.

Eleven Ontario distributors currently have standby rate classes. Distributors have applied for these charges only if they felt it was needed in their service area. The applications have been made at different times with different approaches and the OEB has considered each one as the case arose. This has resulted in considerable variation in these rates. A standby charge is generally a separate tariff regardless of size with a demand-only rate based on measured demand over the month. Some of these tariffs are based on allocated costs and some on estimates of cost. How distributors calculate the rate and measure the billing determinant vary considerably.

D.3 – Changes Proposed for GS≥50, Intermediate and Large Customers

GS≥50kW customers, Intermediate and Large customers are already billed on demand so their bill is already reflective of distribution system cost drivers. In written responses to the Staff Discussion Paper, there was some support for a 3-part distribution rate (fixed monthly service charge and two demand rates – one coincident and one non-coincident) as being more cost reflective than the current 2-part rate. We also heard very strongly in consultation that these customers were already dealing with many changes, both in general business conditions and the electricity bill. These customers also pointed out that they had often made previous business decisions for investments and operations based on managing their bill, including to participate in the Industrial Conservation Initiative peak demand reduction program. Changes to the rate design could undermine those decisions.

Based on the feedback and further research, staff are now proposing that there be no change to the underlying rate classes, basis for fixed charge, or rate design and allocations for these customers.

However, these customers are more likely to own their own facilities and make investments in distributed energy resources such as generation and storage to manage their bill. The objective of a change for these customers is to allow them to make decisions on investment in distributed energy resources for their own benefit based on sound economic principles. However, it is also important to prevent those decisions from negatively impacting more traditional customers through unintentional cost shifting. Those decisions should to be integrated into distribution system planning where possible to harness the benefits of distributed energy resources for all customers.

On that basis, OEB staff are recommending a capacity reserve charge (CRC) be designed for customers who install distributed generation with or without storage to represent the cost of capacity that is being held in the system to supply their needs when their own generation cannot. Staff recommend that these would be mandatory for distributors to implement for distributed generation.

Staff's recommendation is that these CRC would replace any current standby charges and be technology specific. For larger customers, the CRCs could take into account the level of service that the customer needs (emergency backup service, maintenance service or basic connection) and the specific planning and locational circumstances of the distributor's system.

The design of the CRCs would achieve the following objectives as set out by the OEB in its May 2015 letter:

D.4 – Proposed Capacity Reserve Charges for Customers with Generation

Many GS≥50kW, Intermediate and Large customers will consider distributed energy resources as a way to lower their costs. The OEB Strategic Blueprint speaks to enabling innovation that enhances consumer choice and control. Staff have developed a proposal to enable customer choice while meeting the general rate policy of ensuring fairness in the recovery of costs to maintain a reliable distribution system. The intention is to ensure that distribution systems' pricing is not a barrier to customer innovation while ensuring that the costs of the system are fairly recovered from those who are using it. These changes will only affect those customers who have behind the meter generation.

Under the current rules, the following scenario has happened in more than one distribution service area. A customer in the large class of a distributor without a standby class who is already a load decides to install distributed generation for essentially all its load. Its transmission cost is billed based on gross load (i.e. the delivered load plus its self-provided load) as per the transmission rate order. It has reduced its monthly demand significantly except for the one month during which it services the generator where its demand on the distribution system is for its full load. Over the course of the year, the customer pays the fixed Monthly Service Charge and likely very else for distribution. As a result the distributor under-recovers for that class until it reviews the allocation of cost for all classes and resets rates.

Since total costs have likely not gone down, due to the long-term nature of distribution system investments, and therefore the revenue requirement for the distributor has not gone down, those costs are reallocated to other classes when rates are reset. The amount that those other classes have to pay goes up and the demand charges in all classes (including the large class) go up. Meanwhile, the distributor must continue keep the full capacity reserved for the customer's once a year servicing and the customer has no incentive to keep its once a year demand in off-peak times.

The OEB commissioned work by Navigant[28] that shows that relatively low penetrations of load reductions can have significant effects on distributor revenue.

Table 4: Distributor Revenue Impact of Reducing Demand using Current Tariffs

LDC	GS < 50	GS >= 50	Large
Entegrus	-4.5%	-8.8%	NA
Hydro One (Rural)	-7.9%	-9.7%	NA
Hydro One (Urban)	-7.3%	-9.6%	NA
Orangeville	-5.4%	NA	NA
PowerStream	-5.7%	-9.3%	-7.0%
Toronto Hydro	-6.2%	-9.8%	NA

Table 5: Distributor Revenue Impact of Reducing Demand Using Proposed Tariffs for GS < 50kW

LDC	GS<10	GS 10 - 50
Entegrus	0.0%	-6.6%
Hydro One (Rural)	0.0%	-9.2%
Hydro One (Urban)	0.0%	-8.7%
Orangeville	0.0%	-7.7%
PowerStream	0.0%	-7.5%
Toronto Hydro	0.0%	-8.1%

Source: Navigant Analysis

By implementing a Capacity Reserve Charge (CRC), charges that fluctuated with standby charges will become a fixed charge based on the amount of generation installed. This leads to a more cost reflective recovery of costs from these customers who are expecting the system to be there on demand.

Staff have provided some illustrative graphs to try to show the difference between standby charges, contract demand with penalties, and the proposed emergency backup service. Figures 10, 11 and 12 below provide a comparison of the way that standby, contract demand and capacity reserve charges would work. These graphs are to demonstrate and contrast the concepts and do not represent any particular jurisdiction. The grey bars are the underlying distribution charge based on measured demand. The orange bars represent extra charges based on the operation of the installed generation.

[28] See tables 6 and 8 in Appendix B.

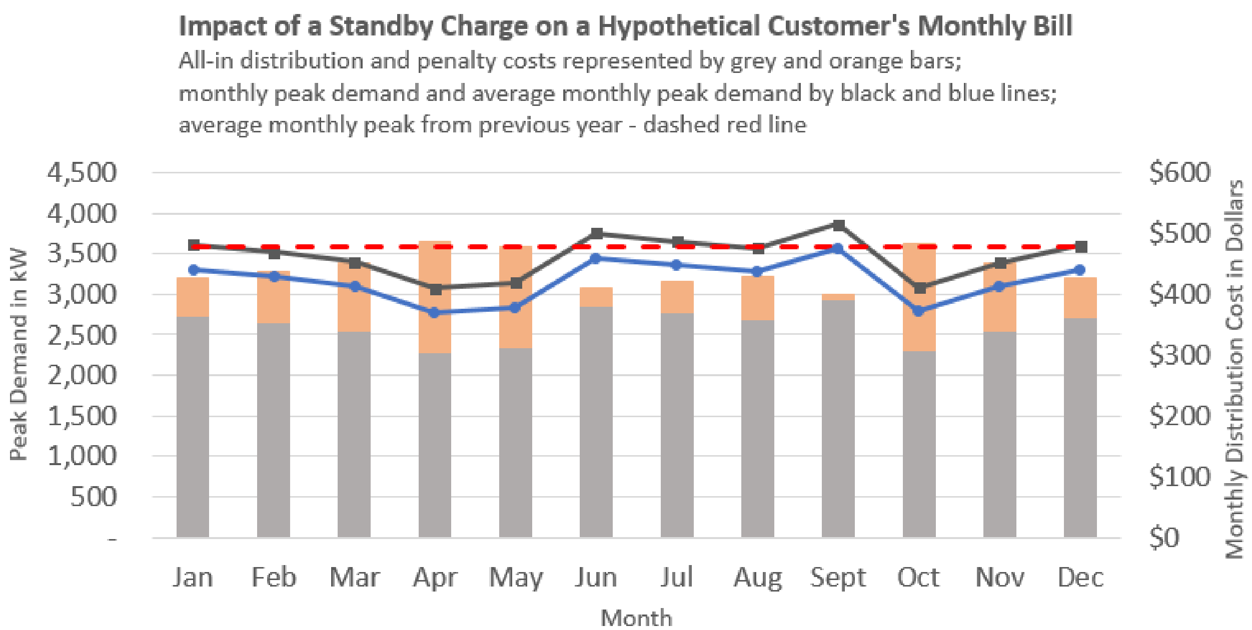

Figure 10: Sample of Standby Charge

For standby charges, there is a fluctuating charge to account for the amount of generation provided on-site. The grey bars are underlying demand charge and the orange bars are a standby charge meant to recover the distribution costs of “standing by” ready to supply the balance of the load being provided by the generator.

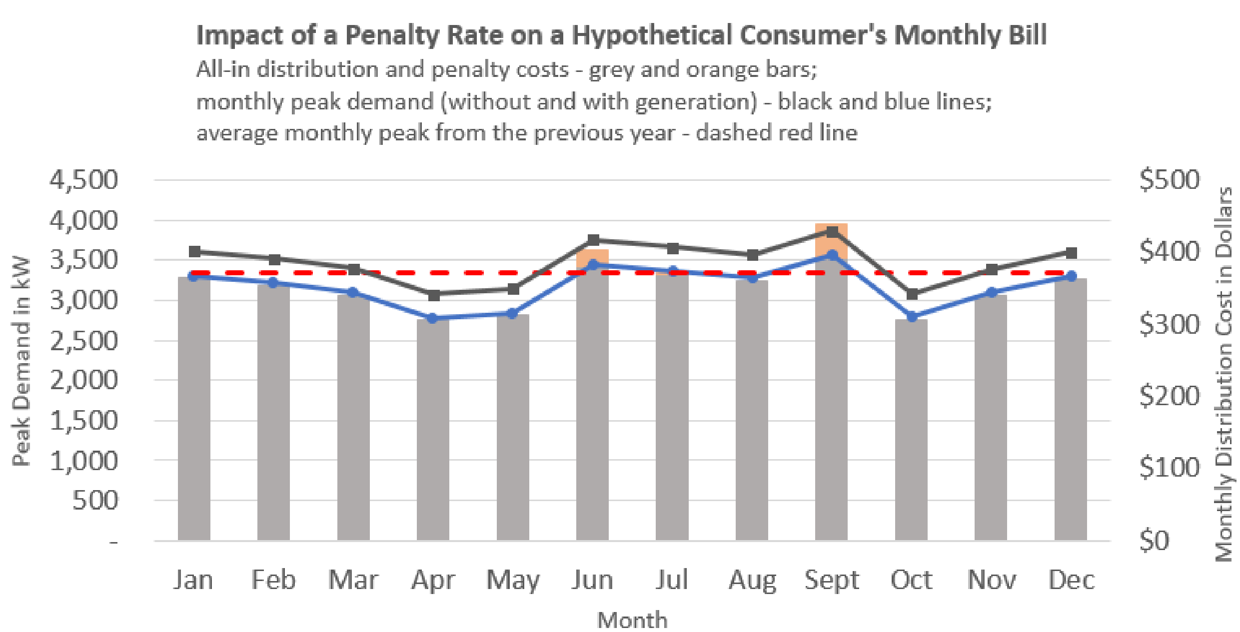

Figure 11: Sample of Contract Demand with Penalty Rate

For a contract demand, there is a penalty charge for demand above the contracted amount. The grey bars are the normal demand charge and the orange bars are penalty charges for going over the contracted demand. The penalty charge is at a significantly higher rate than the normal demand charge.

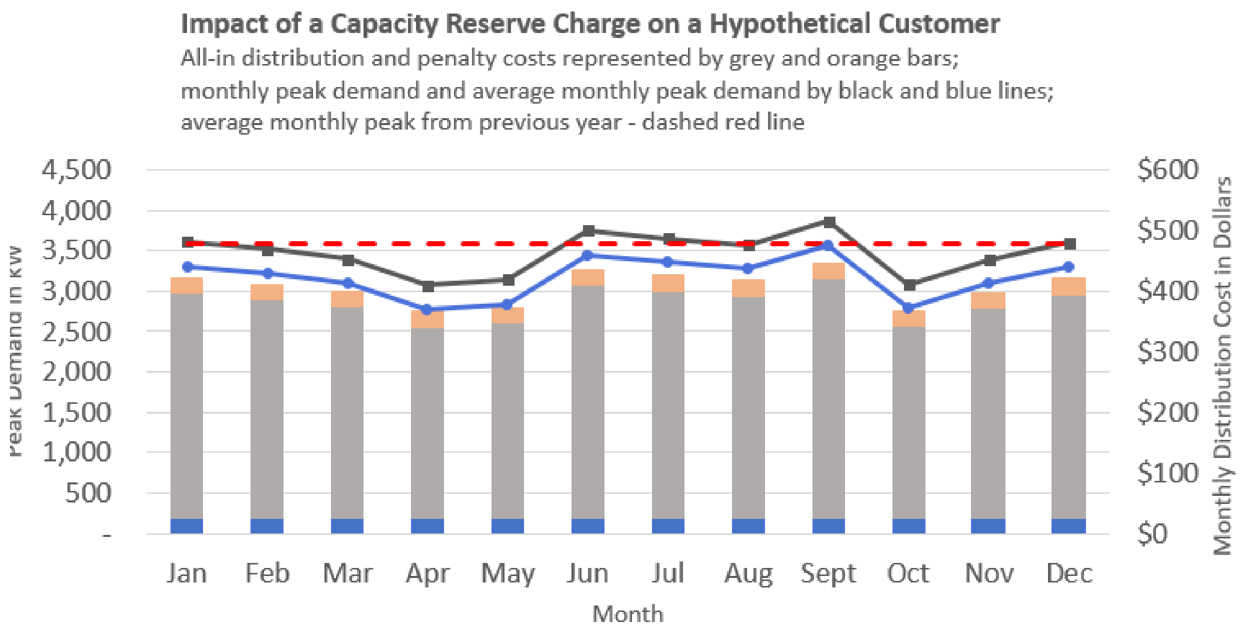

Figure 12: Sample of a Capacity Reserve Charge

For the Capacity Reserve Charge, the blue bars are the Monthly Service Charge, the grey bars are the demand charge for the class and the orange bars are the CRC. The CRC is a fixed monthly amount that represents a payment for capacity being held in the system that the customer will not otherwise be paying over the course of the year. Staff now recommend that it be based on the faceplate rating and the capacity factor of the of the generator and the underlying demand rate of the class.

The CRC payment is intended to compensate for capacity being held for the customer in the system. It should represent that value as closely as possible without either avoided costs that will end up being shifted to other customers or being a windfall for the distributor and skew the economic decisions of the customers.

Staff's initial proposal for a CRC was to set a fixed factor intended to prevent distributors from over-collecting. The work by Navigant suggested that this factor would be 90%. Staff proposed that this factor would decrease over time as a generator proved reliable service to the distributor, and the need for back-up capacity lessened. Staff's thinking was that this would provide an incentive for the operators to maintain their installation and would allow distributors to reduce the capacity held in the system for that connection.

Staff took these ideas to customers with existing onsite and load displacement generators, such as the Ontario Power Plant Administrators Association, Canadian Manufacturers & Exporters and the Association of Major Power Consumers in Ontario They pointed out that running a generator flat out to replace all load is typically not how they operate. They described other factors that influence how the customer runs its load displacement generator.

- Resource limited: Solar or wind or other renewable generators are often intermittent based on fuel availability.
- Emissions-limited: Emergency generators with a Certificate of Approval from the Ministry of Energy are limited to the number of hours they can run based on emissions. These generators may be running otherwise required tests of equipment in hours to participate in the ICI program.
- Requirements limited: Combined heat and power (CHP) plants may be heat following rather than having the goal of optimizing electricity output.
- System operations limited: Physical plant operators pointed out that their distributor will sometimes request that they not run for operational purposes of the host system.

Based on this feedback and further analysis of the system data, staff have revised the proposal for calculation of the CRC. The high level concept of the CRC remains the same. However, staff are now recommending that the proposed calculation reflect the expectation that generation is displacing load based on using a capacity factor. A capacity factor (CF) is the ratio of a generator's actual output over a period of time, to its potential output if it were possible for it to operator at full nameplate capacity continuously over the same period of time. Capacity factor is specific to the technology and more specifically to how the generator is run. For examples of potential capacity factors, see Table 6.

The CRC would be a fixed payment that is made monthly in addition to the variable charge for the metered maximum demand in the billing period. Unlike traditional standby charges that attempt to reach a contracted level every month, the CRC should recover the capacity payment on average over the year. By including capacity factor, the CRC would take into account the expectation that the customer will reach and pay for full or partial load at some point in the billing cycle.

Renewable energy generation is also referred to as intermittent generation since it depends on immediate fuel. At some point in each month or billing period, the sun will not shine or the wind will not blow during a customer's peak load. It is likely that the distributor will provide full service almost every month for renewable generation. The customer will pay the full distribution bill for its full demand load. The capacity factor for renewable plus storage installations would be higher. If the customer has its own storage, it is able to store power during times of generation excess and use this during periods when the renewable fuel source is not available. And if there was not enough of its own generation, it could store power from the grid to use when the renewable fuel source is not available. A customer with renewable generation plus storage would be able to manage to avoid drawing its full power from the grid and the capacity factor is higher.

Staff recommend that the only type of Capacity Reserve Charge available to GS ≥50kW customers is for full Emergency backup service.

Emergency backup service (EBS) is a full emergency service that is instantaneously (or nearly instantaneously) available if the customer's generator fails for any reason. Since the distributor must maintain full capacity for this customer including like-for-like asset replacement, the distributor should charge a capacity reserve charge that is based on the normal demand charge for the class and the full value (faceplate rating) of the generator and projected or historic levels of capacity factor.

EBS = Faceplate capacity rating x Demand rate of class x Capacity Factor

Some customers keep a generator on premises to provide their own emergency backup generation in the case of grid failure. Hospitals or large commercial buildings will sometimes do this in addition to manufacturers who want to ensure that they are not subject to a lengthy service disruption. These generators often use diesel for fuel and are subject to environmental restrictions and certification to limit their emissions.

Some customers are using these backup generators to participate in the Industrial Conservation Initiative (ICI) program. The ICI program allows participants to reduce their global adjustment costs and help the provincial system defer the need for investments in new electricity infrastructure that would otherwise be needed. These emission limited generators have a very low capacity factor and would pay a very low capacity reserve charge since the customer is expected to draw full load almost every month.

In staff's previous proposal, installations like renewable energy and emissions-limited generators would have had to be exempted. Under the new proposal, the capacity factor should account for the expected level of charge for load.

The IESO included standard capacity factors in Feed In Tariff (FIT) contracts to recognize expected output. The IESO also uses capacity factors in their planning for the same reason. Table 2 is some typical capacity factors. Staff expects to be able to add to and refine this table before implementation. In addition, staff expects that for Large customers, especially those with existing installations, the Capacity Factor can be agreed between the customer and the distributor and potentially adjusted periodically.

Table 6: Samples of Capacity Factors for Technologies Based on IESO System Planning

Type	Installation	Capacity Factor
Solar	Rooftop – fixed	10
	Ground mounted – fixed	20
	With storage	50
Wind	Fixed	30
	Orienting	35
	With storage	50
Bioenergy	Standard	40
	With storage	50
CHP	Heat following	50
	Full operation	65
Fossil	Certificate of approval limited	15

Implications of the proposed approach

The CRC should make the distributor indifferent to the installation of distributed generation in the service area and so enable customers to install new technology.

Customers should be able to decide on installing generators based on the commodity savings and other factors relevant to their business (e.g. control of generation, power quality, reliability of supply, or non-economic factors like support for green energy). Their decision will not disadvantage other customers through cost shifting.

D.5 – Implementation Issues for Capacity Reserve Charges

Since the new CRC charges only affect customers that are making a change and adding distributed generation, the OEB expects that these can be implemented immediately subject only to appropriate changes in distributor CIS systems. Some customers have existing generators and may or may not be paying standby charges to their distributor. Staff proposes that any current standby charges would be converted to CRC at a distributor's next rate case.

Staff further proposes that any existing generators not currently subject to standby charges begin to pay CRC on a phased-in basis. Existing installations represent an investment by the customer based on the previous rules. At the same time, any existing installation has, from an accounting perspective, depreciated over time with a concurrent increase in return. Staff therefore proposes that the applicable amount of the CRC applied every year increase by 10% of the total. i.e. reach 100% of the CRC in 10 years. This would be in line with depreciation levels for a major asset so that the CRC is implemented only as an existing installation depreciates.

D.6 – Specific Service Options for Large Customers

Large customers are very sophisticated about their energy use. They often have someone whose responsibility is planning for energy use and how to minimize costs. Staff are proposing that they have more choice[29] with regard to their level of service and consequently the amount that they pay for it. This will allow them to make decisions that support their business and respond to the circumstances around them.

At the same time, their decisions can have immediate effect on the operation of the distribution system that ultimately affect the costs allocated and charged to other customers. Their business decisions must not be allowed to disadvantage other customers.

Their decisions should be coordinated with distribution system planning to ensure that distributors can take advantage of opportunities for cost containment and are not surprised by customer actions. Distribution companies will need to discuss with each

[29] In conjunction with the levels used in regional planning, staff are suggesting that these options only apply to Large class customers, those over 5MW of demand.

customer what level of service is required and how it will be accomplished. These customers are few in number and more individual attention is warranted.
In addition to the Emergency backup service (EBS) available to GS ≥ 50kW customers, staff recommend that Large customers be able to choose Maintenance service or paying a Bypass charge.

Maintenance service (MS) would be negotiated with the distributor to provide full load at off-peak times at the distributor's discretion. Since the additional cost to the distributor is low for maintenance service, the charge should be lower than EBS. However, since the customer is abandoning load, there should be some form of recalculated economic test as an exit payment. It would include the net book value of dedicated assets and some upstream assets as well as the cost of the load limiter. The cost of removing and reinstalling the load limiter would be charged whenever the customer requires the service. Under this model, the customer is taking the risk of poor performance of the generator and that it will not be able to supply the load.

MS = Faceplate capacity rating x Demand rate of class x Maintenance Factor

> Where Maintenance Factor is negotiated with the distributor such as between 25% and 50%. For the purposes of comments, assume that the OEB chooses 30% as the Maintenance Factor.

Bypass is when a customer is essentially taking most or all load off the system. There would be a calculation of the value of abandoned assets so that the remaining costs of assets built to serve the customer (in particular feeder lines, controls, and protection systems) are not passed to the remaining customers.

Bypass could be full for disconnection or partial where some load remains on the system. There will be an economic evaluation to determine the payment owing for the value of the abandoned assets to calculate a full or partial bypass charge.

Full Bypass charge = Net Book Value of abandoned assets and system costs based on the load being abandoned

Partial bypass is when the customer wants to permanently remove their load from grid service but maintain a connection to the grid. The customer may choose to reduce their load to some minimum and protect the rest with emergency backup or maintenance levels of service from the distributor. The customer should pay out the net book value (NBV) of connection assets built to serve them, offset by the expected continuing revenue stream which may only be the Monthly Service Charge or may include some load and/or level of Capacity Reserve Charge.

During the OEB's consultation on the Regional Planning and Cost Responsibility Review[30] (Cost Responsibility consultation) which was recently completed, a number of stakeholders requested clarification in relation to how a bypass compensation charge in that consultation would work with the capacity reserve charge (CRC) being considered in this consultation.

The primary stakeholder concern was the potential for a customer being required to pay both charges to compensate the distributor for the same bypassed capacity (i.e., charged twice). In its Revised Notice of Proposal[31] related to the Cost Responsibility consultation, the OEB noted that clarification was not possible at that time, since both bypass compensation and the CRC were at the proposal stage[32]. As a consequence, in that Notice, the OEB indicated it would address the relationship between the two charges, as part of this policy consultation process, once the Cost Responsibility consultation was concluded.

OEB staff notes that bypass compensation is broader in scope than the CRC. Unlike the CRC, it is not limited to cases of bypass involving embedded generation. For example, a bypass compensation charge would be applied where bypass is achieved through wires reconfiguration, such as a customer that shifts existing load from the distributor's facilities (e.g., transformation station) to its own duplicative facilities that the customer later constructed.

Where embedded generation is involved, renewable generation is also exempt from the requirement to provide bypass compensation. As a result, the comments requesting clarification appear to be limited to one bypass scenario in relation to where both charges could potentially be applied. That scenario involves the customer installing behind-the-meter non-renewable generation (e.g., natural gas CHP). OEB staff further notes that, as reflected in the final DSC amendments in the Cost Responsibility consultation[33], for distribution-connected customers, bypass compensation will also be limited to large consumers which the OEB concluded will be those with a non-coincident peak demand of 5 MW and above (i.e., large user rate class for distribution charges). In contrast, the currently contemplated threshold for the CRC is much lower as it would be

[30] EB-2016-0003
[31] Notice of Revised Proposal
[32] Ibid, p. 23
[33] Notice of Amendments to Facilitate Regional Planning

applicable to customers over 50 kW. However, under the CRC proposal, bypass options will only be available to Large customer classes.

Bypass compensation is now required for both *full* and *partial* bypass within the distribution system. The potential where bypass compensation and the CRC could be applicable is related to partial bypass. Under a full bypass scenario, the customer fully disconnects from the distributor's system. That would not occur under any CRC scenario since the customer is maintaining its connection to reserve capacity on the system, so they can use it as needed.

Based on the above, the only scenario where both charges could be applied is therefore where a large customer (over 5 MW) has embedded non-renewable generation to supply some of its load. Key differences on the implementation side are bypass compensation is a *one-time charge* – calculated based on the remaining net book value (NBV) of the bypassed asset(s) – due to a customer *permanently* removing its load from the distributor's system. In contrast, the CRC is an *ongoing charge* and the customer is *not permanently* removing a certain amount of load from the system. Instead, they are reserving capacity for when they need it from time to time.

Under the staff proposal for the CRC, the stakeholder concern noted above will never be realized. That is, there will never be a case where a customer would be charged both the CRC and bypass compensation in relation to the same capacity. A key reason for that is it will be based on *customer choice*; i.e., not determined by the distributor which charge is applied.

Paying bypass compensation may be the lower cost option for a customer over the longer term, but they would be assuming the risk of no longer being able to rely on the system to supply all of their electricity needs. In contrast, the customer would be able to continue to rely on the system when they need it if they opt to pay the CRC for the capacity they reserve, so it is like an insurance policy.

To use an analogy, the customer's decision is similar in nature to a customer deciding on whether they want to purchase and own their water heater (after they have rented it for some time) or continue to rent and pay an ongoing monthly charge. If they choose to pay the remaining NBV and own it, they assume the risk to repair and/or replace the water heater, whereas if they continue to rent, the risk remains with the company to service the water heater and/or replace it.

A hypothetical example is set out below based on a customer that has existing demand of 100 kW and they install gas-fired embedded generation that can supply 20% of their load.

Total existing customer demand	100 kW	
Demand supplied by new LDG gas generation	20 kW	BC or CRC applies
Demand remaining on distribution system	80 kW	Unaffected

In the example above, under staff's recommendation, if the customer opted to pay bypass compensation, the capacity allocated to them would be limited to 80 kW. On the other hand, if they opted to pay the CRC, they would still have access to the full 100 kW, but they would pay the CRC in relation to 20 kW in order to pay for services received from the distributor, including maintaining capacity on the distribution system that is reserved for them. OEB staff notes this is only an example, as the customer could opt to reserve less than 20 kW.

D.7 – Implementation Issues for Large Customer Options

Treatment of Demand Overages

One implementation issue for maintenance and bypass is how to ensure that customers do not access emergency backup service without paying for it. There could be some penalty imposed for customers who are only paying for the limited service but whose generator fails and end up using full emergency backup. This could be a physical limitation or financial penalties.

One possibility for a customer that remains connected to the grid is that the distributor installs a load limiter at the customer's service to ensure that it does not draw more than the agreed amount. Under this model, the customer is taking the risk of poor performance of the generator and that it will not be able to self-supply the load. A distributor who has limited capacity on a line or faces an end-of-life replacement decision many need to physically limit the demand that a customer can draw. In this case, a customer who discovers that it actually needs full emergency backup could end up paying significant fees to install and then reverse load limiters. The distributor may make decisions based on an expectation of the customer's reduced load that then needs to be served again.

Another way of dealing with overages is to apply penalty rates to any demand over the agreed load. Network providers in the UK apply excess capacity charges[34] to demand over the agreed supply capacity. The penalties try to discourage companies from exceeding their agreed supply capacity to assist the distribution network operators with balancing network usage. The penalty rate depends on the specific distributor but ranges from 15% to 106%[35] above the base demand rate.

When penalty charges apply, a customer is taking a business risk of overage charges but not an operational risk of not having enough service. A distributor with excess capacity may prefer to allow a customer to draw over the agreed demand and incur penalties that would offset charges for other customers rather than install more equipment to have a physical limitation. The application of penalties would prevent customers from trying to game the system by choosing a lower level of service and using the higher level.

Links to Distribution System Planning

For Large customers, economic tests could be done on an individual basis. These calculation could include credit for system benefits specific to the generator and location. However, the distributor should not continue on with business as usual planning models. The distributor should assume some risk of load change.

In consultation, customers noted that installation of a large distributed generator is not a momentary decision. Developing the business case, the dedication of capital, and construction is likely a 7 year program.

The OEB began asking distributors for specific, 5-year system planning information in 2009. The filing requirements for those plans have increased in detail since then. Distributors are also expected to find out their customers experience and expectations for service level and quality. OEB expects distributors to involve customers in planning. For larger customers, this could be discussing replacement plans as dedicated assets reach their end of life. Without evidence that these kinds of consultation have taken place, the distributor would not be entitled to include those assets in the economic evaluation of NBV.

[34] Distribution Connection and Use of System Agreement (DCUSA) DCP161 - Excess capacity charges | Ofgem
[35] Professional Cost Management Group summary of excess capacity charges

Implications of Maintenance Service and Bypass

Staff believe that the proposal addresses the objectives of the project.

- It addresses concerns of distributors and customers that the level of change in the sector is already overwhelming in that it maintains the status quo for underlying rate and only applies to advanced customer installing or operating distributed generation.
- It allows for customer choice in the level of service provided by the distributor of full emergency backup service, maintenance service, or full or partial bypass.
- Customers can choose to install distributed generation to lower their bills through savings on commodity. However, they will not avoid paying for the capacity maintained in the system and thereby shift costs to other customers.
- It enables technology implementation by making the distributor indifferent to customer installation of distributed generation.