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

DECISION AND RATE ORDER

EB-2017-0080

Waterloo North Hydro Inc.

Application for rates and other charges to be effective January 1, 2018

By Delegation, Before: Theodore Antonopoulos

[date]

1 INTRODUCTION AND SUMMARY

Through this Decision and Order, the Ontario Energy Board (OEB) approves the incentive rate-setting mechanism (IRM) application filed by Waterloo North Hydro Inc. (Waterloo North Hydro) on August 11, 2017, as amended during the course of the proceeding.

Waterloo North Hydro serves about 56,000 mostly residential and commercial electricity customers in the City of Waterloo and the Townships of Wellesley and Woolwich. The company is seeking the OEB's approval for the rates it charges to distribute electricity to its customers, as is required of licenced and rate-regulated distributors in Ontario.

A distributor may choose one of three rate-setting methodologies approved by the OEB. Each of these is explained in the OEB's *Chapter 3 Filing Requirements for Incentive Rate-Setting Applications* (the Filing Requirements).

Waterloo North Hydro's application is based on a Price Cap Incentive Rate-setting option (Price Cap IR) with a five-year term. The Price Cap IR option involves the setting of rates through a cost of service (COS or rebasing) application in the first year. Mechanistic price cap adjustments, based on inflation and the OEB's assessment of the distributor's efficiency, are then approved through IRM applications in each of the ensuing four (adjustment) years.

As a result of the OEB's findings in this Decision, there will be a monthly bill increase of \$1.77 for a residential customer consuming 750 kWh, effective January 1, 2018.

Waterloo North Hydro has also applied to change the composition of its distribution service rates. Residential distribution service rates currently include a fixed monthly charge and a variable usage charge. In 2015, the OEB issued a policy to transition these rates to a fully fixed structure over a four-year period beginning in 2016.¹ Accordingly, the fixed monthly charge for 2018 has once again been adjusted upward in this Decision by more than the mechanistic price cap adjustment alone. The variable usage rate is commensurately lower. This policy change does not affect the total revenue that distributors collect from residential customers.

¹ Board Policy - "A New Distribution Rate Design for Residential Electricity Customers." EB-2012-0410, April 2, 2015

2 THE PROCESS

This Decision is being issued by delegated authority, without a hearing, under section 6 of the *Ontario Energy Board Act*, 1998 (the OEB Act).

The OEB follows a standardized and streamlined process for IRM applications filed under Price Cap IR. In each adjustment year of a Price Cap IR term, the OEB prepares a Rate Generator Model that includes information from the distributor's past proceedings and annual reporting requirements. A distributor will then review and complete the Rate Generator Model and include it with its application. During the course of the proceeding, the Rate Generator Model will also be updated or corrected, as required.

The Rate Generator Model updates base rates, retail transmission service rates and, if applicable, shared tax saving adjustments. It also calculates rate riders for the disposition of deferral and variance account balances.

Waterloo North Hydro filed its application on August 11, 2017, under section 78 of the OEB Act and in accordance with the Filing Requirements. Waterloo North Hydro supported its application with written evidence and a completed rate model. Questions were asked of, and answers were provided by, Waterloo North Hydro through emails and phone calls with the OEB. Based on this information, a decision was drafted and provided to Waterloo North Hydro on December 1, 2017. Waterloo North Hydro was given the opportunity to provide its comments on the draft for consideration prior to the OEB issuing this Decision.

3 ORGANIZATION OF THE DECISION

In this Decision, the OEB addresses the following issues, and provides reasons for approving or denying Waterloo North Hydro's proposals relating to each of them:

- Price Cap Adjustment
- Retail Transmission Service Rates
- Group 1 Deferral and Variance Accounts
- Residential Rate Design

In the final section, the OEB addresses the steps to implement the final rates that flow from this Decision.

4 PRICE CAP ADJUSTMENT

Waterloo North Hydro seeks to increase its rates, effective January 1, 2018, based on a mechanistic rate adjustment using the OEB-approved *inflation minus X-factor* formula applicable to Price Cap IR applications.

The components of the Price Cap IR formula applicable to Waterloo North Hydro are set out in Table 4.1, below. Inserting these components into the formula results in a 0.90% increase to Waterloo North Hydro's rates: 0.90% = 1.20% - (0.00% + 0.30%).

Table 4.1: Price Cap IR Adjustment Formula

The inflation factor of 1.20% applies to all Price Cap IR applications for the 2018 rate year.

The X-factor is the sum of the productivity factor and the stretch factor. It is a productivity offset that will vary among different groupings of distributors. Subtracting the X-factor from inflation ensures that rates decline in real, constant-dollar terms, providing distributors with a tangible incentive to improve efficiency or else experience declining net income.

The productivity component of the X-factor is based on industry conditions over a historical study period and applies to all Price Cap IR applications for the 2018 rate year.

The stretch factor component of the X-factor is distributor specific. The OEB has established five stretch factor groupings, each within a range from 0.00% to 0.60%. The

_

² Report of the Board – "Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario's Electricity Distributors" EB-2010-0379, December 4, 2013

³ Ibid.

⁴ The stretch factor groupings are based on the Report to the Ontario Energy Board – "Empirical Research in Support of Incentive Rate-Setting: 2016 Benchmarking Update", prepared by Pacific Economics Group LLC., July 15, 2017.

stretch factor assigned to any particular distributor is based on the distributor's total cost performance as benchmarked against other distributors in Ontario. The most efficient distributor would be assigned the lowest stretch factor of 0.00%. Conversely, a higher stretch factor would be applied to a less efficient distributor (in accordance with its cost performance relative to expected levels) to reflect the incremental productivity gains that the distributor is expected to achieve. The stretch factor assigned to Waterloo North Hydro is 0.30%.

Findings

The OEB finds that Waterloo North Hydro's request for a 0.90% Price Cap IR adjustment is in accordance with the annually updated parameters set by the OEB. The adjustment is approved, and Waterloo North Hydro's new rates shall be effective January 1, 2018.

The adjustment applies to distribution rates (fixed and variable charges) uniformly across all customer classes.⁵

5 RETAIL TRANSMISSION SERVICE RATES

Distributors charge retail transmission service rates (RTSRs) to their customers to recover the amounts they pay to a transmitter, a host distributor or both for transmission services. All transmitters charge Uniform Transmission Rates (UTRs) approved by the OEB to distributors connected to the transmission system. Host distributors charge RTSRs to distributors embedded within the host's distribution system.

Waterloo North Hydro is partially embedded within Hydro One Networks Inc.'s distribution system, and is requesting approval to adjust the RTSRs that it charges its customers to reflect the rates that it pays for transmission services included in Table 5.1 and Table 5.2.

⁵ Price Cap IR and Annual IR Index adjustments do not apply to the following rates and charges: rate riders, rate adders, low voltage service charges, retail transmission service rates, wholesale market service rate, rural or remote electricity rate protection charge, standard supply service – administrative charge, transformation and primary metering allowances, loss factors, specific service charges, microFIT charge, and retail service charges.

Table 5.1: Hydro One Networks Inc. UTRs⁶

Current Applicable UTRs (2017)	per kWh
Network Service Rate	\$3.52
Connection Service Rates	
Line Connection Service Rate	\$0.88
Transformation Connection Service Rate	\$2.13

Table 5.2: Hydro One Networks Inc. Sub-Transmission RTSRs⁷

Current Applicable Sub-Transmission RTSRs (2017)	per kWh
Network Service Rate	\$3.19
Connection Service Rates	
Line Connection Service Rate	\$0.77
Transformation Connection Service Rate	\$1.75

Findings

Waterloo North Hydro's proposed adjustment to its RTSRs is approved. The RTSRs were adjusted based on the current UTRs and host-RTSRs.

The differences resulting from the approval of new 2018 UTRs or RTSRs will be captured in Accounts 1584 and 1586 for future disposition.

6 GROUP 1 DEFERRAL AND VARIANCE ACCOUNTS

In each year of an IRM term, the OEB will review a distributor's Group 1 deferral and variance accounts in order to determine whether their total balance should be

⁶ Decision and Rate Order, EB-2017-0280, November 23, 2017

⁷ Decision and Rate Order, EB-2016-0081, December 21, 2016

disposed.⁸ OEB policy requires that Group 1 accounts be disposed if they exceed (as a debit or credit) a pre-set disposition threshold of \$0.001 per kWh, unless a distributor justifies why balances should not be disposed.⁹ If the balance does not exceed the threshold, a distributor may elect to request disposition.

The 2016 actual year-end total balance for Waterloo North Hydro's Group 1 accounts including interest projected to December 31, 2017 is a credit of \$359,420. This amount represents a total credit claim of \$0.0002 per kWh, which does not exceed the disposition threshold. While this amount does not exceed the disposition threshold, Waterloo North Hydro is proposing to dispose this credit amount over a one-year period, beginning in the 2018 rate year.

Included in the balance of the Group 1 accounts is the Global Adjustment (GA) debit account balance of \$334,556. A customer's costs for the commodity portion of its electricity service reflects the sum of two charges: the price of electricity established by the operation of the Independent Electricity System Operator (IESO) administered wholesale market, and the GA.¹⁰

The GA is paid by consumers in several different ways:

- For Regulated Price Plan (RPP) customers, the GA is incorporated into the standard commodity rates, therefore there is no variance account for the GA.
- Customers who participate in the Ontario Industrial Conservation Initiative
 program are referred to as "Class A" customers. These customers are assessed
 GA costs through a peak demand factor that is based on the percentage their
 demand contributes to the top five Ontario system peaks. This factor determines
 a Class A customer's allocation for a year-long billing period that starts in July
 every year. As distributors settle with Class A customers based on the actual GA
 costs there is no resulting variance.

⁸ Group 1 accounts track the differences between the costs that a distributor is billed for certain IESO and host distributor services (including the cost of power) and the associated revenues that the distributor receives from its customers for these services. The total net difference between these costs and revenues is disposed to customers through a temporary charge or credit known as a rate rider.

⁹ "Report of the Board on Electricity Distributors' Deferral and Variance Account Review Initiative (EDDVAR)", EB-2008-0046, July 31, 2009

¹⁰ The GA is established monthly, by the IESO, and varies in accordance with market conditions. It is the difference between the market price and the sum of the rates paid to regulated and contracted generators and conservation and demand management (demand response) program costs.

 "Class B" non-RPP customers pay the GA charge based on the amount of electricity they consume in a month (kWh). Class B non-RPP customers are billed GA based on an IESO published GA price. For Class B non-RPP customers, distributors track any difference between the billed amounts and actual costs in the GA Variance Account for disposal, once audited.

Waterloo North Hydro proposes the recovery of its GA variance account debit balance of \$334,556 as at December 31, 2016, including interest to December 31, 2017, in accordance with Table 6.1:

Table 6.1: Recovery of GA Variance

Proposed Amounts	Proposed Method for Recovery
\$334,556 recovered from customers who were Class B for the entire period from January 2016 to December 2016	per kWh rate rider

The balance of the Group 1 accounts includes a debit balance of \$226,575 for the recovery of Capacity Based Recovery (CBR) charges for Class B customers related to the IESO's wholesale energy market Demand Response 3 program. Distributors paid CBR charges to the IESO in 2016 and recorded these to a dedicated sub-account. The disposition of this sub-account is impacted by whether or not a distributor had any customers who were part of Class A during the period from January 2016 to December 2016.

Waterloo North Hydro had one Class A customer during the period from January 2016 to December 2016. Accordingly, the utility applied to have the balance of this account disposed through a separate kWh rate rider for Class B customers in order to ensure proper allocation between Class A and Class B customers.

The remaining Group 1 accounts being sought for disposition, through the general Deferral and Variance Account rate rider, include the following flow through variance accounts: Low Voltage Charges, Smart Meter Entity Charges, Wholesale Market Service Charges, Retail Transmission Service Charges, Commodity Power Charges, and Account 1595 residual balances. The Group 1 accounts have a credit balance of \$920,551, which results in a refund to customers.

The balances proposed for disposition reconcile with the amounts reported as part of the OEB's *Electricity Reporting and Record-Keeping Requirements*.¹¹ Waterloo North Hydro further notes that its proposal for a one-year disposition period is in accordance with the OEB's policy.¹²

Findings

The OEB approves the disposition of a credit balance of \$359,420 as of December 31, 2016, including interest projected to December 31, 2017 for Group 1 accounts.

The following table identifies the principal and interest amounts which the OEB approves for disposition.

Table 6.2: Group 1 Deferral and Variance Account Balances

Account Name	Account Number	Principal Balance (\$) A	Interest Balance (\$) B	Total Claim (\$) C=A+B
LV Variance Account	1550	154,065	2,542	156,607
Smart Meter Entity Variance Charge	1551	(10,604)	(210)	(10,814)
RSVA - Wholesale Market Service Charge	1580	(1,528,436)	(23,489)	(1,551,925)
Variance WMS - Sub-account CBR Class B	1580	222,477	4,098	226,575
RSVA - Retail Transmission Network Charge	ion 1584 (438,113	(438,113)	(7,036)	(445,149)
RSVA - Retail Transmission Connection Charge	1586 14,245		1586 14,245 551	14,796
RSVA – Power	1588	770,633	18,109	788,742
RSVA - Global Adjustment	1589	357,678	(23,122)	334,556
Disposition and Recovery of Regulatory Balances (2014)	1595	(1,397)	(88)	(1,485)

¹¹ Electricity Reporting and Record Keeping Requirements, Version dated May 3, 2016

¹² As outlined in the Report cited at footnote 9 above.

Disposition and Recovery of Regulatory Balances (2015)	1595	162,319	(33,642)	128,677
Totals for all Group 1 ac	ccounts	(297,133)	(62,287)	(359,420)

The balance of each of the Group 1 accounts approved for disposition shall be transferred to the applicable principal and interest carrying charge sub-accounts of Account 1595. Such transfer shall be pursuant to the requirements specified in Article 220, Account Descriptions, of the *Accounting Procedures Handbook for Electricity Distributors*. The date of the transfer must be the same as the effective date for the associated rates, which is, generally, the start of the rate year. Waterloo North Hydro shall ensure these adjustments are included in the reporting period ending March 31, 2018 (Quarter 1).

The OEB approves these balances to be disposed through rate riders as calculated in the Rate Generator Model. The rate riders, will be in effect over a one-year period from January 1, 2018 to December 31, 2018.¹⁴

7 RESIDENTIAL RATE DESIGN

All residential distribution rates currently include a fixed monthly charge and a variable usage charge. The OEB's residential rate design policy stipulates that distributors will transition residential customers to a fully fixed monthly distribution service charge over a four-year period, beginning in 2016. The OEB requires that distributors filing IRM applications affecting 2018 rates continue with this transition by once again adjusting their distribution rates to increase the fixed monthly service charge and decrease the variable charge consistent with the policy.

The OEB expects an applicant to apply two tests to evaluate whether mitigation of bill impacts for customers is required during the transition period. Mitigation usually takes the form of a lengthening of the transition period. The first test is to calculate the change in the monthly fixed charge, and to consider mitigation if it exceeds \$4. The second is to calculate the total bill impact of the proposals in the application for low volume

¹³ Accounting Procedures Handbook for Electricity Distributors, effective January 1, 2012

¹⁴ 2018 IRM Rate Generator Model Tab 6.1 GA, Tab 6.1a "GA Allocation", Tab 6.2 "CBR B", Tab 6.2a "CBR Allocation" and Tab 7 "Calculation of Def-Var RR"

¹⁵ As outlined in the Report cited at footnote 1 above.

residential customers (defined as those residential RPP customers whose consumption is at the 10th percentile for the class). Mitigation may be required if the bill impact related to the application exceeds 10% for these customers.

Waterloo North Hydro notes that the implementation of the transition results in an increase to the fixed charge prior to the price cap adjustment of \$3.62. The bill impacts arising from the proposals in this application, including the fixed rate change, are below 10% for low volume residential customers.

Findings

The OEB finds that the proposed 2018 increase to the monthly fixed charge is calculated in accordance with the OEB's residential rate design policy. The results of the monthly fixed charge and total bill impact for low consumption residential consumers show that no mitigation is required. The OEB approves the increase as proposed by the applicant and calculated in the final Rate Generator Model.

8 IMPLEMENTATION AND ORDER

This Decision is accompanied by a Rate Generator Model, applicable supporting models, and a Tariff of Rates and Charges (Schedule A).

Model entries were reviewed in order to ensure that they are in accordance with Waterloo North Hydro's last COS decision, and to ensure that the 2017 OEB-approved Tariff of Rates and Charges, as well as the cost, revenue and consumption results from 2016, are as reported by Waterloo North Hydro to the OEB.

The Rate Generator Model was adjusted, where applicable, to correct any discrepancies. The Rate Generator Model incorporates the rates set out in the following table.

Table 8.1: Regulatory Charges

Rate	per kWh
Rural or Remote Electricity Rate Protection (RRRP)	\$0.0003
Wholesale Market Service (WMS) billed to Class A and B Customers	\$0.0032
Capacity Based Recovery (CBR) billed to Class B Customers	\$0.0004

Each of these rates is a component of the "Regulatory Charge" on a customer's bill, established annually by the OEB through a separate generic order. The RRRP rate was set by the OEB on June 22, 2017. The WMS and CBR rates were set by the OEB on December 15, 2016. The WMS are CBR rates were set by the OEB on December 15, 2016.

THE ONTARIO ENERGY BOARD ORDERS THAT

The Tariff of Rates and Charges set out in Schedule A of this Decision and Rate
Order is approved effective January 1, 2018 for electricity consumed or estimated to
have been consumed on and after such date. Waterloo North Hydro Inc. shall notify
its customers of the rate changes no later than the delivery of the first bill reflecting
the new rates.

DATED at Toronto, [date]

ONTARIO ENERGY BOARD

Kirsten Walli Board Secretary

¹⁶ Decision and Order, EB-2017-0234, June 22, 2017

¹⁷ Decision and Order, EB-2016-0362, December 15, 2016

Schedule A

To Decision and Rate Order

Tariff of Rates and Charges

OEB File No: EB-2017-0080

DATED: [date]

Effective and Implementation Date January 1, 2018

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

EB-2017-0080

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. All customers are single-phase. 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 Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge	\$	27.49
Rate Rider for Smart Metering Entity Charge - effective until October 31, 2018	\$	0.79
Rate Rider for Recovery of Stranded Meter Assets - effective until December 31, 2018	\$	0.58
Distribution Volumetric Rate	\$/kWh	0.0053
Low Voltage Service Rate	\$/kWh	0.0002
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until December 31, 2018 Applicable only for Non-RPP Customers	\$/kWh	0.0005
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until December 31, 2018	\$/kWh	(0.0007)
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until December 31, 2018 Applicable only for Class B Customers	\$/kWh	0.0002
Retail Transmission Rate - Network Service Rate	\$/kWh	0.0068
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kWh	0.0023
MONTHLY RATES AND CHARGES - Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service - Administrative Charge (if applicable)	\$	0.25

Effective and Implementation Date January 1, 2018

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

EB-2017-0080

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 Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge	\$	32.76
Rate Rider for Smart Metering Entity Charge - effective until October 31, 2018	\$	0.79
Rate Rider for Recovery of Stranded Meter Assets - effective until December 31, 2018	\$	1.38
Distribution Volumetric Rate	\$/kWh	0.0163
Low Voltage Service Rate	\$/kWh	0.0002
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until December 31, 2018 Applicable only for Non-RPP Customers	\$/kWh	0.0005
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until December 31, 2018	\$/kWh	(0.0006)
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until December 31, 2018 Applicable only for Class B Customers	\$/kWh	0.0002
Retail Transmission Rate - Network Service Rate	\$/kWh	0.0063
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kWh	0.0021
MONTHLY RATES AND CHARGES - Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service - Administrative Charge (if applicable)	\$	0.25

Effective and Implementation Date January 1, 2018

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

EB-2017-0080

GENERAL SERVICE 50 TO 4,999 KW SERVICE CLASSIFICATION

This classification applies to a non residential account whose average monthly maximum demand used for billing purposes is equal to or greater than, or is forecast to be equal to or greater than, 50 kW but less than 5,000 kW. 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. Note that for the application of the Retail Transmission Rate - Network Service Rate and the Retail Transmission Rate - Line and Transformation Connection Service Rate the following sub-classifications apply:General Service 50 to 999 kW non-interval metered; General Service 50 to 999 kW interval metered; and General Service 1,000 to 4,999 kW interval metered.

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.

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.

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 Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge	\$	122.38
Distribution Volumetric Rate	\$/kW	5.1922
Low Voltage Service Rate	\$/kW	0.0738
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until December 31, 2018 Applicable only for Non-RPP Customers	\$/kWh	0.0005
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until December 31, 2018 Applicable only for Non-Wholesale Market Participants	\$/kW	(0.2048)
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until December 31, 2018	\$/kW	(0.0380)

EB-2017-0080

Waterloo North Hydro Inc. TARIFF OF RATES AND CHARGES

Effective and Implementation Date January 1, 2018

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

Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until December 31, 2018 Applicable only for Class B Customers	\$/kW	0.0651
Retail Transmission Rate - Network Service Rate - (less than 1,000 kW)	\$/kW	2.5804
Retail Transmission Rate - Network Service Rate - Interval Metered (less than 1,000 kW)	\$/kW	2.7408
Retail Transmission Rate - Network Service Rate - Interval Metered (1,000 to 4,999 kW)	\$/kW	2.7371
Retail Transmission Rate - Line and Transformation Connection Service Rate - (less than 1,000 kW)	\$/kW	0.8243
Retail Transmission Rate - Line and Trans. Connection Service Rate - Interval Metered (less than 1,000 kW)	\$/kW	1.0295
Retail Transmission Rate - Line and Trans. Connection Service Rate - Interval Metered (1,000 to 4,999 kW)	\$/kW	1.0285
MONTHLY RATES AND CHARGES - Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service - Administrative Charge (if applicable)	\$	0.25

Effective and Implementation Date January 1, 2018

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

EB-2017-0080

LARGE USE SERVICE CLASSIFICATION

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

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 Debt Retirement Charge, the Global Adjustment and the HST.

MONTHLY RATES AND CHARGES - Delivery Component

Standard Supply Service - Administrative Charge (if applicable)

Service Charge	\$	7,151.12
Distribution Volumetric Rate	\$/kW	4.1207
Low Voltage Service Rate	\$/kW	0.0925
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until December 31, 2018	\$/kW	(0.3435)
Retail Transmission Rate - Network Service Rate - Interval Metered	\$/kW	3.0345
Retail Transmission Rate - Line and Transformation Connection Service Rate - Interval Metered	\$/kW	1.0331
MONTHLY RATES AND CHARGES - Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003

0.25

Effective and Implementation Date January 1, 2018

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

EB-2017-0080

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, 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 Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge (per connection)	\$	10.88
Distribution Volumetric Rate	\$/kWh	0.0135
Low Voltage Service Rate	\$/kWh	0.0002
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until December 31, 2018 Applicable only for Non-RPP Customers	\$/kWh	0.0005
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until December 31, 2018	\$/kWh	(0.0007)
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until December 31, 2018 Applicable only for Class B Customers	\$/kWh	0.0002
Retail Transmission Rate - Network Service Rate	\$/kWh	0.0063
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kWh	0.0021
MONTHLY RATES AND CHARGES - Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service - Administrative Charge (if applicable)	\$	0.25

Effective and Implementation Date January 1, 2018

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

EB-2017-0080

STREET LIGHTING SERVICE CLASSIFICATION

This classification applies to an account for roadway lighting with a Municipality, Regional Municipality, Ministry of Transportation and private roadway lighting, controlled by photo cells. The consumption for these customers will be based on the calculated connected load times the required lighting times established in the approved Ontario Energy Board street lighting load shape template. 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 Debt Retirement Charge, the Global Adjustment and the HST.

Service Charge (per connection)	\$	0.34
Distribution Volumetric Rate	\$/kW	9.6111
Low Voltage Service Rate	\$/kW	0.0570
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until December 31, 2018 Applicable only for Non-RPP Customers	\$/kWh	0.0005
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until December 31, 2018	\$/kW	(0.1993)
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until December 31, 2018 Applicable only for Class B Customers	\$/kW	0.0607
Retail Transmission Rate - Network Service Rate	\$/kW	1.9462
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kW	0.6370
MONTHLY RATES AND CHARGES - Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service - Administrative Charge (if applicable)	\$	0.25

Effective and Implementation Date January 1, 2018

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

EB-2017-0080

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 Debt Retirement Charge, the Global Adjustment and the HST.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge \$ 5.40

Effective and Implementation Date January 1, 2018

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

EB-2017-0080

EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION

This classification applies to an electricity distributor licensed by the Ontario Energy Board that is provided electricity by means of this distributor's facilities. 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 Debt Retirement Charge, the Global Adjustment and the HST.

Distribution Volumetric Rate	\$/kW	0.0205
Rate Rider for Disposition of Global Adjustment Account (2018) - effective until December 31, 2018 Applicable only for Non-RPP Customers	\$/kWh	0.0005
Rate Rider for Disposition of Deferral/Variance Accounts (2018) - effective until December 31, 2018	\$/kW	(0.2771)
Rate Rider for Disposition of Capacity Based Recovery Account (2018) - effective until December 31, 2018 Applicable only for Class B Customers	\$/kW	0.0725
MONTHLY RATES AND CHARGES - Regulatory Component		
Wholesale Market Service Rate (WMS) - not including CBR	\$/kWh	0.0032
Capacity Based Recovery (CBR) - Applicable for Class B Customers	\$/kWh	0.0004
Rural or Remote Electricity Rate Protection Charge (RRRP)	\$/kWh	0.0003
Standard Supply Service - Administrative Charge (if applicable)	\$	0.25

Effective and Implementation Date January 1, 2018

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

EB-2017-0080

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)

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 Debt Retirement Charge, the Global Adjustment and the HST.

Customer Administration

Easement letter	\$	15.00
Notification charge	\$	15.00
Credit reference/credit check (plus credit agency costs)	\$	15.00
Returned cheque (plus bank charges)	\$	15.00
Duplicate invoices for previous billing	\$	15.00
Income tax letter	\$	15.00
Account set up charge / change of occupancy charge (plus credit agency costs if applicable)	\$	30.00
Meter dispute charge plus Measurement Canada fees (if meter found correct)	\$	30.00
Non-Payment of Account		
Late payment - per month	%	1.50
Late payment - per annum	%	19.56
Disconnect/reconnect at meter - during regular hours	\$	65.00
Disconnect/reconnect at meter - after regular hours	\$	185.00
Other		
Specific charge for access to the power poles - \$/pole/year (with the exception of wireless attachments)	\$	22.35

Effective and Implementation Date January 1, 2018

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

EB-2017-0080

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 Debt Retirement Charge, 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	\$	100.00
Monthly Fixed Charge, per retailer	\$	20.00
Monthly Variable Charge, per customer, per retailer	\$/cust.	0.50
Distributor-consolidated billing monthly charge, per customer, per retailer	\$/cust.	0.30
Retailer-consolidated billing monthly credit, per customer, per retailer	\$/cust.	(0.30)
Service Transaction Requests (STR)		, ,
Request fee, per request, applied to the requesting party	\$	0.25
Processing fee, per request, applied to the requesting party	\$	0.50
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)	\$	2.00

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	1.0362
Total Loss Factor - Secondary Metered Customer > 5,000 kW	1.0147
Total Loss Factor - Primary Metered Customer < 5,000 kW	1.0259
Total Loss Factor - Primary Metered Customer > 5,000 kW	1.0047