

EB-2012-0272

IN THE MATTER OF the *Ontario Energy Board Act,* 1998, S.O. 1998, c.15 (Schedule B);

AND IN THE MATTER OF an application by Haldimand County Hydro Inc. for an order or orders approving or fixing just and reasonable distribution rates related to Smart Meter deployment, to be effective November 1, 2012.

BEFORE: Ken Quesnelle

Presiding Member

Marika Hare Member

DECISION AND ORDER November 1, 2012

Introduction

Haldimand County Hydro Inc. ("HCHI"), a licensed distributor of electricity, filed an application (the "Application") with the Ontario Energy Board (the "Board") on July 18, 2012 under section 78 of the *Ontario Energy Board Act*, 1998, S.O. 1998, c. 15, (Schedule B), seeking approval for changes to the rates that HCHI charges for electricity distribution to be effective November 1, 2012.

HCHI is seeking Board approval for the disposition and recovery of costs related to smart meter deployment, offset by Smart Meter Funding Adder ("SMFA") revenues collected from May 1, 2006 to April 30, 2012. HCHI requested approval of proposed Smart Meter Disposition Riders ("SMDRs"), Foregone Revenue Rate Rider ("FRRR")

and Smart Meter Incremental Revenue Requirement Rate Riders ("SMIRRs") effective November 1, 2012. The Application is based on the Board's policy and practice with respect to recovery of smart meter costs.¹

The Board issued its Letter of Direction and Notice of Application and Hearing (the "Notice") on July 31, 2012. The Vulnerable Energy Consumers' Coalition ("VECC") was granted intervenor status and cost award eligibility. Two letters of comment were received and responded to by HCHI. The Notice of Application and Hearing established that the Board would consider the Application by way of a written hearing and established timelines for discovery and submissions.

While the Board has considered the entire record in this proceeding, it has made reference only to such evidence as is necessary to provide context to its findings. The following issues are addressed in this Decision and Order:

- Costs incurred with respect to Smart Meter Deployment and Operation;
- Cost Allocation;
- Security Audit;
- Stranded Meter Costs: and
- Implementation.

Costs Incurred with Respect to Smart Meter Deployment and Operation

In the Application, HCHI sought the following approvals:

• A SMDR of \$1.22 per Residential customer per month, \$2.11 per General Service less than 50kW ("GS < 50 kW") customer per month and (\$0.83) per General Service greater than 50kW ("GS > 50kW") for the period from November 1, 2012 to April 30, 2014. These rate riders will collect the difference between the revenue requirement deferred from 2006 to December 31, 2011 related to smart meters deployed as of December 31, 2011 (plus interest on operations, maintenance and administration ("OM&A") and depreciation expenses) and the SMFA revenues collected from May 1, 2006 to April 30, 2012 (and corresponding interest on the principal balance of SMFA revenues);

¹ On December 15, 2011, the Board issued *Guideline G -2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition* ("Guideline G-2011-0001").

- A FRRR of \$1.19 per Residential customer per month, \$1.78 per GS
 50kW customer per month and \$3.28 per GS > 50kW customer per month. These rate riders will collect the six months of the 2012 incremental costs not recovered commencing May 1, 2012 to October 31, 2012 due to the SMIRR implementation date of November 1, 2012; and
- A forecasted SMIRR of \$3.56 per Residential customer per month, \$5.33 per GS < 50 kW customer per month and \$9.83 per GS > 50kW for the period November 1, 2012 to April 30, 2014. These rate riders will collect the 2012 incremental revenue requirement related to smart meter costs to be incurred from January 1, 2012 to December 31, 2012, and in successive years until HCHI rebases its rates through a cost of service application.

In response to Board staff interrogatories, HCHI made the following updates to its Application:

- HCHI provided updated evidence of its OM&A spending in the 2012 test year (Board staff IR #8);
- HCHI calculated the SMDR's for each customer class to now include the recovery of foregone revenues for the period of May 1, 2012 to October 31, 2012, eliminating the need for a separate FRRR (Board staff IR # 11);
- HCHI calculated the interest on OM&A and depreciation expenses based on monthly data on sheet 8A of the Smart Meter model Version 2.17 (Board staff IR # 12); and
- HCHI updated the model to account for interest up until the assumed implementation date of for OM&A and depreciation November 1, 2012 (Board staff IR # 13 a).

In its reply submission, HCHI stated it is seeking approval for the proposed SMDRs and SMIRRs on the basis of the revisions made due to interrogatories. HCHI provided updated SMDR and SMIRR calculations, shown in the table below.

	SMDR as		FRRR as		SM	DR	SM	IRR as	SM	IRR
Class	filed		file	d	Rev	rised	file	d	Rev	/ised
Residential	\$	1.22	\$	1.19	\$	2.42	\$	3.56	\$	3.47
GS<50 kW	\$	2.11	\$	1.78	\$	3.91	\$	5.33	\$	5.24
GS>50 kW	-\$	0.83	\$	3.28	\$	2.49	\$	9.83	\$	9.75

Prudence of Incurred Costs

HCHI's costs in aggregate and on a per meter basis are summarized in the following table:

	2006	2007	2008	2009	2010	2011	2012	Total	
Capital		\$ 90,567	\$ 40,330	\$ 2,444,507	\$ 828,871	\$ 382,802	\$ 8,552	\$ 3,7	95,629
OM&A				\$ 154,612	\$ 230,789	\$ 343,789	\$ 405,265	\$ 1,1	.34,455
Number of Smart Meters				17858	2461	630	29	\$	20,978

	, ,,	
·		Average Per
	Total	Meter
Total		
(capex+opex)	\$ 4,930,084	\$ 235.01
Capex Only	\$ 3,795,629	\$ 180.93

VECC noted that HCHI's costs per meter are above the ranges observed for other utilities in the combined proceeding related to smart meters conducted by the Board in 2007 (EB-2007-0063). HCHI's costs are also above the sector average total cost of \$207.37 reported in the Board's *Sector Smart Meter Audit Review Report*, dated March 31, 2010 and the average total cost of \$226.92 reported by distributors in the Monitoring Report of Smart Meter Investment as at September 30, 2010. VECC also noted HCHI's average total cost per smart meter of \$235.01 is approximately 3.55% above the recent sector average.

Both Board staff and VECC noted that HCHI has a large service territory of 1,252 km² consisting of 1,216 km² rural area and only 36 km² urban area; this has resulted in increased costs for multiple collectors, repeaters and other communication infrastructure to collect data from geographically separate and less dense service territories, compared to a utility serving a similar number of customers within one, smaller urbanized geographic service area. While Board staff and VECC observed HCHI costs are above the higher end of the average cost per meter, Board staff and VECC are of the view that HCHI has provided adequate documentation on the prudence of the costs incurred for smart meter deployment and operation and for which HCHI is seeking recovery in this Application.

The Board notes that authorization to procure and deploy smart meters has been done in accordance with Government regulations, including successful participation in the Niagara Erie Power Alliance ("NEPA") and as part of 31 LDC's working with Util-Assist in the issuance of a request for proposal ("RFP"), overseen by the Fairness Commissioner, to select (a) vendor(s) for the procurement and/or installation of smart meters and related systems. There is thus a significant degree of cost control discipline

that distributors, including HCHI, have been subject to in smart meter procurement and deployment.

The Board finds that HCHI's documented costs, as revised in response to interrogatories and in HCHI's reply submission, related to smart meter procurement, installation and operation, and including costs related to TOU rate implementation, are reasonable. As such, the Board approves the recovery of the costs applied for related to smart meter deployment and operation as of December 31, 2011, and the ongoing recovery of capital-related and operating expenses for 2012 and going forward until HCHI's next cost of service application.

Costs Beyond Minimum Functionality

HCHI included capital costs of \$95,632 and \$53,940 in OM&A in its Application, which are costs "beyond minimum functionality". Board staff noted that \$59,638 of the capital costs are related to the installation of smart meters for the GS > 50 kW customer class. In its reply, HCHI submitted that the remainder of these costs is related to time-of-use ("TOU") rate implementation, web presentation, and integration with the Meter Data Management and Repository ("MDM/R").

Board staff submitted the Board has previously approved costs of this nature and further considers that the documented capital and OM&A costs are reasonable. VECC submitted HCHI costs beyond minimum functionality are in accordance with the Board's Guideline G-2011-0001 and HCHI has provided sufficient justification for these costs.

The Board approves the recovery of these costs as applied for in the original Application.

Level of Unaudited Costs

HCHI stated that, as of June 2012, deployment of smart meters is complete. Board staff noted that HCHI's Application complies with Guideline G-2011-0001 with regard to the expectation that at least 90% of the smart meter costs be audited. VECC also submitted that HCHI's percentage of audited costs conforms to the Board's Guideline G-2011-0001.

The Board accepts HCHI's Application as it is consistent the Board's policy and practice

as documented in Guideline G-2011-0001 in this regard.

Security Audit

In response to Board staff interrogatory #8, HCHI provided updated evidence of its OM&A spending in the 2012 test year. In the updated evidence, \$18,000 represented a security audit and testing of communication software changes. In its submission, Board staff suggested that HCHI provide clarification in its reply submission, as to why two separate security audits are being performed on the AMI system and what the value for money is to HCHI's customers.

In response, HCHI submitted that the annual security audit is a prudent approach to satisfying the due diligence requirements for protection of not only the customer information, but also to ensure that access to the infrastructure is properly protected, thereby securing against unwanted modifications to data collections and / or load-control functionality. HCHI asserts that the impact of one breach of privacy or security has significant impacts to its reputation and customer relations. HCHI stated that it intends to review the selection of security vendors in collaboration with other LDCs at least every two years through a RFP process to ensure the most cost effective approach.

HCHI states that the Smart Meter security testing for the regional network interface ("RNI") reviews ongoing communication software version changes throughout the year prior to implementation. It expects that one significant version upgrade will occur annually with other routine changes periodically throughout the year. HCHI claims that the importance of identifying shortfalls and correcting them in a test environment will minimize its exposure to risk. HCHI submits that this testing has been, and will continue to be, completed in a collaborated approach to minimize costs without reducing effectiveness.

HCHI argued that the ongoing costs associated with the security audit portion of the OM&A spending are prudent and should be approved by the Board.

The Board accepts HCHI's explanation of security audit costs and approves the costs as documented in the Application for recovery. The Board expects that HCHI will periodically evaluate the benefits of two security audits and that it will reflect its conclusions in its next cost of service rebasing application.

Cost Allocation

In its Application, HCHI requested approval for a FRRR to recover six months of foregone SMIRR revenues from May 1 to October 31, 2012. In response to Board staff interrogatory #11 a, HCHI agreed to recover the foregone SMIRR revenue through an adjustment to the SMDR rather than through a separate rate rider.

In response to Board staff interrogatory #11 b, HCHI calculated the revised SMDRs for each customer class to now include the recovery of the foregone SMIRR revenues for the period May 1 to October 31, 2012, eliminating the need for a separate FRRR.

In response to Board staff interrogatory #8, HCHI updated unaudited actual OM&A costs to July 31, 2012 and reforecast for the remaining five months of 2012, reducing OM&A by \$20,980.

HCHI has calculated the class-specific smart meter revenue requirement using the following methodology:

- OM&A expenses allocated on the basis capital installed costs by meter type
- The return on capital and amortization allocated on the basis of the capital costs of the meters installed for each class;
- PILs allocated based on the revenue requirement before PILs derived for each class; and
- Direct allocation by rate class of the SMFA revenue collected from the residential, GS < 50 kW and GS > 50 kW.

Both Board staff and VECC took no issue with HCHI's cost allocation methodology and proposed rate riders.

The Board approves HCHI's methodology and the resulting class-specific SMDRs and SMIRRs as calculated in response to Board staff interrogatory # 11 to recover the historical and prospective revenue requirement on the approved smart meter costs.

Stranded Meter Costs

In its Application, HCHI proposed not to dispose of stranded meters by way of stranded meter rate riders at this time, but to deal with disposition in its next cost of service

application, scheduled for 2014 rates. In response to Board staff interrogatory #10, HCHI stated that it has an estimated net book value of stranded conventional meters, including net salvage revenues, of \$439,049 as of December 31, 2013.

Board staff submitted that HCHI's proposal is also compliant with Guideline G-2011-0001.

The Board agrees and on that basis accepts HCHI's proposal.

Implementation

HCHI requested an effective date of November 1, 2012 for its new rates. The Board has determined that an effective date of November 1, 2012 is appropriate. The SMIRRs shall be effective and implemented on November 1, 2012. The Board notes that these riders are based on an annual revenue requirement and will be in effect until the effective date of HCHI's next cost of service rate order.

With this Decision, the Board is providing HCHI with a draft Tariff of Rates and Charges (Appendix A) that is intended to reflect the elements of this Decision. The Board also reviewed the entries in the draft Tariff of Rates and Charges with the intent to ensure that, other than the rate riders for smart meter cost recovery approved in this Decision, they are in accordance with the 2012 Board approved Tariff of Rates and Charges as approved in HCHI's separate Incentive Regulation Mechanism application (EB-2011-0170) issued on April 4, 2012 and Payments in Lieu of Taxes (EB-2012-0027) issued on September 27, 2012.

Accounting Matters

In granting its approval for the historically incurred costs and the costs projected for 2012, the Board considers HCHI to have completed its smart meter deployment. Going forward, no capital and operating costs for new smart meters and the operations of smart meters shall be tracked in Accounts 1555 and 1556. Instead, costs shall be recorded in regular capital and operating expense accounts (e.g. Account 1860 for meter capital costs) as is the case with other regular distribution assets and costs.

HCHI is authorized to continue to use the established sub-account Stranded Meter Costs of Account 1555 to record and track remaining costs of the stranded conventional

meters replaced by smart meters. The balance of this sub-account should be brought forward for disposition in HCHI's next cost of service application.

THE BOARD ORDERS THAT:

- 1. Haldimand County Hydro Inc.'s new distribution rates shall be effective November 1, 2012.
- 2. Haldimand County Hydro Inc. and the Vulnerable Energy Consumers Coalition shall review the draft Tariff of Rates and Charges set out in Appendix A. Haldimand County Hydro Inc. and the Vulnerable Energy Consumers Coalition shall file with the Board a written confirmation assessing the completeness and accuracy of the draft Tariff of Rates and Charges, or provide a detailed explanation of any inaccuracies or missing information, within 7 days of the date of issuance of this Decision and Order.
- 3. If the Board does not receive any submissions from Haldimand County Hydro Inc. and the Vulnerable Energy Consumers Coalition pursuant to item 2 of this Decision and Order to the effect that inaccuracies were found or information was missing, the draft Tariff of Rates and Charges set out in Appendix A of this Decision and Order will become final effective November 1, 2012, and will apply to electricity consumed or estimated to have been consumed on and after November 1, 2012. Haldimand County Hydro Inc. shall notify its customers of the rate changes no later than with the first bill reflecting the new rates.
- 4. If the Board receives (a) submission(s) from Haldimand County Hydro Inc. or the Vulnerable Energy Consumers Coalition to the effect that inaccuracies were found or information was missing pursuant to item 2 of this Decision and Order, the Board will consider the submission(s) and will issue a final Rate Order and Tariff of Rates and Charges.

Cost Awards

The Board will issue a separate decision on cost awards once the following steps are completed:

- The Vulnerable Energy Consumers Coalition shall submit its cost claim no later than
 7 days from the date of issuance of the final Rate Order.
- 2. Haldimand County Hydro Inc. shall file with the Board and forward to the Vulnerable Energy Consumers Coalition any objections to the claimed costs within **14 days** from the date of issuance of the final Rate Order.
- 3. The Vulnerable Energy Consumers Coalition shall file with the Board and forward to Haldimand County Hydro Inc. any responses to any objections for cost claims within **21 days** from the date of issuance of the final Rate Order.
- 4. Haldimand County Hydro Inc. shall pay the Board's costs incidental to this proceeding upon receipt of the Board's invoice.

All filings to the Board must quote file number **EB-2012-0272**, be made through the Board's web portal at, www.pes.ontarioenergyboard.ca/eservice/ and consist of two paper copies and one electronic copy in searchable / unrestricted PDF format. Filings must clearly state the sender's name, postal address and telephone number, fax number and e-mail address. Parties must use the document naming conventions and document submission standards outlined in the RESS Document Guideline found at www.ontarioenergyboard.ca. If the web portal is not available parties may email their document to BoardSec@ontarioenergyboard.ca. Those who do not have internet access are required to submit all filings on a CD in PDF format, along with two paper copies. Those who do not have computer access are required to file 2 paper copies.

DATED at Toronto, November 1, 2012

ONTARIO ENERGY BOARD

Original signed by

Kirsten Walli Board Secretary

Appendix A

To Decision and Order

Draft Tariff of Rates and Charges

Board File No. EB-2012-0272

DATED: November 1, 2012

Effective and Implementation Date November 1, 2012

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

EB-2011-0170 EB-2012-0027 EB-2012-0272

RESIDENTIAL SERVICE CLASSIFICATION

This classification applies to a customer's main place of abode and may include additional buildings served through the same meter, provided they are not rental income units. Residential includes Urban, Suburban and Farm customer's premises which can be occupied on a year-round and seasonal basis. Farm applies to properties actively engaged in agricultural production as defined by Statistics Canada. These premises must be supplied from a single phase primary line. The farm definition does not include tree, sod, or pet farms. Services to year-round pumping stations or other ancillary services remote from the main farm shall be classed as farm. 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 Board, and amendments thereto as approved by the 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 Board, and amendments thereto as approved by the 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 Board approval, such as the Debt Retirement Charge, the Global Adjustment, the Ontario Clean Energy Benefit and the HST.

MONTHLY RATES AND CHARGES – Delivery Component

Service Charge	\$	16.16
Rate Rider for Disposition of Residual Historical Smart Meter Costs – effective until October 31, 2013	\$	2.42
Rate Rider for Smart Meter Incremental Revenue Requirement – in effect until the effective date of the	c	0.47
next cost of service-based rate order	\$	3.47
Distribution Volumetric Rate	\$/kWh	0.0289
Low Voltage Service Rate	\$/kWh	0.0004
Rate Rider for Global Adjustment Sub-Account Disposition (2012) – effective until April 30, 2013		
Applicable only for Non-RPP Customers	\$/kWh	(0.0035)
Rate Rider for Deferral/ Variance Account Disposition (2012) – effective until April 30, 2013	\$/kWh	(0.0022)
Rate Rider for Tax Change – effective until April 30, 2013	\$/kWh	(0.0004)
Rate Rider for Lost Revenue Adjustment Mechanism (LRAM) Recovery – effective until April 30, 2013	\$/kWh	0.0006
Rate Rider for Disposition of Balance in Account 1562 – effective until April 30, 2014	\$/kWh	(0.0018)
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0067
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0052

MONTHLY RATES AND CHARGES – Regulatory Component

Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0011
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Effective and Implementation Date November 1, 2012

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

> EB-2011-0170 EB-2012-0027 EB-2012-0272

GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION

General Service does include farms supplied from polyphase primary lines. General Service includes commercial, industrial, educational, administrative, auxiliary and government services. It also includes combination services where a variety of uses are made of the service by the owner of one property. This classification applies to a non residential account whose average monthly maximum demand is less than, or is forecast to be less than, 50 kW. 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 Board, and amendments thereto as approved by the 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 Board, and amendments thereto as approved by the 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 Board approval, such as the Debt Retirement Charge, the Global Adjustment, the Ontario Clean Energy Benefit and the HST.

MONTHLY RATES AND CHARGES – Delivery Component

Service Charge	\$	28.90
Rate Rider for Disposition of Residual Historical Smart Meter Costs – effective until October 31, 2013	φ	3.91
· · · · · · · · · · · · · · · · · · ·	φ	3.91
Rate Rider for Smart Meter Incremental Revenue Requirement – in effect until the effective date of the	Ф	5.04
next cost of service-based rate order	\$	5.24
Distribution Volumetric Rate	\$/kWh	0.0204
Low Voltage Service Rate	\$/kWh	0.0003
Rate Rider for Global Adjustment Sub-Account Disposition (2012) – effective until April 30, 2013		
Applicable only for Non-RPP Customers	\$/kWh	(0.0035)
Rate Rider for Deferral/ Variance Account Disposition (2012) – effective until April 30, 2013	\$/kWh	(0.0022)
Rate Rider for Tax Change – effective until April 30, 2013	\$/kWh	(0.0003)
Rate Rider for Lost Revenue Adjustment Mechanism (LRAM) Recovery – effective until April 30, 2013	\$/kWh	0.0004
Rate Rider for Disposition of Balance in Account 1562 – effective until April 30, 2014	\$/kWh	(0.0012)
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0060
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0048
MONTHLY RATES AND CHARGES - Regulatory Component		

MONTHLY RATES AND CHARGES – Regulatory Component

Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0011
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Effective and Implementation Date November 1, 2012

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

EB-2011-0170 EB-2012-0027 EB-2012-0272

\$/kWh

\$/kWh

0.0052

0.0011

0.25

GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION

General Service does include farms supplied from polyphase primary lines. General Service includes commercial, industrial, educational, administrative, auxiliary and government services. It also includes combination services where a variety of uses are made of the service by the owner of one property. 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. 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 1,000 kW non-interval metered

General Service 50 to 1,000 kW interval metered

General Service greater than 1,000 to 5,000 kW interval metered.

APPLICATION

Wholesale Market Service Rate

Standard Supply Service - Administrative Charge (if applicable)

Rural Rate Protection Charge

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Board, and amendments thereto as approved by the 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 Board, and amendments thereto as approved by the 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 Board approval, such as the Debt Retirement Charge, the Global Adjustment, the Ontario Clean Energy Benefit and the HST.

MONTHLY RATES AND CHARGES – Delivery Component

\$	103.56
\$	2.49
\$	9.75
\$/kW	4.8055
\$/kW	0.1502
\$/kW	(1.2926)
\$/kW	(0.7941)
\$/kW	(0.0414)
\$/kW	0.0590
\$/kW	(0.1995)
\$/kW	2.4495
\$/kW	1.8820
\$/kW	2.5983
\$/kW	2.0801
	\$/kW \$/kW \$/kW \$/kW \$/kW \$/kW \$/kW \$/kW

Effective and Implementation Date November 1, 2012

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

EB-2011-0170 EB-2012-0027 EB-2012-0272

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. 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 Board, and amendments thereto as approved by the 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 Board, and amendments thereto as approved by the 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 Board approval, such as the Debt Retirement Charge, the Global Adjustment, the Ontario Clean Energy Benefit and the HST.

MONTHLY RATES AND CHARGES - Delivery Component

Service Charge (per connection)	\$	20.73
Distribution Volumetric Rate	\$/kWh	0.0027
Low Voltage Service Rate	\$/kWh	0.0003
Rate Rider for Deferral/ Variance Account Disposition (2012) – effective until April 30, 2013	\$/kWh	(0.0022)
Rate Rider for Tax Change - effective until April 30, 2013	\$/kWh	(0.0004)
Rate Rider for Disposition of Balance in Account 1562 – effective until April 30, 2014	\$/kWh	(0.0016)
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0060
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0048

MONTHLY RATES AND CHARGES – Regulatory Component

Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0011
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Effective and Implementation Date November 1, 2012

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

EB-2011-0170 EB-2012-0027 EB-2012-0272

SENTINEL LIGHTING SERVICE CLASSIFICATION

This classification refers to an account that is an unmetered lighting load supplied to a sentinel light. (Metered sentinel lighting is captured under the consumption of the principal service.) The consumption for these customers is assumed to have the same hourly consumption load profile as for Street Lighting. 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 Board, and amendments thereto as approved by the 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 Board, and amendments thereto as approved by the 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 Board approval, such as the Debt Retirement Charge, the Global Adjustment, the Ontario Clean Energy Benefit and the HST.

MONTHLY RATES AND CHARGES – Delivery Component

Service Charge (per connection)	\$	12.93
Distribution Volumetric Rate	\$/kW	33.3692
Low Voltage Service Rate	\$/kW	0.1103
Rate Rider for Global Adjustment Sub-Account Disposition (2012) – effective until April 30, 2013		
Applicable only for Non-RPP Customers	\$/kW	(1.2573)
Rate Rider for Deferral/ Variance Account Disposition (2012) – effective until April 30, 2013	\$/kW	(0.7724)
Rate Rider for Tax Change - effective until April 30, 2013	\$/kW	(0.8555)
Rate Rider for Disposition of Balance in Account 1562 – effective until April 30, 2014	\$/kW	(2.2663)
Retail Transmission Rate – Network Service Rate	\$/kW	1.8564
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.4855

MONTHLY RATES AND CHARGES – Regulatory Component

Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0011
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Effective and Implementation Date November 1, 2012

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

EB-2011-0170 EB-2012-0027 EB-2012-0272

\$/kWh

0.0011

0.25

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 OEB street lighting load shape template. Further servicing details are available in the distributor's Conditions of Service.

APPLICATION

Rural Rate Protection Charge

The application of these rates and charges shall be in accordance with the Licence of the Distributor and any Code or Order of the Board, and amendments thereto as approved by the 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 Board, and amendments thereto as approved by the 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 Board approval, such as the Debt Retirement Charge, the Global Adjustment, the Ontario Clean Energy Benefit and the HST.

MONTHLY RATES AND CHARGES – Delivery Component

Standard Supply Service - Administrative Charge (if applicable)

Service Charge (per connection)	\$	6.06
Distribution Volumetric Rate	\$/kW	15.5108
Low Voltage Service Rate	\$/kW	0.1081
Rate Rider for Global Adjustment Sub-Account Disposition (2012) – effective until April 30, 2013		
Applicable only for Non-RPP Customers	\$/kW	(1.2597)
Rate Rider for Deferral/ Variance Account Disposition (2012) – effective until April 30, 2013	\$/kW	(0.7739)
Rate Rider for Tax Change - effective until April 30, 2013	\$/kW	(0.3666)
Rate Rider for Disposition of Balance in Account 1562 – effective until April 30, 2014	\$/kW	(1.0803)
Retail Transmission Rate – Network Service Rate	\$/kW	ì.8471 [°]
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.4551
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate	\$/kWh	0.0052

Effective and Implementation Date November 1, 2012

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

EB-2011-0170 EB-2012-0027 EB-2012-0272

microFIT GENERATOR SERVICE CLASSIFICATION

This classification applies to an electricity generation facility contracted under the Ontario Power Authority'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 Board, and amendments thereto as approved by the 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 Board, and amendments thereto as approved by the 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 Board approval, such as the Debt Retirement Charge, the Global Adjustment, the Ontario Clean Energy Benefit and the HST.

MONTHLY RATES AND CHARGES – Delivery Component

Service Charge \$ 5.25

Effective and Implementation Date November 1, 2012

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

EB-2011-0170 EB-2012-0027 EB-2012-0272

EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION FOR HYDRO ONE NETWORKS INC.

This classification applies to Hydro One Networks Inc., an electricity distributor licensed by the Board, and provided electricity by means of Haldimand County Hydro Inc.'s distribution facilities. 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 Board, and amendments thereto as approved by the 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 Board, and amendments thereto as approved by the 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 Board approval, such as the Debt Retirement Charge, the Global Adjustment, the Ontario Clean Energy Benefit and the HST.

MONTHLY RATES AND CHARGES – Delivery Component

Service Charge Distribution Wheeling Service Rate	\$ \$/kW	183.44 0.5653
Rate Rider for Global Adjustment Sub-Account Disposition (2012) – effective until April 30, 2013 Applicable only for Non-RPP Customers Rate Rider for Deferral/ Variance Account Disposition (2012) – effective until April 30, 2013 Retail Transmission Rate – Network Service Rate Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW \$/kW \$/kW \$/kW	(0.3758) (0.2905) 2.1063 1.8422
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate Rural Rate Protection Charge Standard Supply Service – Administrative Charge (if applicable)	\$/kWh \$/kWh \$	0.0052 0.0011 0.25

Effective and Implementation Date November 1, 2012

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

EB-2011-0170 EB-2012-0027 EB-2012-0272

ALLOWANCES

Transformer Allowance for Ownership - per kW of billing demand/month	\$/kW	(0.60)
Primary Metering Allowance for transformer losses – applied to measured demand and 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 Board, and amendments thereto as approved by the 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 Board, and amendments thereto as approved by the 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 Board approval, such as the Debt Retirement Charge, the Global Adjustment, the Ontario Clean Energy Benefit and the HST.

Customer Administration		
Legal letter charge	\$	15.00
Credit reference/credit check (plus credit agency costs)	\$	15.00
Returned Cheque (plus bank charges)	\$	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
Collection of account charge – no disconnection	\$	30.00
Disconnect/Reconnect Charge - At Meter During Regular Hours	\$	65.00
Disconnect/Reconnect Charge - At Meter After Regular Hours	\$	185.00
Disconnect/Reconnect at pole – during regular hours	\$	185.00
Disconnect/Reconnect at pole – after regular hours	\$	415.00
Install/Remove load control device – during regular hours	\$	65.00
Install/Remove load control device – after regular hours	\$	185.00
Temporary service install & remove – overhead – no transformer	\$	500.00
Specific Charge for Access to the Power Poles – per pole/year	\$	22.35
Bell Canada Pole Rentals	\$	18.08
Norfolk Pole Rentals – Billed	\$	28.61

Effective and Implementation Date November 1, 2012

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

EB-2011-0170 EB-2012-0027 EB-2012-0272

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 Board, and amendments thereto as approved by the 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 Board, and amendments thereto as approved by the 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 Board approval, such as the Debt Retirement Charge, the Global Adjustment, the Ontario Clean Energy Benefit 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.

1.0680
N/A
1.0573
N/A
1.0305