



EB-2012-0081

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 Burlington Hydro Inc. for an order or orders approving or fixing just and reasonable distribution rates related to Smart Meter deployment, to be effective May 1, 2012.

BEFORE: Ken Quesnelle
Presiding Member

Marika Hare
Member

DECISION AND ORDER

June 21, 2012

Introduction

Burlington Hydro Inc. (“Burlington Hydro”) a licensed distributor of electricity, filed an application (the “Application”) with the Ontario Energy Board (the “Board”) on February 29, 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 Burlington Hydro charges for electricity distribution, to be effective May 1, 2012.

Burlington Hydro sought 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. Burlington Hydro requested approval of proposed Smart Meter Disposition Riders (“SMDRs”) and Smart Meter Incremental Revenue Requirement Rate Riders (“SMIRRs”) effective May 1, 2012.

The Application was based on the Board's policy and practice with respect to recovery of smart meter costs.

The Board issued its Letter of Direction and Notice of Application and Hearing (the "Notice") on March 19, 2012. The Vulnerable Energy Consumers' Coalition ("VECC") requested intervenor status and cost award eligibility. One letter of comment was received. The Board grants VECC intervenor status and eligibility for cost awards. Board staff also participated in the proceeding. The Notice 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;
- Other Matters; and
- Implementation.

Costs Incurred with Respect to Smart Meter Deployment and Operation

In the Application, Burlington Hydro sought the following approvals:

- a. SMDR – A cost recovery rate rider of (\$0.05) per metered customer per month for the two-year period May 1, 2012 to April 30, 2014 for the Residential, General Service < 50kW and General Service > 50kW rate classes. This rate rider will refund the difference between the May 1, 2006 to December 31, 2011 revenue requirement related to smart meters deployed as of December 31, 2011, plus interest on operations, maintenance and administration 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.
- b. SMIRR – A forecasted cost recovery rate rider of \$3.10 per metered customer per month for the period May 1, 2012 to April 30, 2014 for the Residential, General Service < 50kW and General Service > 50kW rate

classes. This rate rider will collect the incremental revenue requirement related to smart meter cost from January 1, 2012 to December 31, 2013.

- c. SMFA– Termination of Burlington Hydro’s current SMFA of \$2.50 per metered customer per month effective April 30, 2012 to reflect the smart meter costs approved for recovery through the SMDR and SMIRR rate riders above.

With respect to the last item, Board staff noted in its submission that the termination of the SMFA as of April 30, 2012 was determined by the Board in its decision with respect to Burlington Hydro’s 2011 IRM application (EB-2010-0067), and has been taken into account in Burlington Hydro’s 2012 IRM application (EB-2011-0155). The Board will not address this further in this Decision.

In response to Board staff interrogatories, Burlington Hydro made corrections in the Smart Meter Model regarding tax rates, cost of capital parameters and prescribed interest rates for deferral and variance accounts, and revised the recovery period for the SMDR from two years to one year. Burlington Hydro revised its proposed rate riders for smart meter cost recovery to reflect these changes.

Burlington Hydro’s Application had been prepared on the basis of 2010 audited actual costs, 2011 actual costs and forecast 2012 costs. In the original Application, Burlington Hydro stated that 89% of the smart meter costs had been audited, and that audited financial statements for 2011 smart meter costs would be filed when finalized, to meet the 90% threshold of audited costs. In response to Board staff interrogatory #2, Burlington provided a copy of the 2011 audited Financial Statements. Board staff did not take issue with Burlington Hydro’s audited costs. VECC submitted that the application conformed to the Board’s Guideline regarding audited costs¹.

Burlington Hydro’s total costs in aggregate and on a per meter basis are summarized in Table 1 below, which was prepared from the updated model submitted in response to interrogatories:

¹ G-2011-0001 Guideline *Smart Meter Funding and Cost Recovery – Final Disposition*

Table 1

	2007	2008	2009	2010	2011	2012	Total		
Capital	\$448,502	\$260,195	\$3,566,618	\$4,956,320	\$517,023	\$100,000	\$9,848,658		
OM&A	\$882	\$559	\$97,955	\$109,548	\$813,585	\$1,079,303	\$2,101,832		
Number of Smart Meters	232	640	29791	33194	9	0	63866		
							Total	Average per meter	
							Total (capex + opex)	\$11,950,490	\$187.12
							Capex only	\$9,848,658	\$154.21

In Appendix A of its response to VECC Interrogatory #1, Burlington Hydro provided a calculation of the average invoiced cost per meter per year on the basis of capital costs, as well as by capital and operating costs for each of the Residential, GS < 50 kW and GS > 50 kW classes. These exclude costs that are beyond minimum functionality. The average total cost per meter for all classes was \$138 (based on capital and OM&A costs) or \$122 (based on capital costs only).

Both Board staff and VECC noted that Burlington Hydro's costs per meter on a combined capital and operating basis are within the range of \$123.59 to \$189.96 (excluding Hydro One Networks Inc.), as documented in Appendix A of the Board's Decision with Reasons EB-2007-0063. Both parties also noted that these averages were below the industry average of \$226.92 reported by distributors in the Monitoring Report of Smart Meter Investment as at September 30, 2010.

Both Board staff and VECC noted that authorization to procure and deploy smart meters had been done in accordance with Government regulations, including successful participation in the London Hydro RFP process, overseen by the Fairness Commissioner, to select vendor(s) for the procurement and/or installation of smart meters and related systems. VECC submitted that it was reasonable to presume that Burlington Hydro realized some benefits and efficiencies through this process.

The Board agrees that distributors, including Burlington Hydro, are subject to a significant degree of regulation in smart meter procurement and deployment. The Board also agrees that Burlington Hydro's average cost per meter is within the range

established for minimum functionality in EB-2007-0063 and is below the industry average based on applications with respect to smart meter cost recovery that the Board has considered to date.

Burlington Hydro did not document any costs beyond minimum functionality in its smart meter model, stating that the costs incurred for TOU implementation, CIS system changes, web presentment and integration with MDM/R were minimal costs necessary to implement the smart meter program and a functioning TOU system. Board staff noted in its submission that these cost items are beyond minimum functionality, as defined by O.Reg. 425/06 and the Functional Specification for an Advanced Metering Infrastructure, Version 2, August 2007, and as confirmed by the Board in its Decision with Reasons EB-2007-0063 and also documented in Guideline G-2011-0001. However, these costs may be recoverable in accordance with Guideline G-2011-0001, which requires that these costs should be clearly identified and supported.

In its reply submission, Burlington Hydro provided a breakdown of these costs as follows:

- MDM/R Support: \$535,425
- Project Support: \$35,088
- Program Admin: \$75,427
- Data Collection Fee: \$11,119

Burlington Hydro reiterated that these were the minimal costs necessary to meet the Government's smart meter mandate and that the costs were strictly incremental.

Burlington Hydro also noted that the installation of smart meters for GS > 50 kW was beyond minimum functionality. It installed 571 meters at a total installed cost of \$259,549. Burlington Hydro submitted that providing smart meters for this customer class was a prudent course of action, due to efficiencies to be gained in meter reading, the potential for significant numbers of GS > 50 kW customers to be reclassified as GS <50 kW, and allowing these customers the opportunity to take advantage of peak and energy saving opportunities. Neither Board staff nor VECC took issue with the installation of smart meters for GS > 50 kW.

The Board notes that the total costs on an average per meter basis as shown in Table 1 above, which include the costs beyond minimum functionality, are \$154 and \$187 for capital costs and for capital and operating costs, respectively. These average costs

including costs beyond minimum functionality are below the industry average of \$226.92 discussed above.

Due to the relatively small expense and the potential for benefits the Board will allow Burlington's costs for the installation of the smart meters for the GS > 50 kW class to be recovered. The Board notes however that Burlington Hydro supplied no cost benefit analysis for any of the three factors it offered in justifying the expense. Two of the three supporting factors cited were the avoidance of manual meter reading and the avoidance of future installations due to customers dropping below the 50 kW class delineation threshold. Both of these factors lend themselves to easily decipherable costs and benefits. In future filings to the Board, Burlington Hydro should be mindful of the Board's expectations that investments are to be justified, where possible, by financial analysis.

The Board finds that Burlington Hydro's documented costs, as revised in response to interrogatories, 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 for smart meter deployment and operation. The Board notes that certain stranded meter costs appear to have been incurred prior to authorization. These are discussed later in this Decision.

Cost Allocation

Burlington Hydro's Application proposed uniform SMDRs and SMIRRs for its Residential, GS < 50 kW and GS > 50 kW customers. These uniform rate riders were updated to reflect the corrections arising from its responses to Board staff interrogatories, as well to reduce the recovery period of the SMDR to one year from two years.

In response to Board staff Interrogatory #10, Burlington Hydro calculated class-specific SMDRs and SMIRRs based on the cost allocation methodology used by PowerStream in its smart meter application:

- Return and Amortization allocated based on the capital cost of the meters installed for each class;
- OM&A allocated based on the number of meters installed for each class;
- PILs allocated based on the revenue requirement allocated to each class before PILs; and

- Smart Meter Funding Adder collected, including carrying costs, allocated based on the revenue requirement allocated to each class before PILs.

Burlington Hydro provided the following calculations in response to Board staff's interrogatories:

Table 2

Rate Rider	Uniform Rate Riders	Class-Specific Rate Riders		
		Residential	GS<50kW	GS>50kW
SMDR	\$(0.01)	\$(0.57)	\$6.19	\$1.49
SMIRR	\$3.21	\$2.90	\$6.63	\$4.18
Forecast Revenue		\$1,648,633	\$788,430	\$61,848
	\$2,495,923		\$2,498,911	

In its interrogatory response, Burlington Hydro noted the inequalities in the rates between the two commercial classes, although the costs per meter are essentially the same. Burlington Hydro stated that these inequalities arise as a result of the unequal proportions of customers with smart meters within the two classes. The GS > 50 kW class has a much higher proportion of interval-metered customers who would be required to pay for smart meters, but had not received them. Burlington Hydro suggested that combining the GS < 50 kW and GS > 50 kW into one commercial class would eliminate the discrepancy in rates. To illustrate, Burlington Hydro calculated the rate riders for a combined commercial class as follows:

Table 3

Rate Rider	Separate Commercial Classes		Combined Commercial Classes
	GS<50kW	GS>50kW	
SMDR	\$6.19	\$1.49	\$5.48
SMIRR	\$6.63	\$4.18	\$6.26
Forecast Revenue	\$788,430	\$61,848	
	\$850,278		\$850,070

Board staff submitted that combining the GS < 50 kW and GS > 50 kW rate classes for the purposes of calculating the SMDR and SMIRR produces a more logical result if the cost per meter is the same or similar for both classes, but expressed concern for the impact on GS < 50 kW customers with smaller consumption profiles for whom the same meter type as the residential class would be used. In its reply submission, Burlington Hydro clarified that the rate riders for GS < 50 kW customers would decrease under a combined commercial class.

VECC submitted that the current cost allocation methodology reflects the capital costs and types of meters for each class and takes into consideration the higher proportion of interval meters in the GS > 50 kW class. VECC stated that it supported the individual class rate riders based on Board staff's interrogatory #10 and that combining the GS < 50 kW and GS > 50 kW classes for the purposes of calculating the SMDR and SMIRR is contrary to the current cost allocation methodology based on cost causality applied to distinct customer classes underpinning existing rates and thus should be avoided.

In its reply submission, Burlington Hydro clarified that, while it had calculated separate rate riders by rate classes and a combined commercial class, it continued to request uniform rate riders for all three rate classes, as this methodology involves the least amount of arbitrary cost allocation.

The Board notes that the Guideline G-2011-0001 recognized that class-specific revenue requirement may not be appropriate or feasible for all distributors as the necessary data may not be available. Guideline G-2011-0001 further states that, where practical and where the data is available, class-specific SMDRs should be calculated based on full cost causality.

The Board considers that the cost allocation methodology resulting in class-specific SMDRs and SMIRRs based on cost causality within the existing identified classes is most appropriate. The SMIRR is intended to be a proxy for that portion of the future revenue requirement that is associated with Smart Meters. Burlington's class specific revenue requirements will be established in its next cost of service application based on its existing classes that are currently differentiated by level of electrical demand. Not all customers within the existing classes utilize the same types or value of system assets in obtaining service. The existence of specific inequities due to customers within a class having disparate system needs is an accepted ratemaking principle that balances the desirability of charging for all identifiable cost drivers with the need to maintain a workable number of separate classes. Burlington's proposal for uniform SMDR and SMIRR values is based on asset usage of one particular asset that is used by multiple classes. The Board does not consider it appropriate to treat this particular asset differently than all other assets that are used by the various classes in the determination class specific revenue requirements.

The Board notes that the allocation of revenues from the SMFA on the basis of the revenue requirement allocated to each class is not consistent with Guideline G-2011-0001 and recent Board Decisions that have approved a direct allocation of SMFA revenues.

Consistent with the Board decision in the case of Orangeville Hydro (EB-2012-0039), the Board will approve an allocation methodology for the SMFA revenues based on a direct allocation of SMFA revenues as billed for the Residential, GS < 50 kW and GS > 50 kW customer classes. Where this information is not available, the Board will accept an allocation of average SMFA revenue collected at the rate class level (average number of customers in each class per year, multiplied by 12 months, further multiplied by the applicable SMFA for each year in the period), similar to its approach in the cases of PowerStream (EB-2011-0128) and Guelph Hydro (EB-2011-0123).

Other Matters

In its Application, Burlington Hydro 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 rebasing application, scheduled for 2014 rates. Neither VECC nor Board staff took issue with Burlington Hydro's proposal. Board staff submitted that Burlington Hydro's proposal to defer recovery of stranded meter costs is compliant with Guideline G-2011-0001. The Board agrees.

Board staff also noted that Burlington Hydro's stranded meter account appears to contain \$413,533 for 4,738 Elster Rex 1 Smart Meters. These were installed outside its initial approved Smart Meter Pilot program beginning in 2006 and prior to Burlington Hydro becoming authorized for smart meter activities, in accordance with O. Reg. 427/06, as amended by O. Reg. 235/08 on June 25, 2008, and that these meters were subsequently replaced following the selection of Elster Rex 2 meters through the London Hydro AMI RFP process. Board staff submitted that Burlington Hydro should be prepared to address the appropriateness of recovering these costs at the time that it requests recovery of stranded meter costs. In its reply submission, Burlington Hydro confirmed its intention to do so.

Board staff also submitted that Burlington Hydro should be prepared to address and quantify any further smart meter-related operational efficiencies and cost savings in the utility's next cost of service application, beyond the \$216,000 cost savings in meter

reading already incorporated into the smart meter model. Burlington Hydro stated that it would continue to seek out additional cost savings as experience with smart meters is gained, and would address this issue in its next rebasing application.

The Board directs Burlington Hydro to address these matters in its next rebasing application.

Implementation

The Board expects Burlington Hydro to file detailed supporting material, including all relevant calculations showing the impact of this Decision and Order on its class-specific smart meter revenue requirements and the determination of the updated SMDRs and SMIRRs.

Burlington Hydro requested an implementation date of May 1, 2012 for the new rate riders. Given the filing date and the time required to process an application of this nature, the Board has determined that an implementation date of July 1, 2012 is appropriate. In developing its draft Rate Order, Burlington Hydro is directed to establish the SMDRs based on a 10-month recovery period to April 30, 2013 and to accommodate within the SMDR the applicable revenue requirement amounts to be recovered through the SMIRRs related to the period from May 1 to June 30, 2012.

The SMIRRs shall be effective and implemented on July 1, 2012. The Board notes that these rate riders are based on an annual revenue requirement and will be in effect until the effective date of Burlington Hydro's next cost of service rate order.

Burlington Hydro 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 Burlington Hydro's next cost of service application.

THE BOARD ORDERS THAT:

1. Burlington Hydro shall file with the Board, and shall also forward to VECC, a draft Rate Order attaching a proposed Tariff of Rates and Charges reflecting the Board's findings in this Decision and Order, within **7 days** of the date of this Decision and Order. The draft Rate Order shall also include customer rate impacts and detailed

supporting information showing the calculation of the final rates.

2. VECC and Board staff shall file any comments on the draft Rate Order with the Board and forward to Burlington Hydro within **5 days** of the date of filing of the draft Rate Order.
3. Burlington Hydro shall file with the Board and forward to VECC responses to any comments on its draft Rate Order within **5 days** of the date of receipt of the submission.

Cost Awards

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

1. VECC shall submit its cost claims no later than **7 days** from the date of issuance of the final Rate Order.
2. Burlington Hydro shall file with the Board and forward to VECC any objections to the claimed costs within **14 days** from the date of issuance of the final Rate Order.
3. VECC shall file with the Board and forward to Burlington Hydro any responses to any objections for cost claims within **21 days** from the date of issuance of the final Rate Order.
4. Burlington Hydro 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-2012-0081**, be made through the Board's web portal at, www.errr.ontarioenergyboard.ca 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, June 21, 2012

ONTARIO ENERGY BOARD

Original signed by

Kirsten Walli
Board Secretary