

**2012 ELECTRICITY DISTRIBUTION RATES**

**Burlington Hydro Inc.**

**Application for Disposition and Recovery of  
Costs Related to Smart Meter Deployment**

**EB-2012-0081**

**STAFF SUBMISSION**

**May 23, 2012**

## INTRODUCTION

Burlington Hydro Inc. (“Burlington Hydro”) is a licensed electricity distributor serving approximately 64,300 customers within the City of Burlington. Burlington Hydro filed a stand-alone application (the “Application”) with the Board, received on February 29, 2012, 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. 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 is 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 on March 19, 2012. The Vulnerable Energy Consumers’ Coalition (“VECC”) requested intervenor status and cost award eligibility. One letter of comment was received and has been placed on the public record. 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.

Board staff and VECC posed interrogatories to Burlington Hydro on April 18, 2012 and April 19, 2012, respectively. Burlington Hydro filed its responses to Board staff interrogatories on May 1, 2012. On May 9, 2012, the Board issued Procedural Order No. 1 granting an extension to May 16 for Burlington Hydro to respond to VECC interrogatories and corresponding extensions for parties to file submissions. On May 16, Burlington Hydro filed its responses to VECC interrogatories.

This submission reflects observations and concerns which arise from Board staff’s review of the record of the proceeding, including the original Application and updates as provided in response to interrogatories.

## THE APPLICATION

### *Approvals Sought*

In the Application as filed on February 29, 2012, Burlington Hydro applied for the following approvals:

- SMDR – An actual cost recovery rate rider of (\$0.05) per customer per month for the Residential, General Service less than 50kW and General Service greater than 50 kW rate classes for the period May 1, 2012 to April 30, 2014. This rate rider will refund the difference between the 2006 to December 31, 2011 revenue requirement 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 collected from May 1, 2006 to April 30, 2012 (and corresponding interest on the principal balance of SMFA revenues).
- SMIRR – A forecasted cost recovery rate rider of \$3.10 per customer per month for the Residential, GS < 50kW and GS > 50 kW rate classes for the period May 1, 2012 to April 30, 2014. This rate rider will collect the 2012 incremental revenue requirement related to smart meter costs to be incurred from January 1, 2012 to December 31, 2012.
- SMFA – A termination of Burlington Hydro’s current SMFA of \$2.50 per metered customer per month effective May 1, 2012 to reflect the smart meter costs approved for recovery through the SMDR and SMIRR rate riders above.

Board staff notes that approval for the termination of Burlington Hydro’s current SMFA has been previously determined by the Board. In Burlington Hydro’s 2011 EDR IRM3 rates application (EB-2010-0067), the Board approved the current SMFA of \$2.50 with a sunset date of April 30, 2012. Further, the cessation of the SMFA has been factored into Burlington Hydro’s 2012 IRM3 rates application (EB-2011-0155). A Rate Order in that proceeding was issued on March 22, 2012.

### ***Updated Evidence***

In response to Board staff interrogatories, Burlington Hydro made corrections for the following:

- Corrected the tax rates in the model to correspond with tax rates underpinning Burlington Hydro's approved rates for 2010 to 2012 (Board staff IR #4);
- Corrected the cost of capital parameters in the model to reflect the Board approved parameters for Burlington Hydro for the applicable years (Board staff IR #11);
- Corrected the prescribed interest rates for deferral and variance accounts to calculate interest on the SMFA revenues only until April 30, 2012 (Board staff IR #12);
- Revised the recovery of the SMDR over one year until April 30, 2013, rather than the two year collection period originally proposed (Board staff IR #14); and
- Calculation of class-specific SMDRs and SMIRRs (Board staff IR #10)

In its response to Board staff IRs, Burlington Hydro filed a revised smart meter model and class-specific SMDRs and SMIRRs to reflect the corrections noted in Board staff IRs # 4, 11, 12, 14 and 10.

Through its interrogatories, VECC also asked Burlington Hydro to prepare class-specific SMDRs and SMIRRs based on the PowerStream methodology from EB-2011-0128. In response to VECC IR # 6, Burlington Hydro expressed concerns that while it had detailed records for meter capital costs and PILs, it did not have class-specific costs for other cost types, such as computer hardware and software, communications, etc., some of which were quite substantial. Burlington Hydro did recognize, however, that the capital costs for commercial meters were significantly greater than those for residential meters, and referred to its response to Board staff interrogatory #10, which showed the calculation of the SMDR and SMIRR on the basis of separate allocators for Return and Amortization, OM&A,

PILs and SMFA collected in accordance with the allocation methodology approved in EB-2011-0128. These allocation factors were as follows:

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

These calculations incorporated the updated information noted above in response to Board staff IRs. The revised class-specific SMDRs and SMIRRs calculated as a result of responses to Board staff interrogatories are summarized below:

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

Burlington Hydro noted that the class-specific calculations for the GS < 50kW and GS >50 kW produced very different rate riders, although the costs per meter are the same. It explained that the basis for the different results was the difference in the number of interval-metered customers within each class who would also be required to pay for smart meters. Specifically, while the GS >50kW class contains 571 smart meters, the costs of these meters are assigned to all 909 customers in the rate class (Burlington Hydro response to Board staff IR #10). The costs of the 5,125 smart meters within the GS <50kW class are assigned to a total of 5,140 customers.

Burlington Hydro proposed that combining the calculations for the GS <50kW and GS >50kW into one combined “commercial” class would remove this discrepancy and provided the models to calculate a SMDR of \$5.48 and a SMIRR of \$6.26 (Burlington Hydro Response to Board staff IRs, Appendix D).

Board staff agrees 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. Board staff would be concerned though about smaller single-phase customers in the GS < 50 kW class for which the same meter type as the residential class would be used. Board staff requests the Burlington address the impact to these customers in their reply.

### ***Minimum Functionality***

Burlington Hydro has not documented any costs beyond minimum functionality in its smart meter model, stating that the costs incurred for TOU rate implementation, CIS system changes, web presentment, integration with MDM/R were the minimal costs necessary to implement the smart meter program and a functioning TOU system. Board staff notes that these cost items are beyond minimum functionality, however they may be recoverable in accordance with Guideline G-2011-0001. Section 3.4 of the Guideline requires that these costs should be clearly identified and supported. Board staff requests that Burlington Hydro provide a breakdown of these costs in its reply submission.

### ***Prudence of Smart Meter Costs***

In response to VECC IR #1, Burlington Hydro provided its average cost per meter (capital cost only and capital and operating costs) over the five year period of 2007 to 2011 by rate class. Burlington Hydro installed Rex2 meters for residential customers and A3RL meters for its commercial customers. Rex2 meters are significantly less costly than A3RL meters, but form the vast majority of meter installations (58,789 residential meters compared to 5,671 commercial meters). The overall average per meter cost calculated from the data provided in Appendix A of Burlington Hydro's Response to VECC IRs is \$138 (capital and OM&A) or \$122 (capital only). These average per meter costs are within the ranges observed for other utilities in EB-2007-0063, and are below 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.

Board staff also observes that the revised proposed SMIRR is \$3.21/month (from Board staff IR # 10) for Residential customers. The SMIRR is, by design, a proxy for the incremental increase in distribution rates to recover the annualized capital-related and operating costs of smart meters as if they were in rate base and operating expenses. This is within the range of \$3 to \$4 that was originally estimated (albeit on limited and preliminary data) in the Board's Report on Smart Meters in 2005<sup>1</sup>.

Finally, Board staff observes that Burlington Hydro was authorized to deploy smart meters under O. Reg. 427/06 as amended by O.Reg. 238/08 in accordance with the London Hydro RFP process. It has complied with the London Hydro RFP process for the procurement of smart meters and associated equipment and for services to install and operate the smart meters and associated equipment. Board staff considers that the documented costs are reasonable.

### ***Other Matters***

Burlington Hydro has also responded to interrogatories regarding the net book value of stranded conventional meters. Burlington Hydro is proposing not to dispose of stranded meters at this time, but to deal with disposition in its next rebasing application, scheduled for 2014 rates. Board staff submits that this is compliant with Guideline G-2011-0001.

Board staff notes that Burlington Hydro's stranded meter account appears to contain \$413,533 for 4,738 Elster Rex 1 Smart Meters (Board staff IR #7), which

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<sup>1</sup> *Smart Meter Implementation Plan - Report of the Board To the Minister*, January 26, 2005, pg. vi, [http://www.ontarioenergyboard.ca/documents/communications/pressreleases/2005/press\\_release\\_sm\\_implementationplan\\_260105.pdf](http://www.ontarioenergyboard.ca/documents/communications/pressreleases/2005/press_release_sm_implementationplan_260105.pdf)

were installed outside its initial approved Smart Meter Pilot program beginning in 2006 and prior to authorization through O.Reg. 427/06, as amended by O.Reg. 235/08 on June 25, 2008. These meters would appear to have been replaced shortly after installation by the Elster Rex 2 Smart Meters, which were ultimately selected through the London Hydro AMI RFP process. Board staff submits that Burlington Hydro should be prepared to address the appropriateness of recovering these costs through its stranded meter cost request in its next rebasing application.

In response to Board staff IR #8, Burlington Hydro has discussed operational efficiencies and cost savings resulting from smart meter deployment. Burlington Hydro stated that manual meter readings for Residential and GS < 50 kW have been virtually eliminated, resulting in a cost saving of \$216,000 per year. No other savings were noted. Board staff recognizes that it may take time for further savings to be recognized. As Burlington Hydro, and the utility sector generally, become more accustomed to customer and operational data (i.e. service interruptions, meter tampering) that smart meters and TOU pricing provide, re-engineering of business processes may allow for more, and more substantial, efficiencies to be realized over time.

Board staff submits that Burlington Hydro should be prepared to address any operational efficiencies further in its next cost of service rebasing application.

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Subject to the above comments, Board staff submits that Burlington Hydro's Application is compliant with Guideline G-2011-0001, reflects prudently incurred costs and is consistent with Board policy and practice with respect to the disposition and recovery of costs related to smart meter recovery.

*- All of which is respectfully submitted -*