



**EB-2012-0193**

**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 Oakville Hydro Electricity Distribution 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**  
**August 23, 2012**

**Introduction**

Oakville Hydro Electricity Distribution Inc. (“Oakville Hydro”), a licensed distributor of electricity, filed an application (the “Application”) with the Ontario Energy Board (the “Board”) on April 3, 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 Oakville Hydro charges for electricity distribution, to be effective May 1, 2012.

Oakville Hydro 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. Oakville 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.<sup>1</sup>

The Board issued its Letter of Direction and Notice of Application and Hearing (the “Notice”) on May 2, 2012. The Vulnerable Energy Consumers’ Coalition (“VECC”) was granted intervenor status and cost award eligibility. No letters of comment were received. 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;
- Stranded Meter Costs; and
- Implementation.

### **Costs Incurred with Respect to Smart Meter Deployment and Operation**

In the Application, Oakville Hydro sought the following approvals:

- Smart Meter Disposition Rider – An actual cost recovery credit rate of \$0.21 per Residential customer per month and a credit of \$0.57 per General Service less than 50kW customer per month. Oakville Hydro proposed that these rate riders be effective for two years from May 1, 2012 to April 30, 2014. These rate riders will collect 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 and depreciation expenses, and the SMFA revenues collected from 2006 to April 30, 2012 and corresponding interest on the principal balance of SMFA revenues; and.

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<sup>1</sup> On December 15, 2011, the Board issued *Guideline G -2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition* (“Guideline G-2011-0001”).

- Smart Meter Incremental Revenue Requirement Rate Rider – A forecasted cost recovery rate rider of \$2.49 per Residential customer per month and \$7.25 per General Service less than 50kW customer per month until its next cost of service rate application, scheduled for 2014 rates. This rate rider will recover the 2012 incremental revenue requirement related to smart meter costs to be incurred from January 1, 2012 to December 31, 2012, for installed smart meters.

In responses to interrogatories, Oakville Hydro made corrections to various data in the Smart Meter Model and revised its proposed rate riders for smart meter cost recovery. Oakville Hydro's costs in aggregate and on a per meter basis are summarized in the following table:

Cost per installed Smart Meter

	<b>Total Cost</b>	<b>Cost per Meter</b>
Overall Capital Costs (including 2012 projected)	\$10,331,152	\$162.10
Overall OM&A Costs (including 2012 forecast)	\$1,691,348	\$26.54
<b>Total Cost Per Smart Meter</b>	<b>\$12,022,500</b>	<b>\$188.64</b>
Overall Capital Costs Beyond Minimum Functionality (including 2012 projected)	\$227,905	\$3.58
Overall OM&A Costs Beyond Minimum Functionality (including 2012 projected)	\$363,660	\$5.71
<b>Total Costs Beyond Minimum Functionality</b>	<b>\$591,565</b>	<b>\$9.29</b>
Total Number of Smart Meters	63,734	-
Forecast 2012 Smart Meter Installations	0	-
Incremental Capital 2012 projected	\$200,000	-
Incremental OM&A 2012 projected	\$585,147	-

**Sources:** Smart Meter Model, Sheet 2, as filed on June 15, 2012 and Response to VECC staff interrogatory #1, filed on June 15, 2012

In response to Board staff IR#15, Oakville Hydro provided its average capital costs per meter for the Residential and GS < 50 kW classes. Those costs are summarized in the table below.

<b>Class</b>	<b>Number of Meters</b>	<b>Capital Cost per Meter</b>	<b>Total (Capital + OM&amp;A) Cost Per Meter</b>
Residential	58,720	\$136.62	\$163.16
GS < 50 kW	5,014	\$460.48	\$487.02

Board staff noted that the cost levels reported by Oakville Hydro for Residential meters are in line with the range of costs previously seen by the Board in other smart meter prudence review applications as well as costs documented in the combined smart meter proceeding (EB-2007-0063). Board staff noted that in other similar applications before the Board, GS < 50 kW smart meters had typically shown per meter costs approximately 2 to 2.5 times higher than the average Residential smart meter. While Oakville Hydro's costs for this class were higher than that for this level, Board staff noted that a significant portion (i.e. approximately 14%) of Oakville Hydro's GS < 50 kW customers had more expensive polyphase meter configurations (e.g. A3TL, A3RL, and GE KV2c+.). As such, Board staff took no issue with the above average costs per meter for customers in the GS < 50 kW class. Board staff submitted that it considered Oakville Hydro's documented costs to be prudent.

VECC observed that Oakville Hydro's total average costs per meter were within the range established in the combined smart meter proceeding (EB-2007-0063) and consistent with most recent sector averages.<sup>2</sup> VECC stated that it took no issue with the quantum or nature of Oakville Hydro's smart meter costs.

VECC observed that Oakville Hydro, in the Application, included \$591,565 for costs beyond minimum functionality which represents approximately 4.9% of total smart meter spending. These costs were for activities such as Time of Use ("TOU") rate implementation, CIS upgrades, web presentation and integration with the MDM/R. VECC noted that section 3.4 of the Guideline G-2011-0001 states that these costs may be recoverable provided a distributor shows that these costs are required for its smart meter program and that the costs are incremental. VECC submitted that Oakville Hydro has appropriately demonstrated consistency with Guideline G-2011-0001 regarding the nature of its costs beyond minimum functionality.

Oakville Hydro submitted that it complied with O. Reg. 427/06 and the London Hydro RFP process for the procurement of smart meters and associated equipment and that its costs are in line with average costs. Oakville Hydro submitted that it has adequately demonstrated that its cost above minimum functionality were required for its smart meter implementation and incremental to costs currently embedded in rates and

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<sup>2</sup> The Board's Monitoring Report Smart Meter Investment – September 2010, dated March 3, 2011, showed a sector average total cost per meter of \$226.92.

respectfully requested that the Board approve its total costs including those above minimum functionality.

The Board notes that authorization to procure and deploy smart meters has been done in accordance with Government regulations, including successful participation in the London Hydro RFP process, 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 Oakville Hydro, are subject to in the procurement and deployment of smart meters.

Subject to comments found in the sections below, the Board finds that Oakville Hydro's documented costs, as revised in response to interrogatories, related to smart meter procurement, installation and operation, and including costs beyond minimum functionality, are reasonable. As such, the Board approves the recovery of the costs for smart meter deployment and operation as of December 31, 2011.

#### Time of Use Pricing Pilot Project

In the Application, Oakville Hydro requested approval to recover costs associated with the implementation of a pilot project involving Time of Use ("TOU") electricity prices. The pilot followed the consumption patterns of residents in three condominium buildings in Oakville as they changed from bulk metering to individual metering and billing under tiered RPP prices and subsequently to individual metering and billing under TOU RPP prices. The Board approved the pilot on December 1, 2006 (EB-2006-0306) provided that: i) an independent third-party analysis was completed of the results; ii) that Oakville Hydro consult with Board staff before the independent analysis was carried out in order to ensure consistency with the analytical approach used by the Board; and iii) that Oakville Hydro agree to share the results from the proposed pilot project. On April 3, 2008, Oakville Hydro filed the third party report completed by Navigant Consulting with the Board.

In response to Board staff IR #3a, Oakville Hydro noted that it had included \$24,041 in OM&A expenses for recovery of the costs incurred in the completion of Navigant's third party review of the TOU pilot. Oakville stated that, as the study was directly related to smart meter technology, it had recorded those costs in the smart meter OM&A variance account (1556) and was seeking approval for those costs in this Application.

Board staff took no issue with the nature and quantum of the costs associated with Oakville Hydro's TOU pilot project and submitted that it could not identify any reason why the Board should not approve recovery of these costs in this Application.

In its reply submission, Oakville Hydro submitted that it undertook the Time of Use Pricing study under the direction of the Board, that it consulted with Board staff to ensure consistency with the analytical approach used by the Board, and that it submitted the final report to the Board. Oakville Hydro requested that the Board approve the recovery of the costs related to the pilot project in the Application.

Given that the Board approved the pilot on December 1, 2006, as noted above, and that the Board takes no issue with the nature and quantum of the costs associated with Oakville Hydro's TOU pilot project, the Board will approve the \$24,041 amount for recovery.

#### Treatment of 2012 Costs

In the Application, Oakville Hydro provided \$200,000 in forecasted smart meter capital costs and \$585,147 in OM&A costs for 2012. In response to Board staff IR#16, Oakville Hydro identified which of those costs were for ongoing activities and which were expected to be one-time expenditures in 2012 only. In response to Board staff IR#16a, Oakville Hydro confirmed that the OM&A costs identified as one-time costs have been amortized over the two-year period before Oakville Hydro's next scheduled cost of service application.

In its submission, Board staff accepted the reasoning and need for the forecasted 2012 costs requested for recovery by Oakville Hydro. Board staff noted that the unaudited costs included in the SMIRR represented less than 10% of the total costs sought for recovery. Board staff noted that the 2012 costs in the smart meter model form the basis of the calculation for the annualized revenue requirement that is recovered through the SMIRR. Board staff noted that the SMIRR is to be in effect until the distributor's next cost of service application and, as such, one-time OM&A expenditures should not be included in its calculation. Although Oakville Hydro is scheduled to file its cost of service application for 2014 rates, Board staff took no issue with the inclusion of one-time OM&A expenses in the calculation of the SMIRR as these have been included in such a manner so as to amortize the amounts over the two years until the utility's next expected cost of service application.

Board staff noted that Oakville Hydro had not provided the number of forecasted meter installations for the residential and GS < 50 kW customer classes for 2012 and had forecasted costs for meters installed as of December 31, 2011. As Oakville Hydro had not included forecasted costs for activities related to customer growth in 2012, Board staff took no issue with Oakville Hydro's customer numbers as the costs and the numbers of customers are for the same period.

Oakville Hydro submitted that its 2012 costs, including the amortization of one-time OM&A costs over two years is appropriate and respectfully requested that the Board approve these costs.

The Board is satisfied that the nature and quantum of Oakville Hydro's forecasted costs is appropriate and, as the forecasted costs account for less than 10% of the total costs sought for recovery, approves these costs for recovery. The Board considers that Oakville Hydro's approach to recovering the one-time costs over the two-year period that the SMIRR is expected to be in effect to be appropriate. The Board agrees with Oakville Hydro's approach to not provide the number of forecasted meter installations for 2012 as it has not included forecasted costs for activities related to customer growth.

### **Cost Allocation**

In its Application, Oakville Hydro proposed class-specific SMDRs and SMIRRs. Initial smart meter funding was provided by a uniform SMFA collected from all metered customers, and there was no specific Board direction for recording of costs and revenues by class.

However, it was recognized by the Board that, as there would be differing costs in different customer classes, in large part due to the costs of the meters themselves and, to the extent that accurate data was available from the utility's records, the principle of cost causality would support class-specific cost recovery. To this end, Guideline G-2011-0001 indicates that a utility is expected to address the allocation of costs in its application seeking the disposition of smart meter costs recorded in accounts 1555 and 1556. Further, in recent decisions, the Board has reviewed and approved the evolution of approaches for calculating class-specific rate riders.<sup>3</sup>

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<sup>3</sup> The Board's decisions with respect to PowerStream Ltd.'s 2010 and 2011 smart meter applications (respectively, EB-2010-0209 and EB-2011-0128) confirmed approaches for allocating costs and calculating class-specific rate

In response to Board staff IR #14, Oakville Hydro confirmed that it proposed to allocate costs to each class on the following basis:

- Return (deemed interest plus return on equity) and Amortization were allocated based on the number of smart meters installed by rate class;
- Amortization was allocated based on the smart meter costs per rate class;
- OM&A expenses were allocated based on the number of meters installed for each class;
- Payments in lieu of taxes (“PILs”) were allocated based on the revenue requirement allocated to each class before PILs; and
- Smart Meter Funding Adder revenues, including interest on the principal, were allocated based on the actual amounts collected from each class. Revenues collected from the GS > 50 kW class were allocated equally between the Residential and GS < 50 kW classes.

In response to VECC interrogatory #10, Oakville Hydro completed a separate smart meter model by rate class and provided updated SMDR and SMIRR calculations for each rate class. In response to VECC interrogatory #10d, Oakville Hydro stated:

Oakville Hydro has re-calculated the SMDR and SMIRR rate riders on full cost causality by rate class by completing a separate smart meter revenue requirement model by rate class in response to part c) of this interrogatory. Oakville Hydro notes that this methodology results in the allocation of a larger portion of the SMDR credit to the Residential rate class than the methodology proposed by PowerStream in EB-2011-0128 which allocated the Smart Meter True-up in proportion to the revenue requirement calculated for each class.

The two separate models reflect the difference between the revenue requirement for each rate class and the revenues collected from each rate class through the smart meter funding adder. Oakville Hydro suggests that this method of calculating the SMDR reflect full cost causality and, as such, is a more reasonable response.

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riders for recovery of smart meter costs. The approach approved in Decision EB-2011-0128, or an analogous or improved approach is expected where data of adequate quality at a class level is available.

In its submission, Board staff submitted that cost causality should be the guiding principle when allocating costs to each class. Board staff noted the revised cost allocation methodology proposed by VECC and accepted by Oakville Hydro would be consistent with the cost allocation methodology approved by the Board in PowerStream's 2012 smart meter cost recovery application (EB-2011-0128) and submitted that it is appropriate.

VECC submitted that the updated SMDR and SMIRR rate riders that reflect full cost causality are consistent with Guideline G-2011-0001 and should be approved.

In its reply submission, Oakville Hydro stated that it is seeking approval for the proposed SMDRs and SMIRRs on the basis of its revised cost allocation. Oakville Hydro provided updated SMDR and SMIRR calculations, shown in the table below.

	<b>Application</b> (April 3, 2012)	<b>Oakville Hydro Reply</b> <b>Submission</b>
<b>Residential</b>		
SMDR	\$(0.21)	\$(0.45)
SMIRR	\$2.49	\$2.49
<b>GS &lt; 50 kW</b>		
SMDR	\$(0.57)	\$2.61
SMIRR	\$7.25	\$7.33

Oakville Hydro noted that, in Burlington Hydro's recent smart meter application (EB-2012-0081), the Board permitted Burlington Hydro to recover the revenue requirement related to period from May 1, 2012 to the implementation date of its rate riders. Oakville Hydro noted that it filed the Application at the earliest opportunity following the availability of audited costs in accordance with Guideline G-2011-0001. Oakville Hydro requested that the Board approve an effective date of May 1, 2012 for its SMIRRs and that Oakville Hydro be permitted to recover the foregone revenue requirement related to the period from May 1, 2012 to the implementation data as determined by the Board in its decision. Oakville Hydro proposed that the foregone revenue requirement be recovered through a separate rate rider to be in effect from the implementation date as determined by the board in its decision on the Application through April 30, 2012. Oakville Hydro stated that it will recalculate the rate riders in the draft rate order.

The Board approves Oakville Hydro's revised cost allocation methodology as it is consistent with the approach approved by the Board in PowerStream's smart meter cost recovery application (EB-2011-0128).

With respect to the recovery of the SMIRR revenues back to May 1, 2012, the Board notes that it has approved such recovery in recent decisions, including that of Burlington Hydro as referenced by Oakville Hydro. In a recent Decision and Order with reference to the Cambridge and North Dumfries Hydro Inc., the Board stated:

In finding that CND's smart meter costs are prudent, the Board considers that it is appropriate that CND receive the commensurate revenues to recover the approved costs. As the SMIRR is intended to reflect the ongoing revenue requirement in advance of a distributor's next cost of service application, the Board is of the view that on a principled basis the full amount should be reflected. The Board has, in recent decisions established mechanisms for distributors to recover the foregone revenues from the SMIRR where the SMDR and SMIRR could not be implemented on the May 1, 2012 date. The Board therefore directs CND to calculate the foregone SMIRR revenues for the period from May 1 to August 31, 2012 in developing the SMDR, as documented above.<sup>4</sup>

The Board finds that this principle should also apply for Oakville Hydro's Application, and thus approves the recovery of the 2012 revenue requirement related to the approved installed smart meters and costs corresponding to the period from May 1, 2012 to August 31, 2012. However, this recovery of the foregone revenue shall not be done through a separate rate rider. As has been the approach approved by the Board in other recent applications for smart meter cost disposition and recovery, the Board finds that the recovery of the foregone SMIRR revenues from May 1, 2012 to August 31, 2012 can be effected through an adjustment to the class-specific SMDRs.

Further direction regarding implementation is provided later in this Decision.

### **Stranded Meter Costs**

In its Application, Oakville 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

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<sup>4</sup> Decision and Order, EB-2012-0086], July 26, 2012, page 9

application, scheduled for 2014 rates. In response to Board staff IR#2, Oakville Hydro stated that it transferred its stranded meters to the deferral sub account 1555 in May of 2010. Oakville Hydro stated that the net book value was \$6,145,034 which it expected to remain unchanged through to December 31, 2013.

In its submission, Board staff stated that, if the depreciation expense on stranded meters is currently incorporated in Oakville Hydro's base rates, then Oakville Hydro should continue to amortize the net book value of the stranded meters until its next cost of service application, as per Guideline G-2011-0001, and consistent with the Board's policy and practice in other applications to date.

In its reply submission, Oakville Hydro stated that it will address the recovery of its stranded meters, including amortization, in its next cost of service application.

The Board accepts Oakville Hydro's proposal to address the recovery of stranded meter costs, including the treatment of amortization, in its next cost of service application.

### **Implementation**

The Board will approve an effective date of May 1, 2012 as proposed by Oakville Hydro, but, given the filing date and the time required to process an application of this nature, the Board has determined that an implementation date of September 1, 2012 is appropriate. In developing its draft Rate Order, Oakville Hydro is directed to establish the SMDRs based on a 20-month recovery period from September 1, 2012 to April 30, 2014, and to accommodate within the SMDR the applicable revenue requirement (SMIRR) amount related to the period from May 1, 2012 to August 31, 2012.

The SMIRRs are monthly fixed rates based on the annualized revenue requirement and remain in effect until the effective date of the utility's next cost of service rate order, at which point the capital and operating costs are directly incorporated into the rate base and revenue requirement. As Oakville Hydro is scheduled to rebase its rates for 2014, the Board notes that the SMIRR may be in effect from September 1, 2012 until April 30, 2014.

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

### *Accounting Matters*

In granting its approval for the historically incurred costs and the costs projected for 2012, the Board considers Oakville Hydro 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.

Oakville 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 Oakville Hydro's next cost of service application.

### **THE BOARD ORDERS THAT:**

1. Oakville 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 **6 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 Oakville Hydro within **6 days** of the date of filing of the draft Rate Order.
3. Oakville Hydro shall file with the Board and forward to VECC responses to any comments on its draft Rate Order within **3 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. Oakville 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 Oakville Hydro any responses to any objections for cost claims within **21 days** from the date of issuance of the final Rate Order.
4. Oakville 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-2012-0193**, be made through the Board's web portal at, <https://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](http://www.ontarioenergyboard.ca). If the web portal is not available parties may email their document to [BoardSec@ontarioenergyboard.ca](mailto: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, August 23, 2012

**ONTARIO ENERGY BOARD**

*Original signed by*

Kirsten Walli  
Board Secretary