



**EB-2012-0094**

**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 Cooperative Hydro Embrun 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**  
**July 26, 2012**

**Introduction**

Cooperative Hydro Embrun Inc. ("CHEI"), a licensed distributor of electricity, filed an application (the "Application") with the Ontario Energy Board (the "Board") on March 16, 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 CHEI charges for electricity distribution, to be effective May 1, 2012.

CHEI 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. CHEI 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 April 13, 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.

On May 1, 2012, the Board issued an Interim Rate Order making the current approved Tariff of Rates and Charges interim for CHEI and other distributors with proposed effective dates of May 1, 2012 in their applications seeking approval for disposition and recovery of smart meter costs.

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, CHEI sought the following approvals:

- a. Smart Meter Disposition Rider – An actual cost recovery rate of \$0.14 per metered customer per month for the period May 1, 2012 to April 30, 2013. The SMDR will collect the difference between the deferred revenue requirement from January 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 smart meter funding adder collected from May 1, 2006 to April 30, 2012 (and corresponding interest on the principal balance of SMFA revenues);

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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").

- b. Smart Meter Incremental Revenue Requirement Rate Rider – The forecasted SMIRR of \$1.69 per metered customer per month for the period May 1, 2012 until April 30 of the test year of CHEI’s next cost of service rebasing application (expected to be for 2014). Based on the 2012 incremental revenue requirement related to smart meter costs, the SMIRR would recover the prospective capital-related and operating costs [from January 1, 2012 to December 31, 2013] of installed smart meters; and
- c. Smart Meter Funding Adder – A termination of CHEI’s current SMFA of \$1.33 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 CHEI’s 2011 IRM application (EB-2010-0077), and has been taken into account in CHEI’s 2012 IRM application (EB-2011-0164). The Board will not address this further in this Decision.

### Prudence of Incurred Costs

CHEI’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				\$ 296,227	\$ 16,306	\$ 1,883		\$ 314,417	
OM&A								\$ -	
Number of Smart Meters				1,907	37	12	14	1,970	
							<b>Total</b>	<b>Average per meter</b>	
							<b>Total (capex + opex)</b>	<b>\$ 314,417</b>	<b>\$ 159.60</b>
							<b>Capex only</b>	<b>\$ 314,417</b>	<b>\$ 159.60</b>

Both Board staff and VECC noted that CHEI’s costs per meter are within the ranges observed for other utilities in the combined proceeding related to smart meters conducted by the Board in 2007 (EB-2007-0063). CHEI’s costs are also 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.

CHEI did not include any OM&A costs in its Application. In response to Board staff interrogatories, CHEI noted that it elected to waive its claim for operating costs in this Application. Board staff noted that this means that ongoing costs, primarily for data collection and verification and for TOU billing, will not be recovered until CHEI next rebases its rates through a cost of service application. VECC took no issue with CHEI's treatment of OM&A costs.

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 CHEI, are subject to in smart meter procurement and deployment. The Board further notes that CHEI has documented that it participated with other distributors in Eastern Ontario on smart meter procurement and operational processes to better realize cost savings and efficiencies.

Subject to comments found in the sections below, the Board finds that CHEI's documented costs, as revised in response to interrogatories and in CHEI'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 for smart meter deployment and operation as of December 31, 2011.

#### Costs Beyond Minimum Functionality

CHEI included capital costs for 12 smart meters for the GS>50 kW customer class, which are costs beyond minimum functionality. In response to VECC interrogatory #2, CHEI provided average costs based on meter type. Board staff submitted that, although CHEI provided the costs per meter, the record relating to the nature and justification of these costs is insufficient. Board staff requested that CHEI provide clarity on the increased costs of the smart meters for the GS > 50 kW class, noting that they are over three times that of GS < 50 kW smart meters. Board staff also sought clarity with respect to how the smart meter deployment to GS > 50 kW relates to CHEI's overall smart meter implementation plan. VECC agreed with Board staff's submission.

In its reply submission, CHEI provided some clarity. CHEI noted that it recognized that the installation of smart meters for GS > 50kW customers was technically beyond minimal functionality, but that it decided it was the only prudent course of action. The following three key factors were identified by CHEI:

- Changing out meters so they could be read remotely while leaving out the GS>50 kW which would be required to be read manually could result in a grossly inefficient meter reading operation;
- As some of the GS > 50kW customers have loads which could potentially fall into the GS < 50kW customer class for any month(s) in the year, it made no sense to wait to replace the existing meter with a smart meter only when the customer designation actually changed; and
- Providing the GS > 50kW customers with a smart meter would provide these customers with peak and energy-saving opportunities consistent with the Government's CDM objectives.

The Board notes that Guideline G-2011-0001 states that a distributor may apply for the recovery of costs for deployment of smart meters to customers other than residential and small general service. Smart meters for other than residential and small commercial (General Service < 50 kW) customers are "beyond minimum functionality", as defined in Regulation 425/06 and the Board's decisions and guidelines regarding smart meter cost recovery. Any application for costs for smart meters for customer classes other than residential and GS < 50 kW should document the nature, the justification and the cost per meter separately from those for the residential and GS < 50kW customers.

CHEI has provided the required information. Further, in response to VECC IR # 2, CHEI provided the average costs per meter disaggregated by customer class summarized by VECC in its submission as follows:

Customer Class	Average Meter Cost	Average Installation Cost	Total Average Cost
Residential	\$93.34	\$11.79	\$105.13
GS<50 kW	\$271.19	\$34.25	\$305.44
GS>50 kW	\$924.01	\$116.69	\$1,040.69

**Source:** VECC Submission dated June 20, 2012, page 8

The level of costs between the customer classes show similar variability compared to what the Board has seen in other cases. The Board also considers as reasonable

CHEI's reasons for deploying smart meters to its GS > 50 kW to be able to take advantage of operational efficiencies from remote meter reading and to be able to provide enhanced information on energy consumption to these customers. The Board therefore approves the smart meter costs beyond minimum functionality for the deployment of smart meters to the GS > 50 kW class.

The Board notes however that CHEI 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, CHEI should be mindful of the Board's expectations that investments are to be justified, where possible, by financial analysis.

#### Capital Costs for 2011 and 2012

In Board staff interrogatory #6, Board staff requested that CHEI explain the absence of capital costs for procurement and installation in 2011 and 2012 for new installed smart meters. In response, CHEI stated that it included in its 2010 capital costs the costs of meters purchased for installation in 2011 and 2012.

Board staff submitted that the Smart Meter Model and proposed SMDRs and SMIRRs should be revised to reflect the capital costs of smart meters purchased and installed in each year due to the smart meter rate base being overstated in 2010. As a result of this, Board staff submitted that the return on capital and depreciation expense is also overstated in 2010 and subsequent years. Further, Board staff submitted that this treatment is contrary to the Board's policy and practice with respect to rate-setting under a cost of service framework, where the costs of capital assets are reflected in rate base and revenue requirement when the assets come into service and are "used and useful". VECC agreed with Board staff.

In its reply submission, CHEI agreed to comply with the submissions by Board staff and VECC and submitted a revised Smart Meter Model. As a result, the rate riders were recalculated by CHEI and documented in its reply submission as follows:

Rate Class	SMDR (one year recovery)	SMIRR
Residential	(\$0.63)	\$1.44
GS < 50 kW	\$6.46	\$4.20
GS > 50 kW	\$32.51	\$14.30

Source: CHEI Reply Submission dated June 28, 2012, page 3

### Level of Unaudited Costs

CHEI stated that it completed the installation of approximately 98% of its smart meters in 2010 for which audited financial statements have been completed. Board staff submitted that CHEI'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 submitted that CHEI's percentage of audited costs conforms to the Board's Guidelines.

The Board accepts CHEI's 2010 audited costs and approves the smart meter costs documented in the Application for recovery.

### **Cost Allocation**

In its Application, CHEI proposed uniform SMDRs and SMIRRs per metered customer per month. CHEI did not address the allocation of smart meter costs to the applicable costs in accordance with Guideline G-2011-0001.

In Board staff interrogatory #13, Board staff provided CHEI a cost allocation methodology based on PowerStream Inc.'s approach in its 2011 Smart Meter Cost Recovery Application (EB-2011-0128) using the following approach:

- OM&A expenses allocated on the basis of the number of meters installed for each class;
- 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
- SMFA revenues and interest on the principal first calculated directly for the Residential and GS < 50 kW classes, with then the residual SMFA revenues and interest collected from other metered customer classes (i.e., GS 50-4999 kW and Large Use) allocated 50:50 to the Residential and GS < 50 kW classes. This

approach has been used and approved in some recent cost of service applications, including that for Guelph Hydro's 2012 rates application [EB-2011-0123].

In response to Board staff interrogatory # 13, CHEI proposed the class-specific SMDRs and SMIRRs mirroring the Guelph Hydro spreadsheet from Guelph Hydro's 2012 cost of service rates application [EB-2011-0123] as provided by Board staff. Board staff submitted that the class-specific SMDRs and SMIRRs as provided in the Application have been calculated appropriately through class-specific models.

VECC did not agree with this approach and submitted that CHEI did not provide a response to Interrogatory # 3 from VECC which had sought class-specific riders based on full cost causality and separate smart meter revenue requirement models for each customer class to recalculate the rate riders using the class specific revenue requirements.

VECC summarized the total average installed smart meter costs as provided by CHEI in response to VECC interrogatory #2 as follows:

Customer Class	Average Meter Cost	Average Installation Cost	Total Average Cost
Residential	\$93.34	\$11.79	\$105.13
GS<50 kW	\$271.19	\$34.25	\$305.44
GS>50 kW	\$924.01	\$116.69	\$1,040.69

**Source:** VECC Submission dated June 20, 2012, page 8

VECC submitted that, given the average installed meter cost for a GS < 50 kW customer is almost 3 times the average installed meter cost for a residential customer, VECC submits the better way to avoid undue cross subsidy is to calculate class-specific rate riders based on VECC's proposed cost allocation methodology of separate models to reflect the full costs for each customer class.

In its reply submission, CHEI did not provide the information requested by VECC and noted that the methodology used in response to Board staff has been accepted by the Board previously as being reasonable for the purpose of cost allocation. CHEI further noted that, while VECC's methodology may have merit for larger distributors, it does not believe the potential cross-subsidization to be of material concern to its customers.



The Board notes that CHEI has deployed smart meters to all classes of its metered customers, namely Residential, GS < 50 kW and GS > 50 kW. In response to interrogatories and submissions, CHEI has proposed updated class-specific SMDRs and SMIRRs. In developing its class-specific SMDRs and SMIRRs, CHEI has allocated the costs appropriately and in accordance with the methodology documented in Section 3.5 of Guideline G-2011-0001 and accepted by the Board in decisions in previous applications for smart meter cost recovery. CHEI has also directly allocated the SMFA revenues and associated interest in calculating the class-specific SMDRs. The Board accepts CHEI's explanation for not calculating class-specific models as requested by VECC.

As such, the Board approves CHEI's methodology for the calculation of class-specific SMDRs and SMIRRs to recover the historical and prospective revenue requirement on the approved smart meter costs.

### **Stranded Meter Costs**

In its Application, CHEI 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 #3, CHEI stated that it has an estimated net book value of stranded conventional meters, including net salvage revenues, of \$39,761.10 as of December 31, 2013. Board staff submitted that CHEI's proposal is also compliant with Guideline G-2011-0001. The Board agrees.

### **Implementation**

CHEI requested an effective date of May 1, 2012 for its new rates. 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, CHEI is directed to establish the SMDRs based on an 8-month recovery period to April 30, 2013 and to accommodate within the SMDR the applicable revenue requirement amount related to the period from May 1, 2012 to August 31, 2012.

The SMIRRs shall be effective and implemented on September 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 CHEI's next cost of service rate order.

The Board expects CHEI to file detailed supporting material, including all relevant calculations showing the impact of this Decision and Order on CHEI'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 CHEI 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.

CHEI 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 CHEI's next cost of service application.

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

1. Cooperative Hydro Embrun Inc. shall file with the Board, and shall also forward to the Vulnerable Energy Consumers Coalition, 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. The Vulnerable Energy Consumers Coalition and Board staff shall file any comments on the draft Rate Order with the Board and forward to Cooperative Hydro Embrun Inc. within **7 days** of the date of filing of the draft Rate Order.
3. Cooperative Hydro Embrun Inc. shall file with the Board and forward to the Vulnerable Energy Consumers Coalition responses to any comments on its draft Rate Order within **7 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:

4. The Vulnerable Energy Consumers Coalition shall submit its cost claims no later than **7 days** from the date of issuance of the final Rate Order.
5. Cooperative Hydro Embrun 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.
6. The Vulnerable Energy Consumers Coalition shall file with the Board and forward to Cooperative Hydro Embrun Inc. any responses to any objections for cost claims within **21 days** from the date of issuance of the final Rate Order.
7. Cooperative Hydro Embrun 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-2012-0094**, be made through the Board's web portal at, [www.errr.ontarioenergyboard.ca](http://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](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, July 26, 2012

## ONTARIO ENERGY BOARD

*Original signed by*

Kirsten Walli  
Board Secretary