# 2012 ELECTRICITY DISTRIBUTION RATES

## Cooperative Hydro Embrun Inc.

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

## EB-2012-0094

## STAFF SUBMISSION

## June 18, 2012

## INTRODUCTION

Cooperative Hydro Embrun Inc. ("CHEI") is a licensed electricity distributor that is rate regulated by the Ontario Energy Board (the "Board") under the *Ontario Energy Board Act, 1998*. CHEI filed a stand-alone application (the "Application") with the Board, received on March 16, 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. 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.[1]

The Board issued its Letter of Direction and Notice of Application and Hearing on April 13, 2012. The Vulnerable Energy Consumers' Coalition ("VECC") requested and was granted intervenor status and cost award eligibility. No letters of comment were received.[2] 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 posed interrogatories to CHEI on May 22, 2012, and VECC filed interrogatories on May 23, 2012. CHEI filed its responses to all interrogatories on May 31, 2012.

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.

[1] *Guideline G-2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition* ("Guideline G-2011-0001"), dated December 15, 2011

[2] Response to Board staff IR #1.

# THE APPLICATION

### *Approvals Sought*

In the Application as filed on March 16, 2012, CHEI applied for the following approvals:

- **Smart Meter Disposition Rider –** CHEI proposed a SMDR of $0.14 per metered customer per month for the period May 1, 2012 to April 30, 2012;
- **Smart Meter Incremental Revenue Requirement Rate Rider –** CHEI proposed a SMIRR of $1.69 per metered customer per month from May 1, 2012 until April 30 of the test year of CHEI's next cost of service rebasing application; and
- **Smart Meter Funding Adder ("SMFA") –** Elimination of the existing SMFA of $1.33 per metered customer per month effective April 30, 2012.

Board staff notes that CHEI's SMFA terminated on April 30, 2012, as approved by the Board in its decision on CHEI's 2011 IRM rates application [EB-2010-0077]. [3]

### *Updated Evidence*

In responses to Board staff interrogatories, CHEI made adjustments for the following:

- Updated the SMDRs and SMIRRs to reflect the approved Cost of Capital parameters applicable to CHEI (Board staff IR # 7);
- CHEI confirmed the tax rates correspond to the rates for taxes/PILs actually paid by CHEI in each of the historical years and that CHEI forecasts it will pay for 2012 (Board staff IR #8);
- Corrected the Smart Meter Model so that interest on SMFA revenues is only calculated to April 30, 2012 (Board staff IR # 10);

[3] Decision and Order EB-2010-0077, issued April 7, 2011, pp. 4-5.

- Input monthly data for OM&A and depreciation expense to sheet 8A of the Smart Meter Model for a more detailed calculation of interest on the principal of OM&A and depreciation expense, for determination of the SMDR (Board staff IR # 11);
- CHEI calculated class-specific SMDRs based on an allocation of smart meter costs and direct allocation of SMFA revenues, in accordance with the methodology documented in Guideline G-2011-0001 and accepted by the Board in Guelph Hydro's 2012 cost of service rates application [EB-2011-0123] (Board staff IR # 13 and VECC IR # 3)

In its response to Board staff IR # 14, CHEI filed a revised smart meter model and class-specific SMDRs and SMIRRs to reflect the adjustments noted in Board staff IRs # 7, 10, 11 and 13.

***Cost Allocation***

The proposed class-specific SMDRs and SMIRRs and those calculated in response to Board staff IR # 13 and VECC IR # 3 are summarized below:

**Table 1: Original and Revised SMDRs and SMIRRs**

| Class | SMDR ($/month, for 12 months) | | SMIRR ($/month) | |
|---|---|---|---|---|
| | **Original** | **Revised** | **Original** | **Revised** |
| | | Board staff IR # 13 and VECC IR # 3 | | Board staff IR # 13 and VECC IR # 3 |
| **Residential** | ($0.14) | ($0.58) | $1.69 | $1.45 |
| **GS < 50 kW** | ($0.14) | $6.63 | $1.69 | $4.21 |
| **GS > 50 kW** | ($0.14) | $33.08 | $1.69 | $14.33 |

CHEI now proposes 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 in IR # 13.

Board staff submits that the class-specific SMDRs and SMIRRs as provided in the Application have been calculated appropriately through class-specific models.

***Prudence of Smart Meter 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 submits 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.

CHEI provided the following data with respect to its smart meter program:

| Smart Meters Installed | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | Total |
|---|---|---|---|---|---|---|---|---|
| Residential | 0 | 0 | 0 | 1,755 | 22 | 9 | 10 | 1,796 |
| GS Less Than 50 kW | 0 | 0 | 0 | 152 | 3 | 3 | 4 | 162 |
| Other | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 12 |
| **Total** | **0** | **0** | **0** | **1,907** | **37** | **12** | **14** | **1,970** |
| **% Installed** | | | | **96.8%** | **1.9%** | **0.6%** | **0.7%** | **100.0%** |

| | | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | Total |
|---|---|---|---|---|---|---|---|---|---|
| 3.1 | Capital Costs | | | | | | | | |
| 3.1.1 | Smart Meter | $ - | $ - | $ - | $ 293,686 | $ 14,643 | $ 1,883 | $ - | $ 310,212 |
| 3.1.2 | Computer Hardware | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| 3.1.3 | Computer Software | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| 3.1.4 | Tools & Equipment | $ - | $ - | $ - | $ 2,542 | $ 1,663 | $ - | $ - | $ 4,205 |
| 3.1.5 | Other Equipment | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| 3.1.6 | Applications Software | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| **3.1.7** | **Total Capital Costs** | $ - | $ - | $ - | $ 296,227 | $ 16,306 | $ 1,883 | $ - | $ 314,417 |
| | **Capital Cost per meter** | | | | | | | | $ 159.60 |
| 3.2 | OM&A Costs | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| 3.2.1 | Total OM&A Costs | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - |
| | | | | | | | | | 0.0% |

CHEI has not included any OM&A costs and noted in response to Board staff IRs # 4 and # 9 that it has elected to waive its claim for operation costs in this Application. What this means is 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. In addition, CHEI stated that the net operational efficiencies from meter reading costs of $5220, which help to offset the incremental costs incurred from smart meter implementation, were not included in its Application.

Board staff notes that CHEI's 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 notes that CHEI became authorized to deploy smart meters through compliance with the London Hydro RFP process, as required in subsection 1.(1) 8 of O. Reg. 427/06. Further, 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.[4] Board staff submits that CHEI has acted in accordance with the regulations in its processes for the procurement of smart meters and associated equipment and for services to install and operate the smart meters and associated equipment. As noted above, CHEI has not included smart meter-related OM&A costs, different from the practice in other applications. Subject to these waived costs, partially offset by savings that CHEI is realizing (e.g. for meter reading) not materially and adversely impacting CHEI's financial viability, Board staff considers that the documented historical costs and the forecasted costs are reasonable.

***Cost beyond Minimum functionality***

In its Application 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 IR # 2, CHEI provided the following table to show average costs based on meter type:

| Class | Type of Meter | Quantity | Meter Cost | Average Meter Cost | Installation Cost | Average Installation Cost | Total Average Cost |
|---|---|---|---|---|---|---|---|
| Residential | Elster | 1,796 | $ 167,642.18 | $ 93.34 | $ 21,170.60 | $ 11.79 | $ 105.13 |
| GS<50 kW | Elster | 162 | $ 43,932.68 | $ 271.19 | $ 5,548.02 | $ 34.25 | $ 305.44 |
| GS>50kW | Elster | 12 | $ 11,088.06 | $ 924.01 | $ 1,400.25 | $ 116.69 | $ 1,040.69 |

Board staff 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

[4] Exhibit 1/Tab 1/Schedule 6/page 2 and response to Board staff IR #5

residential and small general service. Smart meters for other than residential and small commercial (General Service) customers are "beyond minimum functionality", as defined in Regulation 425/06 and the Board's decisions and guidelines regarding smart meter costs. 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 form those for the residential and GS < 50kW customers.

Board staff submits that CHEI has provided the cost per meter but that the record on the nature and justification of these costs is insufficient. Noting that some of this information only came to light in responses to interrogatories, Board staff suggests that CHEI provide additional information in its reply submission to provide clarity, specifically on the increased costs of the smart meters for the GS > 50 kW class (over three times that of GS < 50 kW smart meters as shown in the above table) and on how the smart meter deployment to GS < 50 kW relates to CHEI's overall smart meter implementation plan.

***Inclusion of 2012 Costs and Demand for Customer Growth***

Board staff notes that in the Smart Meter Model, CHEI has shown 12 Residential and GS<50 kW smart meter installations, and a further 14 smart meter installations forecasted for 2012, however no smart meter capital costs for procurement and installation are shown. In response to Board staff IR # 6, CHEI stated that it included in its 2010 capital costs the costs of meters purchased for installation of the meters in 2011 and 2012.

Board staff submits that CHEI should revise the Smart Meter Model to reflect the capital costs of smart meters as purchased and installed in each year. By including the 2011 and 2012 capital costs in 2010, CHEI has overstated the smart meter rate base in that year. As a result, the return on capital and depreciation expense is also overstated in 2010 and subsequent years. Board staff submits 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". Board staff submits that

CHEI should revise the Smart Meter Model and the proposed SMDRs and SMIRRs to align the capital costs with the years in which the smart meters were installed.

***Other Matters***

CHEI has also responded to interrogatories regarding the net book value of stranded conventional meters, and has an estimated net book value, including net salvage revenues, of $39,761.10 as of December 31, 2013. Board staff submits that CHEI's proposal is consistent with Guideline G-2011-0001, and that CHEI should address stranded meter costs in its next cost of service application.

In response to Board staff IR # 5, CHEI discussed its cost sharing contract with other electricity distributors in eastern Ontario. The cost sharing arrangement solely relates to smart meter deployment and operation and CIS (software and hardware). Furthermore, CHEI notes that it is able to bring down costs by sharing resources with five other electricity distributors.

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Subject to the above comments, Board staff submits that should CHEI agree with the submissions of Board staff, including the filing of revisions to the Smart Meter Model and the proposed SMDRs and SMIRRs to align the capital costs with the years in which the smart meters were installed, CHEI's Application is consistent with Guideline G-2011-0001. Further, Board staff submits that subject to the above comments, CHEI's Application 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 -