

**2012 ELECTRICITY DISTRIBUTION RATES
Cambridge and North Dumfries Hydro Inc.
Application for Disposition and Recovery of
Costs Related to Smart Meter Deployment**

EB-2012-0086

STAFF SUBMISSION

June 12, 2012

INTRODUCTION

Cambridge and North Dumfries Hydro Inc. (“CND”) is a licensed electricity distributor serving customers in the City of Cambridge. CND filed a stand-alone application (the “Application”) with the Board on March 27, 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. CND requested approval of proposed Smart Meter Disposition Riders (“SMDRs”) and Smart Meter Incremental Revenue Requirement Rate Riders (“SMIRRs”) effective July 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 9, 2012. The Vulnerable Energy Consumers’ Coalition (“VECC”) requested and was granted intervenor status and cost award eligibility. Two letters of comment were received, and CND responded to the commenters.² The Notice of Application and Hearing established that the Board would consider the Application by way of a written hearing and set timelines for discovery and submissions.

Board staff and VECC filed interrogatories on May 18, 2012, and CND filed its responses to all interrogatories on May 29, 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 On December 15, 2011, the Board issued *Guideline -2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition* (“Guideline G-2011-0001”). In preparing its Application, CND used Smart Meter Model, Version 2.17, issued along with Guideline G-2011-0001, and prepared its application considering recent Board decisions on smart meter cost disposition and recovery.

² Response to Board staff IR #1.

THE APPLICATION

Approvals Sought

In the Application filed on March 27, 2012, CND applied for the following approvals:

- The Board's determination that Smart Meter capital of \$8,177,996 and operating expenditures of \$427,716 to December 31, 2011 were prudent;
- A SMDR of (\$.06) for residential customers and (\$.16) for GS<50kW customers, to dispose of the deferred revenue requirement related to Smart Meters installed through December 31, 2011, net of the Smart Meter Funding Adder ("SMFA") revenues collected to April 30, 2012. The SMDR would be in place for a period of 22 months, from July 1, 2012 until the implementation date for new rates as determined in CND's next Cost of Service Application, expected to be May 1, 2014; and
- A SMIRR of \$1.67 for residential customers and \$3.76 for GS<50kW customers, to recover the annual revenue requirement associated with Smart Meters installed from the inception of the Smart Meter program through to December 31, 2011 including forecasted costs after December 31, 2011. The SMIRR would be in place for the same 22 month period implemented for the SMDR.³

Board staff notes that CND's SMFA terminated on April 30, 2012, as approved by the Board in its decision on CND's 2011 IRM rates application [EB-2010-0068].

On page 14 of the Application, CND notes that it has included in the forecasted operating expenses in 2012 an amount to recover the proposed fee of \$0.81 per month per RPP-eligible customer proposed by the Independent Electricity System Operator in its role as the Smart Metering Entity (the "IESO-SME") for costs related to the development and operation of the provincial Meter Data Management/Repository ("MDM/R"). The IESO-SME filed its application on March 23, 2012, and is being considered by the Board under File No. EB-2012-

³ Application, page 3

0100. Board staff makes submissions on CND's proposed recovery of the IESO-SME fee later in this submission.

Updated Evidence

CND revised its proposed SMDRs and SMIRRs in responses to interrogatories, with respect to the following:

- CND confirmed the aggregate federal and provincial corporate income tax rates to correspond to the rate for taxes/PILs actually paid by CND in each year;⁴
- CND calculated the interest on OM&A and depreciation expenses based on monthly data on sheet 8A of the Smart Meter model Version 2.17;⁵
- In response to Board staff IR # 11, CND 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];⁶ and
- In response to an interrogatory from VECC, CND calculated class-specific SMDRs and SMIRRs based on applying the class-specific costs to the Smart Meter Model Version 2.17.⁷

The proposed class-specific SMDRs and SMIRRs and those calculated in response to Board staff IR # 11 and VECC IR # 5 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 # 11	VECC IR # 9		Board staff IR # 11	VECC IR # 9
Residential	(\$0.06)	(\$0.38)	(\$0.40)	\$1.67	\$1.67	1.66
GS < 50 kW	(\$0.16)	\$3.07	\$3.28	\$3.76	\$3.76	3.83

⁴ Response to Board staff IR # 9

⁵ Response to Board staff IR # 10 and Exhibit C

⁶ Response to Board staff IR # 11 and Exhibit D

⁷ Response to VECC IR # 9

CND now proposes the class-specific SMDRs and SMIRRs as calculated in response to class-specific models as provided in response to VECC IR # 9.

Board staff notes that the revised SMDRs and SMIRRs calculated in the class-specific models in response to VECC IR # 9 still include the OM&A expense of \$495,720 for recovery of the proposed IESO-SME fee as applied for by the IESO in a separate application [EB-2012-0100]. As discussed subsequently in this submission, Board staff submits that this amount should be excluded from the calculations; this will only affect the class-specific SMIRRs. With this exception, 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

In its Application, CND stated that all of the historical costs for which disposition and recovery to December 31, 2011 is being sought, have been audited, with the 2011 Audited Financial Statements subject to approval by CND's Board of Directors. In response to Board staff IR # 2, CND confirmed that the 2011 Audited Financial Statements were approved by its Board of Directors without changes to the smart meter costs that are the subject of this Application. With this confirmation, Board staff submits that CND's Application complies with Guideline G-2011-0001 with regard to the expectation that at least 90% of the smart meter costs be audited actuals.

Board staff observe that, while CND stated that it had commenced MDM/R integration in June 2011 and cut over to production of customer billing with Time-of-Use ("TOU") rates on February 24, 2012, CND has not documented any costs "beyond minimum functionality" for CIS/billing system changes, TOU implementation, etc. In response to Board staff IR # 4, CND noted that it had already begun the replacement of a CIS/billing system that had the capability to handle TOU pricing, and the costs for that system were approved for recovery in distribution rates in the Board's decision with respect to CND's 2010 cost of service application [EB-2009-0260]. CND stated:

The CIS/Billing System ultimately purchased by CND included all of the functionality discussed above. Because the costs related to TOU implementation were not easily or practically segregated from the CIS/Billing System package that was purchased, such costs were not charged to the Smart Meter variance account as they could have been. The costs were and continue to be part of the purchase price of the CIS/Billing System.⁸

Board staff submits that CND's treatment and explanation is acceptable to ensure that there is no double-recovery of the costs incurred.

In section 5.0 of its Application, CND has documented its procurement process and the process to become authorized for smart meter deployment in compliance with O.Reg. 427/06. CND has documented how its adherence to the London Hydro RFP process, and its cooperation with other Ontario local distribution companies has resulted in improved technology selection and deployment, and cost benefits to CND and ultimately to ratepayers. Board staff takes no issue with CND's explanations on these matters.

In response to VECC IR #4 b), CND provided a table showing the average cost per installed meter, according to meter type and customer class. Residential meters average \$131.60, while GS < 50 kW smart meters average \$455.55. The overall average is \$161.25. Board staff considers that these per meter costs are reasonable and supported by the documentation, and are well within the ranges that the Board has seen for most utilities serving urbanized areas.⁹

⁸ Response to Board staff interrogatory # 4

⁹ In Appendix A of the Board's Decision with Reasons EB-2007-0063, issued August 8, 2007, with respect to the combined smart meter proceeding, the Board documented the per meter cost for the 13 applicant utilities, including Horizon, then authorized for smart meter deployment. For "urban" distributors for which data was available, the per meter costs ranged from \$123.59 to \$189.96. The cost information in the combined smart meter proceeding is informative, but reflects an early stage of smart meter deployment, and so must be used with caution. However, similar patterns and ranges for utilities serving urban areas as those observed in Appendix A of the Decision with Reasons EB-2007-0063 have been observed in more recent cases in which smart meter costs have been or are being considered by the Board.

Further, Board staff observes that the proposed SMIRR is \$1.66/month for Residential customers and \$3.83/month for GS < 50 kW customers, and that both of these are inflated by the inclusion of the proposed IESO-SME fee of \$0.81. Once the IESO-SME fee is removed, as Board staff submits should be done (discussed later in this submission), the class-specific SMIRRs will be reduced. Board staff estimates that CND's SMIRRs will likely be amongst the lowest in the province, with the exclusion of CIS and billing system conversion costs, already recovered in rates as a result of CND's 2010 cost of service application being an important driver.

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. The SMIRR is below 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, reflecting technological improvements and experience gained by manufacturers and the industry over time.¹⁰

Noting that CND 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, Board staff submits that CND 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 such, Board staff considers that the documented historical costs and the forecasted costs, excluding the amount of \$495,720 proposed to recover the IESO-SME charge, are prudent.

¹⁰ *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

Exclusion of 2012 Costs and Demand for Customer Growth

Board staff notes that CND has not included costs for smart meters to be forecasted to be deployed in 2012 due to customer growth.

This approach is consistent with what the Board has approved for final smart meter disposition in recent applications. In PowerStream's 2011 smart meter application (EB-2011-0128), the utility included costs to the end of 2011. In Kenora Hydro's 2011 cost of service application (EB-2010-0135), smart meter costs to the end of the 2010 test year were included in the SMDR, and capital and operating costs for 2011 were included in the test year rate base and revenue requirement. Similarly, in Hydro Ottawa's 2012 cost of service application (EB-2011-0054), only costs to the end of 2011 were included in the determination of the SMDR.

In other smart meter stand-alone applications currently before the Board, other distributors have included both the capital costs and forecasted number of new smart meters installed due to customer growth in the determination of the SMIRR. In these cases, utilities have generally also documented capital and one-time operating expenses due to, for example, TOU implementation in 2012.

Board staff submits that both approaches set out above are acceptable, so long as the costs and the demand (number of customers) are for the same period and the forecasted costs for both 2011 and 2012 are less than 10% of the total costs of the program. In the long run, both approaches should be equivalent. Board staff submits that CND will be compensated through the SMIRR for smart meter costs associated with customer growth until its distribution rates are next rebased through a cost of service application.

Request for Recovery of the Proposed IESO-SME fee of \$0.81 per month

As noted earlier, CND has included an amount in the 2012 OM&A for recovery of the \$0.81 per month fee for which the IESO-SME applied for Board approval in an application filed on March 23, 2012, and the Board is considering under file number EB-2012-0100.

In response to Board staff IR # 6, CND provided a disaggregation of 2012 OM&A expenses. The amount being sought for recovery for the IESO-SME fee is \$495,720, calculated as $\$0.81/\text{month} \times 12 \text{ months} \times 51,000 \text{ customers}$.

Board staff notes that CND's application was filed on March 27, 2012, only four days after the IESO had filed its application in EB-2012-0100. Thus, inclusion of the proposed IESO-SME fee was a last-minute addition to CND's Application, but was obviously also prior to the Board's Notice of May 18, 2012 indicating how the Board was initiating, on its own motion, a generic proceeding [EB-2012-0211] on how distributors would pass through and recover the IESO-SME fee from end ratepayers and that EB-2012-0100 and EB-2012-0211 would be considered jointly. In response to a Board staff interrogatory regarding CND's proposal, both in terms of CND's original rationale and in light of the subsequent Notice on the IESO-SME fee issued by the Board, CND stated:

The IESO in its application is proposing to collect the Smart Metering Charge ("SMC") from all licensed electricity distributors for the period July 1, 2012 to December 31, 2017. As such, all licensed electricity distributors including CND, must in some manner, recover such costs from their customers. Because CND is in the process of applying for recovery of its Smart Meter related costs in this current application, it would be remiss of CND to not include costs that it is aware are forthcoming. Under this scenario, it is appropriate that recovery of the proposed IESO-SME charges be dealt with in this current Application.

Having said this, the OEB has determined that it will commence a proceeding on its own motion to review the options for and ultimately determine the appropriate allocation and recovery of the SMC. The appropriate recovery of the SMC has not yet been finalized. If the recovery is included, as an example, as a separate charge to customers, then it is not appropriate to deal with the

recovery of the proposed IESO-SME charge in this current Application.¹¹

Board staff submits that it is not appropriate to allow for recovery of the IESO-SME charge as originally proposed by CND in its Application as it is being considered in a separate proceeding. In light of the Board's Notice in EB-2012-0100, and the Board's commencement on its own notice of a joined proceeding under EB-2012-0211 to consider the mechanisms for pass-through and recovery of the IESO-SME fee by distributors, Board staff submits that it is premature and inappropriate to include the proposed IESO-SME charge for recovery in the SMIRR. This amount should be excluded from the calculation of the SMIRRs, as CND has done in the response to Board staff IR # 6 e).

Recovery Period for the SMDR and SMIRR

CND has proposed a recovery period of 22 months for the SMDR, so that the termination date for the SMDR would coincide with the expected termination date for the SMIRR, based on the May 1, 2014 expected effective date for CND's next rebased rates. Board staff queried CND about its proposed 22 month period given the relatively small quantum of the deferred revenue requirement and hence associated SMDRs. In response a Board staff IR, CND stated that it:

... proposed a refund period for the SMDRs that is consistent with the recovery period for the SMIRR. To have non[-]compatible periods of refund and recovery for these two closely related charges is, in the opinion of CND, confusing for customers and breaks the inherent link between the charges. ... Regardless of the changes that may be required as a result of responses to interrogatories, CND believes that the period of recovery or refund for the SMDR should be the same as the period of recovery or refund as the SMIRR.

Board staff acknowledges that it is often preferable for the SMDR and SMIRR to have similar periods. Having the same period results in less rate volatility and

¹¹ Response to Board staff IR # 5 d)

should be less confusing to customers. However, Board staff submits that there is no “inherent link” between the SMDR and SMIRR; these two rates have different purposes with respect to recovery of, respectively, deferred historical and prospective smart meter costs until a distributor’s next cost of service rebasing. The SMDR acts more like a traditional rate rider to dispose of a historical variance account balance. As such, the SMDR should be determined to recover or refund the variance balance over as short a period as possible, taking into account the impacts on customers.

Based on the final amounts approved to be recovered or refunded as a result of the Board’s decision, Board staff submits that a recovery or refund period of either 10 months or 22 months may be appropriate.

The effective period for the SMIRR is unchanged, as the SMIRR remains in effect until the effective date of CND’s next cost of service rebased rates.

Other Matters

Stranded Meters

CND 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.¹² The aggregated net book value of stranded meters, in aggregate for the Residential and GS < 50 kW classes, is \$2,446,644.29 as of December 31, 2013. The stranded conventional meters will continued to be amortized until disposition. The average per meter cost for a stranded meter is estimated as \$48.25 as of December 31, 2013. Based on the evidence, Board staff estimates that the average gross book value of stranded conventional meters works out to about \$162 per meter. Sincere this is solely for the Residential and GS < 50 kW customer classes, this average initial cost per stranded conventional meter seems relatively high, and CND should be prepared to address this when it does apply for recovery of its stranded meter costs in its next cost of service application.

¹² Application, Section 7.0, page 11

Board staff submits that CND's proposal is compliant with Guideline G-2011-0001. However, in its next cost of service application for 2014 rates, CND should make a proposal for the recovery of stranded meter costs through class-specific Stranded Meter Rate Riders, as envisaged in Section 3.7 of Guideline G-2011-0001.

Board staff submits that CND should be prepared to address any operational efficiencies due to smart meter and TOU implementation in its next cost of service rebasing application.

Foregone SMIRR Revenues for the Period May 1 to June 30, 2012

In its Application, CND has proposed an effective date for the SMIRR of July 1, 2012. CND's SMFA ceased on April 30, 2012, in accordance with the Tariff of Rates and Charges approved in CND's 2011 IRM rates application EB-2010-0068. In proposing an effective date of July 1, 2012, CND is effectively foregoing two months of revenue recovery of the SMIRR, related to current capital-related and operating costs of deployed smart meters. Board staff notes that CND has not requested recovery of this in its Application.

The Smart Meter Model Version 2.17 issued along with Guideline G-2011-0001 contemplated a May 1, 2012 effective date for the SMDR and SMIRR, to coincide with the normal rate year for most electricity distributors. The rate year lags the fiscal calendar year by four months, but in the long run, the distributor is held whole with respect to the recovery of charges.¹³

In this Application, CND has proposed an effective date of July 1, 2012 for the SMDR and SMIRR. There is an issue of the interest on both SMFA revenues and on OM&A and depreciation expense for the two month period. However, the additional interest on revenues and costs will be largely offsetting, particularly

¹³ For example, for a utility with a May 1 to April 30 rate year, the SMIRR will continue for four additional months, from January 1 to April 30 of the test year in the year that the utility rebases, even though the test year revenue requirement will include the smart meter costs for the period January 1 to December 31, and hence smart meter costs will be implicitly recovered in the distribution rates for the test year.

with the current prescribed interest rate on deferral and variance accounts of 1.47% (about 0.12% monthly).

The other aspect of this is the SMIRR revenues foregone for the two month period from May 1 to June 30, 2012. The SMIRR is a proxy for the change in the monthly rate to recover the ongoing annualized incremental revenue requirement for the operating and capital-related costs of deployed smart meters until the utility actually rebases through a cost of service application, at which time the capital and operating expenses will be reflected in rate base and revenue requirement and hence recovered through the commensurate distribution rates.

With respect to Orangeville's smart meter application, the Board, in its decision, stated:

In developing its draft Rate Order, Orangeville is directed to establish the SMDRs based on an 11-month recovery period to April 30, 2013 and to accommodate within the SMDR the applicable revenue requirement amounts related to the month of May.¹⁴

In its draft Rate Order filing, Orangeville has used the approach documented above to adjust the SMDR to account for the foregone revenues for the SMIRR for one month. The Board's final Rate Order is pending at the time of this submission.

In another recently filed application for Smart Meter cost recovery, Waterloo North Hydro Inc. has proposed an effective date of November 1, 2012, and has adjusted the SMDR similarly to account for six months of foregone SMIRR revenues from May 1, 2012 to October 31, 2012.¹⁵

Board staff submits that this approach is appropriate in terms of enabling the distributor to more fully recover the historical deferred and ongoing costs related to smart meters until the rates are rebased through a cost of service application

¹⁴ Decision and Order, EB-2012-0039, May 24, 2012, page 8

¹⁵ Waterloo North Hydro Inc. filed its application on May 31, 2012. The application has been given file number EB-2012-0266.

for the utility. While CND has not proposed recovery of the two months of foregone SMIRR revenues, CND should confirm this or indicate if it wishes to avail itself to this adjustment to recover the foregone revenues for the period from May 1 to July 1, 2012.

Subject to the above comments, Board staff submits that CND'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 -