

**Cambridge and North Dumfries Hydro Inc.
2012 Smart Meter Cost Recovery
EB-2012-0086**

Board staff Interrogatories

General

1. Letters of Comment

Following publication of the Notice of Application, the Board has, to date, received one letter of comment. The Board is also in receipt of a response letter sent from Cambridge and North Dumfries Hydro Inc. ("CND") to the commenter.

Please confirm whether CND has received any other letters of comment. If so, please file a copy of any letters of comment. For each, please confirm whether a reply was sent from CND to the author of the letter. If confirmed, please file that reply with the Board. Please ensure that the author's contact information except for the name is redacted. If not confirmed, please explain why a response was not sent and confirm if CND intends to respond to the commenter.

Manager's Summary

2. Ref: Manager's Summary – Audited Results

On page 6 of its Application CND states:

CND confirms that 100% of the costs submitted for disposition are included in the audited financial statements to December 31, 2011. The audit for the year ended December 31, 2011 is completed and it is anticipated that the audited financial statements will be approved by CND's Board of Directors at their next scheduled Board meeting on April 12, 2012.

Please confirm that CND's Audited Financial Statements for the year ending December 31, 2011 have been approved by CND's Board of Directors and that there are no changes to the smart meter costs to December 31, 2011 for which CND is seeking recovery in this Application. In the alternative, please explain.

3. Ref: Manager's Summary – Efficiencies from Smart Meter Deployment

On page 7 of its Application, CND states:

The Guidelines indicate that the distributor will provide evidence on any operational efficiencies and cost savings that result from smart meter implementation. In this context CND has initially identified \$155,000 per year in savings from no longer requiring Residential and General Service < 50 kW customer meters to be read. CND installed all the required smart meters by December 31, 2011, and given the recent completion of the installations, it is difficult at this time to determine any other efficiencies or cost savings that result from smart meter implementation.

Other distributors have noted that capabilities of smart meters and the associated communications systems can provide information for a utility's SCADA and result in earlier detection and response to tampering, meter failures and service disruptions. This should result in better and more efficient maintenance and repair with respect to faults. Is CND using, or intent on using, deployed smart meters and communications networks for operational purposes and, if so, does it not expect efficiencies in operations and maintenance as a result? Please explain your response.

4. Ref: Manager's Summary – Costs Beyond Minimum Functionality

On page 8 of its Application, CND states that it "has incurred no costs considered to be beyond minimum functionality." In the Smart Meter Model Version 2.17, CND has documented no costs in categories 1.6.3 ("[Capital] Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.") or 2.6.3 ("[OM&A] Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.")

CND states on page 4 of its Application that it cut over to TOU billing on a production basis on February 24, 2012 after commencing testing of MDM/R integration in June 2011.

What are the "beyond minimum functionality" costs, as defined in section 3.4 of *Guideline G-2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition*, that CND has incurred for TOU implementation, and how are these costs being recovered?

TOU Billing

5. Ref: Application - TOU billing

On page 4 of its Application, CND states:

CND began the enrolment of its Smart Meters with the provincial MDM/R in June, 2011 and successfully cutover to Production Operations on February 24, 2012.

CND's enrolment process and systems configuration was based on the availability of EnergyIP r7.2, which was expected to be in production at the IESO by the end of 2011. Due to subsequent delays by the IESO, CND is presently unable to bill customers at TOU rates. Smart Meter data is flowing to the MDM/R, and CND will bill TOU rates once EnergyIP r7.2 is promoted to the production environment of the MDM/R.

- a) Please explain what CND means when it states that it "successfully cutover to Production Operations on February 24, 2012" despite not being able to bill customers at TOU rates.
- b) Is CND billing customers now with TOU rates? If not, please explain.

Provincial MDM/R Cost Recovery

6. Ref: Manager's Summary – IESO-SME Charges

On page 14 of its Application, CND states:

CND has included the monthly Smart Metering Charge of \$.81 that the IESO applied to the OEB to recover. The IESO Application was submitted March 23, 2012 and requests the \$.81 per RPP-eligible customer to be recovered from LDC's effective July 1, 2012.

In Table 9 on page 15 of its Application, CND shows that an amount of \$581,280 for "Other AMI Expenses" for 2012. A footnote indicates that the \$581,280 covers expenses for "MDM/R fees, ODS fees, and AMI Test Environment (Powerstream Test RNI)".

- a) Please provide a disaggregation of the \$581,280 into the component expense categories listed in the footnote, and any others that may apply.
- b) Please explain what is meant by each of: MDM/R fees; ODS fees; and AMI Test Environment.

- c) Please explain how CND has converted the \$0.81 fee applied for by the IESO-SME under File No. EB-2012-0100 into an aggregate expense which CND is seeking incorporation into its 2012 prospective revenue requirement for recovery through the SMIRR in this Application.
- d) To date, and prior to the application filed by the IESO-SME for recovery of costs incurred for the Provincial MDM/R, the Board has disallowed recovery for forecasted IESO-SME MDM/R costs as being premature (e.g. PowerStream's 2010 smart meter application EB-2010-0209). The IESO-SME's application is before the Board. On May 18, 2012, the Board issued its Notice of Application by the Smart Metering Entity for Approval of a Smart Metering Charge and Notice of Proceeding to Determine the Appropriate Recovery and Allocation of the Smart Metering Charge with respect to the IESO-SME's application. In that Notice, the Board stated that it was commencing a proceeding, on its own motion, that would consider, jointly with the costs being proposed for recovery by the IESO-SME, the mechanism(s) by which electricity distributors should recover these costs from ratepayers. These proceedings are being jointly considered under File Nos. EB-2012-0100 and EB-2012-0211.
 - i. What is the rationale of CND for seeking recovery of the \$0.81 per RPP-eligible customer in this application?
 - ii. In light of the Notice issued by the Board as documented above in the proceeding under EB-2012-0100/EB-2012-0211, please provide CND's views as to whether recovery of the proposed IESO-SME charges should be dealt with in this current Application.
- e) Please provide estimates of the uniform and class-specific SMIRRs omitting these costs. In providing these estimates, please reflect any changes and corrections made as a result of responding to interrogatories. Please provide the supporting calculations.

Recovery Period for SMDR

In its Application, CND has calculated class-specific SMDRs that are fairly small credit rate riders and has proposed that the amounts be refunded to customers over a 22 month period from July 1, 2012 to April 30, 2014.

- a) Given the relatively small quantum to be refunded to Residential and GS < 50 kW customers, why has CND not proposed a shorter refund or recovery period for the SMDRs.
- b) Board staff observes that the class-specific SMDRs may change as a result of responses to interrogatories. If, as a result of interrogatories, CND believes that an alternative refund or recovery period is appropriate, please explain.

Stranded Meters

7. Ref: Manager's Summary – Stranded Meter Costs

On page 11 of its Application, CND documents its proposed treatment for stranded meters. CND is proposing to not dispose and recovery the costs for stranded conventional meters replaced in by smart meters in this Application. In table 4, CND provides estimates of the residual net book value of stranded meters at the end of 2010, 2011 and 2012 reflecting accumulated depreciation and net salvage proceeds.

CND last rebased its rates through a cost of service application for the 2010 rate year [EB-2009-0260] and so is scheduled to next rebase through a cost of service application for 2014. Please provide the estimated residual net book value for stranded meters as of December 31, 2013. Please also provide this as a per meter cost for the applicable Residential and GS < 50 kW customer classes.

Smart Meter Model

8. Ref: Smart Meter Model – Cost of Capital

On sheet 3 of the Smart Meter Model, Version 2.17, CND shows a long-term debt rate of 4.99% for all years from 2006 to 2012.

In CND's 2006 EDR rates application [RP-2005-0020/EB-2005-0343], the utility was approved a long-term debt rate of 6.01%. This would have applied until CND rebased its rates in its 2010 cost of service application [EB-2009-0260]. Please explain the use of the 4.99% for the years from 2006 to 2009.

9. Ref: Smart Meter Model – Taxes/PILs Rates

CND has used the maximum taxes/PILs rates input on sheet 3, row 40, for the years 2006, 2007, 2008, 2009, 2010, 2011 and 2012 and beyond. These are summarized in the following table:

Year	2006	2007	2008	2009	2010	2011	2012 and beyond
Aggregate Federal and provincial income tax rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%

Please confirm that these are the tax rates corresponding to the taxes or PILs actually paid by CND in each of the historical years, and that CND forecasts it will

pay for 2012. In the alternative, please explain the tax rates input and their derivation.

10. Ref: Smart Meter Model – Interest on OM&A and Depreciation Expenses

In the Smart Meter Model Version 2.17 filed by CND, the utility has relied upon sheet 8B to calculate the interest on OM&A and depreciation/amortization expenses. Sheet 8B calculates the interest based on the average annual balance of deferred OM&A and depreciation/amortization expenses based on the annual amounts input elsewhere in the model.

The more accurate and preferred method for calculating the interest on OM&A and depreciation/amortization expense is to input the monthly amounts from the sub-account details of Account 1556, using sheet 8A of the model. This approach is analogous to the calculation of interest on SMFA revenues on sheet 8 of the model.

- a) Please re-file the smart meter model using the monthly OM&A and depreciation/amortization expense data from Account 1556 records. Innisfil should also take into account any revisions necessary as a result of its responses to any preceding interrogatories.
- b) If this is not possible, please explain.

Cost Allocation

11. Ref: Manager's Summary – Cost Allocation

In its Application, CND has proposed class-specific SMDRs and SMIRRs for the Residential and GS < 50 kW classes. Smart Meter costs are allocated as follows, according to CND's Application:

- OM&A expenses have been allocated on the basis of the number of meters installed for each class.
- The Return and Amortization have been allocated on the basis of the capital costs of the meters installed for each class.
- PILs have been allocated based on the revenue requirement derived for each class before PILs.

This has been used for the calculation of both the SMDRs and the SMIRRs.

- a) In Table 5, CND shows a percentage allocation of 81.46% for Residential and 18.54% for GS < 50 kW, while Table 7 for the SMDR rates documents an allocation of 80.38% for Residential and 19.62%

for GS < 50 kW. Please explain the differences between the allocations in Tables 5 and 7, and the derivation of the allocation percentages in Table 7.

- b) With CND's proposed SMDRs, GS < 50 kW would receive a larger credit refund than would Residential customers. CND has proposed a Residential SMDR of (\$0.06)/month and a GS < 50 kW SMDR of (\$0.16)/month, both for a period from July 1, 2012 to April 30, 2014. Board staff observes that it is illogical for the SMDR (Residential) to be greater than the SMDR (GS < 50 kW). The average capital cost per GS < 50 kW customer is generally higher than that for the average Residential customer, due to a greater percentage of more expensive polyphase meters for customers with 2-phase or 3-phase service. This means that the deferred revenue requirement, expressed on a per meter basis, should be higher for a GS < 50 kW customer than for a Residential customer, all else being equal. The offsetting SMFA revenues should be equal, as the SMFA was uniform across all metered customer classes. As a result, SMDR (Residential) should be less than or equal to the SMDR (GS < 50 kW).

Board staff observes that this anomaly may result from the calculations in Table 7, which apportions 80.38% of the deferred revenue requirement offset by the SMFA revenues to the Residential class.

An alternative approach would be to allocate the deferred revenue requirement as described by CND and listed above, with the 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].

Using the attached spreadsheet taken from Guelph Hydro's draft Rate Order filing, please provide calculations for class-specific SMDRs using a more direct allocation of SMFA revenues.

12. Ref: Application, Sections 8.0 and 9.0 – Cost Allocation

- a) If CND has made revisions to its Smart Meter Model, Version 2.17 as a result of its responses to interrogatories, please update its proposed class-specific SMDRs.
- b) Similarly, please update the calculation of class-specific SMIRRs.