

**Niagara on the Lake Hydro Inc. ("NOTL")
2012 Smart Meter Cost Disposition and Recovery
EB-2012-0036**

Board staff Interrogatories

General

1. Responses to Letters of Comment

Following publication of the Notice of Application, the Board has, to date, received no letters of comment. Please confirm whether NOTL has received any letters of comment. If so, please file a copy of any letters of comment. For each, please confirm whether a reply was sent from NOTL 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 NOTL intends to respond.

Application

2. Ref: Application, page 3 – Stranded Meter Costs

On page 3 of its application, NOTL states that it is not currently seeking to recover stranded meter costs and that it expects to seek recovery of stranded meter costs in its next cost of service application. NOTL is scheduled to rebase its rates through a Cost of Service application for the 2014 rate year. Please provide NOTL's estimate of the net book value of the stranded meters as of December 31, 2013.

3. Ref: Application, page 6 – Operational Data Store (ODS) Functionality

On page 6 of the application, NOTL states:

With the implementation of the AMI system a need was recognized for an application that supported full integration with the MDM/R and enabled staff to audit, validate, interact with and gain valuable business information from the wealth of meter data that was being collected. The AMI system, while fully capable of collecting meter read data and forwarding that raw data to the MDM/R, does not provide all of the functionality necessary to interpret and/or leverage the information it is providing in an educated and meaningful fashion.

- a) Are there any features of NOTL's ODS which are duplicative of functions performed (or to be performed) by the provincial MDM/R?

- b) If the answer to a) is in the affirmative, please identify what features of the ODS are duplicative of functions performed by the MDM/R, the associated costs and the reasons for having this functionality.

4. Ref: Application, page 10 – Annual Security Audit

On page 10 of the application, NOTL provides a description of its annual security audit as well as the procurement process used to select an audit partner. NOTL states:

Going forward, annual security audit has been budgeted, as this is a prudent approach to satisfying the due diligence requirements for protection not only of the customer information, but also to ensure that access to the infrastructure is properly protected, thereby securing against unwanted modifications to data collection and/or load control functionality.

Please provide the budgeted amount for the annual security audit for 2012.

5. Ref: Application, pages 12 and 13– Capital Expenditures: New CIS System

On page 12 of the application, NOTL states:

The UCS group is a partnership currently consisting of nine Ontario LDCs that share a Harris Northstar CIS software system, hardware, support and its associated operating costs. While the overall cost of UCS membership, conversion and operation to date has been exceeded the estimated COS overhaul cost, we are very pleased that we migrated to the UCS system with a powerful TOU bill-ready system that has allowed us to meet our regulatory obligations.

Earlier on page 12, NOTL states that it initially received an estimate of \$170,000 from its then CIS vendor, COS Computer Systems, to make its CIS system ready for time of use pricing. NOTL later states that the cost for the UCS system selected exceeded the estimate from COS Computer Systems.

- a) Please identify the total costs incurred in the migration to the UCS system.
- b) Please identify if there are any differences between the functionality provided by the chosen UCS system with the functionality that would have been provided by the CIS changes estimated by COS Computer Systems.

6. Ref: Application, page 14 – Internal Cost Savings (Credit)

On page 14 of the application, NOTL states:

The automated meter reading process of the new AMI system has resulted in a sizeable reduction of our meter reading costs. We have calculated an operational credit of \$33,420 attributed to the new AMI technology.

- a) Please confirm whether NOTL has factored the reduction in meter reading costs into its Smart Meter Incremental Revenue Requirement calculation (i.e. that the operating expenses shown for 2012 are incremental to its OM&A expenses recovered through its base Board-approved distribution rates).
- b) If so, please explain how this reduction in OM&A is reflected in cost data provided by NOTL in its Smart Meter Model and the proposed SMIRRs and/or SMDRs.

7. Ref: Application, pages 12, 13 and 14 – Justification for Functionality that Exceeds Minimum Functionality

On pages 12 through 14, NOTL identifies the costs incurred for functionality that exceeds minimum functionality, as defined in the combined proceeding on smart meters (EB-2007-0063).

- a) Please provide a table indicating the costs incurred for each of the items identified on pages 12, 13 and 14 for each year of NOTL's smart meter deployment.
- b) For the year 2012, please identify what amounts are one-time costs (i.e. 2012 only) and which amounts are ongoing annual costs.
- c) Please reconcile the amounts in the table with the amounts entered in rows 105 and 170 of sheet 2 of the Smart Meter model.

Per Meter Costs

8. Ref: Excel Smart Meter Model, Version 2.17 – Sheet 2

Board staff has prepared the following table to calculate the average per meter cost for installed smart meters, on both a capital expenditures and total (capital and operating costs) basis. Note that capital and operating costs above minimum functionality were included in the calculations.

	2006	2007	2008	2009	2010	2011	2012	Total	
Capital	\$ 2,435	\$ 22,147	\$ 61,380	\$ 542,226	\$ 938,881	\$ 264,994	\$ 60,880	\$ 1,892,943	
OM&A				\$ 3,811	\$ 48,598	\$ 73,214	\$ 39,667	\$ 165,290	
Number of Smart Meters				159	7242	282	165	7848	
								Total	Average per meter
							Total (capex + opex)	\$ 2,058,233	\$ 262.26
							Capex only	\$ 1,892,943	\$ 241.20

- a) Please confirm or correct these numbers.
- b) In applications to date, smart meter costs have typically averaged below \$200 per meter on even a total cost (capex plus opex) basis. This is particularly so when smart meter deployment only involves the Residential and GS < 50 kW (i.e., there are no deployments “beyond minimum functionality” for other metered customer classes like GS > 50 kW). Please provide further explanation of NOTL’s circumstances that support its higher than average costs, and of efforts that NOTL took during its smart meter deployment to control its capital and operating costs for the program.

Smart Meter Model, Version 2.17

9. Ref: Excel Smart Meter Model, Version 2.17, Sheet 2 – Smart Meter Costs

On sheet 2 of the Smart Meter Model, NOTL has provided the costs incurred in the installation of smart meters, per year, for their smart meter deployment.

- a) Column S of sheet 2 forms the basis for the calculation of the SMIRR. In column S, NOTL has shown \$60,880 in capital costs and \$39,667 in OM&A expenses for 2012. Please provide a table summarizing the amounts entered in column S that are one-time (i.e. 2012 only) expenses and amounts that are ongoing expenses for meters installed, as of December 31, 2011. Please use a format similar to column S of sheet 2 of the Smart Meter Model.

10. Ref: Excel Smart Meter Model, Version 2.17, Sheet 3 – Taxes/PILs Rates

NOTL 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 NOTL in each of the historical years, and that NOTL forecasts it will pay for 2012. For historical years to 2011, these would be the aggregate rate derived for calculating the taxes/PILs included in the revenue requirement in cost of service applications, or as calculated in taxes/PILs calculations as part of IRM applications. In the alternative, please explain the tax rates entered and their derivation.

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

In the Smart Meter Model Version 2.17 filed by NOTL, 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.
- b) If this is not possible, please explain.

12. Ref: Smart Meter Model

If NOTL has changed its data inputs to the Smart Meter Model, Version 2.17 as a result of interrogatories by Board staff and/or the Vulnerable Energy Consumers Coalition, please update and re-file the smart meter model in working Microsoft Excel format.

Cost Allocation

13. Ref: Application, page 15 – Cost Allocation

On page 15 of its application, NOTL states:

Allocation of the return (deemed interest plus return on equity) and Amortization based on the allocation of Account 1860 in the cost allocation model (CWMC in the cost allocation model).

- a) Please state if NOTL is able to provide separate capital costs for installed smart meters for the residential and GS < 50 kW classes. If not, please explain.
- b) If so, please provide those capital costs. Additionally, please provide updated calculations of the class specific SMDR and SMIRR using the cost allocation approach approved in the Decision and Order from PowerStream's 2011 smart meter cost recovery application (EB-2010-0209).

14. Ref: Application, Section 16 – Cost Allocation

- a) If NOTL 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.