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Tuesday, October 29, 2013

Ontario Energy Board  
P.O. Box 2319, 27<sup>th</sup> Floor  
2300 Yonge Street  
Toronto, ON  
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Attention: Kristen Walli, Board Secretary

Dear Ms. Walli:

**Re: North Bay Hydro Distribution Ltd. (EB-2013-0157)  
Application for 2014 Electricity Distribution Rates  
Responses – Board Staff Interrogatories**

Please find attached a complete copy of Board Staff's interrogatory responses.

Two hard copies of this submission will be sent via courier. An electronic copy of the response in PDF format will be submitted through the Ontario Energy Board's RESS.

An electronic copy of the response in PDF format will be forwarded via email to the Intervenor as follows:

Donald Rennick

a) Donald Rennick, Independent Participant

Vulnerable Energy Consumers Coalition

a) Michael Janigan, Public Interest Advocacy Centre

b) Shelley Grice, Econalysis Consulting Services

Yours truly,

*Original signed by*

Melissa Casson, CGA  
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## RTSR Model

### Board Staff Interrogatory #1

#### Ref: RTSR Workform Sheet 4

Rate Class	Unit	Non-Loss Adjusted Metered kWh	Non-Loss Adjusted Metered kW	Applicable Loss Factor	Load Factor	Loss Adjusted Billed kWh	Billed kW
Residential	kWh	200,614,425		1.0480		210,243,917	-
General Service Less Than 50 kW	kWh	84,948,671		1.0480		89,026,207	-
General Service 50 to 2,999 kW	kW	223,688,453	540,969		56.67%	223,688,453	540,969
General Service 3,000 to 4,999 kW	kW	35,722,772	68,480		71.50%	35,722,772	68,480
Unmetered Scattered Load	kWh	88,774		1.0480		93,035	-
Sentinel Lighting	kW	487,759	2,345		28.51%	487,759	2,345
Street Lighting	kW	2,790,238	7,788		49.11%	2,790,238	7,788

- a) Please confirm that the data entered in columns “Non-Loss Adjusted Metered kWh” and “Non-Loss Adjusted Metered kW” are not adjusted by Hydro Ottawa’s Board-approved loss factor.

#### **Response:**

North Bay Hydro Distribution Ltd. (NBHDL) confirms that the amounts entered into the columns “Non-Loss Adjusted Metered kWh” and “Non-Loss Adjusted Metered kW” have not been adjusted by NBHDL’s Board-approved loss factor.

## **SMART METER COST RECOVERY**

### **Board Staff Interrogatory #2**

#### **Ref: EB-2012-0152 Decision and Order**

In its EB-2012-0152 Decision and Order in NBHDL's 2013 IRM proceeding, the Board ordered NBHDL to file a stand-alone smart meter cost recovery application as soon as possible in 2013.<sup>1</sup>

- a) Please explain why NBHDL has included its smart meter application with its 2014 IRM application, rather than filing a stand-alone application as ordered by the Board.

#### **Response:**

NBHDL was ordered by the Board to file a stand-alone application as soon as possible in 2013 and NBHDL had intended to do so. However, due to the timing of the completed smart meter application NBHDL respectfully believed it would be more efficient to combine the smart meter cost recovery application with the 2014 IRM in order to reduce the administrative burden of having two separate proceedings. NBHDL also felt that this approach would make it easier for customers should they choose to follow the application proceeding.

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<sup>1</sup> Decision and Order EB-2012-0152, April 4, 2013, page 8

### **Board Staff Interrogatory #3**

#### **Ref: Appendix J, Page 3**

NBHDL states that it incurred smart meter OM&A costs in 2012 and has on-going and forecasted costs related to smart meters throughout 2013 and 2014. However, NBHDL states that these costs have been absorbed into its normal business operations of the company, and have not been included for recovery.

- a) Please explain why NBHDL has not included these costs for recovery in this application.

#### **Response:**

NBHDL did not include these costs for recovery in this application because from NBHDL's perspective smart meters had by this time been integrated into daily routine operations. The only remaining incremental costs associated with the implementation after 2011 were those related to capital such as the purchase of three phase smart meters.

- b) Is NBHDL recovering the on-going OM&A expenses associated with smart meters and associated communications and computer storage systems (e.g. licensing fees, communications costs, etc.) through existing rates in place of the analogous OM&A expenses (e.g. meter reading) associated with the conventional meters replaced by the smart meters?

#### **Response:**

NBHDL is partially recovering the on-going OM&A expenses associated with smart meters and associated communications and computer storage systems (e.g. licensing fees, communications costs, etc.) through existing rates in place of the analogous OM&A expenses (e.g. meter reading) associated with the conventional meters replaced by the smart meters. NBHDL has not included these costs for recovery as the philosophy since the end of 2011 has been that these costs are part of the normal day to day operations of the company; NBHDL has managed resources and financial needs accordingly within the framework of the IRM period with the expectation that the full cost of smart meters will be included in test year rates in the next cost of service application.

**Board Staff Interrogatory #4**

**Ref: Appendix J, Pages 3, 9**

NBHDL states that it has installed 98% of total residential and GS<50kW meters as of June 2013.

- a) Please provide a status update on implementation for the remaining 2% of residential and GS<50kW meters.

**Response:**

All meters will be installed by the end of 2013.

- b) Are all of the outstanding meters the 3-phase meters as described at page 9 of Appendix J?

**Response:**

Yes, all of the outstanding meters are the 3-phase meters as described at page 9 of Appendix J.

- c) Does NBHDL have any remote meters that can't be reliably read by its smart meter infrastructure? If so, please explain what NBHDL is doing in these situations.

**Response:**

NBHDL currently has approximately 14 meters that cannot be reached by current infrastructure as deployed and tuned. NBHDL is currently tuning meter configuration to relay from meters with good communication and also redeploying FNP (relay units) from well covered areas in order to pick up the few meters in radio "holes".

**Board Staff Interrogatory #5**

**Ref: Appendix J, Page 8**

NBHDL states that some of the Metro locations were in remote areas and the electrical grid had to be extended in some situations to provide service.

- a) Please provide the cost of the grid extensions.

**Response:**

The total cost of the grid extensions was \$50,157.87

- b) Have the costs of these extensions been included for smart meter cost recovery?

**Response:**

Yes, \$31,607.07 of the cost of the grid extensions was deemed incremental and is included for smart meter cost recovery. The remaining costs were included in NBHDL's Property, Plant & Equipment (PP&E) additions for 2012.

- c) If so, please indicate where the costs have been included in the smart meter model.

**Response:**

\$31,394.68 of the costs referenced in part b) was incurred in 2012 and included in Section 1.5.6 of the smart meter model. The remaining \$212.39 in costs, also incurred in 2012, is included in Section 1.2.1 of the smart meter model.

- d) Are these grid extensions dedicated to NBHDL's AMI infrastructure, or are they serving, or intended to serve, regular customers?

**Response:**

The grid extensions are dedicated to the AMI.

**Board Staff Interrogatory #6**

**Ref: Appendix J, Pages 8-9 and 17**

NBHDL describes the Remote Meter Application exchange process, whereby Sensus exchanged meters that had not communicated with the system over an extended period of time.

- a) How many meters were affected?

**Response:**

Approximately 211 meters were affected.

- b) Are these meters related to the warranty replacement described at page 17 of Appendix J?

**Response:**

Yes, these meters are related to the warranty replacement described at page 17 of Appendix J.

- c) Were these meters returned to NBHDL inventory upon completion of the warranty work?

**Response:**

Yes, these meters were returned to NBHDL inventory upon completion of the warranty work.

- d) Please confirm that no costs were incurred to perform this warranty work.

**Response:**

NBHDL confirms that no costs were incurred to perform this warranty work.

**Board Staff Interrogatory #7**

**Ref: Appendix J, Pages 9, 20**

NBHDL states that it is currently in the process of completing installation of 3-phase meters to eligible GS <50kW customers. NBHDL also states that the average cost of a GS <50kW meter is \$226.01.

- a) Please provide a status update regarding these installations.

**Response:**

NBDHL has completed 95% of the deployment of the 3-phase smart meters.

- b) How many GS <50kW customers will have 3 phase meters?

**Response:**

Approximately 35% of GS<50 customers will have the 3-phase Elster meters.



## Board Staff Interrogatory #7 Cont'd

- c) Please provide a calculation of the average cost per GS <50kW meter of \$226.01.

### Response:

The calculation of the average cost per GS <50kW meter of \$226.01 was calculated by determining the cost per meter type paid by NBHDL and averaging the total costs by the # of meters, however, upon preparation of the following table to provide the calculation for the average cost per meter it was noted that there was an error inadvertently included in the calculation with regards to meter quantities. The meter quantity of GS <50 kW customers was understated by approximately 40 meters. While NBHDL deems this discrepancy as immaterial, the average cost has been revised as follows:

Meter Type	Qty	Cost/Mtr	Total Cost
TX Rated Single Phase	179	\$ 143.09	\$ 25,633.99
Icon A 2S	1,473	\$ 79.02	\$ 116,395.05
Network 1200	74	\$ 167.33	\$ 12,382.34
Single Phase 120V	16	\$ 144.75	\$ 2,384.17
3PH Self-Contained	926	\$ 477.50	\$ 442,161.63
	<u>2,669</u>		<u>\$ 598,957.19</u>
Total <50 kW Meter Costs			\$ 598,957.19
# of Meters			2,669
<b>Average Cost per Meter - &lt;50 kW Meters</b>			<b>\$ 224.44</b>

The bulk of these meters were installed internally and as such very little labour costs were included as incremental costs therefore NBHDL utilized meter costs only in deriving the average cost per meter.

Please also refer to VECC interrogatory # 10 for the calculation of the average cost for residential meters.

**Board Staff Interrogatory #8**

**Ref: Appendix J, Page 9**

NBHDL states that, in one situation, a FNP had to be connected by phone line to NBHDL's office and re-routed to the RNI, due to poor cellular reception in more rugged areas of the territory.

- a) Please define the term "FNP".

**Response:**

FNP is a FlexNet Network Portal, which is a lower capability relay only unit designed for remote areas not visible to the main AMI infrastructure. The FNP uses an internet feed, phone line or cell line to relay the reads back to NBHDL.

- b) Is this a permanent or temporary solution?

**Response:**

This is a permanent solution as the area the FNP is deployed in does not have broad band internet, or reliable cell service.

- c) How many smart meters submit data through this FNP?

**Response:**

The portal provides direct communication ability for 700 meters and backup for approximately 600 additional meters.

- d) Were new phone lines required to reach the FNP?

**Response:**

An extension from existing Bell Canada infrastructure and a cross road drop was needed to connect the portal.

- e) If so, how have these costs been recovered?

**Response:**

The costs have not been included for recovery as they are immaterial.

**Board Staff Interrogatory #9**

**Ref: Appendix J, Page 10**

NBHDL states that it has joined a consortium to contract for smart meter network security audit services and has budgeted for an annual security audit.

- a) What are the total costs for security services for NBHDL?

**Response:**

The cost to NBHDL for security services is approximately \$12,000.

- b) Please explain how these costs are shared and/or allocated among the participating utilities.

**Response:**

The costs are shared as an equal portion divided by the 32 utilities who utilize Sensus as the Advanced Metering Infrastructure provider.

- c) When did the security audits begin?

**Response:**

The security audit began in the 4<sup>th</sup> quarter of 2011.

- d) Have any of these costs been included for recovery in this application?

**Response:**

\$9,281.08 of these security service costs have been included for recovery in this application; within Section 2.5.6 Other AMI Expenses of the smart meter model in 2011.

**Board Staff Interrogatory #10**

**Ref: Appendix J, Page 11**

NBDHL states that the costs for a CIS module to allow TOU billing and communication with the MDM/R were shared among all utilities using the same CIS platform as NBDHL.

- a) What was the total cost of the module for NBHDL?

**Response:**

The total cost of the module for NBHDL was \$8,369.95

- b) Please explain how these costs are shared and/or allocated among the participating utilities.

**Response:**

The cost of the module was split in four equal portions for the four utilities using SunGard HTE.

**Board Staff Interrogatory #11**

**Ref: Appendix J, Page 13**

NBDHL states that it has developed its own web presentment tool at considerably lower cost than that to be shared by the D9 group. This was to be operationalized over the summer of 2013.

- a) What was the cost differential between NBDHL's option and the D9 group option?

**Response:**

The D9 group was quoted a cost of approximately \$70,000 by a vendor to provide a web presentment tool. NBHDL achieved the same functionality at a cost of \$22,000.

- b) What is the status of the operationalization?

**Response:**

The customer portal was fully deployed and operational in July 2013.

- c) Have these costs been included in NBDHL's smart meter model for recovery? If so, where do they appear?

**Response:**

No, these costs have not been included in NBHDL's smart meter model for recovery.

- d) If these costs have been included, please explain why they were not documented as costs "beyond minimum functionality", as defined in Guideline G-2011-001: Smart Meter Funding and Cost Recovery – Final Disposition, issued December 21, 2011 and in sections 1.6.3 and 2.6.3 of Sheet 2. Smart\_Meter\_Costs of the Smart Meter Model?

**Response:**

Please see the response for 11 c).

**Board Staff Interrogatory #12**

**Ref: Appendix J, Page 4**

**Ref: Smart Meter Model, Sheet 2, Smart Meter Costs**

NBDHL was authorized to proceed with smart metering activities on June 28, 2008. NBDHL's smart meter model contains professional fees in 2006 and 2007.

- a) Please explain the entries in the model for 2006 and 2007.

**Response:**

The entries in the model for 2006 and 2007 were for costs related to OUSM working group membership fees and D9 consulting services from Util-Assist in order for NBDHL to be in a position to implement provincial policy with regards to the smart meter transition.

**Board Staff Interrogatory #13**

**Ref: Smart Meter Model Sheet 3, Cost of Service Parameters**

NBDHL has entered long term debt rates in its smart meter model of 6.25%, 6.25%, 5.00% and 5.00% for the years 2006 through 2009.

- a) Please confirm that the long term debt rate approved in NBDHL's 2006 cost of service proceeding (RP-2005-0020/EB-2005-0397) was 5.00%.

**Response:**

NBDHL confirms that the long term debt rate approved in NBDHL's 2006 cost of service proceeding (RP-2005-0020/EB-2005-0397) was 5.00%.

- b) Please explain the rate of 6.25% that has been entered into the model for 2006 and 2007.

**Response:**

The rate of 6.25% in the model for 2006 and 2007 was entered in error.

- c) If this is an error, please correct the long term debt rates on Sheet 3 of the Smart Meter Model for 2006 and 2007 to 5.00%.

**Response:**

The long term debt rates on Sheet 3 of the Smart Meter Model for 2006 and 2007 have been corrected to reflect the Board approved long term debt rate of 5.00%.

**Board Staff Interrogatory #14**

**Ref: Smart Meter Model, Sheet 8, Funding Adder Revenues**

NBDHL's Smart Meter Funding Adder was terminated on April 30, 2012. NBDHL has entered various small amounts (both debits and credits) in the Funding Adder Revenues column of the model between May 1, 2012 and April 30, 2013.

- a) Please explain the entries in the Funding Adder Revenues column for May 2012 to April 2013.

**Response:**

The entries in the Funding Adder Revenues column for May 2012 to April 2013 net to a total of \$7.61 and these amounts are a result of various adjustments that have been processed in relation to billing adjustments to customer accounts.

- b) If these amounts have been entered in error, please make the necessary corrections to the model.

**Response:**

These amounts have not been entered in error. The amounts represent actual billing adjustments and NBHDL believes that corrections are not required to the model.



**Board Staff Interrogatory#15**

**Ref: Smart Meter Model, Sheet 8, Funding Adder Revenues**

Board staff notes that although NBDHL proposes to recover its smart meter costs effective May 1, 2014, it has continued to accumulate interest on its Funding Adder Revenues in the smart meter model from May 2014 to December 2014.

- a) Please correct the smart meter model such that interest on the Funding Adder Revenues on Sheet 8 ceases to accumulate beyond April 2014. This correction will also remove interest on depreciation and OM&A beyond April 30, 2014.

**Response:**

NBHDL has corrected the smart meter model such that interest on the Funding Adder Revenues on Sheet 8 ceases to accumulate beyond April 2014. This correction will also remove interest on depreciation and OM&A beyond April 30, 2014.

**Board Staff Interrogatory #18**

**Ref: Smart Meter Model**

Upon completing responses to all interrogatories from Board staff and intervenors, please provide an updated Smart Meter Model with any corrections or adjustments that the applicant wishes to make. Please provide a short summary of the changes made.

**Response:**

A summary of the changes made to the smart meter model is as follows:

- Sheet 3 - long term debt rate for 2006 and 2007 corrected from 6.25% to 5%
- Sheet 8 – interest of 1.47% from May 2014 ~ December 2014 reduced to 0% to correctly reflect that interest should cease to accumulate beyond April 2014