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March 1, 2010

Delivered by Courier

Ontario Energy Board
P.O. Box 2319
27th Floor
2300 Yonge Street
Toronto, ON M4P 1E4

Attention: Kirsten Walli
Board Secretary

Re: North Bay Hydro Distribution Limited (EB-2009-270)
2010 Electricity Distribution Rate (Cost of Service) Application
Responses to 2nd Round Supplemental Interrogatories

Dear Ms. Walli:

Please find attached a complete copy of the Vulnerable Energy Consumers Coalition's second round of supplemental interrogatory responses.

In accordance with Procedural Order No. 2, two hard copies of this submission will be sent via courier. An electronic copy of the submission in PDF format will be submitted through the Ontario Energy Board's Regulatory Electronic Submission System.

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

Energy Probe

- a) David MacIntosh, Energy Probe
- b) Randy Aiken, Aiken & Associates

Donald Rennick

- a) Donald Rennick, Independent Participants

School Energy Coalition

- a) John De Vellis, Shibley Righton LLP
- b) Wayne McNally, Ontario Education Services Corporation

Vulnerable Energy Consumers Coalition

- a) Michael Buonaguro, Public Interest Advocacy Centre
- b) William Harper, Econalysis Consulting Services Inc.

These responses are respectfully submitted for the Board's review and consideration.

Sincerely,

Original signed by

Cindy Tennant
Finance Manager
North Bay Hydro Distribution Limited
(705) 474-8100 (310)

**NORTH BAY HYDRO DISTRIBUTION LTD.
2010 RATE APPLICATION
EB-2009-0270
VULNERABLE ENERGY CONSUMERS COALITION 2ND ROUND**

Question #36

Reference: VECC #5 c)
Exhibit 2, page 38

- a) Is the cost of the connection impact assessment charged back to the new generation project?

Response:

The cost of the connection impact assessment is charged back to the new generation project

- b) Is this the \$40,000 in contributed capital reported on page 38? If not, what is the contributed capital shown on page 38 for?

Response:

This is the \$40,000 in contributed capital reported on page 38.

- c) If the 2010 spending does not include any costs for system expansions or connections related to renewable generation, what is the \$55,613 capital spending in Account #1830 for?

Response:

The 2010 spending does not include any costs for system improvements or expansions related to renewable generation, but it does include costs for connection of renewable generation which are found in Account 1830 and total \$55,613. The costs include the outsourcing of 4 connection impact assessment studies (\$10,000/study), NBH supervision labour to administer and oversee the connections, and the associated burdens and overheads.

Question #37

Reference: VECC #7

- a) Please explain the material increase in spending for secondary services in 2010 versus 2009, when the number of new services is actually less.

Response:

The material increase in spending for secondary services in 2010 versus 2009 can be explained by the basis for the 2010 cost. The cost is based on the 5 year historical spending average for secondary services between 2004 and 2008.

Question #38

Reference: VECC #10 a) & c)

- a) The response suggests that Table 3-1 reported a Distribution Operating Revenue of \$10,052,198 whereas the table in the Application actually shows \$10,049,807. Please reconcile and correct the responses as required.

Response:

The following was included with NBHDL's response to VECC #10 a):

Note: There is a net difference of \$2,391 due to rounding (# of decimal places when inputting the rates). See schedule in response question c). Also Table 3-1 has a difference in the allocation of the transformer ownership allowance. General Service >50 should have an amount of \$58,777 and Intermediate should be \$46,223.

NBHDL feels that this difference is immaterial.

Question #39

Reference: VECC #11 h)

a) Please explain more fully what the Direct Install and ERIP programs are.

Response:

The Electricity Retrofit Incentive Program (ERIP) is an OPA developed CDM program delivered by NBHDL that provides prescriptive and custom incentives for qualifying energy efficient technologies installed by customers. For further information please refer to the following link:

<http://business.everykilowattcounts.com/feature/ERIP/index.php>

The Power Savings Blitz or Direct Install Program is an OPA developed CDM program delivered by NBHDL that provides qualifying businesses with up to \$1,000 in energy efficiency improvements at no cost or obligation to the customer. For further details please refer to the following link:

<http://business.everykilowattcounts.com/com/programs-incentives-rebates.php?pir=PSB>

b) With respect to the Table provided in the response, please explain what each of the row items represents. Please also provide cross references as to where the values reported here are documented in Exhibit 10.

Response:

NBHDL apologizes as there could have been formatting problems with the table originally inserted as a response to VECC #11 h). The table has been re-formatted and inserted below.

CDM Impacts by Program on Load Forecast						
<u>Program</u>	<u>Without Losses</u>		<u>With Losses</u>		<u>Participating Customers</u>	
	<u>2009</u>	<u>2010</u>	<u>2009</u>	<u>2010</u>	<u>2009</u>	<u>2010</u>
Street Lighting	0	500,000	0	524,000	1	1
Appliance Retirement	206,866	620,598	216,796	650,387	440	440
Direct Install	643,324	1,929,971	674,203	2,022,609	293	293
ERIP	1,513,566	4,178,133	1,586,217	4,378,684	15	14
Total	2,363,755	7,228,702	2,477,215	7,575,680		

The Without Losses column represents the kWh reductions associated with the various programs. The With Loses column has the kWh adjusted by the loss factor so AQEW from the load forecast model could be adjusted appropriately (by class). The kW sales to the GS>50kw were not adjusted.

This information cannot be cross referenced to Exhibit 10 as this Exhibit deals with LRAM and SSM from prior periods.

- c) Why is it reasonable to assume that free riders are not captured in the regression model (i.e. part of the natural conservation trend)?

Response:

The regression model used historical purchased data from January 1999 to December 2008 as the basis to forecast purchases for 2009 and 2010. The model would tend to integrate conservation trends from previous programs. NBHDL only began delivering these new OPA CDM programs in March of 2008. The majority of the CDM reductions in purchases would occur just before or after the December 2008 timeframe. In addition some customers have recently completed or are in the progress of completing unusually extensive retrofits with large kWh reductions. Historic information used to derive the regression analysis would not accurately integrate these results as they would be incremental. Energy efficiency measures implemented by customers under the new OPA CDM programs results in less kWh consumed and the customer savings are a factor of operating hours times kW demand reduction. Free riders have no impact on customer energy savings. NBHDL's power purchased is directly reduced by these measures implemented and therefore should not be further reduced by applying a free rider rate.

- d) Please re-do the table in the response, excluding free riders.

Response:

NBHDL feels that given the rationale provided in b) and c) there should be no adjustment for free riders for the table in b).

Question #40

Reference: VECC #12 f)

- a) Please confirm whether the Hydro One values are billed or purchased energy per customer.

Response:

The Hydro One values are billed energy per customer.

Question #41

Reference: VECC #13 a) and Board Staff #14 a)

- a) Do the revisions set out in Board Staff #14 a) to 2010 for products and services provided to NBHS change the value for Other Revenues in the 2010 Application? If yes, please provide a revised version of Table 3-33. If no, please explain why not.

Response:

Please refer to NBHDL's interrogatory response for Board Staff Question #28.

Question #42

Reference: VECC #16

- a) With respect to the response to VECC #16 c), is the \$140,000 spending for substation grounding studies a one-time cost?

Response:

With respect to the response to VECC #16 c), the \$140,000 spending for substation grounding studies is not a one-time cost. This cost represents grounding studies and feeder analysis studies to be performed at 4 of NBHDL's 16 substations in 2010. It is the intent of NBH to have the studies carried out at the remaining 12 substations over the following 3 years.

Question #43

Reference: VEC #18

- a) What plans does North Bay have to make the \$15,000 available to Low Income groups in 2010 for bill relief given that no specific direction has been received from the OEB or the Government?

Response:

Several electric and natural gas utilities support Winter Warmth campaigns in the communities they serve. A similar campaign exists in North Bay. NBHDL thought it prudent to proceed with this program and not wait for OEB or government direction. NBHDL has identified two agencies that could assist with the delivery of this type of program and is finalizing details on implementation.

Question #44

Reference: VECC #22

- a) What would be the required variable charge per customer per month that would result in North Bay's 2009 billings to retailers equaling its total costs?

Response:

The required variable charge to the retailers per customer per month that would result in North Bay's 2009 billings to retailers equaling its total costs would be an additional \$.87 increasing the current variable from \$.50 to \$1.37.

- b) In North Bay's view, would an increase in the variable rate be the most appropriate way to recover the current shortfall? If not, how else should it be accomplished and why?

Response:

In North Bay's view, it would be appropriate to increase the variable rate charged directly to the retailers to recover this shortfall.

Question #45

Reference: VECC #23

- a) If part of North Bay's depreciation expense is recovered through overhead burdens charged to OM&A and capital why is the depreciation charge in the revenue requirement (\$2,901,108 per Exhibit 1, page 59) equal to the total depreciation shown in Exhibit 2, page 30?

Response:

Please see the following summary that shows that NBHDL has not included fleet depreciation twice in its revenue requirement calculations as implied on page 59 of Exhibit 1:

Income Statement:

Operation & Maintenance - net of truck charge-outs	(137,809)
Depreciation & Amortization	202,871
Net Total Costs & Expenses	<u>65,062</u>

Rate Base:

Capital - truck charge-outs	137,809
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Summary:

P&L	65,062
Capital	137,809
Total Depreciation & Amortization	<u>202,871</u>

Question #46

Reference: Board Staff #26
VECC IRR#33 (b) Appendix F

Preamble: The response to Board Staff #26 states

“None of the extensive activities through the duration of the information based program attracted any TRC benefit, only TRC costs except the exchange of incandescent bulbs for CFL’s or LED Christmas lights and Project Porchlight. NBHDL does not interpret the Information Based Program as a mass market approach but a customer focused residential program on energy efficiency and the environment that promotes the use of CFL’s in high use areas. In summary NBHDL was intimately involved in developing and delivering third tranche CDM programs. The programs were designed and delivered to maximize results for all parties. Considerable care and effort went into program design, delivery and assessment of results. The methodology and rationale detailed above substantiates NBHDL belief that its approach is sound using actual data for calculations. NBHDL believes the use of the inputs and assumptions contained in the Guidelines dated March 28, 2008 are suitable. The Third Party Report provides contains additional information on the use of the OPA Measures and Assumptions list.”

a) Provide for the following Third Tranche Residential measures, a schedule that shows the details of the input assumptions used by NBHI as verified by Bob Mason Associates, and a direct comparison to the assumptions in the OEB 2008 CDM Guidelines and the 2008/2009 OPA Measures and Assumptions List:

- i. 13/15 w Energy Star screw in CFL’s
- ii. 20/25 w CFL
- iii. 3.5 w Seasonal Christmas lights (SLEDs) and
- iv. Project Porchlight screw in 13/15w CFLs
- v. Low flow Showerhead

The Assumptions required are

- Baseline Technology watts and kw/h
- Energy Efficient Technology watts and kw/h
- Annual operating hours
- Gross Annual Energy Savings (AES/Unit)
- Net Annual Energy Savings (AES/Unit)
- Source(s) of assumption(s)
- Authority(ies) and Verification(s) of data

Response:

Appendix A contains the requested table for CFL's, Seasonal Christmas Lights and Low Flow Showerhead. The contents of the table for CFL's assume a few base case scenarios, and then energy savings are calculated by formula for both the OEB Tables and OPA Measures.

The results shown in this table agrees with NBHDL's response to VECC's previous question 33 (b) where the measure is the same except for the following:

- Low Flow Showerhead showed 212 in question 33 (b) instead of the correct annual kWh per unit of 377 as shown in this table which agrees with the OPA Measures.
- The 3.5 watt Seasonal Christmas Lights showed 13.7 in question 33 (b) instead of the calculated annual kWh per unit of 18.83 for the OPA Measures as shown in this table. The 13.7 is what is shown in the OPA Measures, but a blend of mini lights and C7 bulbs is assumed for average situations. Since there were no mini lights involved, the response to question 33(b) should have been 18.83 as shown in this table.

There is no change in the free ridership in this table from the response to question 33 (b). Since the installation of faucet aerators, tank wraps and CFL's included with the water heater tune-up program were provided and installed by NBHDL, a free ridership of 100% would be more appropriate.

Question #47

Reference: Board Staff #26
Board Staff Interrogatories, Appendix E, page 84

Preamble: The Bob Mason Report attached as Appendix E to Board Staff #26 states:

“Many of the CFL’s distributed during Third Tranche to residential customers were the first installed in their homes. The promotion encouraged the installation to be in high use areas to reduce the most energy and therefore cost. For these first installations in a residence for a customer focused program the 2.7 hours or 985 annual hours is too low. The average of 2320 hours used in the OEB Assumptions and Measures List is far more practical”

- a) Demonstrate by providing the actual (verified) average operating hours for CFLs handed out by NBHDI in each residential campaign (2005-2008) that the OEB Guidelines Appendix (average) input assumptions underpinning the as filed LRAM Third tranche claim were applicable *and* more appropriate than the (average) operating hours in the OPA Measures and

Response:

Please refer to Board Staff Interrogatories 37 (c) and 38 (a).

- b) Show that the higher operating hour assumptions were more appropriate than the OPA Every Kilowatt Counts assumptions which were amended in 2007.

Response:

Please refer to Board Staff Interrogatories 37 (c) and 38 (a).

- c) Provide all independent verifications and sources to support the response to parts a) and b).

Response:

The Third Party Review conducted by Bob Mason & Associates addressed many of the issues identified in 47 (a) and (b) which NBHDL supports with the response to Board Staff Interrogatories 37 (c) and 38 (a). Two third party contractors engaged by HBHDL prepared agreements for execution with customers and verified installations on-site by documenting new installations, retrofits, replacements and equipment. Invoices showing labour and material costs for such components as types of ballasts, lamps, fixtures, motion sensors, insulation and air conditioning including model numbers were

obtained for TRC calculations. Technical data was obtained as necessary for TRC Calculations from manufacturers, distributors, consultants and other suppliers for equipment such as a high efficient dual compressor chiller, roof tops, control systems, intelligent parking lot controllers, power transformer, elevators and solar panels. Energy Efficiency Evaluation reports were requested and received from consultants that specialized in home energy improvements using Natural Resources Canada software. The above technical data was required for such things as base kW, efficient kW, equipment life and operating characteristics to develop a load profile as required.

- d) Explain why NBHDL cannot accept the OPA Measures and Assumptions for Third Tranche programs but has changed its LRAM claim for OPA programs to reflect the OPA Measures and Assumptions List?

Response:

NBHDL accepted the OPA Measures for OPA programs because these programs are truly Residential Mass Market as opposed to NBHDL's Third Tranche programs that were delivered personally to individual customers with highly qualified staff contractors. The above was included in Board Staff Interrogatory 26 (b). For more information in this regard, please refer to Board Staff Interrogatories 37 (c) and 38 (a).

Question #48

Reference: Board Staff #26
Board Staff Interrogatories, Appendix E, page 84

Preamble: With respect to multi residential Buildings the Bob Mason Report states

- We find a large discrepancy in the MURB apartment at 2100 hours and a mass market residence at 985 hours in the OPA measures. NBHDL used 1095 hours for some specific MURBS and 2320 hours depending on the environment and use of the lights; and
 - Most of the hours use shown in the OPA measures is higher than what was used for Third Tranche programs for Commercial and Institutional by NBHDL. In some cases they are much higher.
- a) Provide copies of the evidence (surveys independent experts etc) that Bob Mason Associates and NBHDL is relying upon for the first of these assertions.

Response:

NBHDL has no copies of evidence related to MURB Apartments. Please refer to Board Staff Interrogatory 37 (c) for a detailed explanation.

- b) Why did not NBHDL adopt the OPA hours of use as the basis of the CI sector LRAM claim? Provide reasons and support for these.

Response:

Please refer to Board Staff Interrogatory 37 (c).

- c) Comment on the apparent double standard-- using its own assumptions in some cases and OPAs in others for both the OPA programs (as filed and amended) and Third Tranche programs.

Response:

NBHDL does not believe there was a double standard and took every reasonable step to ensure accuracy of information provided to customers and the Board.

The assumptions used for the OPA programs "as filed" were provided in an OPA spreadsheet entitled 2006-2008 Conservation Results, NBHDL. The quantities were the same as those filed.

For the amended filing as per Response to Board Question 26 (b), the average savings per unit kWh were derived from the OPA Measures. The only assumption for the amended OPA programs was to change the free ridership from 90% to 70% for 2006 as per the Horizon decision. The free ridership values in the 2006-2008 Conservation Results were all changed to 70% for all measures to agree with 2006.

For Third Tranche programs, assumptions related to LRAM recovery were based on the OEB Tables. There is only one instance NBHDL recalls where information was developed solely by NBHDL that was never set-up as a Custom Project because it was not material to the results and likely should have been removed. The measure was electric outlet insulators which was given a value of 18 kWh per unit per annum. There were only 22 installed resulting in a total estimated saving of 396 kWh. Formulas were used to calculate the kWh savings per unit from the operating hours, base kW and efficiency kW provided by customers. These formulas were tested against the measures that were included in the OEB Tables to verify accuracy and updated as necessary. Where measures were not included in the OEB Tables, proxies were used and where no proxy was available the project was considered a "Custom Project". Please refer to Board Staff Interrogatory 38 (b) for more information on Custom Projects.

For some projects and measures where the customer did not know operating hours, base kW or efficient kW the values including proxies in the OEB Tables were used when available. If not available the data for all measures including Custom Projects was obtained from manufacturers, distributors, technical references, consultants and other experts external to NBHDL.

NBHDL doesn't believe there is a double standard as a result of using NBHDL measures. Results for Third Tranche were all calculated using the best information available, using the OEB Tables and following the intent of the Guidelines. NBHDL attempted to provide the most fair, consistent and accurate information to the "Board" and customers as possible.

It may be that VECC has a concern because NBHDL filed spreadsheets for each of the four Annual Reports and LRAM entitled "NBH Assumptions and Measures List" for Third Tranche measures. The List was developed as per

above and included all measures used to calculate energy savings and TRC values. In hindsight the name of the title may be misleading.

Question #49

Reference: Board Staff #26 (Updated January 28, 2010)
VECC #11 h)
Exhibit 3, pages 17-18

- a) Do the revisions North Bay has made to savings assumptions underlying its LRAM/SSM claim impact on the CDM adjustment made to the load forecast? If not, explain why not?

Response:

No the revisions made to the LRAM claim has no impact on the CDM adjustment made to the load forecast. Please refer to VECC 39 c) for further details.

- b) If the response to part a) is yes, please revise the responses to VECC # 11h) and #39 b) & d).
- c) If the response to part a) is yes, please provide revised versions of Tables 3-1, 3-9 and 3-18 from Exhibit 3.

APPENDIX “A”

Table in Response to Question 46(a) -- OEB Tables and OPA Measures for Residential Third Tranche														
Response to VECC Question 46 (a)														
Measure	Base kW	Efficient kW	Operating Hours	Annual Energy Savings per Unit (kWh) OEB Tables Gross	Filed Free Riders Filed	Energy Savings per Unit (kWh) OEB Tables Net	Inputs and Assumptions	Authorities and Verification of data	Base kW	Efficient kW	Operating Hours	Annual Energy Savings per Unit (kWh) OPA Measures Gross	Revised Free Riders	Annual Energy Savings per Unit (kWh) OPA Measures Net
	Calculations from OEB Tables								Theoretical Calculations to Compare OPA Measures					
60 Watt Inc. To 15 Watt Energy Star Screw-in CFL	0.060	0.015	2320	104.40	90.00%	93.96	OEB Tables	NBHDL Staff and Contractors	0.060	0.015	985.5	43.02	90.00%	38.72
60 Watt Inc. To 13 Watt Energy Star Screw-in CFL	0.060	0.013	2320	109.04	90.00%	98.14	OEB Tables	NBHDL Staff and Contractors	0.060	0.013	985.5	44.93	90.00%	40.44
75 Watt Inc. To 20 Watt Energy Star Screw-in CFL	0.075	0.02	2320	127.60	90.00%	114.84	OEB Tables	NBHDL Staff and Contractors	0.075	0.02	985.5	52.58	90.00%	47.32
100 Watt Inc. To 25 Watt Energy Star Screw-in CFL	0.100	0.025	2320	174.00	90.00%	156.60	OEB Tables	NBHDL Staff and Contractors	0.100	0.025	985.5	71.70	90.00%	64.53
Inc. 60W to 15W CFL Project Porchlight	0.060	0.015	2320	104.40	90.00%	93.96	OEB Tables	NBHDL Staff and Contractors	0.060	0.015	985.5	43.02	90.00%	38.72
Inc. 60W to 13W CFL Project Porchlight	0.060	0.013	2320	109.04	90.00%	98.14	OEB Tables	NBHDL Staff and Contractors	0.060	0.013	985.5	44.93	90.00%	40.44
Inc (125W) to LED (3.5W) (New)	0.125	0.0035	155	18.83	90.00%	16.95	OEB Tables	NBHDL Staff and Contractors	0.125	0.0035	155	18.83	90.00%	16.95
Low Flow Showerhead	N/A	N/A	N/A	545	90.00%	490.91	OEB Tables	NBHDL Staff and Contractors	N/A	N/A	N/A	377.00	90.00%	339.30