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January 19, 2009

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 1st Round Interrogatories

Dear Ms. Walli:

North Bay Hydro Distribution Limited filed an application with the Ontario Energy Board on October 26, 2009 seeking approval for just and reasonable changes to rates that North Bay Hydro Distribution Limited may charge for electricity distribution to be effective May 1, 2010.

Board Staff issued Procedural Order No. 1 on December 12, 2009 and Intervenors filed interrogatories December 21 through December 23, 2009. North Bay Hydro Distribution Limited was required to files responses by January 19, 2010.

The following interrogatories have not been completed at this time; please refer to the individual answers for the suggested timelines.

Board Staff – rate impacts and question # 27
VECC – questions #24, #26 and LRAM and SSM questions #30 to #35
Energy Probe – questions #22a) and # 23b)
SEC – questions #3, #4, #9, #10, #14, #16, #22 and #26

In accordance with Procedural Order No. 1, two hard copies of the completed responses to all interrogatories are enclosed. An electronic copy of the completed responses in PDF format will be submitted through the Ontario Energy Board's Regulatory Electronic Submission System

An electronic copy of the responses in PDF format will be forwarded via email to the Intervenors 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,

Originally signed by

Cindy Tennant
Finance Manager
North Bay Hydro Distribution Limited
(705) 474-8100 (310)
ctennant@northbayhydro.com

Board Staff Interrogatories
North Bay Hydro Distribution Limited
2010 Electricity Distribution Rates
EB-2009-0270

1. Letters of Comment

a) Has North Bay Hydro Distribution Limited (NBHDL) sent letters replying to the two letters of comment filed with the Board Secretary from Michel and Carmen Cazabon and from Terry Whelan? If so, please provide copies of the replies for the record of this case.

Response:

NBHDL responded to both of these letters. Attached as Appendix "A" please find copies of the questions and responses.

b) Following publication of the Notice of Application, has BVHDL received other letters of comment? If so, please provide a copy or description, and a copy of the reply if any.

Response:

NBHDL received one other inquiry by email from Roger Lamothe. Attached as Appendix "B" please find a copy of this response. No other inquiries were received by phone or by customers in person on this matter.

c) If no reply has been sent, does NBHDL intend to respond to the comments?

Response:

All customer inquiries have been responded to.

2. 2010 Contributions and Grants

Ref: Exhibit 2, p. 29

Forecast contributions are less than $600,000, compared to over $1 million in 2009 and nearly $1.5 million actual in 2008.

Please explain the basis for NBHDL's forecast of contributions.

Response:

The basis for NBHDL's forecast of contributions is formed by applying contribution percentages to annual expenditures per project category, and if applicable, specific identified projects. Contribution amount is based on the DSC, and governing by laws.

The reduction of forecasted contributions from 2008 to 2010 can be explained by the following:

2008

- Enormous road reconstruction program for the City of North Bay which required major changes to a number of our lines. Contributions from the City of North Bay were in excess of $700k, which is well above the annual average for road relocation contributions.

2009

- One large expansion and one large rebuild of a line to accommodate a proposed development, both at 100% contribution amounts, totaling over $224k.
- Higher number of Subdivisions forecasted based on information received in 2008 from developers and the City of North Bay

2010

- There are no major expansions forecasted for 2010 and subdivision and road relocation projects expenditures are forecasted at the annual average, which is turn, lowers contribution amounts.

3. Population in the Regression Model

Refs: Exhibit 3 pp. 15 and 23, and Appendix 3-A

The population data used in the load forecast is frozen at the year-end 2008 amount, despite a steady monthly increase up to that point.

a) Please provide a set of monthly population amounts to the end of 2010 that would continue the historic growth pattern, and provide a new fitted value of the energy forecast using the larger population variable for 2010 as an input to the econometric equation.

Response:

A set of monthly population amounts to the end of 2010 that continues the historic growth pattern is provided below. The 2010 billed energy forecast assuming these revised population numbers is 564,528,538 kWh.

Month	Population
Jan-09	54,683
Feb-09	54,703
Mar-09	54,723
Apr-09	54,743
May-09	54,763
Jun-09	54,783
Jul-09	54,803
Aug-09	54,822
Sep-09	54,842
Oct-09	54,862
Nov-09	54,882
Dec-09	54,902
Jan-10	54,922
Feb-10	54,942
Mar-10	54,962
Apr-10	54,982
May-10	55,002
Jun-10	55,022
Jul-10	55,042
Aug-10	55,061
Sep-10	55,081
Oct-10	55,101
Nov-10	55,121
Dec-10	55,141

b) Base on the results in part (a) while also considering the weak t-statistic for population in Table 3-7 'Statistical Results', does NBHDL wish to alter the adjustment(s) it has submitted in Table 3-18 'Alignment of Non-normal 1 to Weather Normal Forecast'?

Response:

Considering the weak t-statistic for population, NBHDL has rerun the regression analysis excluding the population variable and the resulting 2010 billed load forecast is 562,603,744 kWh. Since this is essentially the same forecast as is in the Application NBHDL does not wish to alter the adjustment(s) it has submitted in Table 3-18 'Alignment of Non-normal 1 to Weather Normal Forecast'.

4. Economic Activity in the Regression Model

Refs: Exhibit 3, p. 14 (line 29), and p. 17 (Table 3-8)

a) Please describe how the Ontario Monthly GDP index is used in NBHDL's econometric model, in particular where observed values are used and where forecast values are used.

Response:

For the months Jan 1999 to Dec 2008 the Ontario Monthly GDP index is used in regression analysis to determine the prediction formula outlined in Exhibit 3, page 14. For the months of May 2009 to Dec 2010 the Ontario Monthly GDP index is used as a variable in the prediction formula to forecast NBHDL's monthly energy purchases.

b) Does NBHDL have access to data for actual economic activity that is more local in nature than the provincial data that has been used in the econometric model?

Response:

NBHDL does not have access to data for actual economic activity that is more local in nature than the provincial data that has been used in the econometric model.

c) Has NBHDL considered whether differences between local and provincial economic activity may be responsible for the pattern of regression residuals found in Table 3-8 'Total System Purchase', in which the annual differences between actual and predicted purchases appear to have the same sign for several years in a row?

Response:

NBHDL has not considered whether differences between local and provincial economic activity may be responsible for the pattern of regression residuals found in Table 3-8 'Total System Purchase', since the annual differences between actual and predicted purchases only have the same sign for two to three years in a row.

5. CDM Adjustments to the Load Forecast

Refs: Exhibit 3, p. 17-18, and Exhibit 10, Appendix 10-A

a) Please describe the CDM programs that NBHDL will deliver, including a breakdown between the future results of ongoing programs and any new programs that are expected to result in the adjustments shown in Table 3-9.

Response:

As per page 17 and 18 0f Exhibit 3 in 2009 NBHDL delivered the Electricity Retrofit Incentive Program (ERIP), Power Savings Blitz (Direct Install) and Appliance Retirement programs.

For simplicity the 3 programs delivered in 2009 were assumed to have 50% of their annual impact in 2009 and 100% impact in 2010.

In 2010 NBHDL will be delivering the same CDM programs with the same targets in addition to a street lighting retrofit that will be completed by the City of North Bay. Again for simplicity these 4 programs delivered in 2010 would have a 50% impact in terms of kwh their annual savings in 2010 and 100% in 2011. Also a very large retrofit by an industrial customer in 2009 was removed from forecasted results in 2010 to ensure results were not biased.

NBHDL did not adjust the load forecast from other earlier CDM programs completed under the Third Tranche initiative or from initiatives delivered directly by the OPA.

The following table summarizes results.

	2009 KWH Impact	2010 KWH Impact
2009 CDM Programs	2,363,756	4,727,510
2010 CDM Programs		2,501,192
Load Forecast Impact (with losses)	2,477,216	7,575,680

b) Please provide any assumptions about the percentage of NBHDL's customers that are predicted to participate in the main programs in 2010, as a means of showing that it is reasonable to make the adjustments in Table 3-9 in addition to the large number of completed projects detailed in Appendix 10-A.

Response:

NBHDL has assumed that it will be delivering ERIP, Direct Install, Appliance Retirement programs in addition to a street lighting retrofit by the City of North Bay. NBHDL will achieve the same participation rates and results in 2010 compared to 2009. The following table summarizes targeted customer numbers versus total potential.

Program	2010 Targeted Number of Customers	Total Potential Customer Base
ERIP	14	412
Direct Install	293	2,500
Appliance Retirement	440	20,915

NBHDL feels that the results for ERIP and Direct Install are entirely achievable given the carry over of uncompleted projects that commenced in 2009 and a number of new projects identified through previous activities. The Appliance Retirement program has been delivered in various iterations for a number of years and has reached a steady state in terms of its annual results. In addition NBHDL has assumed that the City of North Bay will be retrofitting its street lighting system in 2010. NBHDL has experimented with several new fixture types and light sources to help the City find an effective alternative for high pressure sodium fixtures. The current street lighting fixtures are end of life. As noted in 5 a) a large retrofit completed by an industrial customer in 2009 was not part of 2010 forecasted results.

6. Smart Grid

Ref: Exh 4, pp. 24-25

a) Please provide a more complete description of the Residential Pilot that NBHDL will conduct, including any expenditures or savings that NBHDL expects the participating customers to incur.

Response:

The Province has indicated its desire to move towards a Smart Grid and NBHDL is interested in learning how residential customers, particularly those in the north can participate in a way that allows cost savings. The north has a large amount of electric heat either as the primary heating system or as supplemental to natural gas. Also there is a large population of electric water heaters and in the winter the incoming water temperature is just above freezing. North Bay has a very large percentage of retirees somewhere between 30-35% of all homes. NBHDL is interested in installing in-home devices with these types of customers (in addition to low income) that will allow real time reading of smart meters so customers can monitor electricity consumption as it occurs at a location readily accessible by the customer. NBHDL wants to install technology that allows customers to control electric water heating or space heating through devices available on the market today. NBHDL wants customers to be able to decide when they want to operate equipment in response to consumption and pricing information. NBHDL is not aware of any similar initiatives by other northern utilities that would allow realistic evaluation of the technologies. Costs for each customer are forecasted as follows:

In Home Display	$500
Control Devices	$1000
Monitoring/Education/Admin	$1000
Total per Customer	$2500
Targeted # of Customers	20
Total Costs	$50,000

Potential results in terms of electricity saved or shifted by customers are not known at this point, hence the need for the pilot.

b) Please indicate how the cost of the Industrial and Residential Pilots relate to NBHDL's capitalization policy, and explain why the cost of the pilot projects should not be capitalized under that policy.

Response:

Although NBHDL's does not have a formal capitalization policy the intent is to follow Generally Accepted Accounting Principles and the guidelines set out in the OEB Accounting Procedures. Upon further review of the values included in the Industrial and Residential Pilot programs NBHDL has determined that $20,000 of the Industrial Pilot project should have been capitalized instead of being included in OM&A expenses. Please refer to the table below that breaks out the detail of each program. NBHDL will include this correction as part of the updated RRWF requested in question #27.

Industrial Real Time Pilot Project

	Total	Capital	Expense	Justification
Meters including installation	10,000	10,000		owned by NBHDL fits definition of an asset as per Article 410 of the OEB Accounting Procedures Handbook
Monitoring Equipment	5,000		5,000	owned by the customer should not be included as part of NBHDL assets
Customer Incentive	10,000		10,000	funds supplied to customer to participate in the program to offset any expenditures they incur
Administration	5,000		5,000	
Total per Customer	30,000	10,000	20,000	
# of Customers	2			
Total Program	60,000	20,000	40,000	

Residential Real Time Pilot Project

	Total	Capital	Expense	
In home Displays	500		500	owned by the customer should not be included as part of NBHDL assets
Control Devices	1,000		1,000	owned by the customer should not be included as part of NBHDL assets
Monitoring/Education/Admin	1,000		1,000	
Total per Customer	2,500	-	2,500	
# of Customers	20			
Total Program	50,000	-	50,000	

7. Management and Executive Salaries and Benefits

Ref: Exhibit 4, p. 60

a) Please confirm that the inflation rate assumed for management and executive salaries is 3%, along with the other employees mentioned in the first bullet on p. 60.

Response:

a) NBHDL confirms that the inflation rate assumed for management and executive salaries is 3%, along with the other employees mentioned in the first bullet on p. 60. To clarify the 3% is an annual rate; the union contract rates change on April 1st of each year therefore 9/12 of the rate or 2.25% for the union members was used for the 2010 test year. Management salaries normally change on January 1st so the full 3% was used for that group of employees.

b) Please confirm that an inflation rate of 2.3% is used for other O&M categories (per Exh 8, p. 8), and explain why a higher rate is assumed for compensation.

Response:

NBHDL confirms that an inflation rate of 2.3% is used for other O&M categories. NBHDL assumed a rate of 3% for compensation due to the fact that the prior three years rate increases averaged 3.25%. Note as per a) above that due to the timing of the rate increase the affect is 2.25% for the 2010 test year.

8. LEAP

Refs: Table 2-14A 2010 Capital Expenditures 1 – General Assets, and Exhibit 4, p. 53

NBHDL is including $15,000 in account 5415 Community Relations for the LEAP initiative, in response to the Board's requirement for assistance to low-income consumers. It also has a capital expenditure of $26,899 in account 1925, also called LEAP.

a) Please identify how much of the $15,000 amount relates to existing programs and how much too new program(s).

Response:

The $15,000 amount relates to new program(s). The amount was derived by using the suggested guideline of .12% of the revenue requirement for the 2010 test year.

b) Please provide a brief description of LEAP in account 1925, and if it is related to assistance for low income consumers please include an explanation.

Response:

Account 1925 described as LEAP of $26,899, is related to assistance for low income consumers. Currently NBHDL's Customer Information Systems does not have the ability to manage multiple "classes" of customers in regards to billing options, payment terms, interest rates, past due criteria or deposit rules. Therefore NBHDL has included this amount as an estimate to customize the system to handle the suggested rules and guidelines around this group of customers.

9. Affiliate Services

Ref: Exhibit 4, p. 71

a) Please provide a more complete description of NBHDL's use of the dark fibre service that it purchases from its affiliate NBHS, and a description of how the market-based price was established for the service.

Response:

NBHDL uses several metres of NBHS dark fibre to haul information from substations and towers located throughout the distribution system back to NBHDL's office. For example the dark fibre links to the towers allows for the accumulation and flow of smart meter data from the AMI system. This will be a critical link in settlement through the provincial MDMR. NBHS has an inventory of the lengths of dark fibre utilized by NBHDL. NBHDL is charged the same commercial rate structure that NBHS uses for other dark fibre customers. NBHDL only uses dark fibre when other service is not available, not secure or is too costly to install.

10. Purchases from Non-Affiliates

Ref: Exhibit 4, p. 72

a) Please describe the service that will be purchased from Mearle Management Inc. for "Benefits", including how the amount of $581,810 is established.

Response:

The services that will be purchased from Mearie Management Inc. for "Benefits" is shown in the table below. The amount of $581,810 was established by using the forecasted benefit costs by benefit type for 2009, plus the increase related to the new employees, plus the suggested 2010 rate and plan increases provided by NBHDL's Mearie Management advisor.

Mearie Management Summary

	Mearie Management Rate Increases	2009 Forecast	New Employees	% Increase	Changes to plan	2010 Test
Active Employees						
Life Insurance	5%	9,229	1,758	549		11,537
Long-term disability plan	3%	42,599	8,114	1,521		52,234
Extended Health Care	9%	131,473	25,043	14,086	4,512	175,115
Dental Benefits	3%	46,096	8,780	1,646	9,058	65,581
		229,397	43,695	17,803	13,571	304,466
Retiree Benefits						
Dental	3%	48,886		1,467		50,353
Health	9%	169,493		15,254		184,747
Life Insurance	6%	39,852		2,391		42,243
		258,231	0	19,112	0	277,343
Total		487,628	43,695	36,916	13,571	581,809

b) Please describe the service that will be purchased from Sungard Public Service for "System Provider Training", including how the amount of $102,914 is established.

Response:

The services that will be purchased from Sungard Public Service for "System Provider/ Training" are shown in the table below. The Sungard H.T.E. maintenance fee was calculated by using the 2009 maintenance fee increased by new modules purchased for 2010, inflation and exchange. The training amount was determined by assessing the required training by employee related to the H.T.E. system. NBHDL employees have not received any system training since the initial installation back in 1998 H.T.E until fiscal 2009.

Sungard Public Sector

	2009 Bridge Year	2010 Test
H.T.E. Annual Maintenance Fee	83,906	87,914
H.T.E. Training	16,438	15,000
Total System Provider/Training	100,344	102,914

11. Harmonized Sales Tax

It is likely that the PST and GST will be harmonized effective July 1, 2010. Unlike the GST, the PST is included as an OM&A expense and is also included in capital expenditures. If the GST and PST are harmonized, corporations would experience changes in OM&A expenses and capital expenditures.

In the event that PST and GST are harmonized effective July 1, 2010:

a) Would NBHDL agree to the establishment of a variance account to capture the expected reductions in OM&A and capital expenditures?

Response:

NBHDL would agree to the establishment of a variance account to capture the expected reductions in OM&A and capital expenditures if it becomes a directive from the Board. NBHDL believes that this is an industry issue and that a public consultation process should take place so that all alternatives are considered. NBHDL would also like to note that the recording of differences from PST & GST harmonization will increase costs due to the following:

1) NBHDL's H.T.E. system is not capable of tracking the "PST & GST harmonization" variances therefore it would need to be tracked manually
2) Extra training for the Accounts Payable staff to ensure the proper level of understanding between the old PST and GST rules and the new HST rules to properly record the variances.

b) Are there other alternatives that the Board might consider to reflect the expected reductions in OM&A and capital expenditures?

Response:

Considering the effect on the transitional rules for large businesses and the fact that expenses that were previously PST exempt will now attract HST, NBHDL is not comfortable in suggesting other alternatives for the Board to consider.

12. PILs

Ref: Exhibit 4, p. 82

a) Please provide details of the forecast reserves, comparable to the "Continuity of financial statement reserves (not deductible)" schedule that has been filed for 2008, as a means of supporting the forecast balances $4,993,106 (beginning of 2010) and $5,284,743 (end of 2010).

Response:

Details of the forecast reserves, comparable to the "Continuity of financial statement reserves (not deductible)" schedule that has been filed for 2008, as a means of supporting the forecast balances $4,993,106 (beginning of 2010) and $5,284,743 (end of 2010) is presented in Appendix "C".

b) Please provide details of the forecast tax reserves, comparable to the "Continuity of financial statement reserves (not deductible)" schedule that has been filed for 2008, as a means of supporting the forecast balances $ 1,201,494 (beginning of 2010) and $ 1,202,546 (end of 2010).

Response:

Details of the forecast tax reserves, comparable to the "Continuity of financial statement reserves (not deductible)" schedule that has been filed for 2008, as a means of supporting the forecast balances $ 1,201,494 (beginning of 2010) and $ 1,202,546 (end of 2010) is presented in Appendix "C".

Please confirm why it is correct to include in the Additions to Accounting Income the tax reserves at the beginning of the year and the financial statement reserves at year-end, while including in the Deductions from Accounting Income the tax reserves at year-end and the financial statement reserves at the beginning of the year.

Response:

Tax reserves at the end of the previous year are considered taxable income for the current year; therefore it is correct to include in the Additions to Accounting Income the tax reserves at the beginning of the year. Tax reserves at the end of the year are not included in the determination of taxable income under the Canadian income tax act, therefore the tax reserves at year end are deducted from accounting income. Since Financial statement reserves are not permitted under the Canadian income tax act the balance at year end is added to the accounting income and conversely the balance at the beginning of the year is deducted from accounting income in the determination of income for tax purposes.

c) With respect to the two additions to accounting income for charitable donations and Ontario tax credits, please explain why there are no offsetting amounts that are necessary to include in the deductions from accounting income.

Response:

With regards to the charitable donations the offsetting deduction to arrive at taxable income was missed in the tax calculation for both 2009 and 2010. The affect on taxes payable for 2009 is an increase of $1,980 and $2,696 for 2010. With regard to the Ontario tax credits there are no offsetting amounts since these amounts are to be included in the determination of taxable income.

13. SSS Administration Charge

Ref: Exh 3, p. 26 and Exh 6, p. 3

Table 3-23 shows total Other Revenue before RSVA Interest at $751,484. The Revenue Deficiency Calculation in Table 6-1 shows Other Operating Revenue at $825,116.

Please confirm that difference is due to the SSS Administration Charge, and that $825,116 is the appropriate alternative to use to determine the Base Revenue Requirement to be generated from Distribution Rates.

Response:

NBHDL confirms that difference is due to the SSS Administration Charge, and that $825,116 is the appropriate alternative to use to determine the Base Revenue Requirement to be generated from Distribution Rates.

14. Affiliate Administration Fee

Ref: Exh 3, p. 26 and Exh 4, p. 61

a) Please confirm that the decrease in the Affiliate Administration Fee is the result of ending the customer service provided to North Bay Hydro Services water heater customers. If not confirmed, please describe the reason for the decrease in this source of revenue.

Response:

The decrease in the Affiliate Administration Fee is a result of North Bay Hydro Services (NBHS) paying their own invoices related to the water heater business which attracts a 15% management fee. In 2009 NBHDL paid $206,722 included in the $214,622 of purchases shown in the table below for NBHS, in 2010 these transactions will disappear and the related 15 % management fee will decrease by $31,016. This decrease in management fee is offset by other contracted services charges that are expected to increase as per the table below.

NBHDL's application may not have been clear enough on the customer service comments related to the water heater business. In 2010 MBHS will hire their own customer services representative which will relieve NBHDL's customer service staff of this service. The NBHS employee will be paid through NBHDL payroll system therefore NBHDL will charge NBHS for the wages and burdens related to this employee, plus they will attach the 15% administration fee to this expense. Due to this arrangement the amount for contracted services does not show a decrease nor does the Affiliate Administration Fee.

Note the summary table below has been revised for the line" From NBHDL to NBHS for Contracted Services" from $169,873 in 2009 to $233,192 and from $180,304 to $254,263. This change is due to the service charges for rent, IT, HR and Billing being missed when compiling this summary table.

Table 4-19 Summary of Affiliated Products and Services

Product & Services Provided		Activity	2006 Actual	2007 Actual	2008 Actual	2009 Bridge Year	2010 Test Year	Pricing Methodology
From	To							
NBHDL	NBHS	Loan Interest	66,648	66,648	66,648	-	-	5% on principle balance as per loan agreement
NBHDL	NBHS	Purchases	308,801	329,248	331,906	214,622	8,064	Cost of materials/contractor fees
NBHDL	NBHS	Contract Services	54,226	48,599	98,574	233,192	254,263	Cost of labour as per time sheets plus burdens, billing services, rent, Human Resources and IT services
NBHDL	NBHS	Management Fee	54,454	56,667	64,572	67,172	39,349	15% of purchase and contract services
NBHDL	NBHS	Joint pole attachment Fee	19,579	20,920	22,395	22,395	22,395	as per approve rates $22.35 per attachment
		Total	503,708	522,082	584,094	537,381	324,071	
NBHDL	CNB	Power Purchase	1,731,388	1,891,518	1,739,831	1,777,830	1,735,869	Market based
NBHDL	CNB	Street Light Energy	339,425	373,048	318,967	323,505	369,365	Market based
NBHDL	CNB	Construction Activity	332,475	436,177	356,492	183,215	153,754	Legislated cost sharing formula
NBHDL	CNB	Street Light Maintenance	137,485	150,781	99,485	102,121	104,828	Cost basis
		Total	2,540,773	2,851,524	2,514,775	2,284,550	2,258,988	
CNB	NBHDL	Loan Interest	975,550	975,550	975,550	975,550	975,550	5% on principle balance as per loan agreement
CNB	NBHDL	Property Taxes	78,522	80,391	78,422	62,429	64,292	assessment at market price
CNB	NBHDL	IT Services	80,124	92,500	83,689	85,200	87,160	as per service agreement
CNB	NBHDL	Vehicle Fuel	62,861	66,420	88,435	86,300	88,320	bulk price plus 5% markup
		Total	1,197,057	1,214,861	1,226,096	1,209,479	1,215,322	
NBHS	NBHDL	Fibre Rental	25,315	25,315	25,315	25,315	25,315	Market based

b) Please describe the activity that is forecast to generate revenue in 2010 of $39,349, and confirm whether it is an activity that is expected to continue generating revenue after 2010.

Response:

The activity that is forecasted to generate revenue in 2010 of $39,349 is shown in the table above. The $39,349 is the 15% management fee attached to the Purchases of $8,064 and the Contracted Services of $254,263. The purchases and contracted services and the accompanying pricing methodology are outlined in the application Exhibit #4 page 69. These activities are expected to continue generating revenue after 2010.

16. Embedded Distributor

Ref: Exhibit 1, p. 36

a) Please provide information on the amount of electricity delivered by NBHDL to Hydro One at the two delivery points (at Bond Street and at Highway 11) during 2008, and forecast to be delivered in 2010.

Response:

NBHDL delivered the following amount of electricity to the two Hydro One delivery points in 2008:

- Bond Street 3,501,300 kwh
- Highway 11 362,927 kwh

At the Bond Street location demand in the summer months is typically 440kW and demand in winter is 890kW. At Highway 11 demand in summer is just over 50kW and in the winter 80kW.

Discussions with Hydro One indicated there would not be significant change in these volumes for 2010 therefore the load forecast was not adjusted.

b) Please provide a brief description of the distribution facilities that are used to serve the load, and an explanation of whether the load on the facilities is partly for customers in NBHDL's service area or only for Hydro One.

Response:

The Bond Street delivery point is supplied by a 22kv sub-transmission circuit originating from North Bay Transformer Station. This circuit supplies 3 NBHDL customers and 1 Municipal Substation before the delivery point to Hydro One.

The Highway 11 delivery point is supplied by the 12.470 kv 14F3 circuit which supplies approximately 340 NBHDL customers before the delivery point to Hydro One.

Please provide information on the form of the billing by NBHDL to Hydro One, the rates charged in 2008 and proposed for 2010, and the amount of revenue in 2008 and forecast for 2010.

Response:

Hydro One is billed as retail General Service 50 to 2,999 kW customer of NBHDL for energy, RTSR and distribution charges. Billing is monthly on NBHDL's CIS billing system.

Rates charged in 2008 are as follows:

- January to April 2008 – Distribution Volumetric - $2.1981/kW
  Service Charge (on 30 days) - $314.23
- May to December 2008 – Distribution Volumetric - $2.1783/kW
  Service Charge (on 30 days) - $311.40

Proposed 2010 rates are as follows:

- Service Charge (on 30 days) - $329.78
- Distribution Volumetric - $2.3014/kW
- LRAM & SSM Rider - $.0679/kW

- Distribution Revenue for 2008 is $24,869

2010 Forecast Revenue is $27,514.

17. <u>Unmetered Scattered Load ("USL") Service Charge</u>

Ref: NBHDL Cost Allocation Model Sheet I6 'Customer Data', and Exhibit 9, p. 24

The information in the cost allocation filing shows that NBHDL serves 21 USL customers (252 bills annually), and there are 140 connections

a) Please provide a list of how many connections each USL customer has.

Response:

NBHDL incorrectly showed 140 connections. This count was derived from the 2006 Cost Allocation Study. The correct number of connections is 76. 20 of the 21 customers have 1 connection each and 1 customer has 56 connections.

b) Please provide a calculation of what the USL monthly service charge would be if it were charged on a "per connection" basis.

Response:
Based on the information provided in part a) the following calculation shows what the USL monthly service charge would be if it were charged on a "per connection basis":

2010 - Per Connection Calculation

Total Net Rev. Requirment	$	12,052
Current Fixed Charge Split		53.86%
Total Fixed Revenue	$	6,491
# of Connections		76
Total Fixed Revenue / Connection	$	85.41
# of Months		12
Monthly Per Connection Charge		**7.12**

c) Please provide a calculation of the bill impact on the customer with the most connections and the customer with the least connections if the service charge provided in part b) were to be charged in place of the "per customer" charged that is proposed by NBHDL.

Response:

A calculation of the bill impact on the customer with the most connections and the customer with the least connections if the service charge provided in part b) were to be charged in place of the "per customer" charged that was proposed in the rate application is provided below. All other 2010 proposed rates were kept the same in order to see the impact of the monthly service charge only. It should be noted that NBHDL only has one customer with multiple connections.

Unmetered Scattered - Monthly Bill Impact - Customer with Most Connections

Consumption		2010 Bill-Customer			2010 Bill-Connection			Impact		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	$	%	% of Total Bill
20,000 kWh	Monthly Service Charge			25.70	56	7.1175	398.58	372.88	1,450.89%	14.45%
56 # of connections	Distribution (kWh)	20,000	0.0165	330.00	20,000	0.0165	330.00	0.00	0.00%	11.96%
	LRAM & SSM Rider (kWh)	20,000	0.0024	48.00	20,000	0.0024	48.00	0.00	0.00%	1.74%
	Regulatory Assets (kW)	20,000	0.0003	5.20	20,000	0.0003	5.20	0.00	0.00%	0.19%
	Sub-Total - Distribution			**408.90**			**781.78**	**372.88**	**91.19%**	**28.34%**
	RTSR - Network	20,960	0.0049	102.14	20,960	0.0049	102.14	0.00	0.00%	3.70%
	RTSR - Connection	20,960	0.0043	90.40	20,960	0.0043	90.40	0.00	0.00%	3.28%
	Sub-Total - Delivery			**601.44**			**974.32**	**372.88**	**62.00%**	**35.32%**
	Wholesale Market Rate	20,960	0.0065	136.24	20,960	0.0065	136.24	0.00	0.00%	4.94%
	DRC	20,000	0.0070	140.00	20,000	0.0070	140.00	0.00	0.00%	5.08%
	Cost of Power Commodity (kWh)	750	0.0570	42.75	750	0.0570	42.75	0.00	0.00%	1.55%
	Cost of Power Commodity (kWh)	20,210	0.0660	1,333.88	20,210	0.0660	1,333.88	0.00	0.00%	48.35%
	Sub-Total - Other Charges			**2,254.32**			**2,627.20**	**372.88**	**16.54%**	**95.24%**
	GST		5.00%	112.72		5.00%	131.36	18.64	16.54%	4.76%
	TOTAL BILL			**2,367.03**			**2,758.55**	**391.52**	**16.54%**	**100.00%**

Unmetered Scattered - Monthly Bill Impact - Customer with Least Connections

Consumption		2010 Bill-Customer			2010 Bill-Connection			Impact		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	$	%	% of Total Bill
400 kWh	Monthly Service Charge			25.70	1	7.1175	7.12	(18.58)	(72.31%)	14.11%
1 # of connections	Distribution (kWh)	400	0.0165	6.60	400	0.0165	6.60	0.00	0.00%	13.08%
	LRAM & SSM Rider (kWh)	400	0.0024	0.96	400	0.0024	0.96	0.00	0.00%	1.90%
	Regulatory Assets (kW)	400	0.0003	0.10	400	0.0003	0.10	0.00	0.00%	0.21%
	Sub-Total - Distribution			**33.36**			**14.78**	**(18.58)**	**(55.70%)**	**29.30%**
	RTSR - Network	419	0.0049	2.04	419	0.0049	2.04	0.00	0.00%	4.05%
	RTSR - Connection	419	0.0043	1.81	419	0.0043	1.81	0.00	0.00%	3.58%
	Sub-Total - Delivery			**37.21**			**18.63**	**(18.58)**	**(49.93%)**	**36.93%**
	Wholesale Market Rate	419	0.0065	2.72	419	0.0065	2.72	0.00	0.00%	5.40%
	DRC	400	0.0070	2.80	400	0.0070	2.80	0.00	0.00%	5.55%
	Cost of Power Commodity (kWh)	419	0.0570	23.89	419	0.0570	23.89	0.00	0.00%	47.36%
	Cost of Power Commodity (kWh)	0	0.0660	0.00	0	0.0660	0.00	0.00	0.00%	0.00%
	Sub-Total - Other Charges			**66.63**			**48.05**	**(18.58)**	**(27.89%)**	**95.24%**
	GST		5.00%	3.33		5.00%	2.40	(0.93)	(27.89%)	4.76%
	TOTAL BILL			**69.97**			**50.45**	**(19.51)**	**(27.89%)**	**100.00%**

18. Retail Transmission Service Rates

Ref: Exhibit 8, p. 8

Over the two year period shown in Table 8-10, what has been the approximate percentage of the wholesale transmission cost that is paid to IESO and what percentage is paid to Hydro One Distribution as the host distributor?

Response:

The approximate percentage of the wholesale transmission cost paid to the IESO is 97.37% and 2.63% to Hydro One Distribution as the host distributor.

19. Low Voltage Adder

Ref: Exhibit 8, p. 6

a) Please confirm that NBHDL's Low Voltage cost consists only of Hydro One's service charge, the ST Common Line rate, and the regulatory asset rate riders.

Response:

a) NBHDL confirms that the Low Voltage cost consists only of Hydro One's service charge, the ST Common Line rate, and the regulatory asset rate riders. The service charge was missed in error in NBHDL's explanation of the low voltage expense in Exhibit 8, pg. 6.

b) Please provide a calculation of NBHDL's annual LV cost without Rate Rider # 4, i.e. the S.T. Common Line rate at $0.55 per kW, detailing the component parts of the calculation.

Response:

	kW	Rate	Rate Rider #4	Rate Rider #5	Net Rate	Rate Excluding Rate Rider #4	2006 Reg Assets	2008 Reg Assets	Annual Cost
Service Charge (3 points)		$ 183.92	$ (65.78)	$ 0.13	$ 118.27	$ 184.05			$ 6,625.80
2006 Reg. Assets							$ 542.12		$ 6,505.44
2008 Reg. Assets	36,475.21							$ (887.12)	$ (887.12)
Common Charge	36,475.21	$ 0.55	$ (0.20)	$ -	$ 0.35	$ 0.55			$ 20,061.37
						Total			**$ 32,305.49**

2006 Reg. Assets:			%		
	LV (1550)	$ 26,001	5.212711	$	542.12
	OEB (1508)	$ 1,140	0.228549	$	23.77
	Network (1584)	$ (4,763)	-0.954892	$	(99.31)
	Connection (1586)	$ (17,390)	-3.486367	$	(362.58)
	Total	**$ 4,988**		**$**	**104.00**

2008 Reg. Assets - based on volumetric credit of $0.01/kW:

	Province Wide $	NBHDL %
Network (1584)	$ (4,257,700)	574.25%
Connection (1586)	$ 1,903,440	-256.72%
LV (1550)	$ 1,803,260	-243.21%
OEB Costs (1508)	$ (3,920)	0.53%
PILS (1592)	$ (189,950)	25.62%
Smart Meter Minimum pre May 2007	$ 3,370	-0.45%
Smart meter excess functionality	$ 630	-0.08%
Smart Meter minimum post May 2007	$ (570)	0.08%
	$ (741,440)	**100.00%**

20. Bills Impacts

Ref: Exhibit 8, p. 21

a) Please provide a more complete version of Appendix 8-A with customers in each class covering various monthly consumption amounts, as specified in the 2010 Filing Requirement, Appendix 2-R.

Response:

A more complete version of Appendix 8-A with customers in each class covering various monthly consumption amounts, as specified in the 2010 Filing Requirement, Appendix 2-R, is provided in Appendix "D".

Ref: Exhibit 8, p. 23

b) In the calculation of the bill impact for Sentinel Lights, the 2010 amount in the row "Sub-total - Other Charges" appears to be too large, which in turns affects the total bill impact. Please check this calculation, and if found to be in error please provide a corrected calculation.

Response:

In the calculation of the bill impact for Sentinel Lights, the 2010 amount in the row "Sub-total - Other Charges" had a calculation error, which in turn affected the total bill impact. A corrected bill impact calculation has been provided as part of the response to part a) above.

21. Total Loss Factor

Ref: Exhibit 8, p. 10

a) Please provide a brief explanation of what is meant by "AQEW" and "Kinetiq".

Response:

"AQEW" is the Total Allocated Quantity of Energy Withdrawn by the Market Participant (NBHDL) from the IESO-controlled grid for use in Ontario for the applicable portion of the Settlement Period.

"Kinetiq" is the settlement software that NBHDL's service bureau uses to collect, store and manage NHBDL's metering data.

"AQEW" in this context means NBHDL's historical records of monthly IESO kwh values. Our settlement service bureau uses "Kinetiq" software to also store historical IESO kwh values.

Ref: Exhibit 8, p. 11, lines 13-15

b) Please provide a brief explanation of the effect of de-registering meters on the losses associated with the points of supply listed in this reference.

Response:

Hydro One owned all metering inside the transformer stations supplying NBHDL prior to de-registration. At Trout Lake Transformer Station which supplies between 75-80% of NBHDL's load, Hydro One metered their feeders and station service and NBHDL's load was calculated by summing total station load and subtracting Hydro One feeder load and station service load. NBHDL was billed on the basis of calculation as opposed to actual metered load on its feeders prior to de-registration. NBHDL has no evidence to confirm the accuracy of this billing process. In addition NBHDL is of the opinion that Hydro One's meters and associated equipment was very old and had been in service for several decades. Hydro One did not provide evidence of Measurement Canada accuracy compliance after this metering was placed in service. NBHDL's experience with mechanical metering is that readings tend to be low over time and therefore under-record actual consumption. NBHDL cannot confirm this suspicion as this metering equipment was owned by Hydro One.

The de-registration process was largely completed in 2005 and early 2006. All new metering and associated equipment was installed at this time and NBHDL was billed by the IESO on actual metered data not calculations. Based on this history and experience NBHDL thought it prudent to calculate losses on 3 complete years of data after the de-registration process was completed as this is the most accurate data available. Extending line loss analysis to 5 years would include 2 years of less accurate information.

Ref: Exhibit 8, p. 12, Table 8-12

c) Please give a breakdown of the amount of electricity in the first row of the table for at least one of the years in two amounts, one part being the electricity delivered through IESO-controlled delivery points and the other part being the electricity delivered through embedded Hydro One Distribution Low Voltage (or Sub-transmission) delivery points.

Response:

Please find below Exhibit 8, Table 8-12 with the additional two rows above "A" marked as "A1" and "A2". A1 represents two Hydro One feeders MS#3 and MS#7 each with losses of 3.4% as inputs to Delivery Point 105340. For 2007 the total load on MS#7 was 11,206,552.1 kwh and on MS#3 was 4,942,158.0 kwh for a total of 16,148,710.1 kwh. The Hydro One loss factor of 3.4% increased the value "With Losses" to 16,697,766.3 kwh.

Table 8-12
Total Loss Factor Calculation

	Description	2006	2007	2008	Total
A1	Hydro One MS#3 and MS#7 (Inputs to Trout Lake TS Delivery Point 105340)		16,148,710		
A2	Difference (Excludes MS#3 and MS#7 above)		578,490,183		
A	"Wholesale" kWh IESO Without Losses (Total of Delivery Points 105340 and 100279)	581,595,644	594,638,894	590,931,792	1,767,166,329
B	"Wholesale" kWh for Large Use customer(s)				
C	Net "Wholesale" kWh (A)-(B)	581,595,644	594,638,894	590,931,792	1,767,166,329
D	"Retail" kWh (Distributor)	560,321,499	570,440,203	567,021,540	1,697,783,242
E	"Retail" kWh for Large Use Customer(s)				
F	Net "Retail" kWh (D)-(E)	560,321,499	570,440,203	567,021,540	1,697,783,242
G	Loss Factor [(C)/(F)]	1.037968	1.042421	1.042168	1.040867
H	**Distribution Loss Adjustment Factor (3 year avg.)**				**1.040867**
I	**Supply Facility Loss Factor (3 year avg.)**	1.007165	1.006729	1.006722	**1.006870**
J	**Total Loss Factor**				**1.048018**

d) Please provide supporting documentation of the losses associated with the embedded delivery points, for example by providing a copy of a monthly statement from the host distributor.

Response:

Please find below a copy of the December 2008 statement from host distributor Hydro One that supports the loss factor of 3.4% associated with the embedded delivery points.

hydro one

Please deliver payment to:
by mail:
Hydro One Networks Inc.
PO Box 4102 STN A
Toronto ON
M5W 3L3

SUMMARY OF SERVICE ACCOUNT BILLINGS
For Period from 11/28/2008 to 12/29/2008
Summary Bill Account No. 23792-62005

NORTH BAY HYDRO DISTRIBUTION LTD
PO BOX 3240
NORTH BAY ON P1B8Y5

Line #	Account Number	Service Classification	Account Name	Date Billed	Address	Township/ City	Reason Not Billed	Retailer Name	Reading From Date
1	07437-01000	stribution - Subtransmission	NORTH BAY HYDRO	12/23/2008	NORTH BAY MS 3, NAM ACCT 540617	MULOCK			11/05/2008
2	19497-53003	stribution - Subtransmission	NORTH BAY HYDRO	12/23/2008	TROUT LAKE TS, NAM ACCT 540617	MULOCK			11/05/2008
3	36352-27005	stribution - Subtransmission	NORTH BAY HYDRO	12/23/2008	NSULA ROAD MS, NAM ACCT 540617	MULOCK			11/05/2008
							TOTAL		

Total Balance Due : **$14,391.77**
Date Due : **01/19/2009**

Reading To Date	Read Type	Interval Meter	Meter Number	Meter Reading	Meter Multiplier	Metered Usage [kWh]	Adjustment Factor	Adjusted Usage [kWh]	Demand [kW]	Demand [kVA]	Power Factor	Adjustment Indicator
12/04/2008		Y	D200050W1	2986.7919		320228	1.034	331116	851	851	1.0	
12/04/2008		Y	8200050R1	5566.5935		1369346	1.034	1415904	2927	2927	1.0	
12/04/2008		Y	8200510W1	7044.4795		1049117	1.034	1084787	2311	2311	1.0	

	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI
1												
2												
3												
4												
5												
6												
7												
8												
9						Electricity						
10	**Pricing**	**Price Reason**	**Previous Balance**	**Payment**	**Budget Billing Plan**	**Usage**	**Rate**	**Amount**	**Delivery**	**GST (87086-5821-RT0001)**	**Total Current Charges**	**Outstanding Balance**
11	Spot Price	mbedded WMP	$562.50	-$562.50	$0.00	331116	0.0000	$0.00	$538.74	$26.94	$565.68	$565.68
12	Spot Price	mbedded WMP	$10,221.06	-$10,221.06	$0.00	1415904	0.0000	$0.00	$11,704.75	$585.24	$12,289.99	$12,289.99
13	Spot Price	mbedded WMP	$1,199.89	-$1,199.89	$0.00	1084787	0.0000	$0.00	$1,462.95	$73.15	$1,536.10	$1,536.10
14												
15			$11,983.45	-$11,983.45	$0.00				$13,706.44	$685.33	$14,391.77	$14,391.77

22. Specific Service Charges

Ref: NBHDL Conditions of Service, p. 28

NBHDL includes a "general administration fee" in its Conditions of Service for unauthorized energy use.

a) Has NBHDL charged this fee to any customers, and if so how much revenue has been generated?

Response:

The Conditions of Service referencing a 'general administration fee" is no longer current. NBHDL revised our Conditions of Service in June 2006. The following is taken from NBHDL's current Conditions of Service related unauthorized energy use. Disconnection and reconnection costs will apply as well payment of estimated energy used, and all costs incurred by NBHDL including inspections, repair costs and agent fees.

North Bay Hydro Distribution Limited Conditions of Service	**Number:** NBHDLCOS – 220 – 02 **Issue Date:** June, 2006 **Review Date:** November, 2007
Unauthorized Energy Use	

1. Preamble

Energy usage that is not recorded by a *Measurement Canada* approved meter, and/or where the *Person* using *energy* does not have a *Distribution Services Agreement* with North Bay Hydro Distribution Limited (NBHDL) is considered unauthorized *energy* usage. This includes, but not limited to, fraud, abuse, theft of power, and *energy diversion.*

2. Disconnection

NBHDL reserves the right to *disconnect* any *Person*, or *Consumer*, for causes, not limited to, *energy diversion*, fraud, or abuse on the part of the *Person* or *Consumer.* Reconnection may not occur until the *Consumer* or *Person* rectifies the condition and provides full payment to NBHDL of estimated *energy* used, all costs incurred by NBHDL arising from unauthorized *energy* use, including inspections, repair costs, agent fees, and the cost of *disconnection* and reconnection. Refer to NBHDLCOS-240-03 Deposits.

3. Criminal Code

Unauthorized use of *energy* is a criminal offence, and the North Bay Police Services will be notified of all occurrences.

b) In NBHDL's view, should this fee be included on the tariff sheet?

Response:

Refer to response to a). NBHDL does not have a "general administrative fee" in our current Conditions of Service.

23. Allocation of Deferral and Variance Accounts

Ref: Exhibit 9, Table 9-7 'Load Forecast Data', (p. 15)

a) Please provide a brief description of how NBHDL made its 2010 forecast of energy to be supplied to Non-RPP Customers for the Residential, General Service < 50 kW, General Service 50 – 2999 kW, and Sentinel Lighting classes.

Response:

NBHDL made its 2010 forecast of energy to be supplied to Non-RPP Customers for the Residential, General Service <50kW, General Service >50kW, and Sentinel Lighting classes based on historical 2008 percentage by class.

b) Please provide a forecast of the billing kilowatts of the non-RPP customers in the General Service 50 – 2999 kW class.

Response:

Using the same methodology answered in 23 a) the billing kilowatt of the non-RPP customers in the General Service 50 - 2999 kW class would be 548,923 kW.

24. Regulatory Asset Rate Riders

Ref: Exhibit 9, Table 9-9 'Deferral and Variance Account Rate Riders', (p. 17)

Table 9-9 provides a calculation of two rate riders for each class that would recover RSVA and non-RSVA balances respectively.

a) Please provide rate riders by rate class for each class that would recover the balance in the Global Adjustment sub-account of Account 1588 from non-RPP customers only.

Response:

The following table provides the applicable rate riders in response to a) above.

Rate Class	Proposed Rate Rider	Billing Determinant
Residential RPP		kWh
Residential non-RPP	$ 0.00162	kWh
General Service <50 kW RPP		kWh
General Service <50 kW non-RPP	$ 0.00162	kWh
General Service 50 to 2999 kW RPP		kW
General Service 50 to 2999 kW non-RPP	$ 0.56728	kW
Intermediate non-RPP	$ 0.84894	kW
Sentinel Lighting RPP		kW
Sentinel Lighting non-RPP	$ 0.58329	kW
Street Lighting non-RPP	$ 0.57645	kW
Unmetered Scattered Load non-RPP		kWh

b) Does NBHDL have the billing capability to have two rate riders by rate class: one for RPP customers and another for non-RPP customers?

Response:

NBHDL does not have the billing capability to have two rate riders by rate class.

Please provide rate riders by rate class that would recover the aggregate balance of all of the other accounts (i.e. excluding the Global Adjustment sub-account of Account 1588) for which NBHDL has requested disposition.

Response:

The following table provides the applicable rate riders in response to c) above.

Rate Class	Proposed Rate Rider	Billing Determinant
Residential RPP	$ 0.00013	kWh
Residential non-RPP	$ 0.00013	kWh
General Service <50 kW RPP	$ 0.00016	kWh
General Service <50 kW non-RPP	$ 0.00016	kWh
General Service 50 to 2999 kW RPP	-$ 0.03768	kW
General Service 50 to 2999 kW non-RPP	-$ 0.03768	kW
Intermediate non-RPP	-$ 0.16685	kW
Sentinel Lighting RPP	-$ 0.42121	kW
Sentinel Lighting non-RPP	-$ 0.42121	kW
Street Lighting non-RPP	-$ 1.43883	kW
Unmetered Scattered Load non-RPP	$ 0.00026	kWh

c) If NBHDL were to establish a separate rate rider to dispose of the balance of the Global Adjustment sub-account of Account 1588, please provide NBHDL's view as to whether this rate rider would be applicable to MUSH ("Municipalities, Universities, Schools and Hospitals") sector customers.

Response:

NBHDL's view is that if a separate rate rider were created to dispose of Global Adjustment sub-account 1588 balances that a portion would apply to MUSH sector customers. NBHDL notes that in this context that the definition of customer should be expanded to include meters. One MUSH sector customer may be served by several meters. NBHDL has not completed a thorough analysis; however some MUSH sector customers may have never been on RPP rates or transitioned off RPP rates as early as 2004. Some MUSH customers opted to sign with retailers and if they were served by multiple meters then the transition may have occurred over a few months for a single customer.

If the answer to g) is in the negative, does NBHDL have the capability in its billing system to exclude MUSH sector customers to which the separate rate rider for the disposition of the Global Adjustment sub-account of Account 1588 balance would apply?

Response:

For limitations of the billing system please refer to 24 b). NBHDL notes that applying a Global Adjustment rate rider to the MUSH customers that moved off RPP would be an onerous and time consuming process given the number of years, the number of customers and the number of meters involved in such calculations.

25. Service Quality

Ref: Exhibit 4, p. 61

Please provide a description of the service quality indicator that applies to the Customer Service Representatives, including the target level for the indicator, together with a brief explanation of what it means to have achieved 67% in 2008.

Response:

The service quality indicator that is referenced to the Customer Service Representatives is the Telephone Service Factor (TSF). The description of this service quality indicator is the percentage of calls to the utility's general inquiry number that are answered within 30 seconds. The TSF standard is 65% or better. NBHDL's actual performance for 2008 of 67% means that they have performed 2% better than the required standard.

26. LRAM / SSM

Ref: Exhibit 10, Page 6 of 22

NBHDL is applying for recovery of a Lost Revenue Adjustment Mechanism ("LRAM") amount of $321,318 to recover revenue lost from programs implemented from 2005-2008, a Shared Savings Mechanism ("SSM") amount of $124,447 and carrying charges totaling $17,237. It appears that North Bay Hydro has used the OEB Assumptions list when calculating its LRAM claim. On January 27, 2009, by way of letter to all licensed electricity distributors, the Board indicated that it would be adopting the Ontario Power Authority's ("OPA") Measures and Assumptions list for use by distributors for the purposes of applications for new distribution rate-funded CDM programs, LRAM and SSM. Further, in the Board's decision on LRAM to Horizon Utilities (EB-2009-0192/EB-2009-0158), dated October 8, 2009, the Board noted in its findings that "what is clear is the underlying principle of LRAM, which is that distributors are to be kept whole for revenue that they have forgone as a direct consequence of implementing CDM programs." In the same Decision, the Board goes on to state that "utilities should always use the most current input assumptions which have been adopted by the Board when preparing their applications because these assumptions represent the best estimate of the impact of the programs."

a) Please provide the rationale for why NBHDL has not used the most recently published OPA Measure and Assumption list when calculating its LRAM claim.

Response:

The submission covers the recovery of LRAM and SSM for selected Third Tranche programs delivered by North Bay Hydro (NBHDL) from 2005 to April 30, 2008. It also includes the LRAM recovery for the OPA programs delivered by the OPA that were considered final by the OPA for 2006 and 2007. Forgone revenue is calculated to the end of 2009 and carrying charges for LRAM are calculated to September 30, 2009.

In part NBHDL's response to question 26 a) can be answered with additional and/or highlighted information contained in Exhibit #10. Some of the submission is repeated here for convenience. This question is divided into three parts and are related to Third Tranche and describe the methodology: Part 1) for the larger customers including General Service > 50 kW, General Service < 50 kW and Un-metered Scattered Load (traffic lights); Part 2 for customers making like-for-like changes including General Service > 50 kW and General Service < 50 kW customers and Part 3) for Residential customers.

As per section 1.4 of Exhibit 10 submitted to the Board on October 26, 2009, the inputs and assumptions found on the Board's website are used wherever possible and where not, a suitable proxy is selected for the required inputs. Sections 3.0, 3.1 and 3.11 of the each of the four annual reports explained each of the common measures and sections 3.6, 3.7 and 3.8 provided an overview of the custom measures. Both the common and custom measures were included

in an appendix for each of the annual reports by segment. Although not part of the filing guidelines included in sections 9.2 and 9.3 of the Guidelines, each measure used for LRAM and SSM was included in Appendix 10-A of Exhibit 10. These were modified as per section 1.4 of Exhibit 10 and organized by segment as was the case of the annual reports.

For further information related to this section please refer to the Bob Mason & Associates Third Party Review.

Part 1: Methodology for Larger Customers

This part includes General Service > 50 kW, General Service < 50 kW and Traffic Lights. This part represents 74 of the 100 projects. This group represents 90.27% of the kWh savings for the total of parts 1 and 2. Part 2 which represents the remaining 26 projects has a different agreement and methodology to calculate the TRC screening and incentive levels which provides faster results.

1.1 Delivery Channels

Various delivery channels were used to develop projects with customers. For example NBHDL hosted various meetings and information sessions targeted at both General Service customers and larger commercial and industrial customers. NBHDL made arrangements with various local allies such as consultants, contractors and suppliers to conduct audits. These allies proved most useful to assist with the development and implementation of projects. NBHDL educated some customers and several other contractors and consultants on Demand Reduction Programs who were not auditors who also initiated projects.

Part of the mandate with the various delivery channels was to encourage and educate the customers on energy conservation and present NBHDL any potential project for review and a TRC screening analysis. Customers and allies understood that installations had to meet all regulations and improve the lighting levels where required, ensure controls operate as designed and high quality energy efficient equipment was installed. As a result of this approach NBHDL is not aware of any complaints on lighting levels, the operation of motors, fans, chillers, heating systems, air conditioning or thermal envelope improvements.

To pass the TRC screening analysis the various consultants understood the advantages of installations resulting in the largest energy savings and the use of long life equipment. Thus many projects did not result in simply like-for-like changes but such things as: a) permanent wiring changes resulting in the removal of fixtures, installation of manual switches, occupancy sensors, zone controllers, Enterprise Buildings Integrator (EBI); b) reductions in the number of ballasts per fixture; c) use of long life lamps; and d) use of fewer and smaller high efficient motors for pumps, circulations and fans.

This approach involved the calculation of kWh peak kW saved for many of these projects. This is discussed later in this section.

1.2 Data Collection

Once NBHDL approved a potential project with a third party, an audit was conducted by that third party. The information submitted by the third party included what exists at the premises such as types and numbers of lamps, fixtures and ballasts, wattage of each fixture, motor sizes, control systems, hours of use and operation. The submission included the estimated cost, types and numbers of lamps, fixtures and ballasts, wattage of each fixture, motor sizes, control systems and hours of use. The report showed the kWh energy savings, equipment life, simple payback (years or months), and explanation of costs, assumptions and recommendations. The submission had to satisfy the customer and provide the same or better quality than the base case for such technologies as lighting, heating ventilation and air conditioning, controls and thermal envelope.

The customer provided the third party with the operating characteristics of the building and equipment if available. This information was necessary to calculate the most accurate estimated energy savings. Once this information was submitted by the third party to NBHDL it is reviewed by NBHDL and its consultants to ensure accuracy and completeness.

When a third party auditor was not available, the customer provides the data to an NBHDL consultant who utilized the same steps as per above.

NBHDL used the report as a basis to conduct the necessary technology screening analysis as per the Guidelines. To pass the screening analysis the total project was considered. If the project failed, various measures were eliminated until the project passed. When the project or the modified project was completed the incentive was calculated from the peak kW reductions for both winter and summer tabulated in the TRC calculations. NBHDL prepared an agreement for presentation to the customer.

1.3 Agreement

The agreement included various schedules depending on the type of project. One schedule summarized the project, providing expected results and the calculated incentive based on the available information. A second schedule contained the detail of work to be done such as retrofits, removals and replacements, estimated costs, operating time, energy savings, customer savings, equipment life and simple payback. When a measure did not have a load profile and a suitable proxy did not exist on the inputs and assumptions included on the Board's website, an additional schedule was included containing the expected profile of the equipment based on input from the customer or their consultant. With the above information the TRC calculations were not

necessarily based on averages of the Board's website but unique operating characteristics for the customer. Where that information was not available, the quantities from the Board's website were used unless the information was available from another similar project. The agreement was executed by both the customer and NBHDL.

1.4 Verification

Once the project was completed a walk through audit was conducted by a NBHDL consultant. In that walk through the consultant identified any changes from the plan, obtaining a list of material installed as well as labour and material costs. This information was analyzed by a second consultant and modified as necessary to ensure the material matches what was installed. A new spreadsheet was prepared with the actual costs and material installed. If there are any other changes such as operating hours of various areas, base case altered, additional installations or less work accomplished, the data was updated and input into the tool for recalculating the TRC and incentives. These changes were presented to the customer and the incentive paid based on these revised calculations. In some cases there was no change from the agreement as the all work went as planned and actual labour costs were the same as quoted.

1.5 Sample Calculations

The following samples are included here to provide some of the mechanics to calculate energy savings for the majority of the projects for large customers.

For most measures the following formula was used to calculate the annual kWh saved. In some cases the energy had to be divided into seasons while in others monthly. However for most installations the annual load profile was used to provide seasonal kWh.

Annual kWh saved = (kW/unit * N * H) base - (kW/unit * N * H) efficient
kW /unit is the specified wattage of equipment for base and efficient
N is the number of units
H is the operating time of each unit

1.5.1 Lighting

For lighting, total wattage of installed equipment (ballast and lamps) was calculated and equipment life recorded from technical reference material and hours usage. The calculations were based on a common formula for annual kWh saved. The incremental costs of $44.36 were the complete actual costs from invoices for labour and material for lamps and ballasts. Equipment Life is dependent on the shortest life component which in this case was the lamps at 26,000 hours.

Below is an example of an office building from the submission:
Annual Operating Hours = 3120
Life of Lamp is 26000 hours
Base Case 2-4ft T12's 40 watt lamps is 82 watts
Efficient Case 2-4ft 28 watt lamps 45 watts
Annual kWh saved = (.082 *1*3120)base - (.045 * 1*3120)efficient = 115 kWh
Peak Summer kW saved = .030
Peak Winter kW saved is .032
Equipment Life is 8.33 years.

1.5.2 Controls

For occupancy sensors the average reduction of 30% was used from the OEB tables for many installations. The kWh savings were calculated from the total installed wattages of fixtures that are controlled by each occupancy sensor. This was determined from either a manual check during verification or a schedule provided by the customer's contractor or consultant upon completion.

Sometimes these installations were very complicated using zone controllers with different setting for different areas. For example one building had eight different zones where the lighting was on for 8110 hours per year in all eight areas. The wattage for each area was determined and the settings of the zone controller used to calculate the annual kWh savings. Three different settings were required for the eight zones reducing zones 4, 5, 6 and 7 totalling 15,170 watts to 2730 hours; reducing zone 8 totalling 2,050 watts to 4680 and zones 1, 2 and 3 totalling 15,580 watts to 6571 hours. This resulted in an annual kWh savings of 112,624 for this customer. Various examples of controllers can be found in sections 3.6, 3.7 and 3.8 of each of the annual reports. Many had free riders of 30% as they were custom projects.

1.5.3 Thermal Envelope Improvements

One new building was going to be constructed according to the base requirements of the building code for various parts of the construction. After discussions with the consultant, heat loss calculations were done by the consultant on the basic installation and on a more efficient installation. The more efficient installation proved economic to the customer and proceeded based on annual energy saving of 108,736 kWh.

For a second building one customer requested assistance with improving the energy efficiency of 40 existing units and recreation centre. This project was done with a third party who produced Energy Efficient Evaluation Reports using Natural Resources Canada Hot 2000 and ecoEnergy for energuide rating to retrofit Homes. The information produced showed a favourable result for increasing amounts of attic insulation, but not as good for heat recovery ventilation as it failed the TRC screening process and was not supported by NBHDL. The lower quantities derived from the OEB tables were used for Attic Insulation resulting in a savings of 21,648 kWh.

1.5.4 Engineering Calculations and Technical Background Information

For projects in addition to the above such as free cooling, chillers, parking lot controllers, energy efficient transformer and air conditioning, engineering calculations and/or related technical information was obtained to make the necessary TRC calculations.

1.6 Calculation of Final TRC and Incentives

Following verification the TRC was recalculated based on any new information. From that information the final incentive amount was calculated and paid. The incentive was delivered to the customer and a release signed. The TRC's were totalled by segment and by project. At year end all utility costs less incentives are included in the TRC calculation.

For the purpose of LRAM and SSM recovery the segments had to be reformatted so that the data was available by customer class. This was accomplished by first removing the portion of any projects that included individual residential meters within the building. These were removed and included in a Demand Reduction section for residential. The portion of LED traffic lights that were unmetered was also removed and placed in the unmetered scattered load class. The remaining metered traffic lights was included with the General Service < 50 kW class. For both the residential portion and traffic lights the utility costs were transferred so that they could be included in the correct customer class. The remainder was reorganized by customer class and the utility costs reallocated based on customer class as opposed to by segment.

Part 2: Methodology for Like-for-Like Changes

This part includes 6 General Service > 50 kW customers and 20 General Service < 50 kW customers with a total kWh savings of 708,113. Of this total 326,712 kWh savings are in the General Service > 50 kW class, 194,575 kWh savings are in the General Service < 50 kW class and 186,826 kWh for Demand Reduction for Residential. Four of the 20 General Service < 50 kW customers include individual residential meters.

This methodology was set-up to streamline the process for simple like-for like replacements. For these projects a separate TRC screening was done for changes like-for-like based on the default values in the OEB List such as 4000 annual hours for commercial, 2320 hours for Residential (MURB apartments) whether on individual meters or metered in total.

For those that passed the TRC Screening analysis a list of measures was developed with fixed incentives on a per unit basis similar to some of the OPA measures. The fixed incentives were calculated in the same manner as part 1.

2.1 Delivery Channels

The delivery channels were similar to part 1 except more were delivered by fewer suppliers, contractors and consultants.

2.2 Data Collection

The only information required for an agreement was the base case installation and efficiency improvement that included measures from an approved list. This approach of developing a prescriptive list of retrofit measures is similar to the methodology of the OPA programs. The estimated savings and incentive were calculated using information from this list.

2.3 Agreement

The agreement included one schedule with the number of lights to be replaced for each measure. The agreement was executed by both the customer and NBHDL as was the case in part 1.

2.4 Verification

Once the project was completed a walk through audit was conducted by a NBHDL consultant. In that walk through the consultant identified any changes from the plan and made appropriate changes to the schedule. If the customer had invoices including material lists and costs, this information was obtained to assist with the TRC calculation. This information was reviewed by a second consultant and modified as necessary for TRC calculations. If there were any changes such as number of units, additional installations or less work accomplished, the data was updated and input into the tool for recalculating the TRC. The incentives were recalculated based on the revised schedule. These changes were presented to the customer and the incentive paid based on the revised calculations. In most cases there were no changes from the agreement as the all work went as planned.

2.5 Calculations

As per this part 2 the calculations are straight forward utilizing the formula below for lighting to calculate kWh saved. The only lights included on the schedule were changes from T12's to T8's, incandescent changed to either CFL's or LED's.

Annual kWh saved = (kW/unit * N * H) base - (kW/unit * N * H) efficient
kW /unit is the specified wattage of equipment for base and efficient
N is the number of units
H is the operating time of each unit

The only other components included on the schedule were controls. For occupancy sensors and any others the average reduction of 30% is used from the OEB tables for all installations. The kWh savings are calculated from the total installed wattages of fixtures that are controlled by each occupancy sensor. This is determined from a manual check during verification.

2.6 Calculation of Final TRC

Following verification the TRC was calculated for the first time for the project based on the all available information. The TRC's were totalled by segment and project and combined with those of part 1. At year end all utility costs less incentives are included in the TRC calculation.

For the purpose of LRAM and SSM recovery the segments had to be reformatted so that the data was available by customer class. This was accomplished by first removing the portion of any projects that included individual residential meters within the building. These were removed and included in a Demand Reduction section for residential. For the residential portion of the project utility costs were transferred so that they could be included in the correct customer class. The remainder was reorganized by customer class and the utility costs reallocated based on customer class as opposed to by segment.

Part 3: Methodology for Residential Programs

For the residential programs there was no specific contract with customers for water heater tune-up, refrigerator buy-back, EnerGuide for houses or information based. There were a few contracts with suppliers on the delivery of the programs as addressed below.

The water heater tune-up, refrigerator buy-back and EnerGuide for houses was delivered in partnership with Greening Nipissing, a local non profit environmental group. The home visits by Greening Nipissing were conducted in conjunction with their ongoing program of Green Home Visits on various energy and environmental issues. Greening Nipissing had a package they left with customers on the Green Home Visits. A second package to leave at each home was developed to leave with the customer after a visit on any of the three above programs. Greening Nipissing logged all information related to the visit including all required numbers of units installed.

3.1 Water Heater Tune-up

The water heater tune-up was delivered in partnership with Greening Nipissing, a local non profit environmental group. The target of 300 homes was surpassed as 448 tank wraps were installed. There were more home visits than tank wraps for the following reasons: impossible to install due to tank location, tank was new and the water heater was gas. When at a home with gas water heating, Greening Nipissing often installed one or two compact fluorescent bulbs. When the tank couldn't be wrapped pipe wrap was installed as well as the other components of the program.

NBHDL provided all the materials including tank wraps, pipe wrap, low flow showerheads, faucet aerators and compact fluorescent bulbs. The installed units reported by Greening Nipissing were checked against the materials they were provided.

The Water Heater Tune-up was a highly residential customer focussed program involving several components:

- Wrapping the tank with additional insulation;
- Wrapping at least the first three feet of hot water pipe from the tank with foam or insulating tape;
- Installing low flow showerheads;
- Installing aerators on high use faucets; and
- Installing two compact fluorescents in areas with high operating hours.

While with the customer Greening Nipissing promoted the refrigerator buy-back and EnerGuide for houses programs and was sometimes able to schedule a second visit for those programs. The agreement between Greening Nipissing and NBHDL required Greening Nipissing to provide feedback on the installation and customer contacts. They provided units at satisfactory intervals to show progress against targets. At various times there were minor changes to the delivery and requirements to streamline the process.

The number of units installed were included in section 1.5, table 2 of Exhibit 10.

3.2 Refrigerator Buy-back

The refrigerator buy-back program was delivered in partnership with Greening Nipissing, a local non profit environmental group. In addition another agreement was arranged for a contractor to pickup of the second refrigerator. The target of 300 refrigerators was surpassed as 492 refrigerators were removed. This program was targeted at second refrigerators that were in working order.

The agreement with Greening Nipissing required them to arrange pickup of the second refrigerator, evacuating the refrigerant and tagging for recycling. Greening Nipissing had little hands on work regarding this program but made all arrangements, reported units and provided certificates provided for disposal. Once NBHDL received the required paperwork for the refrigerator a cheque for $50.00 was paid to the customer. A few customers turned down the money.

3.3 EnerGuide for Houses

The EnerGuide for Houses program was delivered in partnership with Greening Nipissing, a local non profit environmental group.

During 2005 most of the activity was setting up a program with only four installations completed. Of the four three were fuel substitution and the other thermal envelope improvements. To determine annual kWh savings and peak kW savings and TRC calculations proxies for thermal envelope improvements were utilized together with an average cost of $6,000 per house for the equipment cost.

EnerGuide for Houses was terminated by Natural Resources Canada in 2006 as the NBHDL program was gaining momentum and systems put in place to promote the EnerGuide for Houses program. The intent of the program was to promote the use of this Federal Program and pay for the two blower tests if the customer reached a minimum threshold improvement. This never occurred in either year but there were some related successes early in 2006 to report against the program. There were three blower tests and savings on 39 furnace fans.

The three B-audits (blower door test) that occurred resulted in average annual kWh savings 8,215 kWh at a cost of $4,400. This was compared to average data from Green Communities Canada of 7,400 kWh and a cost of $4,000. The TRC was calculated based on the data provided by the customers. The remaining 39 audits were done on gas or oil heated houses, thus no electrical gains were found. Green Communities Canada stated that the average home that implemented these measures saved about 40% or about 300 kWh per year on their furnace fans. The furnace fans and B-audits were reported for 2006 resulting in a large negative TRC for 2006. This program was terminated by NBHDL in 2006.

3.4 Residential Information Based

The residential information based program was delivered in partnership with Greening Nipissing, a local non profit environmental group until mid 2007.

For the years 2005 and 2006 the focus was mostly on promotion and education on electricity conservation using such forums as public presentations, university panels, radio interviews, newspaper articles, trade shows, open houses, meetings with church groups and community groups. Handouts were provided and compact fluorescent bulbs were provided at two functions. The benefits of the CFL was described and information provided on the best location for use in fixtures with highest operating hours to save the most electricity and money.

Handouts were provided and compact fluorescent bulbs were provided at two functions. The use of the CFL’s was described and the customers informed that the best location for installation of these new lights was in high use areas to save the most electricity and money.

For the year 2007 the focus continued on the promotion and education on electricity conservation using many of the same forums as in 2006 plus additional ones such as student school meetings, Nipissing First Nations panel discussion, film presentation at the public library and presentation to “fit for life” group. In addition Powercost monitors were given out, a new website was launched on energy conservation and newspaper and radio weekly advertising was increased.

New group meetings were initiated to encourage the use of CFL bulbs and LED Christmas lights. For example the Capitol Centre (a large theatre) was rented and the free screening of a movie attracted attendees with several conservation groups attending. It was promoted as a light exchange which resulted in the return of 1600 incandescent bulbs and 800 CFL’s handed out in return. Other similar activities were initiated resulting in another 200 CFL’s exchanged during Earth day and another 75 CFL bulbs exchanged at a hockey game. Again explanations were given to promote the installation of these bulbs in high use areas.

There were also four more events held where a total of 1950 LED Christmas light strings were handed out in exchange for 2400 incandescent strings exchanged.

For 2008 the information based program included Conservation and Demand Management Report, Community Program, Cheque Presentation, School Campaign Materials, Insert Materials for School Kits, Conservation and Demand Management Campaign for the Community and Project Porchlight. Each of the forgoing is included in the 2008 Annual Report. NBHDL will repeat and expand on Project Porchlight below.

3.4.1 Project Porchlight

NBHDL contracted with Project Porchlight to manage and operate a campaign that would distribute 20,000 CFL’s and further educate the residents of North Bay on the environment and conservation. Project Porchlight began in the latter part of 2007 with the distribution of 3,000 bulbs. During 2008, volunteers, events and field staff personally delivered 17,000 CFL’s.

The final report prepared for the project stated that the program was positive and that most had started using them while those that hadn’t were aware of them. The volunteers reported genuine enjoyment of door-to-door activity in “helping the environment”. There were a few negative comments from the residents such as don’t like the light, does not give off enough heat or they burn out too quickly.

Most residents were aware of the benefits of using energy efficient products and very few didn’t want a bulb. Those that didn’t want a bulb were unsure because they were receiving something for free.

Target audiences were reached through various media outlets, key messages

were well received by residences (raising awareness and inspire action). The promotion of safe handling and recycling of CFL's was well received.

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 focussed 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.

b) Please provide a revised LRAM claim using the most recently published OPA Measures and Assumptions List.

Response:

Based on 26 a) NBHDL does not feel it appropriate or necessary to revise its LRAM claim.

Ref: Exhibit 10, Page 22 of 22

NBHDL notes that it retained Bob Mason & Associates to perform the third party review of its CDM programs as per section 7.5 of the Board's Guidelines for Electricity Distributor Conservation and Demand Management (the "Guidelines") issued on March 28, 2008.

c) Please provide a copy of the review submitted by Bob Mason & Associates and discuss how NBHDL will implement any of the recommendations made in the third party review.

Response:

Please see Appendix "E".

27. General

Ref: Exhibit 1, pp. 56-64 'Revenue Requirement Work Form'

Upon completing all interrogatories from Board staff and intervenors, please provide an updated RRWF with any corrections or adjustments that NBHDL wishes to make to the amounts in the Application version of the RRWF. Include documentation of the corrections and adjustments, such as a reference to an interrogatory response or an explanatory note.

Response:

NBHDL will be providing an update to this question by January 22, 2010.

APPENDIX "A"

NORTH BAY HYDRO

74 Commerce Crescent
P.O. Box 3240
North Bay, Ontario
P1B 8Y5

Tel. (705) 474-8100
Fax: (705) 495-2756 Administration
Fax: (705) 474-3138 Engineering/Purchasing
Fax: (705) 474-8579 Customer Services/Accounting
Fax: (705) 474-4634 Operations

Michel Cazabon
28 Nipissing Crescent
North Bay, Ontario
P1A 2V7

December 27, 2009

Re: Application for Distribution Rate Increase EB_2009-0270

Dear Mr. Cazabon,

In November you expressed concern to the Ontario Energy Board Secretary with respect to North Bay Hydro's proposed electricity rate change that was published in the Nugget.

One of your concerns was around harmonization of taxes and the application of PST to electricity bills effective July 1, 2010. This is a provincial government issue and we have forwarded your concern to our local MPP for consideration.

I would also like to explain why North Bay Hydro Distribution Limited is seeking a rate increase at this time. It is also important to keep in mind that North Bay Hydro owns and operates the local distribution system that serves you. I believe that some of the issues identified in your email could be with other parties involved in the provincial electricity system. North Bay Hydro has a voluntary Board of Directors made up of local citizens that provide discipline and control of our spending and priorities. Our Board feels that North Bay Hydro is an effective and efficient business that balances many priorities.

The Ontario Energy Board established a multi-year electricity distribution rate setting plan that, commencing with 2008 rates, a limited number of distributors like North Bay Hydro would be identified each year to file a future test year cost of service application. The plan would run for four years enabling each rate regulated distributor in the province to rebase its rates at least once during the four year plan. North Bay Hydro filed its cost of service application for rates effective May 1, 2010. Until another cost of service application is filed in the future (potentially 2013 for rates effective 2014) the process usually allows minor changes in rates during the interim years. At times the rates decrease if inflation is less than a productivity improvement factor that must be achieved. Essentially this proposed rate increase must sustain the business for up to 4 years as the interim filings do not usually generate new revenues.

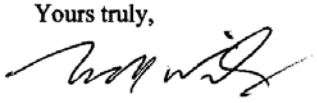
North Bay Hydro's last cost of service application was filed with the Ontario Energy Board in 2005 for rates that were effective May 1, 2006. The rates that drive revenues for the business decreased significantly at that time and also have decreased between 2006 and 2009.

Costs have increased considerably since 2002, for example, transformers, copper, wire, insurance, vehicles, etc have all increased. North Bay Hydro has worked hard to mitigate these costs and the regulatory process in Ontario does not allow annual adjustments, rather several years of impact are accumulated for recovery when the cost of service application is filed.

North Bay Hydro is faced with a significant task of replacing infrastructure that is end of life. Almost 50% of our poles have been in service for approximately 30 years, with about 24% in service more than 50 years. Much of the equipment at our substations has been in service for more than 35 years and in some cases over 70 years. This plant has served customers well however if not systematically replaced according to a defined plan could result in decreased reliability and safety hazards to our staff and the public. It will take North Bay Hydro several years to replace this old equipment. In the interim we must perform additional maintenance to ensure reliability and safety of the system. These capital and maintenance costs are a significant component of the requested rate increase to improve the system that provides you service. Perhaps you have noted significant construction by crews in the Jane Street and Pinewood area and the rebuild of Gormanville Road to supply the new hospital. New revenue is required to continue with this process of modernizing the system that customers rely on for electricity 24 hours a day, year over year.

I hope this helps to explain some of the reasons behind the proposed rate increase and if you have any further questions please do not hesitate to contact me at extension 305.

Yours truly,



Todd Wilcox
Chief Operating Officer

APPENDIX "B"

NORTH BAY HYDRO

74 Commerce Crescent
P.O. Box 3240
North Bay, Ontario
P1B 8Y5

Tel. (705) 474-8100
Fax: (705) 495-2756 Administration
Fax: (705) 474-3138 Engineering/Purchasing
Fax: (705) 474-8579 Customer Services/Accounting
Fax: (705) 474-4634 Operations

Terry Whelan
643 Norman Avenue
North Bay, Ontario
P1B 8C2

December 27, 2009

Re: Application for Distribution Rate Increase EB_2009-0270

Dear Mr. Whelan,

In November you expressed concern to the Ontario Energy Board Secretary with respect to North Bay Hydro's proposed electricity rate change that was published in the Nugget.

One of your concerns was around harmonization of taxes and the application of PST to electricity bills effective July 1, 2010. This is a provincial government issue and we have forwarded your concern to our local MPP for consideration.

You also expressed concern about the impact of smart meters on electricity costs. As you noted, North Bay Hydro has not completed our deployment of smart meters and at this point the transition to time of use rates will not be completed until late 2010. The experience in southern Ontario indicates that in general customers did not experience significant changes in costs when their supplying distribution company adopted this new rate structure. North Bay Hydro monitored a small population of customers in 2008 and early 2009 to assess the impact of the time of use rates and found no real appreciable increase in costs.

I would also like to explain why North Bay Hydro Distribution Limited is seeking a rate increase at this time. It is also important to keep in mind that North Bay Hydro owns and operates the local distribution system that serves you. I believe that some of the issues identified in your email could be with other parties involved in the provincial electricity system. North Bay Hydro has a voluntary Board of Directors made up of local citizens that provide discipline and control of our spending and priorities. Our Board feels that North Bay Hydro is an effective and efficient business that balances many priorities.

The Ontario Energy Board established a multi-year electricity distribution rate setting plan that, commencing with 2008 rates, a limited number of distributors like North Bay Hydro would be identified each year to file a future test year cost of service application. The plan would run for four years enabling each rate regulated distributor in the province to rebase its rates at least once during the four year plan. North Bay Hydro filed its cost of service application for rates effective May 1, 2010. Until another cost of service application is filed in the future (potentially 2013 for

rates effective 2014) the process usually allows minor changes in rates during the interim years. At times the rates decrease if inflation is less than a productivity improvement factor that must be achieved. Essentially this proposed rate increase must sustain the business for up to 4 years as the interim filings do not usually generate new revenues.

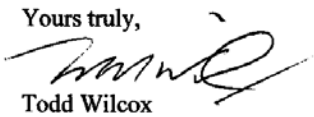
North Bay Hydro's last cost of service application was filed with the Ontario Energy Board in 2005 for rates that were effective May 1, 2006. The rates that drive revenues for the business decreased significantly at that time and also have decreased between 2006 and 2009.

Costs have increased considerably since 2002, for example, transformers, copper, wire, insurance, vehicles, etc have all increased. North Bay Hydro has worked hard to mitigate these costs and the regulatory process in Ontario does not allow annual adjustments, rather several years of impact are accumulated for recovery when the cost of service application is filed.

North Bay Hydro is faced with a significant task of replacing infrastructure that is end of life. Almost 50% of our poles have been in service for approximately 30 years, with about 24% in service more than 50 years. Much of the equipment at our substations has been in service for more than 35 years and in some cases over 70 years. This plant has served customers well however if not systematically replaced according to a defined plan could result in decreased reliability and safety hazards to our staff and the public. It will take North Bay Hydro several years to replace this old equipment. In the interim we must perform additional maintenance to ensure reliability and safety of the system. These capital and maintenance costs are a significant component of the requested rate increase to improve the system that provides you service. Perhaps you have noted significant construction by crews in the Jane Street and Pinewood area and the rebuild of Gormanville Road to supply the new hospital. New revenue is required to continue with this process of modernizing the system that customers rely on for electricity 24 hours a day, year over year.

I hope this helps to explain some of the reasons behind the proposed rate increase and if you have any further questions please do not hesitate to contact me at extension 305.

Yours truly,



Todd Wilcox
Chief Operating Officer

APPENDIX "C"

North Bay Hydro Distribution Ltd.
License Number ED-2003-0024, File Number EB-2009-0270

CONTINUITY OF RESERVES FOR 2009

Description	Balance at December 31, 2008 Actual Year as per tax returns	Non-Distribution Eliminations	Utility Only Opening Balance	Eliminate Amounts Not Relevant for Test Year Sign Convention: Increase (+) Decrease (-)	Adjusted Utility Balance	Additions	Disposals	Balance for Bridge Year	Change During the Year	Disallowed Expenses
Capital Gains Reserves ss.40(1)			0		0			0	0	
Tax Reserves Not Deducted for accounting purposes										
Reserve for doubtful accounts ss. 20(1)(l)	475,807		475,807		475,807	0	6,006	469,801	-6,006	
Reserve for goods and services not delivered ss. 20(1)(m)	766,147		766,147		766,147	0	34,454	731,693	-34,454	
Reserve for unpaid amounts ss. 20(1)(n)			0		0			0	0	
Debt & Share Issue Expenses ss. 20(1)(e)			0		0			0	0	
Other tax reserves			0		0			0	0	
Total	**1,241,954**	**0**	**1,241,954**	**0**	**1,241,954**	**0**	**40,460**	**1,201,494**	**-40,460**	**0**
Financial Statement Reserves (not deductible for Tax Purposes)										
General Reserve for Inventory Obsolescence (non-specific)	0		0		0			0	0	
General reserve for bad debts	475,807		475,807		475,807	0	6,006	469,801	-6,006	
Accrued Employee Future Benefits:	4,264,214		4,264,214		4,264,214	259,091		4,523,305	259,091	
- Medical and Life Insurance			0		0			0	0	
-Short & Long-term Disability			0		0			0	0	
-Accumulated Sick Leave			0		0			0	0	
- Termination Cost			0		0			0	0	
- Other Post-Employment Benefits			0		0			0	0	
Provision for Environmental Costs			0		0			0	0	
Restructuring Costs			0		0			0	0	
Accrued Contingent Litigation Costs			0		0			0	0	
Accrued Self-Insurance Costs			0		0			0	0	
Other Contingent Liabilities			0		0			0	0	
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)			0		0			0	0	
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)			0		0			0	0	
Other			0		0			0	0	
Total	**4,740,021**	**0**	**4,740,021**	**0**	**4,740,021**	**259,091**	**6,006**	**4,993,106**	**253,085**	**0**

CONTINUITY OF RESERVES FOR 2010

Description	Adjusted Utility Balance	Additions	Disposals	Balance for Test Year	Change During the Year	Disallowed Expenses
Capital Gains Reserves ss.40(1)	0			0	0	
Tax Reserves Not Deducted for accounting purposes						
Reserve for doubtful accounts ss. 20(1)(l)	469,801	1,051	0	470,853	1,051	
Reserve for goods and services not delivered ss. 20(1)(m)	731,693			731,693	0	
Reserve for unpaid amounts ss. 20(1)(n)	0			0	0	
Debt & Share Issue Expenses ss. 20(1)(e)	0			0	0	
Other tax reserves	0			0	0	
Total	**1,201,494**	**1,051**	**0**	**1,202,546**	**1,051**	**0**
Financial Statement Reserves (not deductible for Tax Purposes)						
General Reserve for Inventory Obsolescence (non-specific)	0			0	0	
General reserve for bad debts	469,801	1,051		470,853	1,051	
Accrued Employee Future Benefits:	4,523,305	290,585		4,813,890	290,585	
- Medical and Life Insurance	0			0	0	
-Short & Long-term Disability	0			0	0	
-Accumulated Sick Leave	0			0	0	
- Termination Cost	0			0	0	
- Other Post-Employment Benefits	0			0	0	
Provision for Environmental Costs	0			0	0	
Restructuring Costs	0			0	0	
Accrued Contingent Litigation Costs	0			0	0	
Accrued Self-Insurance Costs	0			0	0	
Other Contingent Liabilities	0			0	0	
Bonuses Accrued and Not Paid Within 180 Days of Year-End ss. 78(4)	0			0	0	
Unpaid Amounts to Related Person and Not Paid Within 3 Taxation Years ss. 78(1)	0			0	0	
Other	0			0	0	
Total	**4,993,106**	**291,636**	**0**	**5,284,743**	**291,636**	**0**

APPENDIX “D”

RESIDENTIAL

Consumption 100 kWh	2009 BILL Volume	2009 BILL RATE $	2009 BILL CHARGE $	2010 BILL Volume	2010 BILL RATE $	2010 BILL CHARGE $	IMPACT $	IMPACT %	% of Total Bill
Monthly Service Charge			12.53			14.84	2.31	18.44%	54.08%
Distribution (kWh)	100	0.0112	1.12	100	0.0133	1.33	0.21	18.75%	4.85%
Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	5.36%
LRAM & SSM Rider (kWh)	100	0.0000	0.00	100	0.0004	0.04	0.04	100.00%	0.15%
Regulatory Assets (kWh)	100	0.0000	0.00	100	0.0004	0.04	0.04	100.00%	0.15%
Sub-Total - Distribution			**15.76**			**17.72**	**1.96**	**12.45%**	**64.58%**
RTSR - Network	104	0.0052	0.54	105	0.0053	0.55	0.01	2.44%	2.02%
RTSR - Connection	104	0.0047	0.49	105	0.0048	0.51	0.02	3.62%	1.84%
Sub-Total - Delivery			**16.79**			**18.78**	**1.99**	**11.87%**	**68.44%**
Wholesale Market Rate	104	0.0065	0.68	105	0.0065	0.68	0.01	0.90%	2.48%
DRC	100	0.0070	0.70	100	0.0070	0.70	0.00	0.00%	2.55%
Cost of Power Commodity (kWh)	104	0.0570	5.92	105	0.0570	5.97	0.05	0.90%	21.77%
Cost of Power Commodity (kWh)	0	0.0660	0.00	0	0.0660	0.00	0.00	0.00%	0.00%
Sub-Total - Other Charges			**24.08**			**26.14**	**2.05**	**8.52%**	**95.24%**
GST		5.00%	1.20		5.00%	1.31	0.10	8.52%	4.76%
TOTAL BILL			**25.29**			**27.44**	**2.15**	**8.52%**	**100.00%**

RESIDENTIAL

Consumption 250 kWh	2009 BILL Volume	2009 BILL RATE $	2009 BILL CHARGE $	2010 BILL Volume	2010 BILL RATE $	2010 BILL CHARGE $	IMPACT $	IMPACT %	% of Total Bill
Monthly Service Charge			12.53			14.84	2.31	18.44%	34.58%
Distribution (kWh)	250	0.0112	2.80	250	0.0133	3.33	0.53	18.75%	7.75%
Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	3.43%
LRAM & SSM Rider (kWh)	250	0.0000	0.00	250	0.0004	0.10	0.10	100.00%	0.23%
Regulatory Assets (kWh)	250	0.0000	0.00	250	0.0004	0.10	0.10	100.00%	0.24%
Sub-Total - Distribution			**17.44**			**19.84**	**2.40**	**13.76%**	**46.23%**
RTSR - Network	260	0.0052	1.35	262	0.0053	1.38	0.03	2.44%	3.22%
RTSR - Connection	260	0.0047	1.22	262	0.0048	1.26	0.04	3.62%	2.95%
Sub-Total - Delivery			**20.01**			**22.49**	**2.48**	**12.38%**	**52.40%**
Wholesale Market Rate	260	0.0065	1.69	262	0.0065	1.70	0.02	0.90%	3.97%
DRC	250	0.0070	1.75	250	0.0070	1.75	0.00	0.00%	4.08%
Cost of Power Commodity (kWh)	260	0.0570	14.80	262	0.0570	14.93	0.13	0.90%	34.80%
Cost of Power Commodity (kWh)	0	0.0660	0.00	0	0.0660	0.00	0.00	0.00%	0.00%
Sub-Total - Other Charges			**38.25**			**40.87**	**2.63**	**6.86%**	**95.24%**
GST		5.00%	1.91		5.00%	2.04	0.13	6.86%	4.76%
TOTAL BILL			**40.16**			**42.92**	**2.76**	**6.86%**	**100.00%**

RESIDENTIAL

Consumption 500 kWh	2009 BILL			2010 BILL			IMPACT		
	Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	$	%	% of Total Bill
Monthly Service Charge			12.53			14.84	2.31	18.44%	21.60%
Distribution (kWh)	500	0.0112	5.60	500	0.0133	6.65	1.05	18.75%	9.68%
Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	2.14%
LRAM & SSM Rider (kWh)	500	0.0000	0.00	500	0.0004	0.20	0.20	100.00%	0.29%
Regulatory Assets (kWh)	500	0.0000	0.00	500	0.0004	0.21	0.21	100.00%	0.30%
Sub-Total - Distribution			**20.24**			**23.37**	**3.13**	**15.46%**	**34.01%**
RTSR - Network	519	0.0052	2.70	524	0.0053	2.77	0.07	2.44%	4.03%
RTSR - Connection	519	0.0047	2.44	524	0.0048	2.53	0.09	3.62%	3.68%
Sub-Total - Delivery			**25.38**			**28.66**	**3.28**	**12.94%**	**41.72%**
Wholesale Market Rate	519	0.0065	3.38	524	0.0065	3.41	0.03	0.90%	4.96%
DRC	500	0.0070	3.50	500	0.0070	3.50	0.00	0.00%	5.09%
Cost of Power Commodity (kWh)	519	0.0570	29.60	524	0.0570	29.87	0.27	0.90%	43.47%
Cost of Power Commodity (kWh)	0	0.0660	0.00	0	0.0660	0.00	0.00	0.00%	0.00%
Sub-Total - Other Charges			**61.86**			**65.44**	**3.58**	**5.79%**	**95.24%**
GST		5.00%	3.09		5.00%	3.27	0.18	5.79%	4.76%
TOTAL BILL			**64.95**			**68.71**	**3.76**	**5.79%**	**100.00%**

RESIDENTIAL

Consumption 800 kWh	2009 BILL			2010 BILL			IMPACT		
	Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	$	%	% of Total Bill
Monthly Service Charge			12.53			14.84	2.31	18.44%	14.56%
Distribution (kWh)	800	0.0112	8.96	800	0.0133	10.64	1.68	18.75%	10.44%
Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	1.44%
LRAM & SSM Rider (kWh)	800	0.0000	0.00	800	0.0004	0.32	0.32	100.00%	0.31%
Regulatory Assets (kWh)	800	0.0000	0.00	800	0.0004	0.33	0.33	100.00%	0.33%
Sub-Total - Distribution			**23.60**			**27.60**	**4.00**	**16.97%**	**27.09%**
RTSR - Network	831	0.0052	4.32	838	0.0053	4.43	0.11	2.44%	4.34%
RTSR - Connection	831	0.0047	3.91	838	0.0048	4.05	0.14	3.62%	3.97%
Sub-Total - Delivery			**31.83**			**36.08**	**4.25**	**13.36%**	**35.40%**
Wholesale Market Rate	831	0.0065	5.40	838	0.0065	5.45	0.05	0.90%	5.35%
DRC	800	0.0070	5.60	800	0.0070	5.60	0.00	0.00%	5.49%
Cost of Power Commodity (kWh)	600	0.0570	34.20	600	0.0570	34.20	0.00	0.00%	33.56%
Cost of Power Commodity (kWh)	231	0.0660	15.24	238	0.0660	15.74	0.49	3.24%	15.44%
Sub-Total - Other Charges			**92.27**			**97.06**	**4.79**	**5.20%**	**95.24%**
GST		5.00%	4.61		5.00%	4.85	0.24	5.20%	4.76%
TOTAL BILL			**96.88**			**101.92**	**5.03**	**5.20%**	**100.00%**

RESIDENTIAL

Consumption 1,000 kWh	2009 BILL			2010 BILL			IMPACT		
	Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	$	%	% of Total Bill
Monthly Service Charge			12.53			14.84	2.31	18.44%	11.92%
Distribution (kWh)	1,000	0.0112	11.20	1,000	0.0133	13.30	2.10	18.75%	10.68%
Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	1.18%
LRAM & SSM Rider (kWh)	1,000	0.0000	0.00	1,000	0.0004	0.40	0.40	100.00%	0.32%
Regulatory Assets (kWh)	1,000	0.0000	0.00	1,000	0.0004	0.42	0.42	100.00%	0.34%
Sub-Total - Distribution			**25.84**			**30.43**	**4.59**	**17.76%**	**24.43%**
RTSR - Network	1,039	0.0052	5.40	1,048	0.0053	5.53	0.13	2.44%	4.44%
RTSR - Connection	1,039	0.0047	4.88	1,048	0.0048	5.06	0.18	3.62%	4.06%
Sub-Total - Delivery			**36.12**			**41.02**	**4.90**	**13.56%**	**32.94%**
Wholesale Market Rate	1,039	0.0065	6.75	1,048	0.0065	6.81	0.06	0.90%	5.47%
DRC	1,000	0.0070	7.00	1,000	0.0070	7.00	0.00	0.00%	5.62%
Cost of Power Commodity (kWh)	600	0.0570	34.20	600	0.0570	34.20	0.00	0.00%	27.46%
Cost of Power Commodity (kWh)	439	0.0660	28.95	448	0.0660	29.57	0.62	2.13%	23.74%
Sub-Total - Other Charges			**113.03**			**118.60**	**5.58**	**4.93%**	**95.24%**
GST		5.00%	5.65		5.00%	5.93	0.28	4.93%	4.76%
TOTAL BILL			**118.68**			**124.53**	**5.85**	**4.93%**	**100.00%**

RESIDENTIAL

Consumption 1,500 kWh	2009 BILL			2010 BILL			IMPACT		
	Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	$	%	% of Total Bill
Monthly Service Charge			12.53			14.84	2.31	18.44%	8.20%
Distribution (kWh)	1,500	0.0112	16.80	1,500	0.0133	19.95	3.15	18.75%	11.02%
Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	0.81%
LRAM & SSM Rider (kWh)	1,500	0.0000	0.00	1,500	0.0004	0.60	0.60	100.00%	0.33%
Regulatory Assets (kWh)	1,500	0.0000	0.00	1,500	0.0004	0.63	0.63	100.00%	0.35%
Sub-Total - Distribution			**31.44**			**37.49**	**6.05**	**19.24%**	**20.70%**
RTSR - Network	1,558	0.0052	8.10	1,572	0.0053	8.30	0.20	2.44%	4.58%
RTSR - Connection	1,558	0.0047	7.32	1,572	0.0048	7.59	0.26	3.62%	4.19%
Sub-Total - Delivery			**46.86**			**53.37**	**6.51**	**13.89%**	**29.48%**
Wholesale Market Rate	1,558	0.0065	10.13	1,572	0.0065	10.22	0.09	0.90%	5.64%
DRC	1,500	0.0070	10.50	1,500	0.0070	10.50	0.00	0.00%	5.80%
Cost of Power Commodity (kWh)	600	0.0570	34.20	600	0.0570	34.20	0.00	0.00%	18.89%
Cost of Power Commodity (kWh)	958	0.0660	63.23	972	0.0660	64.15	0.93	1.47%	35.43%
Sub-Total - Other Charges			**164.92**			**172.45**	**7.53**	**4.56%**	**95.24%**
GST		5.00%	8.25		5.00%	8.62	0.38	4.56%	4.76%
TOTAL BILL			**173.16**			**181.07**	**7.90**	**4.56%**	**100.00%**

RESIDENTIAL

Consumption 2,000 kWh		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	$	%	% of Total Bill
	Monthly Service Charge			12.53			14.84	2.31	18.44%	6.25%
	Distribution (kWh)	2,000	0.0112	22.40	2,000	0.0133	26.60	4.20	18.75%	11.20%
	Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	0.62%
	LRAM & SSM Rider (kWh)	2,000	0.0000	0.00	2,000	0.0004	0.80	0.80	100.00%	0.34%
	Regulatory Assets (kWh)	2,000	0.0000	0.00	2,000	0.0004	0.84	0.84	100.00%	0.35%
	Sub-Total - Distribution			**37.04**			**44.55**	**7.51**	**20.27%**	**18.75%**
	RTSR - Network	2,077	0.0052	10.80	2,096	0.0053	11.07	0.26	2.44%	4.66%
	RTSR - Connection	2,077	0.0047	9.76	2,096	0.0048	10.12	0.35	3.62%	4.26%
	Sub-Total - Delivery			**57.61**			**65.73**	**8.12**	**14.10%**	**27.66%**
	Wholesale Market Rate	2,077	0.0065	13.50	2,096	0.0065	13.62	0.12	0.90%	5.73%
	DRC	2,000	0.0070	14.00	2,000	0.0070	14.00	0.00	0.00%	5.89%
	Cost of Power Commodity (kWh)	600	0.0570	34.20	600	0.0570	34.20	0.00	0.00%	14.39%
	Cost of Power Commodity (kWh)	1,477	0.0660	97.50	1,496	0.0660	98.74	1.24	1.27%	41.56%
	Sub-Total - Other Charges			**216.81**			**226.29**	**9.48**	**4.37%**	**95.24%**
	GST		5.00%	10.84		5.00%	11.31	0.47	4.37%	4.76%
	TOTAL BILL			**227.65**			**237.61**	**9.96**	**4.37%**	**100.00%**

GENERAL SERVICE < 50 kW

Consumption 1,000 kWh		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	Change $	Change %	% of Total Bill
	Monthly Service Charge			21.70			25.70	4.00	18.43%	18.81%
	Distribution (kWh)	1,000	0.0139	13.90	1,000	0.0165	16.50	2.60	18.71%	12.08%
	Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	1.08%
	LRAM & SSM Rider (kWh)	1,000	0.0000	0.00	1,000	0.0002	0.20	0.20	100.00%	0.15%
	Regulatory Assets (kWh)	1,000	0.0000	0.00	1,000	0.0004	0.40	0.40	100.00%	0.29%
	Sub-Total - Distribution			**37.71**			**44.27**	**6.56**	**17.38%**	**32.40%**
	RTSR - Network	1,039	0.0048	4.99	1,048	0.0049	5.11	0.12	2.44%	3.74%
	RTSR - Connection	1,039	0.0042	4.36	1,048	0.0043	4.52	0.16	3.62%	3.31%
	Sub-Total - Delivery			**47.06**			**53.89**	**6.83**	**14.52%**	**39.44%**
	Wholesale Market Rate	1,039	0.0065	6.75	1,048	0.0065	6.81	0.06	0.90%	4.99%
	DRC	1,000	0.0070	7.00	1,000	0.0070	7.00	0.00	0.00%	5.12%
	Cost of Power Commodity (kWh)	750	0.0570	42.75	750	0.0570	42.75	0.00	0.00%	31.29%
	Cost of Power Commodity (kWh)	289	0.0660	19.05	298	0.0660	19.67	0.62	3.24%	14.40%
	Sub-Total - Other Charges			**122.61**			**130.12**	**7.51**	**6.13%**	**95.24%**
	GST		5.00%	6.13		5.00%	6.51	0.38	6.13%	4.76%
	Total Bill			**128.74**			**136.63**	**7.89**	**6.13%**	**100.00%**

GENERAL SERVICE < 50 kW

Consumption 2,000 kWh		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	Change $	Change %	% of Total Bill
	Monthly Service Charge			21.70			25.70	4.00	18.43%	10.21%
	Distribution (kWh)	2,000	0.0139	27.80	2,000	0.0165	33.00	5.20	18.71%	13.10%
	Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	0.58%
	LRAM & SSM Rider (kWh)	2,000	0.0000	0.00	2,000	0.0002	0.40	0.40	100.00%	0.16%
	Regulatory Assets (kWh)	2,000	0.0000	0.00	2,000	0.0004	0.79	0.79	100.00%	0.31%
	Sub-Total - Distribution			**51.61**			**61.36**	**9.75**	**18.89%**	**24.37%**
	RTSR - Network	2,077	0.0048	9.97	2,096	0.0049	10.21	0.24	2.44%	4.06%
	RTSR - Connection	2,077	0.0042	8.72	2,096	0.0043	9.04	0.32	3.62%	3.59%
	Sub-Total - Delivery			**70.31**			**80.61**	**10.31**	**14.66%**	**32.01%**
	Wholesale Market Rate	2,077	0.0065	13.50	2,096	0.0065	13.62	0.12	0.90%	5.41%
	DRC	2,000	0.0070	14.00	2,000	0.0070	14.00	0.00	0.00%	5.56%
	Cost of Power Commodity (kWh)	750	0.0570	42.75	750	0.0570	42.75	0.00	0.00%	16.98%
	Cost of Power Commodity (kWh)	1,327	0.0660	87.60	1,346	0.0660	88.84	1.24	1.41%	35.28%
	Sub-Total - Other Charges			**228.16**			**239.83**	**11.67**	**5.11%**	**95.24%**
	GST		5.00%	11.41		5.00%	11.99	0.58	5.11%	4.76%
	Total Bill			**239.57**			**251.82**	**12.25**	**5.11%**	**100.00%**

GENERAL SERVICE < 50 kW

Consumption 5,000 kWh		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	Change $	Change %	% of Total Bill
	Monthly Service Charge			21.70			25.70	4.00	18.43%	4.30%
	Distribution (kWh)	5,000	0.0139	69.50	5,000	0.0165	82.50	13.00	18.71%	13.81%
	Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	0.25%
	LRAM & SSM Rider (kWh)	5,000	0.0000	0.00	5,000	0.0002	1.00	1.00	100.00%	0.17%
	Regulatory Assets (kWh)	5,000	0.0000	0.00	5,000	0.0004	1.98	1.98	100.00%	0.33%
	Sub-Total - Distribution			**93.31**			**112.65**	**19.34**	**20.72%**	**18.86%**
	RTSR - Network	5,193	0.0048	24.93	5,240	0.0049	25.53	0.61	2.44%	4.27%
	RTSR - Connection	5,193	0.0042	21.81	5,240	0.0043	22.60	0.79	3.62%	3.78%
	Sub-Total - Delivery			**140.05**			**160.78**	**20.73**	**14.80%**	**26.91%**
	Wholesale Market Rate	5,193	0.0065	33.76	5,240	0.0065	34.06	0.30	0.90%	5.70%
	DRC	5,000	0.0070	35.00	5,000	0.0070	35.00	0.00	0.00%	5.86%
	Cost of Power Commodity (kWh)	750	0.0570	42.75	750	0.0570	42.75	0.00	0.00%	7.16%
	Cost of Power Commodity (kWh)	4,443	0.0660	293.26	4,490	0.0660	296.35	3.09	1.05%	49.61%
	Sub-Total - Other Charges			**544.81**			**568.94**	**24.13**	**4.43%**	**95.24%**
	GST		5.00%	27.24		5.00%	28.45	1.21	4.43%	4.76%
	Total Bill			**572.05**			**597.38**	**25.33**	**4.43%**	**100.00%**

GENERAL SERVICE < 50 kW

		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	Change $	Change %	% of Total Bill
Consumption	Monthly Service Charge			21.70			25.70	4.00	18.43%	2.19%
10,000 kWh	Distribution (kWh)	10,000	0.0139	139.00	10,000	0.0165	165.00	26.00	18.71%	14.06%
	Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	0.13%
	LRAM & SSM Rider (kWh)	10,000	0.0000	0.00	10,000	0.0002	2.00	2.00	100.00%	0.17%
	Regulatory Assets (kWh)	10,000	0.0000	0.00	10,000	0.0004	3.95	3.95	100.00%	0.34%
	Sub-Total - Distribution			**162.81**			**198.12**	**35.31**	**21.69%**	**16.89%**
	RTSR - Network	10,387	0.0048	49.86	10,480	0.0049	51.07	1.21	2.44%	4.35%
	RTSR - Connection	10,387	0.0042	43.62	10,480	0.0043	45.20	1.58	3.62%	3.85%
	Sub-Total - Delivery			**256.29**			**294.39**	**38.10**	**14.87%**	**25.09%**
	Wholesale Market Rate	10,387	0.0065	67.51	10,480	0.0065	68.12	0.61	0.90%	5.81%
	DRC	10,000	0.0070	70.00	10,000	0.0070	70.00	0.00	0.00%	5.97%
	Cost of Power Commodity (kWh)	750	0.0570	42.75	750	0.0570	42.75	0.00	0.00%	3.64%
	Cost of Power Commodity (kWh)	9,637	0.0660	636.01	9,730	0.0660	642.19	6.18	0.97%	54.73%
	Sub-Total - Other Charges			**1,072.56**			**1,117.46**	**44.89**	**4.19%**	**95.24%**
	GST		5.00%	53.63		5.00%	55.87	2.24	4.19%	4.76%
	Total Bill			**1,126.19**			**1,173.33**	**47.14**	**4.19%**	**100.00%**

GENERAL SERVICE < 50 kW

		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	Change $	Change %	% of Total Bill
Consumption	Monthly Service Charge			21.70			25.70	4.00	18.43%	1.47%
15,000 kWh	Distribution (kWh)	15,000	0.0139	208.50	15,000	0.0165	247.50	39.00	18.71%	14.15%
	Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	0.08%
	LRAM & SSM Rider (kWh)	15,000	0.0000	0.00	15,000	0.0002	3.00	3.00	100.00%	0.17%
	Regulatory Assets (kWh)	15,000	0.0000	0.00	15,000	0.0004	5.93	5.93	100.00%	0.34%
	Sub-Total - Distribution			**232.31**			**283.60**	**51.29**	**22.08%**	**16.21%**
	RTSR - Network	15,580	0.0048	74.78	15,720	0.0049	76.60	1.82	2.44%	4.38%
	RTSR - Connection	15,580	0.0042	65.44	15,720	0.0043	67.80	2.37	3.62%	3.88%
	Sub-Total - Delivery			**372.53**			**428.00**	**55.48**	**14.89%**	**24.47%**
	Wholesale Market Rate	15,580	0.0065	101.27	15,720	0.0065	102.18	0.91	0.90%	5.84%
	DRC	15,000	0.0070	105.00	15,000	0.0070	105.00	0.00	0.00%	6.00%
	Cost of Power Commodity (kWh)	750	0.0570	42.75	750	0.0570	42.75	0.00	0.00%	2.44%
	Cost of Power Commodity (kWh)	14,830	0.0660	978.77	14,970	0.0660	988.04	9.27	0.95%	56.48%
	Sub-Total - Other Charges			**1,600.31**			**1,665.97**	**65.66**	**4.10%**	**95.24%**
	GST		5.00%	80.02		5.00%	83.30	3.28	4.10%	4.76%
	Total Bill			**1,680.33**			**1,749.27**	**68.94**	**4.10%**	**100.00%**

GENERAL SERVICE > 50 kW

Consumption		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	Change $	Change %	% of Total Bill
25,000 kWh	Monthly Service Charge			311.40			329.78	18.38	5.90%	11.86%
60 kW	Distribution (kWh)	0	0.0000	0.00	0	0.0000	0.00	0.00	0.00%	0.00%
	Distribution (kW)	60	2.1783	130.70	60	2.3153	138.92	8.22	6.29%	5.00%
	Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	0.05%
	LRAM & SSM Rider (kW)	60	0.0000	0.00	60	0.0679	4.07	4.07	100.00%	0.15%
	Regulatory Assets (kW)	60	0.0000	0.00	60	0.4513	27.08	27.08	0.00%	0.97%
	Sub-Total - Distribution			**444.21**			**501.32**	**57.11**	**12.86%**	**18.04%**
	RTSR - Network	60	1.9313	115.88	60	1.9607	117.64	1.76	1.52%	4.23%
	RTSR - Connection	60	1.6636	99.82	60	1.7084	102.50	2.69	2.69%	3.69%
	Sub-Total - Delivery			**659.90**			**721.46**	**61.56**	**9.33%**	**25.96%**
	Wholesale Market Rate	25,966	0.0065	168.78	25,966	0.0065	168.78	0.00	0.00%	6.07%
	DRC	25,000	0.0070	175.00	25,000	0.0070	175.00	0.00	0.00%	6.30%
	Cost of Power Commodity (kWh)	25,966	0.0604	1,567.83	26,200	0.0604	1,581.96	14.14	0.90%	56.91%
	Sub-Total - Other Charges			**2,571.51**			**2,647.21**	**75.70**	**2.94%**	**95.24%**
	GST		5.00%	128.58		5.00%	132.36	3.78	2.94%	4.76%
	TOTAL BILL			**2,700.08**			**2,779.57**	**79.48**	**2.94%**	**100.00%**

GENERAL SERVICE > 50 kW

Consumption		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	Change $	Change %	% of Total Bill
40,000 kWh	Monthly Service Charge			311.40			329.78	18.38	5.90%	7.73%
100 kW	Distribution (kWh)	0	0.0000	0.00	0	0.0000	0.00	0.00	0.00%	0.00%
	Distribution (kW)	100	2.1783	217.83	100	2.3153	231.53	13.70	6.29%	5.43%
	Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	0.03%
	LRAM & SSM Rider (kW)	100	0.0000	0.00	100	0.0679	6.79	6.79	100.00%	0.16%
	Regulatory Assets (kW)	100	0.0000	0.00	100	0.4513	45.13	45.13	0.00%	1.06%
	Sub-Total - Distribution			**531.34**			**614.70**	**83.36**	**15.69%**	**14.41%**
	RTSR - Network	100	1.9313	193.13	100	1.9607	196.07	2.94	1.52%	4.60%
	RTSR - Connection	100	1.6636	166.36	100	1.7084	170.84	4.48	2.69%	4.00%
	Sub-Total - Delivery			**890.83**			**981.60**	**90.77**	**10.19%**	**23.01%**
	Wholesale Market Rate	41,546	0.0065	270.05	41,546	0.0065	270.05	0.00	0.00%	6.33%
	DRC	40,000	0.0070	280.00	40,000	0.0070	280.00	0.00	0.00%	6.56%
	Cost of Power Commodity (kWh)	41,546	0.0604	2,508.52	41,921	0.0604	2,531.14	22.62	0.90%	59.33%
	Sub-Total - Other Charges			**3,949.40**			**4,062.79**	**113.39**	**2.87%**	**95.24%**
	GST		5.00%	197.47		5.00%	203.14	5.67	2.87%	4.76%
	TOTAL BILL			**4,146.87**			**4,265.93**	**119.06**	**2.87%**	**100.00%**

GENERAL SERVICE > 50 kW

Consumption		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	Change $	Change %	% of Total Bill
215,000 kWh	Monthly Service Charge			311.40			329.78	18.38	5.90%	1.56%
500 kW	Distribution (kWh)	0	0.0000	0.00	0	0.0000	0.00	0.00	0.00%	0.00%
	Distribution (kW)	500	2.1783	1,089.15	500	2.3153	1,157.65	68.50	6.29%	5.47%
	Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	0.01%
	LRAM & SSM Rider (kW)	500	0.0000	0.00	500	0.0679	33.95	33.95	100.00%	0.16%
	Regulatory Assets (kW)	500	0.0000	0.00	500	0.4513	225.66	225.66	0.00%	1.07%
	Sub-Total - Distribution			**1,402.66**			**1,748.51**	**345.85**	**24.66%**	**8.27%**
	RTSR - Network	500	1.9313	965.65	500	1.9607	980.33	14.68	1.52%	4.63%
	RTSR - Connection	500	1.6636	831.80	500	1.7084	854.18	22.38	2.69%	4.04%
	Sub-Total - Delivery			**3,200.11**			**3,583.02**	**382.91**	**11.97%**	**16.94%**
	Wholesale Market Rate	223,310	0.0065	1,451.52	223,310	0.0065	1,451.52	0.00	0.00%	6.86%
	DRC	215,000	0.0070	1,505.00	215,000	0.0070	1,505.00	0.00	0.00%	7.12%
	Cost of Power Commodity (kWh)	223,310	0.0604	13,483.30	225,324	0.0604	13,604.87	121.57	0.90%	64.32%
	Sub-Total - Other Charges			**19,639.93**			**20,144.41**	**504.48**	**2.57%**	**95.24%**
	GST		5.00%	982.00		5.00%	1,007.22	25.22	2.57%	4.76%
	TOTAL BILL			**20,621.93**			**21,151.63**	**529.70**	**2.57%**	**100.00%**

GENERAL SERVICE > 50 kW

Consumption		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	Change $	Change %	% of Total Bill
430,000 kWh	Monthly Service Charge			311.40			329.78	18.38	5.90%	0.79%
1,000 kW	Distribution (kWh)	0	0.0000	0.00	0	0.0000	0.00	0.00	0.00%	0.00%
	Distribution (kW)	1,000	2.1783	2,178.30	1,000	2.3153	2,315.30	137.00	6.29%	5.52%
	Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	0.00%
	LRAM & SSM Rider (kW)	1,000	0.0000	0.00	1,000	0.0679	67.90	67.90	100.00%	0.16%
	Regulatory Assets (kW)	1,000	0.0000	0.00	1,000	0.4513	451.32	451.32	0.00%	1.08%
	Sub-Total - Distribution			**2,491.81**			**3,165.77**	**673.96**	**27.05%**	**7.55%**
	RTSR - Network	1,000	1.9313	1,931.30	1,000	1.9607	1,960.65	29.35	1.52%	4.67%
	RTSR - Connection	1,000	1.6636	1,663.60	1,000	1.7084	1,708.37	44.77	2.69%	4.07%
	Sub-Total - Delivery			**6,086.71**			**6,834.79**	**748.08**	**12.29%**	**16.29%**
	Wholesale Market Rate	446,621	0.0065	2,903.04	446,621	0.0065	2,903.04	0.00	0.00%	6.92%
	DRC	430,000	0.0070	3,010.00	430,000	0.0070	3,010.00	0.00	0.00%	7.17%
	Cost of Power Commodity (kWh)	446,621	0.0604	26,966.61	450,648	0.0604	27,209.75	243.14	0.90%	64.85%
	Sub-Total - Other Charges			**38,966.35**			**39,957.57**	**991.22**	**2.54%**	**95.24%**
	GST		5.00%	1,948.32		5.00%	1,997.88	49.56	2.54%	4.76%
	TOTAL BILL			**40,914.67**			**41,955.45**	**1,040.78**	**2.54%**	**100.00%**

General Service > 3000 to 4999 kW

Consumption		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	Change $	Change %	% of Total Bill
2,000,000 kWh	Monthly Service Charge			2,399.29			4,721.33	2,322.04	96.78%	2.57%
3,500 kW	Distribution (kWh)	0	0.0000	0.00	2,000,000	0.0000	0.00	0.00	0.00%	0.00%
	Distribution (kW)	3,500	0.7321	2,562.35	3,500	0.8599	3,009.65	447.30	17.46%	1.64%
	Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	0.00%
	Transformer Credit	3,500	(0.6000)	(2,100.00)	3,500	(0.6000)	(2,100.00)	0.00	0.00%	(1.14%)
	LRAM & SSM Rider (kW)	3,500	0.0000	0.00	3,500	0.0163	57.05	57.05	100.00%	0.03%
	Regulatory Assets (kW)	3,500	0.0000	0.00	3,500	0.6821	2,387.33	2,387.33	0.00%	1.30%
	Sub-Total - Distribution			**2,863.75**			**8,076.83**	**5,213.08**	**182.04%**	**4.40%**
	RTSR - Network	3,500	2.0487	7,170.45	3,500	2.0798	7,279.42	108.97	1.52%	3.97%
	RTSR - Connection	3,500	1.8386	6,435.10	3,500	1.8881	6,608.27	173.17	2.69%	3.60%
	Sub-Total - Delivery			**16,469.30**			**21,964.53**	**5,495.23**	**33.37%**	**11.97%**
	Wholesale Market Rate	2,056,533	0.0065	13,367.46	2,075,075	0.0065	13,487.99	120.53	0.90%	7.35%
	DRC	2,000,000	0.0070	14,000.00	2,000,000	0.0070	14,000.00	0.00	0.00%	7.63%
	Cost of Power Commodity (kWh)	2,056,533	0.0604	124,171.81	2,075,075	0.0604	125,291.40	1,119.58	0.90%	68.29%
	Sub-Total - Other Charges			**168,008.58**			**174,743.91**	**6,735.33**	**4.01%**	**95.24%**
	GST		5.00%	8,400.43		5.00%	8,737.20	336.77	4.01%	4.76%
	TOTAL BILL			**176,409.01**			**183,481.11**	**7,072.10**	**4.01%**	**100.00%**

General Service > 3000 to 4999 kW

Consumption		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	Change $	Change %	% of Total Bill
1,400,000 kWh	Monthly Service Charge			2,399.29			4,721.33	2,322.04	96.78%	3.58%
2,800 kW	Distribution (kWh)	0	0.0000	0.00	1,400,000	0.0000	0.00	0.00	0.00%	0.00%
	Distribution (kW)	2,800	0.7321	2,049.88	2,800	0.8599	2,407.72	357.84	17.46%	1.83%
	Smart Meter / Storm Rider (per month)			2.11			1.47	(0.64)	(30.33%)	0.00%
	Transformer Credit	2,800	(0.6000)	(1,680.00)	2,800	(0.6000)	(1,680.00)	0.00	0.00%	(1.28%)
	LRAM & SSM Rider (kW)	2,800	0.0000	0.00	2,800	0.0163	45.64	45.64	100.00%	0.03%
	Regulatory Assets (kW)	2,800	0.0000	0.00	2,800	0.6821	1,909.87	1,909.87	0.00%	1.45%
	Sub-Total - Distribution			**2,771.28**			**7,406.03**	**4,634.75**	**167.24%**	**5.62%**
	RTSR - Network	2,800	2.0487	5,736.36	2,800	2.0798	5,823.54	87.18	1.52%	4.42%
	RTSR - Connection	2,800	1.8386	5,148.08	2,800	1.8881	5,286.62	138.54	2.69%	4.01%
	Sub-Total - Delivery			**13,655.72**			**18,516.18**	**4,860.46**	**35.59%**	**14.06%**
	Wholesale Market Rate	1,439,573	0.0065	9,357.22	1,452,553	0.0065	9,441.59	84.37	0.90%	7.17%
	DRC	1,400,000	0.0070	9,800.00	1,400,000	0.0070	9,800.00	0.00	0.00%	7.44%
	Cost of Power Commodity (kWh)	1,439,573	0.0604	86,920.27	1,452,553	0.0604	87,703.98	783.71	0.90%	66.58%
	Sub-Total - Other Charges			**119,733.21**			**125,461.75**	**5,728.54**	**4.78%**	**95.24%**
	GST		5.00%	5,986.66		5.00%	6,273.09	286.43	4.78%	4.76%
	TOTAL BILL			**125,719.88**			**131,734.84**	**6,014.96**	**4.78%**	**100.00%**

Street Lighting

		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	Change $	Change %	% of Total Bill
Billing Determinants	Monthly Service Charge	5,682	0.4400	2,499.92	5,682	2.6927	15,298.96	12,799.04	511.98%	29.38%
5,682 Connections	Distribution (kWh)	0	0.0000	0.00	0	0.0000	0.00	0.00	0.00%	0.00%
275,000 kWh	Distribution (kW)	800	2.3570	1,885.60	800	14.4352	11,548.16	9,662.56	512.44%	22.18%
	LRAM & SSM Rider (kW)	800	0.0000	0.00	800	0.0000	0.00	0.00	0.00%	0.00%
800 kW	Regulatory Assets (kW)	800	0.0000	0.00	800	(0.8624)	(689.90)	(689.90)	0.00%	(1.32%)
	Sub-Total - Distribution			**4,385.52**			**26,157.22**	**21,771.70**	**496.44%**	**0.50**
	RTSR - Network	800	1.4565	1,165.20	800	1.4786	1,182.91	17.71	1.52%	2.27%
	RTSR - Connection	800	1.2860	1,028.80	800	1.3206	1,056.49	27.69	2.69%	2.03%
	Sub-Total - Delivery			**6,579.52**			**28,396.62**	**21,817.09**	**331.59%**	**54.53%**
	Wholesale Market Rate	285,630	0.0065	1,856.59	288,205	0.0065	1,873.33	16.74	0.90%	3.60%
	DRC	275,000	0.0070	1,925.00	275,000	0.0070	1,925.00	0.00	0.00%	3.70%
	Cost of Power Commodity (kWh)	285,630	0.0604	17,246.09	288,205	0.0604	17,401.58	155.50	0.90%	33.42%
	Sub-Total - Other Charges			**27,607.20**			**49,596.53**	**21,989.33**	**79.65%**	**95.24%**
	GST		5.00%	1,380.36		5.00%	2,479.83	1,099.47	79.65%	4.76%
	TOTAL BILL			**28,987.56**			**52,076.36**	**23,088.80**	**79.65%**	**100.00%**

Street Lighting

		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	Change $	Change %	% of Total Bill
Billing Determinants	Monthly Service Charge	5,682	0.4400	2,499.92	5,682	2.6927	15,298.96	12,799.04	511.98%	26.83%
5,682 Connections	Distribution (kWh)	0	0.0000	0.00	0	0.0000	0.00	0.00	0.00%	0.00%
336,000 kWh	Distribution (kW)	800	2.3570	1,885.60	800	14.4352	11,548.16	9,662.56	512.44%	20.25%
	LRAM & SSM Rider (kW)	800	0.0000	0.00	800	0.0000	0.00	0.00	0.00%	0.00%
800 kW	Regulatory Assets (kW)	800	0.0000	0.00	800	(0.8624)	(689.90)	(689.90)	0.00%	(1.21%)
	Sub-Total - Distribution			**4,385.52**			**26,157.22**	**21,771.70**	**496.44%**	**0.46**
	RTSR - Network	800	1.4565	1,165.20	800	1.4786	1,182.91	17.71	1.52%	2.07%
	RTSR - Connection	800	1.2860	1,028.80	800	1.3206	1,056.49	27.69	2.69%	1.85%
	Sub-Total - Delivery			**6,579.52**			**28,396.62**	**21,817.09**	**331.59%**	**49.81%**
	Wholesale Market Rate	348,987	0.0065	2,268.42	352,134	0.0065	2,288.87	20.45	0.90%	4.01%
	DRC	336,000	0.0070	2,352.00	336,000	0.0070	2,352.00	0.00	0.00%	4.13%
	Cost of Power Commodity (kWh)	348,987	0.0604	21,071.58	352,134	0.0604	21,261.57	189.99	0.90%	37.29%
	Sub-Total - Other Charges			**32,271.52**			**54,299.06**	**22,027.53**	**68.26%**	**95.24%**
	GST		5.00%	1,613.58		5.00%	2,714.95	1,101.38	68.26%	4.76%
	TOTAL BILL			**33,885.10**			**57,014.01**	**23,128.91**	**68.26%**	**100.00%**

Street Lighting

		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	Change $	Change %	% of Total Bill
Billing Determinants	Monthly Service Charge	5,682	0.4400	2,499.92	5,682	2.6927	15,298.96	12,799.04	511.98%	32.34%
5,682 Connections	Distribution (kWh)	0	0.0000	0.00	0	0.0000	0.00	0.00	0.00%	0.00%
216,000 kWh	Distribution (kW)	800	2.3570	1,885.60	800	14.4352	11,548.16	9,662.56	512.44%	24.41%
	LRAM & SSM Rider (kW)	800	0.0000	0.00	800	0.0000	0.00	0.00	0.00%	0.00%
800 kW	Regulatory Assets (kW)	800	0.0000	0.00	800	(0.8624)	(689.90)	(689.90)	0.00%	(1.46%)
	Sub-Total - Distribution			**4,385.52**			**26,157.22**	**21,771.70**	**496.44%**	**0.55**
	RTSR - Network	800	1.4565	1,165.20	800	1.4786	1,182.91	17.71	1.52%	2.50%
	RTSR - Connection	800	1.2860	1,028.80	800	1.3206	1,056.49	27.69	2.69%	2.23%
	Sub-Total - Delivery			**6,579.52**			**28,396.62**	**21,817.09**	**331.59%**	**60.03%**
	Wholesale Market Rate	224,349	0.0065	1,458.27	226,372	0.0065	1,471.42	13.15	0.90%	3.11%
	DRC	216,000	0.0070	1,512.00	216,000	0.0070	1,512.00	0.00	0.00%	3.20%
	Cost of Power Commodity (kWh)	224,349	0.0604	13,546.02	226,372	0.0604	13,668.15	122.14	0.90%	28.90%
	Sub-Total - Other Charges			**23,095.81**			**45,048.18**	**21,952.38**	**95.05%**	**95.24%**
	GST		5.00%	1,154.79		5.00%	2,252.41	1,097.62	95.05%	4.76%
	TOTAL BILL			**24,250.60**			**47,300.59**	**23,050.00**	**95.05%**	**100.00%**

Sentinel Lighting

		2009 BILL			2010 BILL			IMPACT		
		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	Change $	Change %	% of Total Bill
Billing Determinants	Monthly Service Charge	1	1.9800	1.98	1	3.3721	3.37	1.39	70.31%	10.20%
1 Connection	Distribution (kWh)	0	0.0000	0.00	0	0.0000	0.00	0.00	0.00%	0.00%
180 kWh	Distribution (kW)	1	6.9018	6.90	1	11.7654	11.77	4.86	70.47%	35.60%
	LRAM & SSM Rider (kWh)	1	0.0000	0.00	1	0.000000	0.00	0.00	0.00%	0.00%
1 kW	Regulatory Assets (kW)	1	0.0000	0.00	1	(0.3749)	(0.37)	(0.37)	0.00%	(1.13%)
	Sub-Total - Distribution			**8.88**			**14.76**	**5.88**	**66.21%**	**0.45**
	RTSR - Network	1	1.4639	1.46	1	1.4861	1.49	0.02	1.52%	4.50%
	RTSR - Connection	1	1.3130	1.31	1	1.3483	1.35	0.04	2.69%	4.08%
	Sub-Total - Delivery			**11.66**			**17.60**	**5.94**	**50.94%**	**53.25%**
	Wholesale Market Rate	187	0.0065	1.22	189	0.0065	1.23	0.01	0.90%	3.71%
	RRRP	0	0.0000	0.00	0	0.0000	0.00	0.00	0.00%	0.00%
	DRC	180	0.0070	1.26	180	0.0070	1.26	0.00	0.00%	3.81%
	Cost of Power Commodity (kWh)	187	0.0604	11.29	189	0.0604	11.39	0.10	0.90%	34.47%
	Sub-Total - Other Charges			**25.42**			**31.47**	**6.05**	**23.80%**	**95.24%**
	GST		5.00%	1.27		5.00%	1.57	0.30	23.80%	4.76%
	TOTAL BILL			**26.69**			**33.05**	**6.35**	**23.80%**	**100.00%**

Unmetered Scattered

Consumption		2009 BILL			2010 BILL			IMPACT		
1,000 kWh		Volume	RATE $	CHARGE $	Volume	RATE $	CHARGE $	$	%	% of Total Bill
	Monthly Service Charge			21.75			25.70	3.95	100.00%	17.95%
	Distribution (kWh)	1,000	0.0139	13.90	1,000	0.0221	22.10	8.20	58.99%	15.44%
	LRAM & SSM Rider (kWh)	1,000	0.0000	0.00	1,000	0.0024	2.40	2.40	100.00%	1.68%
	Regulatory Assets (kW)	1,000	0.0000	0.00	1,000	0.0003	0.26	0.26	0.00%	0.18%
	Sub-Total - Distribution			**35.65**			**50.46**	**14.81**	**41.54%**	**0.35**
	RTSR - Network	1,039	0.0048	4.99	1,048	0.0049	5.11	0.12	2.44%	3.57%
	RTSR - Connection	1,039	0.0042	4.36	1,048	0.0043	4.52	0.16	3.62%	3.16%
	Sub-Total - Delivery			**45.00**			**60.09**	**15.09**	**33.53%**	**41.98%**
	Wholesale Market Rate	1,039	0.0065	6.75	1,048	0.0065	6.81	0.06	0.90%	4.76%
	RRRP	0	0.0000	0.00	0	0.0000	0.00	0.00	0.00%	0.00%
	DRC	1,000	0.0070	7.00	1,000	0.0070	7.00	0.00	0.00%	4.89%
	Cost of Power Commodity (kWh)	750	0.0570	42.75	750	0.0570	42.75	0.00	0.00%	29.87%
	Cost of Power Commodity (kWh)	289	0.0660	19.05	298	0.0660	19.67	0.62	3.24%	13.74%
	Sub-Total - Other Charges			**120.55**			**136.32**	**15.77**	**13.08%**	**95.24%**
	GST		5.00%	6.03		5.00%	6.82	0.79	13.08%	4.76%
	TOTAL BILL			**126.58**			**143.13**	**16.56**	**13.08%**	**100.00%**

APPENDIX ‘E”

November 15, 2009

Mr. Todd Wilcox
Chief Operating Officer
North Bay Hydro
74 Commerce Crescent
North Bay ON P1B 8Y5

Re: Independent Third Party Review
Proposed LRAM/SSM Recovery for
North Bay Hydro Distribution Limited (NBHDL)

Dear Mr. Wilcox:

As per our discussion I am preparing my report on the above subject. Over the past several months we have had several discussions on the content of the application for LRAM and SSM recovery. These discussions led to various changes to the filing of October 26, 2009.

Section 7.5 of the Guidelines for Electricity Distributor Conservation and Demand management EB-2008-0037 (Guidelines) dated March 28, 2008 outlines the responsibilities of the Independent Third Party Review (Review). Section 7.3 of the Guidelines states a distributor should engage an independent third party to make a claim for LRAM and SSM. This statement appears not to mandate the requirement with the word "should" and the fact it is contained in a "Guideline". More recent Ontario Energy Board (OEB) decisions confirm the Review is a necessary requirement. Thus I am now submitting the Review.

One requirement is for the Review to cover programs funded in 2007 and beyond. The focus of this Review is mostly on the years 2007 and 2008, but one cannot ignore the two previous years in protecting the interests of ratepayers while at the same time ensuring that NBHDL is recovering adequate funding through LRAM and SSM.

OPA Funded Programs

We determined in advance of filing that the OPA programs delivered by NBHDL for 2008 would not be submitted for claim in this filing, but would be in a later rate filing. Thus there is no review required for the OPA programs as they were not submitted.

The 2006-2008 OPA conservation results were submitted to NBHDL in July 2009. The measures for both 2006 and 2007 were shown as "final" while 2008 was labelled as "preliminary". As a result we determined that NBHDL would file only 2006 and 2007 and wait to file 2008 when the results were shown as "final". These programs were filed October 26, 2009 using the exact data provided by the OPA assuming they had verified program results as they were shown as "final". Although the input assumptions used for 2006 and 2007 differ substantially, we doubt it is necessary to alter the submission because the OPA states they are

"final" and therefore must meet the verification requirements. We assume they have done their own verification and are satisfied they meet the regulators requirement. We assume that when the 2008 results are determined "final" you will be able to file for LRAM recovery based on the data provided by the OPA later this year. Year 2006 appears to use the OEB Assumptions and Measures List (OEB Tables) and year 2007 uses a version of the OPA Measures and Assumptions List.

One should look forward and plan for the filing for LRAM recovery for the years 2008 and 2009 for the OPA programs delivered by NBHDL. A Third Party Review will be required for those programs by either the OPA or a third party designated by the OPA. Data will need to be recorded properly for the Third Party Review and LRAM recovery calculations.

CDM Programs Funded Through Distribution Rates

The only programs funded through Distribution Rates are those related to Third Tranche. As a result we have the benefit of Annual Reports for the years 2005, 2006, 2007 and 2008 to conduct the review. Most of the emphasis will be on 2007 and 2008.

Cost Effectiveness

Program design and implementation was based on the Total Resource Cost Guide issued September 8, 2005. Third Tranche programs were launched during 2005 and early 2006. Any subsequent revisions were based on that revision or the later version issued October 2, 2006. This is broken into parts: residential and demand reduction as the approach is considerably different. The residential portion only affects the LRAM and SSM recovery for residential whereas the demand reduction affects the LRAM and SSM for general service < 50 kW, general service > 50 kW, unmetered scattered load and residential. The Third Tranche annual reports demand reduction was submitted by segment: commercial, institutional and industrial. In addition to residential and demand reduction one optional program (traffic lights) is included in the LRAM and SSM recovery. The process for the traffic lights is the same as demand reduction, thus is included with that group.

Residential

As you know the residential programs include water heater tune-up, refrigerator buy-back, energuide for houses and information based. Each of the residential programs was evaluated using the technology screening analysis, program screening analysis and portfolio screening analysis except for information based.

For the benefit of other readers I'll include the example of the water heater tune-up program to explain the approach for all factors affecting the TRC calculation. Initially it was determined the program would involve tank wrap, pipe wrap, faucet aerator, efficient showerhead, and one compact fluorescent bulb. All five components were included in the OEB Assumptions and Measures List issued September 8, 2005. For screening purposes avoided costs, demand and energy savings, equipment life, equipment costs, free ridership, distributor program costs and portfolio costs were all considered. All but the distributor program costs and portfolio costs were available from the OEB Assumptions and Measures List. The water heater tune-up program resulted in a positive NPV for the two screenings using the total budget amount for water heater tune-up in the TRC calculation. To ensure no surprises, costs were investigated for the tank wrap, pipe wrap, faucet aerator, efficient showerhead, and a compact fluorescent bulb. In addition prices were obtained for delivery of the program including the installation of the equipment with all contract overheads. For this program all materials were purchased by NBHDL and the contractor picked up the materials from stores. Reports were

provided by the contractor outlining the numbers of each installed. These were compared to the material taken from stores.

The same approach was used for the refrigerator buy-back program, energuide for houses program and like-for-like changes as part of the demand reduction program. The latter program is not residential but utilized the same process. For the latter program it was used to determine which measures would be included and which wouldn't be acceptable to a fixed incentive rate for certain measures to simplify and speed up the process. This proved to be a useful program representing energy savings of 708,113 kWh or about 10% of the total savings of the demand reduction program to April 30, 2008 for all classes of customers. At each year end actual costs were determined at the program level and included in the TRC calculation. The only negative TRC occurred in the energuide for houses program in 2006. Natural Resources Canada withdrew from the NBHDL program resulting in a loss of support after considerable expenses causing a negative TRC. NBHDL cancelled to energuide for houses program during 2006.

The only remaining residential program is the information based program. This program did not include a TRC screening as it was originally intended mostly to educate the public on energy conservation, safety and the environment through various means such as advertising, radio interviews, newspaper articles, promotional material, panel discussions, school campaigns, cheque presentations and community programs. To gain momentum and encourage participation other sessions were organized along with other interested parties to encourage greater participation. Incandescent bulb exchanges for LED Christmas lights and compact fluorescents began in late 2006 and carried on through to the end of Third Tranche. These proved very beneficial by involving many more customers. They were very interested in the new technologies and were encouraged to install the CFL's in high use areas to maximize energy savings and save the most money. In addition to these initiatives project porchlight began with volunteers and field staff delivering 20,000 CFL's door to door. The CFL's were well received and welcomed the recommendation to install them in high use areas as well as the means of disposal of the CFL's. The distribution was broad geographically and involved a diverse cross section of residents of the City of North Bay.

The TRC based on actual costs for the program as per the OEB Assumptions and Measures List contained in the TRC Guide issued October 2, 2006 which remained unchanged to the one issued in March 28, 2008 within a month of the completion of Third Tranche. The TRC had been negative to the end of 2006 for this program but was positive by $313,611 as of April 30, 2008.

The net TRC at the portfolio level for the four residential programs: water heater tune-up, refrigerator buy-back, energuide for houses and information based program was positive by $816,911 through the life of the program.

Demand Reduction

For the duration of Third Tranche there were 100 projects completed from 2005 through April 30, 2008. Some of the 100 projects were unique requiring the use of engineering calculations and/or proxies as the technologies were not included in the OEB Assumptions and Measures List.

The process up to the approval of the project is well documented in the annual reports, thus will not repeat much in this section except what is related to cost effectiveness. Once the data is collected from the customer,

customer representative or NBHDL representative a TRC screening analysis is conducted at the program level. There is a great deal of dialogue documented among the consultants, suppliers, contractors and customers regarding the project at this stage to ensure the best accuracy possible.

For lighting the following is required to conduct a TRC screening: detailed cost estimates, material lists, equipment life used for project in hours, base case wattage by fixture together with annual operating hours, efficient case wattage by fixture together with annual operating hours, indicate replacement, new or removal and number of units for each group where there is any difference in foregoing information. Normally none of the measures submitted agree exactly with the OEB Assumptions and Measures List. The kWh saved are calculated from the provided information (kW/unit*number of units*annual operating hours for base case) - (kW/unit*number of units*annual operating hours for efficient case). Equipment life for TRC is calculated by dividing the life of lamp by the annual operating time, seasonal energy usage is calculating by prorating the kWh saved from the calculation to the proxy kWh saved. The peak kW saved for summer and winter is calculated based on a formula developed in the annual reports for different types of lights. In most part it is a proration similar to seasonal energy usage. After the TRC calculation is completed and if positive for the project an agreement may be executed including an incentive calculated from the peak summer kW and peak winter kW.

After the lighting project is completed the installation is verified with a walk through counting each type of fixture and numbers of lamps. Copies of invoices for labour and material are obtained along with any available technical data. Where the invoices do not include the technical data for the lamps including such information as wattage and life of lamp they must be obtained later. The material invoices and counts are compared with the original plan to determine any differences. Common changes is the increase or decrease in T8 lamp wattage, numbers of lamps, rewiring to eliminate fixtures or ballasts, life of lamp, operating hours and costs. These are all included in the new TRC calculation and recalculated as final until year end when the full utility actual costs replaces the estimated utility costs.

Measures other than lighting are dealt with in the same manner as the example above but may require quite different information from qualified experts to conduct the TRC analysis. NBHDL documented many examples in their annual reports in addition to lighting. In most part the differences were related to calculating the energy saved, peak kW saved and the load profile. The process is the same as the lighting example above.

All the measures require the above information. Below are a few examples of measures that require information in place or in addition to the lighting example. As a minimum the same type information is required for all measures.

- For occupancy sensors they required a schedule of controlled lights which included numbers, wattages and expected reduction of hours use. A proxy to make the necessary TRC calculation;
- For adding lights to a photocell or installing a photocell, the Street Light Profile is used for seasonal energy. Since this was not on the OEB Assumptions and Measures List the free rider used was 30% as it was defined as a custom project; and
- For the installation of an energy efficient 5000 KVA transformer technical data including calculated differences between what would have been purchased if not energy efficient which would be the base case. The difference in kWh losses and peak kW losses was calculated from the data obtained from the

- engineer. Also the difference in cost for the two transformers was obtained and treated as incremental costs. A replacement chiller was treated in the same way.

The above and many more are described in sections 3.1, 3.6, 3.7, 3.8 and 3.11 of the annual reports. The total TRC is positive for demand reduction by $1,951,467.

The following is in more general terms rather than the specifics above which address the TRC calculation, electrical energy and demand savings, TRC Costs including equipment costs and program costs related to cost effectiveness as per the Guidelines.

Program costs referenced in the above examples and all projects included development and start-up costs, promotion, equipment and installation, monitoring and evaluation and administration. NBHDL determined early in Third Tranche not to utilize indirect costs as a way of allocating costs to programs. Instead all costs were charged to the program. This did require some proration of time by staff and consultants.

Promotion costs were charged to specific programs, some needed to be allocated based on activities. Incentive payments were only for demand reduction and refrigerator buy-back and were not included in the TRC calculation. Incentives represented a sizeable portion of the budget.

There was very little in the way of distribution equipment and installation costs for Third Tranche. When there was it was charged to the appropriate program.

Monitoring and Evaluation occurred on a regular basis. Those items that drive the TRC test occur every time there is a new, revised or completed application. In addition when any reports are required, follow-up on progress or any other items related to the ongoing operation of the programs such as ensuring that contractors and consultants have what they need.

During Third Tranche programs were improved for efficiency and delivery channels changed for efficiency and faster results. There is plenty of documentation on all the projects. At some point in time they should be combined in one place.

All administrative costs are charged directly to programs. We didn't request access to any of that information, but assume all was reported.

Free riders are primarily derived from the inputs and assumptions where they exist. Nearly in all cases free riders were 10% except water heater tank wraps which is at 5%. The exception is for those defined as "Custom Projects" as per section 7.2.3 of the Guidelines where 30% is required. In most cases the project does not involve customized design and engineering, but is not included in the OEB Assumptions and Measures List thus it should be considered a Custom Project and use 30% (as per "Inputs and Assumptions for Calculating Total Resource Cost" dated March 28, 2008) for free ridership. There is more on this in the input assumptions section.

For all measures undertaken for Third Tranche attribution is 100% as there has been no involvement on any projects with a non-regulated third party as per section 3.4.2 of the Guidelines.

NBHDL assumes that a CDM measures remain in place for the equipment life as per the inputs and assumptions. There is no evidence to vary from the "Inputs and Assumptions for Calculating Total Resource Cost" dated March 28, 2008 which states that "... distributors should assume 100% persistence in assessing CDM cost effectiveness ..." which references section 3.4.3 of the Guidelines.

Section 3.4.4 of the Guidelines states it is appropriate for distributors to include distribution and transmission system losses to adjust energy savings for benefit-cost analysis for the 2008 annual report and should not be included in the calculation of LRAM and SSM recovery. NBHDL has ignored using losses to improve benefit-cost analysis for Third Tranche and has not included losses for the calculation of LRAM and SSM.

In our opinion Third Tranche has been very cost effective using actual costs, calculated kWh saved based on input of third parties and customers, the use of high efficient and long life equipment. The process is sound and has many checks and balances resulting accurate TRC calculations.

We have three concerns as per the following:

- One concern is that additional or less OM&A is not considered as part of the incremental costs of very many measures. It is difficult to know if this would result in higher or lower SSM recovery and is not likely material to LRAM or SSM.
- The second concern is related to the residential information program where it is assumed that the LRAM and SSM recovery is 100% residential. There doesn't appear to be any way to determine what should be allocated to other classes if any. It is unlikely that more than 5% of the savings and costs belong to other classes. It would not be material to the other classes but may be somewhat to residential if the benefit and cost was transferred to other classes. In any case it would be most difficult to come up with a number. To help or completely offset this potential issue it was discovered during the Third Party Review that one project with 750 CFL's was allocated to general service <50 kW rather than residential.
- The third concern is the peak load calculation for winter and summer for the demand reduction programs using the developed formula from previous annual reports. We looked at Commercial T8 lighting only and found the OPA Measures and Assumptions List worked best from 5400 hours to 500 hours. Over 6000 hours it generated larger peak kW savings than the difference in wattage between the base case and efficiency case. From 5400 hours to 6000 hours the OPA had a higher value than NBHDL and had a power factor of more than 90%. For the values less than 5400 hours the OPA always had a lesser value than NBHDL. This came about because the load profile is lower for both summer and winter peaks than the OEB Assumptions and Measures List. Proration of the kWh of the sample using the peak kW values for winter and summer along with the kWh saved from the OEB Assumptions and Measures List didn't work much better than OPA. Proration didn't work for over 4000 hours for the same reason OPA didn't work for over 5400 hours. For less than 4000 hours the peak kW was less than NBHDL approach and more than OPA. For Third Tranche NBHDL used the OEB Assumptions and Measures List and came up with reasonable peak kW, the formula wasn't perfect but likely adequate. The only values provided in the List was 4000 hours for three examples with different kWh savings for winter and summer peak kW. The NBHDL formula worked correctly

- for those three cases and didn't provide any data out of range. The formula was designed to produce the same kW as on the OEB Assumptions and Measures List at 4000 hours and maintain the same peak kW for anything over 3250 hours. It was assumed that when lights are on 3250 hours they will be on for the winter and summer peak periods. The 3250 hours was calculated based on the peak occurring between 7:00am and 8:00pm or a 13 hours period. The peak would only occur on weekdays less statutory holidays. Assuming 10 stat holidays the 3250 is arrived at by multiplying 13*50. Many businesses operate less than 3250 thus will likely always operate during the peak period as well, but the peak may occur when they are closed. A common business operating time is from 8:00 am to 6:00 pm which would result in 2500 hours. The formula reduces the peaks by 23% at 2500 hours. This deduction appears reasonable. The deduction would be far greater using either the OPA or proration method. This requires further investigation for various types of lights for both residential and commercial. Bob Mason & Associates will investigate this further.

Participation Levels

For demand reduction, participants are defined by NBHDL as numbers of units installed such as number of fixtures (installed, retrofitted, replaced or removed) for lighting, number of controls as opposed to number of fixtures controlled or load controlled, number of units with thermal envelope improvements, number of roof tops installed, and number of efficient appliances installed.

These quantities all appear on the TRC calculations which explained under cost effectiveness are derived from the customer, NBH staff and third parties such as contractors and consultants. The details can be found on the TRC for each project by measure. These measures are separated for new, removals and retrofit, controls associated with lights, different operating hours or actual incremental costs per unit. This data is linked to a file (the file) that totals all participants together for such things as lighting, controls and appliances. Then these quantities are linked to the section on measures in Appendix B for each program or sub program which is submitted in the annual reports.

There is a wide variety of energy usage per unit using this approach, but it is consistent each year. For example one control system resulted in annual energy savings of 369,690 where in another case 82 controls controlled 773 fixtures with a load 44,834 watts and annual energy savings of 42,026 kWh. The total of all the measures on this file that summarizes the numbers of participants is balanced to the total kWh saved by segment as a cross check of data. We followed the flow of the numbers of participants from what was provided by consultants and others from screening to actual constructed data including invoices, to TRC calculations, to "the file", to the measures in Appendix B.

Participants for demand reduction programs were only available by segment not by class. When the energy data and TRC's were reformatted to classes from segments the participants were not. This could be done but with a lot of work. The annual kWh saved and TRC's were transferred from segment to class and all quantities reconciled successfully thus there is no reason to suspect the numbers of participant would not also reconcile.

For residential programs (water heater tune-up, refrigerator buy-back and energuide for houses) we were able to follow the numbers of participants from the reports prepared by the contractor delivering these programs to

the TRC to Appendix B of the annual report. We did not attempt to match these with issues from NBHDL stores. These programs were much easier to follow as there were far fewer measures and the contractor reports summarized the participants quarterly with life to date numbers. In this case participants for the water heater tune-up were defined as number of installed tank wraps, faucet aerators, CFL's, pipe wrap and shower heads. For refrigerator buy-back it was number of second fridges removed and for energuide for houses it was number of homes upgraded, number of fans using less energy and the number of thermal envelope improvements by measure.

For the remaining residential program (information based) the same process was followed. The lighting was the same as demand reduction above except it was assumed all installations were residential. The source of numbers of CFL's came from various initiatives prepared by NBHDL staff following activities such as light exchanges, promotional give-aways, and project porchlight. The number of participants related to CFL's is the numbers that were personally given to customers together with energy efficient information.

For the activities such as presentations, panel discussions, radio interviews and the like, the numbers of participants were derived from reports submitted by the contractor and NBH staff. Some numbers were difficult to verify unless there were give-aways involved such as promotional material. In most part they were best estimates by numbers of attendees. It doesn't appear that any data from newspapers, radio stations or TV stations was obtained for readership or audience size. Estimates were reported which often matched the number of residential customers at NBHDL. The reporting of these numbers only occurred a few times and then stopped because of lack of confidence in the numbers. These quantities have no bearing on the LRAM or SSM recovery.

There is no reason to believe the number of participants recorded and used in all calculations is not close to 100% accuracy as a lot of effort was put into ensuring the best possible information was included in the TRC calculation.

Input Assumptions

Most of the Third Party Assessment took place much earlier than this final report dated November 15, 2009. It began at the time the 2009 annual report was written during the first quarter of 2009. At that time it was determined for the 2008 annual report that any projects that were not included in the OEB Assumptions and Measures List and had no justifiable proxy would be treated as a Custom Projects and free riders would be 30% rather than 10% as previously reported. NBHDL and Bob Mason & Associates did not consider many of these projects as Custom as they were normal energy efficient initiates. Many did not require customized design and engineering or specialized equipment. For LRAM and SSM recovery free riders for projects previously reported in 2005, 2006 and 2007 were changed to 30% when not included in the OEB Assumptions and Measures List and had no justifiable proxy to satisfy the definition for Custom Projects in section 3.3 of the TRC Guide dated September 8, 2005 or section 7.2.3 of the Guideline. Approximately 25 of these projects were documented and included with LRAM and SSM filing in Exhibit 10, Appendix 10-C. At least half of these projects did not require customized design and engineering or specialized equipment and should not have been subject to the free riders of 30%. An example would be the use of photocells to control lights where the street light profile is adequate.

According to section 7.3 of the Guidelines under LRAM it states that the input assumptions used for

calculation of LRAM should be the best available at the time of the Third Party Assessment. The timing of

the Third Party Assessment is November 2009. It provides an example that if any input assumptions change in 2007, those changes should apply for LRAM purposes from the beginning of 2007 onwards until changed again. Under SSM of the same section it states that if any input assumptions change in 2007, those changes would apply for SSM purposes from the beginning of 2008 onwards until changed again. Thus based on the input assumptions changing March 28, 2008, LRAM recovery would be based on the new input assumptions issued March 28, 2008 and SSM recovery would be based on the revision of October 2, 2006.

On January 27, 2009 the Board issued a letter endorsing the OPA List for use by distributors containing new input assumptions. The relevant section 7.3 is included in the letter confirming the criteria of the above paragraph. Thus based on the Third Party Assessment of 2009 and ignoring the quote "best available" the LRAM recovery would be based on the new input assumptions issued January 27, 2009 and SSM recovery would be based on the revision of March 28, 2008.

The question is what is the "best available". It appears to us that the OPA input assumptions are more forward looking than backwards. In our view the best available input assumptions are the ones issued March 28, 2008. A few examples follow with reasons:

- The reference in the January 27th letter is to "new distribution rate-funded CDM programs". In the same sentence it refers to LRAM and SSM that we would interpret as applying to new programs;
- The reference in the OPA inputs and assumptions is to "mass markets". For NBHDL all residential programs are customer focused with considerable customer interaction;
- There is a factor of 0.97 included in the calculations to reduce the kWh saved for CFL's because of a 3% replacement rate. This indicates the future not the past for Third Tranche when few if any of these lights were installed;
- 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 focussed 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;
- The water heater tune-up program doesn't include the tank wrap. The only reference is under Low Income Programs where it recommends against them because the tanks installed after 1995 were efficient enough. This may be a good statement now but not at the time most tank wraps were installed in 2005. The SSM was based on six years which is up next year and LRAM recovery only carries on until the end of 2009. NBHDL did not target low income homes. Using the OEB Assumptions and Measures List the new tanks could be offset by a change of free rider rate from 5% to 30%;
- Nearly all data is calculated for kWh savings as described under Cost Effectiveness using most of the same formulas as the OPA Measures and Assumptions List;
- The emphasis on the NBHDL demand reduction changes was to maximize efficiency by making wiring changes and using long life lamps to reduce long term costs. Thus many changes were not like for like but using les fixtures, less lamps and less ballasts;

- 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.

We believe the actual quantities included in Third Tranche modified for LRAM recovery and SSM recovery are the best fit for NBHDL.

The input assumptions that varied from those posted March 28, 2008 were all reviewed at the time of LRAM and SSM filing and found acceptable. We emphasize that NBHDL is in Northern Ontario where lifestyles are different than the referenced areas where much of the data was received to develop the OPA Measures and Assumptions. For example the hours use for certain buildings for demand reduction program appears high compared to the input NBHDL received from the customers and their representatives.

Recommendations

1. Repackage the numbers of participants by rate class for the demand reduction programs;
2. Since this is the end of Third Tranche there is no need to make any recommendations on these programs. However it would be beneficial for NBHDL to learn from this experience when preparing for future LRAM recovery for the years 2008 and 2009.

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