

**Board Staff Supplemental Interrogatories
Thunder Bay Hydro Electricity Distribution Inc.
2013 Electricity Distribution Rates
EB-2012-0167**

EXHIBIT 1- ADMINISTRATIVE

1-Staff-45s

Ref: E1-T1-S2

Following publication of the Notice of Application the Board received one letter of comment. Has Thunder Bay Hydro replied to the letter? If so, please file a copy of the reply with the Board, ensuring that the author's contact information except for the name is redacted. If a response was not sent, please explain why and indicate whether Thunder Bay Hydro intends to respond.

EXHIBIT 2 - RATE BASE

2-Staff- 46s

Ref: 2-Staff-4

- a) Please provide your best estimate of the incremental property taxes Thunder Bay Hydro will incur because of the new maintenance building/garage.
- b) Please provide the amount of operating savings (supported by rationale), on a full year basis, Thunder Bay will realize due to the replacement of an old facility with a new one.

2-Staff-47s

Ref: 2-VECC-3

Please provide a copy of the Internal Business Case Review that was prepared for the new maintenance building/garage.

2-Staff-48s

Ref: 2-Staff- 9

Please refer to the Revised table 9 and clarify whether the gross investment amount to be funded by "External Funding" totaling \$353,239 corresponds to the amount Thunder Bay Hydro proposes to recover from the IESO as shown in E9-T4-S1 p.4 table 9-4.2.

Revised Table 9 - Cost Distribution of TBHEDI System Developments (Appendix 2B)

	Year	2012	2013	2013
Gross Investment		\$375,786	\$187,893	\$375,786
Activity Definition (by the DSC)		"Enhancement"	"Enhancement"	"Renewable Enabling Improvement"
External Funding		\$0	\$0	\$353,239
Funded by TBHEDI Rate Base		\$375,786	\$187,893	\$22,547
Number of Reclosers		6	3	6
Average Cost/Recloser		\$62,631	\$62,631	\$62,631

Does the rate base proposed for 2013 include any of the amounts shown in Revised table 9 as “Funded by Thunder Bay HydroEDI Rate Base”?

2-Staff-49s

Ref: 2-Energy Probe-6 b) 1, 2

Please demonstrate how the staff productivity and reduced rental costs, due to the new RBD truck, and additional staff productivity, due to the new single bucket truck, are reflected in the OM&A proposed for 2013.

EXHIBIT 3 - OPERATING REVENUE

3-Staff-50s

Ref: 3-Staff-12

- a) Was the population of Thunder Bay, as a Census Metropolitan Area, tried as a measure for market size? If not, why not? If so, what were the results?
- b) Please estimate the load forecast for Residential consumption including Ontario Real GDP and other variables but excluding the Number of Customers and the intercept term. Please provide the regression statistics, the MAPE based on monthly residuals, and the forecasts for the 2012 bridge and 2013 test years.

3-Staff-51s

Ref: 3-Staff-14

With respect to the response to part c) of 3-Staff-14, why would not the use of a single variable for the number of business days in the month instead of two variables for the number of days in the month and the number of peak hours in the month be preferable in terms of model parsimony and more realistically relating to the general operating hours of this class of customers?

3-Staff-52s

Ref: 3-Staff-12, 3-Staff-13, 3-Staff-14 and 3-Staff-16

Please re-run each of the Residential, GS < 50 kW and GS 50-999 kW models excluding the CDM variable. In each case, provide the regression statistics, the MAPE based on the monthly residuals, and the forecasts for the 2012 bridge and 2013 test years

3-Staff-53s

Ref: 3-Staff-15, 3-Staff-17, 3-VECC-11 and 3-VECC-15

Board staff in 2013 cost of service applications proceedings has proposed an approach to account for the persistence of 2011 and 2012 CDM programs, and the impact of 2013 CDM programs on 2013 demand (consumption, measured in kWh) that corresponds to the amount used to establish the amount of CDM savings for 2013 (and hence 2014) for the LRAMVA.

Under this approach, the 2011 CDM results and their persistence, as measured and reported by the OPA for Thunder Bay Hydro is used. One then assumes an equal increment for each of 2012, 2013, and 2014 so as to achieve Thunder Bay Hydro's CDM target of 7,810,000 kWh. Board staff views this approach as being preferable as there are actual results on what the utility has achieved to date, which can then be taken into account on what more will be needed to achieve the cumulative four-year target. In using the measured and reported results from the 2011 programs, including the persistence into 2013, Board staff views that an improved estimate of the CDM impact of 2011-2013 programs on the LRAMVA threshold for 2013 (and 2014) would result, along with the corresponding adjustment to the 2013 test year load forecast.

Based on the final 2011 OPA results filed in Thunder Bay Hydro's Application, Board staff has prepared the following table, which is also provided in working Microsoft Excel format:

Load Forecast CDM Adjustment Work Form (2013)

***Thunder Bay Hydro Electricity Distribution
Inc.***

EB-2012-0167

4 Year (2011-2014) kWh Target:					
47,380,000					
	2011	2012	2013	2014	Total
	%				
2011 CDM Programs	4.55%	4.55%	4.55%	4.29%	17.95%
2012 CDM Programs		13.68%	13.68%	13.68%	41.03%

2013 CDM Programs			13.68%	13.68%	27.35%
2014 CDM Programs				13.68%	13.68%
Total in Year	4.55%	18.23%	31.90%	45.31%	100.00%
kWh					
2011 CDM Programs	2,157,479	2,157,479	2,157,479	2,031,020	8,503,456
2012 CDM Programs		6,479,424	6,479,424	6,479,424	19,438,272
2013 CDM Programs			6,479,424	6,479,424	12,958,848
2014 CDM Programs				6,479,424	6,479,424
Total in Year	2,157,479	8,636,903	15,116,327	21,469,292	47,380,000

Check 47,380,000

Net-to-Gross Conversion				
	"Gross"	"Net"	Difference	"Net-to-Gross" Conversion Factor ('g')
2006 to 2011 OPA CDM programs: Persistence to 2013	1	1	0	0.00%

	2011	2012	2013	2014	Total for 2013
Amount used for CDM threshold for LRAMVA	2,157,479	6,479,424	6,479,424		15,116,327
Manual Adjustment for 2013 Load Forecast <i>Manual adjustment uses "gross" versus "net" (i.e. numbers multiplied by (1 + g))</i>	2,157,479	6,479,424	3,239,712		11,876,615
			<i>Only 50% of 2013 CDM impact is used based on a half year rule</i>		

The methodology for this is as follows:

For the top table

- The 2011-2014 CDM target is input into cell B4;
- Measured results for 2011 CDM programs for each of the years 2011 and persistence into 2012, 2013 and 2014 are input into cells C13 to F13;
- Based on these inputs, the residual kWh to achieve the 4 year CDM target is allocated so that there is an equal incremental increase in each of the years 2012, 2013 and 2014.

The second table (Net-to-Gross) is to calculate the conversion from “net” to “gross” results. While the LRAMVA is based on the “net” OPA-reported results, the load forecast is impacted also by CDM savings of “free riders” and “free drivers”. While Board staff has input values of “1” in each of cells D24 and E24, in the absence of other information, these should be populated with the measured “gross” and “net” CDM savings for the persistence of all CDM programs from 2006 to 2011 on 2013, as reported in the final OPA reports, filed in the Application and in response to 3-VECC-11.

For the last table, two numbers are calculated:

- The “Amount used for CDM threshold for LRAMVA” is the sum of the persistence of 2011 and 2012 CDM programs and the annualized impact of 2013 CDM programs on 2013; and
 - “Manual Adjustment for 2013 Load Forecast” represents the amount to be reflected in the 2013 load forecast. This amount uses the “gross” impact, which is calculated by multiplying each year’s CDM program impact or persistence by $(1 + g)$ from the second table. In addition, the impact of the 2013 CDM programs on 2013 “actual” consumption is divided by 2 to reflect a “half year” rule. Since the 2013 CDM programs are not in effect at midnight on January 1, 2013, the “annualized” results reported in the OPA report will overstate the “actual” impact. In the absence of information on the timing and uptake of CDM programs in their initial year, a “half-year” rule may proxy the impact.
- a) Please input the “gross” and “net” cumulative kWh CDM savings from all CDM programs from 2006 to 2011 on 2013 as measured in the final OPA reports into, respectively, cells D24 and E24.
 - b) Please derive the class CDM kWh and kW savings that would correspond with the “net” CDM savings above.
 - c) Please provide Thunder Bay Hydro’s comments on the methodology above to develop the CDM savings that will underlie the 2013 CDM amount for the LRAMVA and the corresponding CDM adjustment for the 2013 test year load forecast. Is this approach consistent with the inclusion of the CDM variable in the regression analysis to develop the load forecast before the CDM adjustment? What refinements to this approach should be considered?

3-Staff-54s

Ref: 3-VECC-13

In the table shown in response to part a), why is the number of streetlighting connections for December 2012, at 13,119, lower than the 2012 annual average of 13,172?

EXHIBIT 4 - OPERATING COSTS

4-Staff-55s

Ref: 4-Staff-21

Please explain why Thunder Bay Hydro is expensing (over 2013-2016) the demolition of the old building rather than charging it to Maintenance Facility capital project?

4-Staff-56s

Ref: 4-staff-22

- a) Does Thunder Bay Hydro's recording of Property Taxes conform with the Accounting Procedures Handbook?
- b) Will Thunder Bay Hydro be increasing its proposed Revenue Requirement for 2013 by the expected increase of \$82,397 in Property Taxes?

4-Staff-57s

Ref: 4-Staff-27

Was the position providing administrative support to the water heating rental business affiliate that was eliminated redeployed within Thunder Bay Hydro or did it result in a net reduction in staffing levels?

4-Staff-58s

Ref: 4-SEC-15

Please explain why "City of Thunder Bay Realty Services" is identified as a non-affiliated vendor?

EXHIBIT 5 - COST OF CAPITAL AND RATE OF RETURN

5-Staff-59s

Ref: 5-Staff-29 and 5-Staff-31

- a) Please provide a yes/no answer to part a) of interrogatory 5-Staff-31. If the answer is “no”, please reconcile your answer with the table found at E5-T1-S2 p.3.
- b) Please provide copies of any precedent decisions that Thunder Bay Hydro is relying on in support of its proposal to “amortize” the interest expense the utility is expecting to incur over the period 2013 to 2016 so that an “average” amortized interest expense is factored into the revenue requirement.
- c) Please explain why Thunder Bay Hydro believes that its proposed method to calculate the costs of the long term debt portion of rate base is preferred to the Board’s general policy and practice, as documented in the *Report of the Board on the Cost of Capital for Ontario’s Regulated Utilities* (EB-2009-0084), whereby the weighted average cost of long-term debt (both actual and forecasted in the test year) is applied to the 56% deemed long-term debt capitalization. In your answer please consider that the inflation measure under the IRM plan also reflects the indirect impacts of changes in the cost of capital in the general market, and hence will adjust the distribution rates during the term of the IRM plan from 2014 until Thunder Bay Hydro next rebases its rates.

EXHIBIT 9 - DEFERRAL AND VARIANCE ACCOUNTS

9-Staff-60s

Ref: 9 VECC-33 (b)

Thunder Bay Hydro stated: “Thunder Bay Hydro has determined the unaudited 2012 actuals for sub-account 1508 IFRS implementation costs to be (\$94,983) including carrying charges. A credit balance represents a receivable to Thunder Bay Hydro.”

- a) Does Thunder Bay Hydro now have an audited balance, for the year-ended December 31, 2012, for sub-account 1508 IFRS implementation costs? If so please confirm the amount.
- b) Thunder Bay Hydro describes the \$94,983 as a “credit” balance for the year 2012. Should this be more appropriately described as a debit balance in that this amount would be recovered from customers?

- c) Has there been a change in the mandatory changeover date for IFRS based reporting? If so, what is the new date and does Thunder Bay Hydro is still requesting the disposition of the transitional costs in this proceeding?
- d) The APH FAQ October 2009 #2 re: 1508 Other Regulatory Assets, “Sub-account Deferred IFRS Transition Costs” states:
In the distributor’s next cost of service rate application immediately after the IFRS transition period, the balance in this sub-account should be included for review and disposition.
- (i) Please confirm the amount of IFRS transition costs Thunder Bay Hydro is proposing to this dispose in this application.
 - (ii) Please provide the justification for disposing the IFRS transition costs in this rate application rather than in the one subsequent to the transition period.