

January 13, 2012

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

Dear Ms. Walli:

Re: Thunder Bay Hydro Electricity Distribution Inc. – 2012 Smart Meter Cost Recovery Application

Thunder Bay Hydro Electricity Distribution Inc. ("TBHEDI") is applying for recovery of its smart meter costs in a stand-alone application as it is currently subject to the Board's 3rd Generation Incentive Regulation Mechanism ("IRM").

Please find enclosed the following:

- Two hard copies of TBHEDI's 2011 Smart Meter Cost Recovery Application.
- Two hard copies of the 2012 Smart Meter Model_20111215_V2_17TB_II, labeled as Appendix A.
- Two hard copies of TBHEDI's letter from the Fairness Commissioner, labeled as Appendix B.
- Two hard copies of the Bill Impacts for Residential and General Service customers < 50 kW, labeled as Appendix C.

An electronic version of the application as well as Appendix A, B, and C (both a PDF and Excel version) has been submitted through the e-Filing Services and emailed to the Board Secretary.

If you require any further information, please contact the undersigned at (807) 343-1119.

Yours truly,



Terri-Ann Sylvester, CA
Acting Vice President, Finance

TS/jp

Enclosures.

MANAGER'S SUMMARY

Distributor Profile and Introduction

TBHEDI is a corporation incorporated pursuant to the Ontario Business Corporations Act with its head office in the City of Thunder Bay. TBHEDI carries on the business of distributing electricity within the City of Thunder Bay and Fort William First Nation Reserve.

TBHEDI is currently subject to the Board's 3rd Generation Incentive Regulation Mechanism and is not required to file a cost of service rate application until its 2013 rate application. Thus, TBHEDI is submitting a stand-alone Smart Meter Cost Recovery Application in accordance with the board's Smart Meter Funding and Cost Recovery Guideline - Final Disposition G-2011-0001. Thunder Bay has used the Board Staff provided 2012 Smart Meter Model modified for the following:

- As filed in our 2009 Cost of Service Application, Thunder Bay has revised the model to reflect that this project is financed entirely by debt. The worksheets affected are:
 - Worksheet #2- Smart_Meter_Costs, Line 158 includes interest on the Smart Meter Loan;
 - Worksheet #3 -Cost_of_Service_Parameters to reflect 100% Long-Term Debt (note that this results in Lines 43 to 47 on Worksheet #5 below to be nil);
 - Worksheet #5-SM_Rev_Reqt , Line 52 has been inserted to reflect actual interest on long-term debt and Line 50 has been adjusted to remove the interest on long-term debt (to remove working capital funding on such).

The rationale for the foregoing is as per TBHEDI's response to OEB Board Staff Supplemental Interrogatory #15b in our 2009 Cost of Service Application. The response is reproduced below.

Response

*The Corporation of the City of Thunder Bay (the City) has never received a return on their investment in Thunder Bay Hydro since incorporation/restructuring in October 2000.** The debt with the City bears no interest. Assuming a simple interest calculation using a 7% interest rate, the annual interest foregone approximates \$2.3M (cumulatively from 2002 to 2008 \$16.4M). Further, the City has not received dividends from Thunder Bay Hydro. The rate of return on equity has been considerably below the allowed rate of return. For simplicity and illustrative purposes only, assuming a spread of 5% (currently 8.57% versus 3.75%), a rate base of \$70M and a debt/equity capital structure of 60/40, annually the City has foregone approximately \$1.4M (cumulatively from 2002 to 2008 \$9.8M). Finally, the City has reinvested the minimal return that they did seek. Having said such, Thunder Bay Hydro is not seeking additional equity injection by the City to fund the Smart Meter Initiative.*

Thunder Bay Hydro operates on the rate minimization model and as such does not have the flexibility to take on a capital project of such magnitude and finance such internally in the debt/equity ratio that matches the deemed capital structure (40% equity) as set out by the Board. The smart meter funding adder model makes this assumption. If the smart meters were allowed to be included in the rate base, the bulk of the financing costs on

the smart meter capital would be included in the capital structure (meaning that Thunder Bay Hydro would be recovering the interest on substantially the full debt amount) and Thunder Bay Hydro would have increased its rate of return on equity sufficient to fund the shortfall approximated at \$44,000. It is Thunder Bay Hydro's intention to have the Smart Meter Adder funding reflect interim funding as if the amounts had been incorporated into the rate base. At the time of rebasing (2012), Thunder Bay Hydro will include the debt at the actual interest rate in the capital structure and will increase the return on equity sufficient to fund the full operations of the corporation including the Smart Meter Project.

In further reviewing the situation, Thunder Bay Hydro feels that using a 100% debt rate in the Smart Meter Model would more appropriately achieve the required funding of the Smart Meter project. Using the 100% debt reduces PILS funding in the Model, recognizing that the interest is tax deductible. The Smart Meter Adder Model (updated by Board Staff in November 2008) is attached as Appendix A to this document. The Model has been updated to reflect current costs based on the results of contract negotiations including volume purchase rates and price adjustments as examples.

****As per the 2009 Interrogatory response; however, in reviewing the historical financial statements, very recently, it came to light that TBHEDI did make interest payments to The Corporation of the City of Thunder Bay in the amount of \$900,000 in 2001.**

In its application, TBHEDI is applying for recovery of its smart meter costs as at December 31, 2011. Please note that the costs up to December 31, 2010 have been audited and the evidence in this application supports the prudence of these expenditures. Costs incurred in 2011 are captured up to December 22, 2011 and the remaining costs for the year have been forecasted. These 2011 costs have not yet been audited; however, these costs represent less than 10% of the costs TBHEDI seeks recovery on.

The rate riders that have been calculated in this application are as follows and apply to all metered customers since sufficient evidence is not available to support an allocation to the applicable classes:

- A Smart Meter Disposition Rate Rider ("SMDR") for all capital and operating, maintenance, and administrative ("OM&A") expenses for meters installed up to December 31, 2011 of (\$0.97) per month per metered customer (refund) over a 24 month period.

The request to repay this over a 24 month period is in keeping with the Stable for the Utility and Stable for the customers "Principles of Rate-making". The Smart Meter Funding Adder has been \$1.97 since 2009 (based on the best information available at that time) and as can be seen will approximate \$2.28 per month per customer when it is rolled into TBHEDI's rate base in its 2013 Cost of Service Application ("COS"). Additionally, the 2013 COS Application will address the cost to cover the "stranded assets" balance.

- A smart meter incremental revenue requirement rate rider ("SMIRR") for the revenue requirement for the smart meters installed up to December 31, 2011 in 2012 of \$2.28 per month per metered customer (charge) over a 12 month period.

Smart Meter Program Status

As at December 31, 2010, TBHEDI had completed installation for nearly 100% of both its Residential and General Service less than 50 kW customers with the exception of a small number of customer refusals and installation-related technical issues. As at November 30, 2011 49,440 meters have been installed, and thus, TBHEDI considers the smart meter installation as 100% deployed. The table below shows the number of smart meters that were installed and originally budgeted:

Customer Class	As at Nov. 30/11 Actual	Original Application*	Variance	Variance %
	A	B	A - B	
Residential	44,855	44,635	220	0.5%
GS < 50 kW	<u>4,585</u>	<u>4,466</u>	<u>119</u>	2.7%
Total	49,440	49,101	339	0.7%

* per TBHEDI's response to the OEB Board Staff Supplemental Interrogatories dated Feb. 11/09 in EB-2008-0245

TBHEDI has completed the mandated smart meter installation and its smart meter funding adder has a sunset date of April 30, 2012 (See Page 5 of the Board's Decision EB-2010-0115). TBHEDI submits that it is appropriate at this time to recover the revenue requirement related to those installed meters as at December 31, 2011.

Procurement of Smart Meters and Installation Services

TBHEDI, via the Fairness Commissioner, monitored the London Hydro Smart Metering Consortium RFP process, and selected Elster Integrated Solutions, LLC ("Elster") as its metering vendor. Following that decision and the formal recognition of the London Hydro process in Regulation 427/06, TBHEDI selected, via a competitive bid process, Ozz Corporation ("Ozz") as its meter installation service provider. Shortly after that decision, Ozz was purchased by Olameter Inc. who then fulfilled the contractual obligations of the installation process. Finally, also through a competitive bid process, TBHEDI selected TBayTel as its cellular service provider for the backhauling of meter data from the Elster collector units into TBHEDI's billing system.

TBHEDI contracted with Util-Assist Inc. ("Util-Assist") to manage the various smart meter related procurements, develop the overall project plan and to monitor and guide the project through to time-of-use ("TOU") bill production.

TBHEDI contracted with Kinetiq Canada Ltd. ("Kinetiq") to prove that the Elster automated metering infrastructure ("AMI") system was meeting the provincial standard, to integrate the AMI data with the meter data management repository ("MDM/R"), to reconcile the meter data sent to the MDM/R matched the data received back to the utility, and finally to automate business processes so as to avoid increasing staffing in the Billing Department.

A copy of the letter from the Fairness Commissioner has been included as Appendix B as support that TBHEDI is authorized for smart metering activities.

Smart Meter Disposal Rate Rider (SMDR)

In this application, TBHEDI is seeking to true-up the costs related to the 49,440 smart meters installed since inception of the smart meter implementation program up to December 31, 2011.

The table below provides a summary of the actual capital and OM&A costs:

TBHEDI SMART METER PROGRAM SUMMARY: As at December 31, 2011

	2008	2009	2010	2011	TOTAL	UNIT COSTS/ METER
RATE FILLING						
Total Meters Installed: 49,440						
Smart Meter Unit Costs (AMI)	\$0	\$5,649,205	\$60,956	\$86,328	\$5,796,489	\$117.24
Smart Meter Other Unit Costs	\$24,472	\$398,776	\$80,985	\$13,280	\$517,513	\$10.47
Smart Meter Installation Costs Per Unit	\$0	\$970,482	\$155,347	\$81,623	\$1,207,452	\$24.42
Smart Meter Other Costs Per Unit	\$0	\$254,265	\$62,753	\$73,477	\$390,496	\$7.90
Smart Meter Unit Costs					\$7,911,951	\$160.03
AMI Computer Hardware Costs	\$0	\$172,961	\$72,472	\$382	\$245,814	\$4.97
AMI Computer Software Costs	\$0	\$0	\$0	\$0	\$0	
Other Computer Hardware Costs	\$0	\$0	\$0	\$0	\$0	
Other Computer Software Costs	\$0	\$0	\$0	\$0	\$0	
Computer Hardware/Software Costs					\$245,814	\$4.97
Incremental AMI Operating & Maintenance ("O&M") Expenses	\$34,888	\$18,197	\$183,760	\$266,133	\$502,978	\$10.17
Incremental AMI Admin Expenses	\$0	\$0	\$0	\$0	\$0	
Incremental Other O&M Expenses	\$0	\$0	\$0	\$11,307	\$11,307	
Incremental Other Admin Expenses	\$0	\$208,912	\$403,510	\$385,268	\$997,690	\$20.18
Incremental O&M and Admin Costs					\$1,511,976	\$30.35
Recoverable/Rate Adder Costs:					\$9,669,741	\$195.59
Deferrable Cost:						
Utility Safety & Mtce Capital Budget	\$0	\$6,996	\$2,198	\$0	\$9,194	\$0.19
MDM/R Cost:						
TOU Billing Budget	\$0	\$20,126	\$764	\$82,303	\$103,194	\$2.09
TOTAL SMART METER COST:	\$59,360	\$7,699,921	\$1,022,745	\$1,000,103	\$9,782,128	\$197.86
	2008	2009	2010	2011	TOTAL	
CAPITAL	\$0	\$7,468,233	\$422,663	\$266,473	\$8,157,370	\$165.00
OPERATING	\$59,360	\$231,688	\$600,081	\$733,629	\$1,624,759	\$32.86
TOTAL	\$59,360	\$7,699,921	\$1,022,745	\$1,000,103	\$9,782,128	\$197.86

Below is a summary of the Original Costs as filed in EB-2008-0245 within TBHEDI's response to the OEB Board Staff Supplemental Interrogatories dated February 11, 2009. In addition, TBHEDI has added the smart meter loan interest charges to the Incremental Other Admin Expenses line for comparative purposes. The budgeted smart meter loan interest charges can be found in the Smart Meter Funding Adder file as the long-term debt charges in the same response as mentioned above.

TBHEDI
SMART METER PROGRAM SUMMARY

RATE FILLING *	2008 and prior	2009	2010	2011	2011 LTD	2012	TOTAL	UNIT COSTS/ METER
Total Meters Installed: 49,101								
Smart Meter Unit Costs (AMI)	\$0	\$5,694,040	\$62,192	\$62,192	\$5,818,425	\$62,192	\$5,880,617	\$119.77
Smart Meter Other Unit Costs	\$57,750	\$243,978	\$26,250	\$0	\$327,978	\$0	\$327,978	\$6.68
Smart Meter Installation Costs Per Unit	\$0	\$1,236,458	\$0	\$0	\$1,236,458	\$0	\$1,236,458	\$25.18
Smart Meter Other Costs Per Unit	\$961	\$650,398	\$0	\$0	\$651,359	\$0	\$651,359	\$13.27
Smart Meter Unit Costs					\$8,034,220		\$8,096,412	\$164.89
AMI Computer Hardware Costs	\$0	\$135,997	\$0	\$0	\$135,997	\$0	\$135,997	\$2.77
SMI Computer Software Costs	\$0	\$20,948	\$0	\$0	\$20,948	\$0	\$20,948	\$0.43
Other Computer Hardware Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00
Other Computer Software Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0.00
Computer Hardware/Software Costs					\$156,945		\$156,945	\$3.20
Incremental AMI O&M Expenses	\$0	\$286,828	\$509,008	\$170,049	\$965,885	\$170,049	\$1,135,934	\$23.13
Incremental AMI Admin Expenses	\$0	\$0	\$3,402	\$0	\$3,402	\$0	\$3,402	\$0.07
Incremental Other O&M Expenses	\$29,025	\$28,350	\$28,350	\$28,350	\$114,075	\$28,350	\$142,425	\$2.90
Incremental Other Admin Expenses	\$0	\$246,627	\$471,886	\$437,518	\$1,156,031	\$404,025	\$1,560,056	\$31.77
Incremental O&M and Admin Costs					\$2,239,393		\$2,841,816	\$57.88
Recoverable/Rate Adder Costs:					\$10,430,558		\$11,095,174	\$225.97
Deferrable Cost:								
Utility Safety & Mtce Capital Budget	\$0	\$222,722	\$0	\$0	\$222,722	\$0	\$222,722	\$4.54
MDMR Cost:								
TOU Billing Budget	\$0	\$379,326	\$435,219	\$244,942	\$1,059,487	\$245,176	\$1,304,664	\$26.57
TOTAL SMART METER COST:	\$87,736	\$9,145,673	\$1,536,307	\$943,051	\$32,573,882	\$909,793	\$12,622,559	\$257.07

	2008	2009	2010	2011	2011 LTD	2012	TOTAL	
CAPITAL	\$58,711	\$8,583,868	\$523,661	\$307,134	\$8,191,165	\$307,369	\$8,498,534	\$173.08
OPERATING	\$29,025	\$561,805	\$1,012,646	\$635,916	\$3,521,602	\$602,424	\$4,124,026	\$83.99
TOTAL	\$87,736	\$9,145,673	\$1,536,307	\$943,051	\$11,712,767	\$909,793	\$12,622,559	\$257.07

* per TBHEDI's response to the OEB Board Staff Supplemental Interrogatories dated Feb. 11/09 in EB-2008-0245

For variance purposes, TBHEDI has compared the Actuals to the Original Costs for the period of 2008 to 2011.

TBHEDI
SMART METER PROGRAM SUMMARY: Variance Analysis

	A	B	A-B
RATE FILLING			
	2011 LTD Actual Costs	2011 LTD Original Costs*	Variance
Total Meters Installed	49,440	49,101	339
Smart Meter Unit Costs (AMI)	\$5,796,489	\$5,818,425	-\$21,935
Smart Meter Other Unit Costs	\$517,513	\$327,978	\$189,535
Smart Meter Installation Costs Per Unit	\$1,207,452	\$1,236,458	-\$29,006
Smart Meter Other Costs Per Unit	\$390,496	\$651,359	-\$260,863
Smart Meter Unit Costs	\$7,911,951	\$8,034,220	-\$122,269
AMI Computer Hardware Costs	\$245,814	\$135,997	\$109,817
AMI Computer Software Costs	\$0	\$20,948	-\$20,948
Other Computer Hardware Costs	\$0	\$0	\$0
Other Computer Software Costs	\$0	\$0	\$0
Computer Hardware/Software Costs	\$245,814	\$156,945	\$88,869
Incremental AMI O&M Expenses	\$502,978	\$965,885	-\$462,907
Incremental AMI Admin Expenses	\$0	\$3,402	-\$3,402
Incremental Other O&M Expenses	\$11,307	\$114,075	-\$102,768
Incremental Other Admin Expenses	\$997,690	\$1,156,031	-\$158,341
Incremental O&M and Admin Costs	\$1,511,976	\$2,239,393	-\$727,417
Recoverable/Rate Adder Costs:	\$9,669,741	\$10,430,558	-\$760,817
<u>Deferrable Cost:</u>			
Utility Safety & Mctce Capital Budget	\$9,194	\$222,722	-\$213,528
<u>MDMR Cost:</u>			
TOU Billing Budget	\$103,194	\$1,059,487	-\$956,294
TOTAL SMART METER COST:	\$9,782,128	\$11,712,767	-\$1,930,639

* per TBHEDI's response to the OEB Board Staff Supplemental Interrogatories dated Feb. 11/09 in EB-2008-0245 for the period 2008 to 2011

The explanations for the significant variances relating to the \$1.9M favourable variance between Actuals and the Original Costs as per the 2009 COS Application include:

- The Smart Meter Other Unit Costs for ancillary collector costs are unfavourable in the amount of \$212,000 due to an under estimation of the Original Costs.
- The Smart Meter Other Costs Per Unit variances include:
 - A \$131,000 unfavourable variance due to internal project management costs that were originally classified as operating were later judged to be

more appropriately classified as capital (original costs were within the Incremental AMI Admin Expenses). As per the Board's Smart Meter Funding and Cost Recovery – Final Disposition G-2011-0001, its states on page 7 "The Board determined that all labour and associated costs incurred, with the exception of material and parts costs for customer owned equipment, should be capitalized and tracked in a sub account of the Smart Meter Capital and Recovery Offset Variance Account 1555." These costs were previously included as part of the Incremental AMI O&M expenses;

- A \$265,000 favourable variance for the capitalized portion of the meter base repairs as fewer repairs were required than expected; and
 - The capitalized operational data store ("ODS") costs came in \$90,000 lower than originally budgeted.
- The actual AMI Computer Hardware Costs included internal labour of \$116,000 which was required to install and get the Metering Automation Servers ("MAS") to an operational state which was included as Smart Meter Other Costs Per Unit in the Original Costs.
 - The Incremental AMI O&M Expenses variances include the following:
 - A \$241,000 favourable variance as a portion of internal labour was capitalized to Smart Meter Other Costs Per Unit. As noted above, these costs were originally budgeted as operating;
 - Costs in the amount of \$95,000 were originally expected for cellular communication of the collectors to the AMI network were not incurred in 2009 and license fees were less than budgeted; and
 - Finally a \$68,000 favourable variance is due to the savings incurred by implementing the ODS provided by Kinetiq compared to the Original Cost estimates.
 - The Incremental Other O&M Expenses have a favourable variance of \$75,000 due to the AMI security audits not being incurred in 2009 or 2010 and the actual costs were less than budgeted.
 - The Incremental Other Admin Expenses represent interest on the smart meter loan TBHEDI secured in order to finance the Smart Meter Program. Please refer TBHEDI's response found above to the OEB Board Staff Supplemental Interrogatory #15b for the rationale for this inclusion.

A \$158,000 favourable variance is a result of TBHEDI securing a loan with an interest rate of 5.27% (versus the 6% budgeted in the Original Costs).

- The Utility Safety & Mtce Capital Budget is \$214,000 favourable due to the actual meter base repairs being significantly less than planned.
- The TOU Billing Budget favourable variance consists of the following:
 - A \$609,000 favourable variance due to the MDM/R costs not being incurred;

- A \$161,000 favourable variance for web presentment which has been moved to operating costs in 2012;
- Customer education costs are approximately \$110,000 lower as a result of \$50,000 being deferred to the 2012 forecast and \$60,000 is under spent; and
- Finally, internal resources required for TOU modifications were less than anticipated resulting in a favourable variance of \$40,000.

In its 2009 Cost of Service application, TBHEDI received approval to increase its smart meter funding adder to \$1.97 per month per metered customer. The revenue collected from the funding adder up to April 30, 2012 has been compared to the revenue requirement, including carrying charges to calculate the smart meter true-up and is shown below:

Smart Meter Disposition Rate Rider as at December 31, 2011

Revenue Requirement 2008	\$60,816
Revenue Requirement 2009	\$469,332
Revenue Requirement 2010	\$1,098,755
Revenue Requirement 2011	\$1,314,535
Total Revenue Requirement	<u>\$2,943,438</u>
Smart Meter Rate Adder	-\$3,987,137
Carrying Charges	-\$107,861
Smart Meter True-Up	<u>-\$1,151,560</u>
Average # of Metered Customers Jan. to Nov. 2011	49,568
Rate rider \$/month/metered customer	-\$0.97

As shown above, TBHEDI's proposes that a fixed SMDR of (\$0.97) per month per metered customer be incorporated in rates commencing May 1, 2012 and repaid over a 24 month period with a sunset date of April 30, 2014.

TBHEDI is seeking a rate rider to recover the SMIRR associated with the smart meters installed up to December 31, 2011 to cover the incremental costs in 2012. The proposed rate rider would commence May 1, 2012 and would be in place until this revenue requirement is incorporated into distribution rates in TBHEDI's next COS Application which is scheduled for the May 1, 2013 rates.

TBHEDI SMART METER PROGRAM SUMMARY

Thunder Bay Hydro Electricity Distribution Inc. – 2012 Smart Meter Cost Recovery Application

The 2012 forecasted incremental OM&A costs above include the following:

- Elster software support charges
- Util-Assist security audits
- Equipment maintenance and license fees
- Cellular communication charges between the collectors and the AMI network
- ODS operational charges from service provider Kinetiq
- Smart meter loan interest charges

The 2012 forecasted TOU billing expenses include the following:

- Customer education sessions and packages that were delayed due to postponing the implementation of TOU rates.
- Funding for web presentment. This cost would be considered outside of the minimum functionality as specified in Ont. Reg. 425/06. In order to provide maximum customer support for the Province's TOU initiative, TBHEDI believes that web presentment of TOU meter readings is critical. This communication channel will be key in the continued education of customers on both the TOU rates and in particular their individual consumption patterns. TBHEDI needs to put the decision making into the customers' hands allowing them to decide to conserve or shift consumption based on electricity rates. Being able to securely log in and monitor usage gives them the control customers need. Smart meters are a conservation tool and customers understand this and are demanding access to the meter readings. In this electronic web based age customers desire quicker and faster access to pretty much everything. Giving them web based access to meter readings is the answer for those customers and ultimately for the Province in its efforts to drive behavioural change.
- Bill print modifications

A variance analysis is provided below that compares the 2012 forecasted costs to the original costs filed in TBHEDI's COS Application EB-2008-0245. The costs in these years represent the ongoing OM&A costs to sustain the installed smart meters as of December 31, 2011.

**TBHEDI
SMART METER PROGRAM SUMMARY**

	A	B	A-B
RATE FILLING	2012 Forecasted Costs	2012 Original Costs	Variance
Total Meters Installed	49,440	49,101	339
Smart Meter Unit Costs (AMI)	\$0	\$62,192	-\$62,192
Smart Meter Other Unit Costs	\$0	\$0	\$0
Smart Meter Installation Costs Per Unit	\$0	\$0	\$0
Smart Meter Other Costs Per Unit	\$0	\$0	\$0
Smart Meter Unit Costs	\$0	\$62,192	-\$62,192
AMI Computer Hardware Costs	\$0	\$0	\$0
AMI Computer Software Costs	\$0	\$0	\$0
Other Computer Hardware Costs	\$0	\$0	\$0
Other Computer Software Costs	\$0	\$0	\$0
Computer Hardware/Software Costs	\$0	\$0	\$0
Incremental AMI O&M Expenses	\$304,840	\$170,049	\$134,791
Incremental AMI Admin Expenses	\$0	\$0	\$0
Incremental Other O&M Expenses	\$8,000	\$28,350	-\$20,350
Incremental Other Admin Expenses	\$369,340	\$404,025	-\$34,685
Incremental O&M and Admin Costs	\$682,180	\$602,424	\$79,756
Recoverable/Rate Adder Costs:	\$682,180	\$664,616	\$17,564
Deferrable Cost:			
Utility Safety & Mtce Capital Budget	\$0	\$0	\$0
MDMR Cost:			
TOU Billing Budget	\$70,000	\$245,176	-\$175,176
TOTAL SMART METER COST:	\$752,180	\$909,793	-\$157,613

The variance items between the 2012 Forecasted Costs and the 2012 Original Costs below account for the majority of the \$158,000 favourable variance:

- The Smart Meter Unit Costs are favourable \$62,000 due to budgeted warranty work on the AMI network that is not expected to be incurred.
- In the Incremental AMI O&M Expenses, the ODS was previously assumed to only be temporary in nature to verify smart meter data and the expectation was for costs to be incurred only until 2010; however, TBHEDI has decided to retain Kinetiq to continue to verify the data prior to it being submitted to the MDM/R as part of its regular operations. The ODS has been instrumental in identifying gaps in meter data and rectifying data errors. It essentially takes away the need for manual clerk intervention on these issues as well as eliminating the need for in-house development related to interfaces for TBHEDI's unique billing and meter vendor setups. As well, the ODS provides TBHEDI's Engineering and System Control departments access to critical voltage reporting. Ultimately the ODS serves as TBHEDI's meter data disaster recovery plan. The incremental charge

for 2012 is \$91,000. In addition, the incremental costs to maintain MAS and the AMI network communication costs have been increased by \$40,000.

- The smart meter loan interest is favourable \$40,000 in 2012 due to TBHEDI securing the loan at 5.27% as opposed to the originally anticipated rate of 6%.
- The TOU Billing Budget is favourable \$217,000 due to the assumption that the budgeted MDM/R charges will not be incurred. However, the customer education spending is unfavourable \$50,000 due to costs deferred from prior years.

Based on the forecasted costs above, TBHEDI has calculated the SMIRR until the smart meters are included in TBHEDI's base rates. TBHEDI plans to file its next cost of service application for its rates effective May 1, 2013. The SMIRR calculation is provided below:

Smart Meter Incremental Revenue Requirement Rate Rider

Revenue Requirement 2012	\$ 1,354,378
Total Revenue Requirement	<u>\$ 1,354,378</u>
Smart Meter Rate Adder	\$ -
Carrying Charges	<u>\$ -</u>
Smart Meter True-Up	<u>\$1,354,378</u>

Average # of Metered Customers Jan. to Nov. 2011	49,568
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Rate rider \$/month/metered customer	\$2.28
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As shown above, TBHEDI's proposes that a fixed SMIRR of \$2.28 per month per metered customer be levied commencing May 1, 2012 over a 12 month period with a sunset date of April 30, 2013. Please note that the number of metered customers is an average of the 2011 monthly actuals up to November.

TBHEDI requests that the Board approves the SMDR and SMIRR rate riders effective May 1, 2012. In the event that the Board is unable to provide a Decision and Order in this Application for implementation as of May 1, 2012, TBHEDI requests that the Board issue an interim Order approving the previously approved rate rider of \$1.97 per month per metered customer, which may be subject to adjustment based on its final Decision and Order. TBHEDI believes this request adheres to the Board's rate-making principles of effectiveness and stability for both the Distributor and its customers. Maintaining status quo until the SMDR and SMIRR are approved will reduce volatility and rate shock by maintaining the \$1.97 until the requested net change of \$1.31 per month per metered customer is approved by the Board. Please note that TBHEDI has previously made this request in its 2012 IRM application EB-2011-0195 on page 6 submitted on November 11, 2011.

Stranded Meters

TBHEDI is not seeking disposition of its stranded meter costs at this time. TBHEDI continues to recover these costs by including the net book value of stranded meters in its rate base for rate-making purposes.

At its next cost of service application, TBHEDI plans to request disposition of the stranded meter amount.

Conclusion

TBHEDI respectfully submits that the costs necessary to fulfill its obligations under the provincially mandated Smart Meter initiative have been prudently incurred in accordance with Board guidelines and that the proposed rate riders are just and reasonable. Appendix C includes the Bill Impacts for both a Residential and General Service < 50 kW customer which shows a (\$0.67) per month or 0.64% and 0.25% decrease respectively. TBHEDI requests that the Board approve these proposed riders at this time for implementation effective May 1, 2012.

V 2.17TB



Ontario Energy Board

Smart Meter Model

Choose Your Utility:

Thunder Bay Hydro Electricity Distribution Inc.
Tillsonburg Hydro Inc.

Application Contact Information

Name: Jenni Pajala

Title: Supervisor of Regulatory Affairs

Phone Number: 807-343-1016

Email Address: jpajala@tbhydro.on.ca

We are applying for rates effective: May 1, 2012

Last COS Re-based Year: 2009

Legend

DROP-DOWN MENU

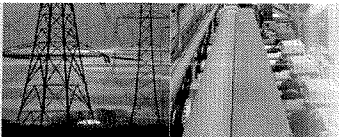
INPUT FIELD

CALCULATION FIELD

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While this model has been provided in Excel format and is required to be filed with the applications, the onus remains on the applicant to ensure the accuracy of the data and the results. The use of any models and spreadsheets does not automatically imply Board approval. The onus is on the distributor to prepare, document and support its application. Board-issued Excel models and spreadsheets are offered to assist parties in providing the necessary information so as to facilitate an expeditious review of an application. The onus remains on the applicant to ensure the accuracy of the data and the results.



Ontario Energy Board Smart Meter Model

Thunder Bay Hydro Electricity Distribution Inc.

Distributors must enter all incremental costs related to their smart meter program and all revenue recovered to date in the applicable table except for those costs (and associated revenues) for which the Board has approved on a final basis, i.e. capital costs have been included in rate base and OM&A costs in revenue requirement.

For 2012, distributors that have completed their deployments by the end of 2011 are not expected to enter any capital costs. However, for OM&A, regardless of whether a distributor has deployments in 2012, distributors should enter the forecasted OM&A for 2012 for all smart meters in service.

Smart Meter Capital Cost and Operational Expense Data

Smart Meter Installation Plan

Actual/Planned number of Smart Meters installed during the Calendar Year

	2006	2007	2008	2009	2010	2011	2012 and later	Total
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
Residential	0	0	0	43,168	1,490	287	0	44855
General Service < 50 kW	0	0	0	3,781	671	133	0	4585
Actual/Planned number of Smart Meters installed (Residential and GS < 50 kW only)	0	0	0	46949	2071	420	0	49440
Percentage of Residential and GS < 50 kW Smart Meter Installations Completed	0.00%	0.00%	0.00%	94.96%	99.15%	100.00%	0.00%	100.00%
Actual/Planned number of GS > 50 kW meters installed	0	0	0	0	0	0	0	0
Other (please identify)	0	0	0	0	0	0	0	0
Total Number of Smart Meters installed or planned to be installed	0	0	0	46949	2071	420	0	49440

1 Capital Costs

1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)

1.1.1 Smart Meters (may include new meters and modules, etc.)

1.1.2 Installation Costs (may include socket kits, labour, vehicle, benefits, etc.)

1.1.3a Workforce Automation Hardware (may include fieldwork handhelds, barcode hardware, etc.)

1.1.3b Workforce Automation Software (may include network handhelds, barcode hardware, etc.)

Total Advanced Metering Communications Devices (AMCD)

Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
Asset Type must be selected to enable calculations								
Smart Meter				5,649,205	60,959	86,328		\$ 5,796,489
Smart Meter				865,347	174,700	74,621		\$ 914,963
Computer Hardware				28,529				\$ 28,529
Computer Software				46,767	233			\$ 47,000
Total Advanced Metering Communications Devices (AMCD)	\$ -	\$ -	\$ -	\$ 6,389,848	\$ 235,985	\$ 161,149	\$ -	\$ 6,786,982

1.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)

1.2.1 Collectors

1.2.2 Repeaters (may include radio licence, etc.)

1.2.3 Installation (may include meter seats and rings, collector computer hardware, etc.)

Total Advanced Metering Regional Collector (AMRC) (includes LAN)

Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
Asset Type must be selected to enable calculations								
Smart Meter				204,436				\$ 204,436
Smart Meter					4,693			\$ 4,693
Smart Meter				386,589	-5,451	6,299		\$ 387,407
Total Advanced Metering Regional Collector (AMRC) (includes LAN)	\$ -	\$ -	\$ -	\$ 591,025	\$ 758	\$ 6,299	\$ -	\$ 596,537

1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)

1.3.1 Computer Hardware

1.3.2 Computer Software

1.3.3 Computer Software Licences & Installation (includes hardware and software) (may include 42500 disk space, backup and recovery computer, UPS, etc.)

Total Advanced Metering Control Computer (AMCC)

Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
Asset Type must be selected to enable calculations								
Computer Hardware								\$ -
Computer Software								\$ -
Computer Software				172,991	72,472	382		\$ 245,814
Total Advanced Metering Control Computer (AMCC)	\$ -	\$ -	\$ -	\$ 172,991	\$ 72,472	\$ 382	\$ -	\$ 245,814

1.4 WIDE AREA NETWORK (WAN)

1.4.1 Activation Fees

Total Wide Area Network (WAN)

Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
Asset Type must be selected to enable calculations								
Smart Meter				38,784	44,441			\$ 83,225
Total Wide Area Network (WAN)	\$ -	\$ -	\$ -	\$ 38,784	\$ 44,441	\$ -	\$ -	\$ 83,225

1.5 OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNCTIONALITY

1.5.1 Customer Equipment (including repair of damaged equipment)

1.5.2 AMI Interface to CIS

1.5.3 Professional Fees

1.5.4 Integration

1.5.5 Program Management

1.5.6 Other AMI Capital

Total Other AMI Capital Costs Related to Minimum Functionality

Total Capital Costs Related to Minimum Functionality

Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
Asset Type must be selected to enable calculations								
Smart Meter				29,910	14,560			\$ 44,470
Computer Software						25,197		\$ 25,197
Smart Meter				63,210		70,000		\$ 133,210
Smart Meter								\$ -
Smart Meter				162,549	23,848	3,477		\$ 189,874
Smart Meter				19,946	32,115			\$ 52,061
Total Other AMI Capital Costs Related to Minimum Functionality	\$ -	\$ -	\$ -	\$ 275,615	\$ 70,523	\$ 98,674	\$ -	\$ 444,812
Total Capital Costs Related to Minimum Functionality	\$ -	\$ -	\$ -	\$ 7,468,233	\$ 422,693	\$ 266,473	\$ -	\$ 8,157,370

1.6 CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY

(Please provide a descriptive title and identify nature of beyond minimum functionality costs)

1.6.1 Costs related to technical capabilities in the smart meters or related communications infrastructure that exceed those specified in O.Reg 425/06

1.6.2 Costs for deployment of smart meters to customers other than residential and small general service

1.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDAR, etc.

Total Capital Costs Beyond Minimum Functionality

Total Smart Meter Capital Costs

Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
Asset Type must be selected to enable calculations								
Smart Meter								\$ -
Applications Software								\$ -
								\$ -
Total Capital Costs Beyond Minimum Functionality	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Smart Meter Capital Costs	\$ -	\$ -	\$ -	\$ 7,468,233	\$ 422,693	\$ 266,473	\$ -	\$ 8,157,370

2 OM&A Expenses

2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)

2.1.1 Maintenance (may include meter investigation costs, etc.)

2.1.2 Other (please specify)

Total Incremental AMCD OM&A Costs

2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)

2.2.1 Maintenance

Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
			7,021	2,198	533		\$ 9,752
							\$ -
Total Incremental AMCD OM&A Costs	\$ -	\$ -	\$ 7,021	\$ 2,198	\$ 533	\$ -	\$ 9,752
							\$ -



Ontario Energy Board Smart Meter Model

Thunder Bay Hydro Electricity Distribution Inc.

	2006	2007	2008	2009	2010	2011	2012 and later
Cost of Capital							
Capital Structure ¹							
Deemed Short-term Debt Capitalization			0.0%				
Deemed Long-term Debt Capitalization			100.0%	100.0%	100.0%	100.0%	100.0%
Deemed Equity Capitalization	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Preferred Shares							
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of Capital Parameters							
Deemed Short-term Debt Rate							
Long-term Debt Rate (actual/embedded/deemed) ²		0.00%					
Target Return on Equity (ROE)		0.00%					
Return on Preferred Shares							
WACC	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Working Capital Allowance							
Working Capital Allowance Rate	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
<i>(% of the sum of Cost of Power + controllable expenses)</i>							
Taxes/PILs							
Aggregate Corporate Income Tax Rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
Capital Tax (until July 1st, 2010)	0.30%	0.225%	0.225%	0.225%	0.075%	0.00%	0.00%
Depreciation Rates							
<i>(expressed as expected useful life in years)</i>							
Smart Meters - years	15	15	15	15	15	15	15
- rate (%)	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%
Computer Hardware - years	5	5	5	5	5	5	5
- rate (%)	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Computer Software - years	5	5	5	5	5	5	5
- rate (%)	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Tools & Equipment - years	10	10	10	10	10	10	10
- rate (%)	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Other Equipment - years	10	10	10	10	10	10	10
- rate (%)	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
CCA Rates							
Smart Meters - CCA Class	47	47	47	47	47	47	47
Smart Meters - CCA Rate	8%	8%	8%	8%	8%	8%	8%
Computer Equipment - CCA Class	50	50	50	50	50	50	50
Computer Equipment - CCA Rate	55%	55%	55%	55%	55%	55%	55%
General Equipment - CCA Class	8	8	8	8	8	8	8
General Equipment - CCA Rate	20%	20%	20%	20%	20%	20%	20%
Applications Software - CCA Class							
Applications Software - CCA Rate							

Assumptions

¹ Planned smart meter installations occur evenly throughout the year.

² Fiscal calendar year (January 1 to December 31) used.

³ Amortization is done on a straight line basis and has the "half-year" rule applied.



Ontario Energy Board Smart Meter Model

Thunder Bay Hydro Electricity Distribution Inc.

	2006	2007	2008	2009	2010	2011	2012 and later
Net Fixed Assets - Smart Meters							
Gross Book Value							
Opening Balance		\$ -	\$ -	\$ -	\$ 7,219,977	\$ 7,569,935	\$ 7,810,830
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ 7,219,977	\$ 349,958	\$ 240,895	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ 7,219,977	\$ 7,569,935	\$ 7,810,830	\$ 7,810,830
Accumulated Depreciation							
Opening Balance		\$ -	\$ -	\$ -	\$ 240,666	\$ 733,663	\$ 1,246,355
Amortization expense during year	\$ -	\$ -	\$ -	\$ 240,666	\$ 492,997	\$ 512,692	\$ 520,722
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ 240,666	\$ 733,663	\$ 1,246,355	\$ 1,767,077
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 6,979,311	\$ 6,836,272	\$ 6,564,474
Closing Balance	\$ -	\$ -	\$ -	\$ 6,979,311	\$ 6,836,272	\$ 6,564,474	\$ 6,043,752
Average Net Book Value	\$ -	\$ -	\$ -	\$ 3,489,655	\$ 6,907,791	\$ 6,700,373	\$ 6,304,113
Net Fixed Assets - Computer Hardware							
Gross Book Value							
Opening Balance		\$ -	\$ -	\$ -	\$ 28,529	\$ 28,529	\$ 28,529
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ 28,529	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ 28,529	\$ 28,529	\$ 28,529	\$ 28,529
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 2,853	\$ 8,559	\$ 14,264
Amortization expense during year	\$ -	\$ -	\$ -	\$ 2,853	\$ 5,706	\$ 5,706	\$ 5,706
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ 2,853	\$ 8,559	\$ 14,264	\$ 19,970
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 25,676	\$ 19,970	\$ 14,264
Closing Balance	\$ -	\$ -	\$ -	\$ 25,676	\$ 19,970	\$ 14,264	\$ 8,559
Average Net Book Value	\$ -	\$ -	\$ -	\$ 12,838	\$ 22,823	\$ 17,117	\$ 11,411
Net Fixed Assets - Computer Software (including Applications Software)							
Gross Book Value							
Opening Balance		\$ -	\$ -	\$ -	\$ 219,728	\$ 292,433	\$ 318,011
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ 219,728	\$ 72,705	\$ 25,578	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ 219,728	\$ 292,433	\$ 318,011	\$ 318,011
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 21,973	\$ 73,189	\$ 134,233
Amortization expense during year	\$ -	\$ -	\$ -	\$ 21,973	\$ 51,216	\$ 61,044	\$ 63,602
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ 21,973	\$ 73,189	\$ 134,233	\$ 197,836
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 197,755	\$ 219,244	\$ 183,778
Closing Balance	\$ -	\$ -	\$ -	\$ 197,755	\$ 219,244	\$ 183,778	\$ 120,176
Average Net Book Value	\$ -	\$ -	\$ -	\$ 98,878	\$ 208,500	\$ 201,511	\$ 151,977
Net Fixed Assets - Tools and Equipment							
Gross Book Value							
Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Fixed Assets - Other Equipment							
Gross Book Value							
Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Ontario Energy Board Smart Meter Model

Thunder Bay Hydro Electricity Distribution Inc.

	2006	2007	2008	2009	2010	2011	2012 and Later
Average Net Fixed Asset Values (from Sheet 4)							
Smart Meters	\$ -	\$ -	\$ -	\$ 3,489,655	\$ 6,907,791	\$ 6,700,373	\$ 6,304,113
Computer Hardware	\$ -	\$ -	\$ -	\$ 12,838	\$ 22,823	\$ 17,117	\$ 11,411
Computer Software	\$ -	\$ -	\$ -	\$ 98,878	\$ 208,500	\$ 201,511	\$ 151,977
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Net Fixed Assets	\$ -	\$ -	\$ -	\$ 3,601,371	\$ 7,139,114	\$ 6,919,001	\$ 6,467,502
Working Capital							
Operating Expenses (from Sheet 2)	\$ -	\$ -	\$ 59,360	\$ 22,776	\$ 196,572	\$ 348,361	\$ 387,840
Working Capital Factor (from Sheet 3)	15%	15%	15%	15%	15%	15%	15%
Working Capital Allowance	\$ -	\$ -	\$ 8,904	\$ 3,416	\$ 29,486	\$ 52,254	\$ 58,176
Incremental Smart Meter Rate Base	\$ -	\$ -	\$ 8,904	\$ 3,604,787	\$ 7,168,600	\$ 6,971,256	\$ 6,525,678
Return on Rate Base							
<i>Capital Structure</i>							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deemed Long Term Debt	\$ -	\$ -	\$ 8,904	\$ 3,604,787	\$ 7,168,600	\$ 6,971,256	\$ 6,525,678
Equity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ -	\$ -	\$ 8,904	\$ 3,604,787	\$ 7,168,600	\$ 6,971,256	\$ 6,525,678
<i>Return on</i>							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deemed Long Term Debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Equity	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Expenses	\$ -	\$ -	\$ 59,360	\$ 22,776	\$ 196,572	\$ 348,361	\$ 387,840
Debt Financing Expenses (Thunder Bay Hydro-specific)				\$ 208,912	\$ 403,510	\$ 385,268	\$ 364,340
Amortization Expenses (from Sheet 4)							
Smart Meters	\$ -	\$ -	\$ -	\$ 240,666	\$ 492,997	\$ 512,692	\$ 520,722
Computer Hardware	\$ -	\$ -	\$ -	\$ 2,853	\$ 5,706	\$ 5,706	\$ 5,706
Computer Software	\$ -	\$ -	\$ -	\$ 21,973	\$ 51,216	\$ 61,044	\$ 63,602
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Amortization Expense in Year	\$ -	\$ -	\$ -	\$ 265,492	\$ 549,919	\$ 579,442	\$ 590,030
Incremental Revenue Requirement before Taxes/PILs	\$ -	\$ -	\$ 59,360	\$ 497,180	\$ 1,150,000	\$ 1,313,072	\$ 1,342,210
Calculation of Taxable Income							
Incremental Operating Expenses	\$ -	\$ -	\$ 59,360	\$ 22,776	\$ 196,572	\$ 348,361	\$ 387,840
Amortization Expense	\$ -	\$ -	\$ -	\$ 265,492	\$ 549,919	\$ 579,442	\$ 590,030
Interest Expense	\$ -	\$ -	\$ -	\$ 208,912	\$ 403,510	\$ 385,268	\$ 364,340
Net Income for Taxes/PILs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grossed-up Taxes/PILs (from Sheet 7)	\$ -	\$ -	\$ -	\$ 28,899.45	\$ 56,495.65	\$ 18,811.04	\$ 12,168.38
Revenue Requirement, including Grossed-up Taxes/PILs	\$ -	\$ -	\$ 59,360	\$ 468,280	\$ 1,093,505	\$ 1,294,261	\$ 1,354,378



For PILs Calculation

UCC - Smart Meters

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Forecast	2012 and later Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ 6,931,177.51	\$ 6,712,643.08	\$ 6,406,890.69
Capital Additions	\$ -	\$ -	\$ -	\$ 7,219,976.57	\$ 349,958.09	\$ 240,894.85	\$ -
Retirements/Removals (if applicable)	\$ -	\$ -	\$ -	\$ 7,219,976.57	\$ 7,281,135.60	\$ 6,953,537.93	\$ 6,406,890.69
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ 3,609,988.29	\$ 174,979.05	\$ 120,447.43	\$ -
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ 3,609,988.29	\$ 7,106,156.56	\$ 6,833,090.50	\$ 6,406,890.69
Reduced UCC	\$ 47	\$ 47	\$ 47	\$ 47	\$ 47	\$ 47	\$ 47
CCA Rate Class	8%	8%	8%	8%	8%	8%	8%
CCA	\$ -	\$ -	\$ -	\$ 288,799.06	\$ 568,492.52	\$ 546,647.24	\$ 512,551.26
Closing UCC	\$ -	\$ -	\$ -	\$ 6,931,177.51	\$ 6,712,643.08	\$ 6,406,890.69	\$ 5,894,339.44

UCC - Computer Equipment

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Forecast	2012 and later Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ 179,985.98	\$ 133,704.93	\$ 78,711.60
Capital Additions Computer Hardware	\$ -	\$ -	\$ -	\$ 28,528.68	\$ -	\$ -	\$ -
Capital Additions Computer Software	\$ -	\$ -	\$ -	\$ 219,727.85	\$ 72,705.15	\$ 25,578.46	\$ -
Retirements/Removals (if applicable)	\$ -	\$ -	\$ -	\$ 248,256.53	\$ 252,691.14	\$ 159,283.39	\$ 78,711.60
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ 124,128.26	\$ 36,352.58	\$ 12,789.23	\$ -
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ 124,128.26	\$ 216,338.56	\$ 146,494.16	\$ 78,711.60
Reduced UCC	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50
CCA Rate Class	55%	55%	55%	55%	55%	55%	55%
CCA	\$ -	\$ -	\$ -	\$ 68,270.55	\$ 118,986.21	\$ 80,571.79	\$ 43,291.38
Closing UCC	\$ -	\$ -	\$ -	\$ 179,985.98	\$ 133,704.93	\$ 78,711.60	\$ 35,420.22

UCC - General Equipment

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Forecast	2012 and later Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reduced UCC	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8
CCA Rate Class	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



Ontario Energy Board Smart Meter Model

Thunder Bay Hydro Electricity Distribution Inc.

PILs Calculation

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Forecast	2012 and later Forecast
INCOME TAX							
Net Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortization	\$ -	\$ -	\$ -	\$ 265,491.54	\$ 549,918.86	\$ 579,442.32	\$ 590,030.00
CCA - Smart Meters	\$ -	\$ -	\$ -	\$ 288,799.06	\$ 568,492.52	\$ 546,647.24	\$ 512,551.26
CCA - Computers	\$ -	\$ -	\$ -	\$ 68,270.55	\$ 118,986.21	\$ 80,571.79	\$ 43,291.38
CCA - Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Change in taxable income	\$ -	\$ -	\$ -	\$ 91,578.07	\$ 137,559.87	\$ 47,776.71	\$ 34,187.36
Tax Rate (from Sheet 3)	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
Income Taxes Payable	\$ -	\$ -	\$ -	\$ 30,220.76	\$ 42,643.56	\$ 13,496.92	\$ 8,974.18
ONTARIO CAPITAL TAX							
Smart Meters	\$ -	\$ -	\$ -	\$ 6,979,310.69	\$ 6,836,271.74	\$ 6,564,474.45	\$ 6,043,752.48
Computer Hardware	\$ -	\$ -	\$ -	\$ 25,675.81	\$ 19,970.08	\$ 14,264.34	\$ 8,558.60
Computer Software (Including Application Software)	\$ -	\$ -	\$ -	\$ 197,755.06	\$ 219,244.13	\$ 183,778.15	\$ 120,175.85
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rate Base	\$ -	\$ -	\$ -	\$ 7,202,741.56	\$ 7,075,485.95	\$ 6,762,516.94	\$ 6,172,486.94
Less: Exemption	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deemed Taxable Capital	\$ -	\$ -	\$ -	\$ 7,202,741.56	\$ 7,075,485.95	\$ 6,762,516.94	\$ 6,172,486.94
Ontario Capital Tax Rate (from Sheet 3)	0.300%	0.225%	0.225%	0.225%	0.075%	0.000%	0.000%
Net Amount (Taxable Capital x Rate)	\$ -	\$ -	\$ -	\$ 16,206.17	\$ 5,306.61	\$ -	\$ -
Change in Income Taxes Payable	\$ -	\$ -	\$ -	\$ 30,220.76	\$ 42,643.56	\$ 13,496.92	\$ 8,974.18
Change in OCT	\$ -	\$ -	\$ -	\$ 16,206.17	\$ 5,306.61	\$ -	\$ -
PILs	\$ -	\$ -	\$ -	\$ 14,014.59	\$ 37,336.95	\$ 13,496.92	\$ 8,974.18
Gross Up PILs							
Tax Rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
Change in Income Taxes Payable	\$ -	\$ -	\$ -	\$ 45,105.62	\$ 61,802.26	\$ 18,811.04	\$ 12,168.38
Change in OCT	\$ -	\$ -	\$ -	\$ 16,206.17	\$ 5,306.61	\$ -	\$ -
PILs	\$ -	\$ -	\$ -	\$ 28,899.45	\$ 56,495.65	\$ 18,811.04	\$ 12,168.38

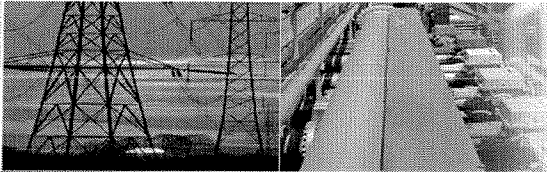
Ontario Energy Board
Smart Meter Model

Thunder Bay Hydro Electricity Distribution Inc.

This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

Interest Rates	Approved Deferral and Variance Accounts	CWIP	Date	Year	Quarter	Opening Balance (Principal)	Funding Adder Revenues	Interest Rate	Interest	Closing Balance	Annual amounts	Board Approved Smart Meter Funding Adder (from Tariff)
2006 Q1			Jan-06	2006	Q1	\$ -	\$ -	0.00%	\$ -	\$ -		
2006 Q2	4.14%	4.68%	Feb-06	2006	Q1	\$ -	\$ -	0.00%	\$ -	\$ -		
2006 Q3	4.59%	5.05%	Mar-06	2006	Q1	\$ -	\$ -	0.00%	\$ -	\$ -		
2006 Q4	4.59%	4.72%	Apr-06	2006	Q2	\$ -	\$ -	4.14%	\$ -	\$ -		
2007 Q1	4.72%	5.18%	May-06	2006	Q2	\$ -	\$ 587.46	4.14%	\$ -	\$ 587.46		
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	\$ 587.46	\$ 6,556.57	4.14%	\$ 2.03	\$ 7,154.06		
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	\$ 7,154.06	\$ 10,982.38	4.59%	\$ 27.36	\$ 18,163.77		
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	\$ 18,130.41	\$ 14,470.34	4.59%	\$ 69.37	\$ 32,676.12		
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	\$ 32,006.75	\$ 11,975.49	4.59%	\$ 124.72	\$ 44,706.96		
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	\$ 44,582.24	\$ 13,215.19	4.59%	\$ 170.53	\$ 57,967.96		
2008 Q3	3.35%	4.53%	Nov-06	2006	Q4	\$ 57,797.43	\$ 13,749.97	4.59%	\$ 221.08	\$ 71,768.48		
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	\$ 71,547.40	\$ 12,170.66	4.59%	\$ 273.67	\$ 83,991.73	\$ 84,606.82	
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	\$ 83,718.06	\$ 15,052.17	4.59%	\$ 320.22	\$ 99,090.45		
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	\$ 98,770.23	\$ 11,154.70	4.59%	\$ 377.80	\$ 110,302.73		
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	\$ 109,924.93	\$ 15,096.21	4.59%	\$ 420.46	\$ 125,441.60		
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	\$ 124,991.14	\$ 11,618.32	4.59%	\$ 478.09	\$ 137,087.55		
2010 Q1	0.55%	4.34%	May-07	2007	Q2	\$ 136,609.46	\$ 15,817.54	4.59%	\$ 522.53	\$ 153,009.33		
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	\$ 152,468.80	\$ 12,301.39	4.59%	\$ 583.26	\$ 165,371.44		
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	\$ 164,788.18	\$ 14,180.22	4.59%	\$ 630.31	\$ 179,607.71		
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	\$ 178,977.40	\$ 12,945.82	4.59%	\$ 684.59	\$ 192,006.81		
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	\$ 191,624.22	\$ 10,562.08	4.59%	\$ 734.11	\$ 202,266.41		
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	\$ 202,516.30	\$ 14,163.62	5.14%	\$ 867.44	\$ 217,547.38		
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	\$ 216,676.92	\$ 13,795.35	5.14%	\$ 928.11	\$ 231,403.38		
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	\$ 230,475.27	\$ 11,543.64	5.14%	\$ 987.20	\$ 243,006.11	\$ 105,834.97	
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	\$ 242,018.91	\$ 10,018.68	5.14%	\$ 1,036.65	\$ 250,074.24		
2012 Q2	1.47%	4.29%	Feb-08	2008	Q1	\$ 256,037.59	\$ 11,640.01	5.14%	\$ 1,105.29	\$ 270,782.89		
2012 Q3	1.47%	4.29%	Mar-08	2008	Q1	\$ 269,677.60	\$ 12,192.00	5.14%	\$ 1,155.12	\$ 283,024.72		
2012 Q4	1.47%	4.29%	Apr-08	2008	Q2	\$ 281,869.60	\$ 14,338.87	4.08%	\$ 958.36	\$ 297,166.83		
			May-08	2008	Q2	\$ 296,208.47	\$ 13,045.01	4.08%	\$ 1,007.11	\$ 310,260.50		
			Jun-08	2008	Q2	\$ 309,253.48	\$ 14,450.28	4.08%	\$ 1,061.46	\$ 324,763.22		
			Jul-08	2008	Q3	\$ 323,733.76	\$ 14,691.11	3.35%	\$ 943.76	\$ 339,326.63		
			Aug-08	2008	Q3	\$ 338,424.87	\$ 10,897.02	3.35%	\$ 944.77	\$ 350,294.66		
			Sep-08	2008	Q3	\$ 349,321.89	\$ 13,660.77	3.35%	\$ 975.19	\$ 363,057.85		
			Oct-08	2008	Q4	\$ 362,982.66	\$ 13,482.53	3.35%	\$ 1,013.33	\$ 377,488.52		
			Nov-08	2008	Q4	\$ 376,475.19	\$ 12,290.12	3.35%	\$ 1,050.99	\$ 389,816.30		
			Dec-08	2008	Q4	\$ 389,765.31	\$ 13,640.79	3.35%	\$ 1,088.30	\$ 403,506.40	\$ 172,683.49	
			Jan-09	2009	Q1	\$ 402,415.10	\$ 14,420.31	2.45%	\$ 851.00	\$ 417,057.01		
			Feb-09	2009	Q1	\$ 416,835.41	\$ 10,429.47	2.45%	\$ 851.04	\$ 428,115.92		
			Mar-09	2009	Q1	\$ 427,264.88	\$ 17,182.86	2.45%	\$ 872.33	\$ 445,320.07		
			Apr-09	2009	Q2	\$ 444,447.74	\$ 12,002.90	1.00%	\$ 370.37	\$ 456,821.01		
			May-09	2009	Q2	\$ 456,450.54	\$ 12,320.68	1.00%	\$ 389.38	\$ 469,154.70		
			Jun-09	2009	Q2	\$ 468,774.32	\$ 14,742.13	1.00%	\$ 390.05	\$ 483,907.10		
			Jul-09	2009	Q3	\$ 483,516.45	\$ 25,702.44	0.55%	\$ 221.61	\$ 509,506.50		
			Aug-09	2009	Q3	\$ 506,278.89	\$ 12,838.60	0.55%	\$ 233.42	\$ 523,350.91		
			Sep-09	2009	Q3	\$ 521,117.49	\$ 105,820.98	0.55%	\$ 266.80	\$ 749,305.27		
			Oct-09	2009	Q4	\$ 749,038.47	\$ 141,020.05	0.55%	\$ 343.31	\$ 890,402.84		
			Nov-09	2009	Q4	\$ 860,059.53	\$ 105,171.48	0.55%	\$ 407.04	\$ 965,638.03		
			Dec-09	2009	Q4	\$ 965,230.99	\$ 102,363.10	0.55%	\$ 456.15	\$ 1,068,040.24	\$ 700,784.69	
			Jan-10	2010	Q1	\$ 1,067,584.09	\$ 101,005.31	0.55%	\$ 503.08	\$ 1,169,092.46		
			Feb-10	2010	Q1	\$ 1,168,589.40	\$ 75,747.45	0.55%	\$ 549.35	\$ 1,274,886.20		
			Mar-10	2010	Q1	\$ 1,274,330.85	\$ 119,231.13	0.55%	\$ 684.07	\$ 1,394,152.05		
			Apr-10	2010	Q2	\$ 1,393,567.98	\$ 96,310.52	0.55%	\$ 638.72	\$ 1,490,517.22		
			May-10	2010	Q2	\$ 1,489,878.50	\$ 85,619.84	0.55%	\$ 682.86	\$ 1,576,181.20		
			Jun-10	2010	Q2	\$ 1,575,498.34	\$ 106,622.09	0.55%	\$ 722.10	\$ 1,682,843.13		
			Jul-10	2010	Q3	\$ 1,682,121.03	\$ 92,941.15	0.89%	\$ 1,247.67	\$ 1,776,309.75		
			Aug-10	2010	Q3	\$ 1,775,062.18	\$ 92,246.54	0.89%	\$ 1,316.50	\$ 1,868,627.22		
			Sep-10	2010	Q3	\$ 1,867,310.72	\$ 102,447.63	0.89%	\$ 1,384.92	\$ 1,971,143.27		
			Oct-10	2010	Q4	\$ 1,969,758.35	\$ 81,718.59	1.20%	\$ 1,969.76	\$ 2,053,446.70		
			Nov-10	2010	Q4	\$ 2,051,478.94	\$ 103,388.94	1.20%	\$ 2,051.48	\$ 2,156,917.36		
			Dec-10	2010	Q4	\$ 2,154,868.88	\$ 91,335.51	1.20%	\$ 2,154.87	\$ 2,248,357.26	\$ 1,162,423.50	
			Jan-11	2011	Q1	\$ 2,249,202.36	\$ 103,472.03	1.47%	\$ 2,751.60	\$ 2,352,426.02		
			Feb-11	2011	Q1	\$ 2,349,674.42	\$ 80,028.51	1.47%	\$ 2,878.35	\$ 2,432,581.28		
			Mar-11	2011	Q1	\$ 2,429,702.93	\$ 115,180.73	1.47%	\$ 2,978.39	\$ 2,547,860.05		
			Apr-11	2011	Q2	\$ 2,544,883.06	\$ 79,882.59	1.47%	\$ 3,117.48	\$ 2,627,883.73		
			May-11	2011	Q2	\$ 2,624,786.25	\$ 105,224.63	1.47%	\$ 3,215.34	\$ 2,733,206.22		
			Jun-11	2011	Q2	\$ 2,729,990.88	\$ 101,088.50	1.47%	\$ 3,344.24	\$ 2,835,023.62		
			Jul-11	2011	Q3	\$ 2,831,679.38	\$ 102,002.03	1.47%	\$ 3,408.81	\$ 2,938,050.22		
			Aug-11	2011	Q3	\$ 2,934,581.41	\$ 92,413.22	1.47%	\$ 3,504.86	\$ 3,030,589.49		
			Sep-11	2011	Q3	\$ 3,026,904.63	\$ 104,060.60	1.47%	\$ 3,708.07	\$ 3,134,763.30		
			Oct-11	2011	Q4	\$ 3,131,055.23	\$ 91,262.82	1.47%	\$ 3,835.54	\$ 3,226,163.59		
			Nov-11	2011	Q4	\$ 3,222,318.05	\$ 103,990.80	1.47%	\$ 3,947.34	\$ 3,330,264.19		
			Dec-11	2011	Q4	\$ 3,326,316.85	\$ 80,508.29	1.47%	\$ 4,074.74	\$ 3,410,899.88	\$ 1,201,535.51	
			Jan-12	2012	Q1	\$ 3,406,825.14	\$ 96,718.56	1.47%	\$ 4,173.36	\$ 3,507,717.06		
			Feb-12	2012	Q1	\$ 3,503,543.70	\$ 96,718.56	1.47%	\$ 4,201.84	\$ 3,604,554.11		
			Mar-12	2012	Q1	\$ 3,600,202.27	\$ 96,718.56	1.47%	\$ 4,410.32	\$ 3,701,391.15		
			Apr-12	2012	Q2	\$ 3,696,980.83	\$ 96,718.56	1.47%	\$ 4,528.80	\$ 3,798,238.19		
			May-12	2012	Q2	\$ 3,793,699.39	\$ 96,718.56	1.47%	\$ 4,647.28	\$ 3,895,005.23		
			Jun-12	2012	Q2	\$ 3,890,417.05	\$ 96,718.56	1.47%	\$ 4,765.76	\$ 3,991,902.28		
			Jul-12	2012	Q3	\$ 3,987,136.62	\$ -	0.00%	\$ -	\$ 3,987,136.62		
			Aug-12	2012	Q3	\$ 3,987,136.62	\$ -	0.00%	\$ -	\$ 3,987,136.62		
			Sep-12	2012	Q3	\$ 3,987,136.62	\$ -	0.00%	\$ -	\$ 3,987,136.62		
			Oct-12	2012	Q4	\$ 3,987,136.62	\$ -	0.00%	\$ -	\$ 3,987,136.62		
			Nov-12	2012	Q4	\$ 3,987,136.62	\$ -	0.00%	\$ -	\$ 3,987,136.62		
			Dec-12	2012	Q4	\$ 3,987,136.62	\$ -	0.00%	\$ -	\$ 3,987,136.62	\$ 607,128.74	
Total Funding Adder Revenues Collected							\$ 3,987,136.52		\$ 107,861.16	\$ 4,094,997.68	\$ 4,094,997.68	



Ontario Energy Board
Smart Meter Model

Thunder Bay Hydro Electricity Distribution Inc.

This worksheet calculates the interest on OM&A and amortization/depreciation expense, based on monthly data.

Account 1556 - Sub-accounts Operating Expenses, Amortization Expenses, Carrying Charges

Prescribed Interest Rates	Approved Deferral and Variance Accounts	CWIP	Date	Year	Quarter	Opening Balance (Principal)	OM&A Expenses	Amortization / Depreciation Expense	Closing Balance (Principal)	(Annual) Interest Rate	Interest (on opening balance)	Cumulative Interest
2006 Q1	0.00%	0.00%	Jan-06	2006	Q1	\$ -	-	-	-	0.00%	-	-
2006 Q2	4.14%	4.68%	Feb-06	2006	Q1	-	-	-	-	0.00%	-	-
2006 Q3	4.59%	5.05%	Mar-06	2006	Q1	-	-	-	-	0.00%	-	-
2006 Q4	4.59%	4.72%	Apr-06	2006	Q2	-	-	-	-	4.14%	-	-
2007 Q1	4.59%	4.72%	May-06	2006	Q2	-	-	-	-	4.14%	-	-
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	-	-	-	-	4.14%	-	-
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	-	-	-	-	4.59%	-	-
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	-	-	-	-	4.59%	-	-
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	-	-	-	-	4.59%	-	-
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	-	-	-	-	4.59%	-	-
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	-	-	-	-	4.59%	-	-
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	-	-	-	-	4.59%	-	-
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	-	-	-	-	4.59%	-	-
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	-	-	-	-	4.59%	-	-
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	-	-	-	-	4.59%	-	-
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	-	-	-	-	4.59%	-	-
2010 Q1	0.55%	4.34%	May-07	2007	Q2	-	-	-	-	4.59%	-	-
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	-	-	-	-	4.59%	-	-
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	-	-	-	-	4.59%	-	-
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	-	-	-	-	4.59%	-	-
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	-	-	-	-	4.59%	-	-
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	-	-	-	-	5.14%	-	-
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	-	-	-	-	5.14%	-	-
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	-	-	-	-	5.14%	-	-
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	-	-	-	-	5.14%	-	-
2012 Q2	1.47%	4.29%	Feb-08	2008	Q1	-	-	-	-	5.14%	-	-
2012 Q3	0.00%	4.29%	Mar-08	2008	Q1	-	\$ 17,168.63	-	17,168.63	5.14%	-	-
2012 Q4	0.00%	4.29%	Apr-08	2008	Q2	17,168.63	\$ 42,191.00	-	59,359.63	4.08%	58.37	58.37
			May-08	2008	Q2	59,359.63	-	-	59,359.63	4.08%	201.82	260.20
			Jun-08	2008	Q2	59,359.63	-	-	59,359.63	4.08%	201.82	462.02
			Jul-08	2008	Q3	59,359.63	-	-	59,359.63	3.35%	165.71	627.73
			Aug-08	2008	Q3	59,359.63	-	-	59,359.63	3.35%	165.71	793.44
			Sep-08	2008	Q3	59,359.63	-	-	59,359.63	3.35%	165.71	959.16
			Oct-08	2008	Q4	59,359.63	-	-	59,359.63	3.35%	165.71	1,124.87
			Nov-08	2008	Q4	59,359.63	-	-	59,359.63	3.35%	165.71	1,290.58
			Dec-08	2008	Q4	59,359.63	-	\$ 1,475.18	60,834.81	3.35%	165.71	1,456.29
			Jan-09	2009	Q1	60,834.81	\$ -	\$ 53.91	60,888.72	2.45%	124.20	1,580.50
			Feb-09	2009	Q1	60,888.72	\$ 428.06	\$ 53.91	61,370.69	2.45%	124.31	1,704.81
			Mar-09	2009	Q1	61,370.69	\$ 425.22	\$ 53.91	61,849.82	2.45%	125.30	1,830.11
			Apr-09	2009	Q2	61,849.82	\$ 15,740.49	\$ 1,154.51	78,744.82	1.00%	51.54	1,881.65
			May-09	2009	Q2	78,744.82	\$ 9,578.87	\$ 9,834.54	78,000.49	1.00%	65.62	1,947.27
			Jun-09	2009	Q2	78,000.49	\$ 4,044.90	\$ 15,060.23	97,105.62	1.00%	65.00	2,012.27
			Jul-09	2009	Q3	97,105.62	\$ 1,884.43	\$ 21,961.07	120,951.12	0.55%	44.51	2,056.78
			Aug-09	2009	Q3	120,951.12	\$ 5,733.75	\$ 26,367.08	153,051.95	0.55%	55.44	2,112.22
			Sep-09	2009	Q3	153,051.95	\$ 3,615.91	\$ 31,305.21	187,973.07	0.55%	70.15	2,182.36
			Oct-09	2009	Q4	187,973.07	\$ 15,343.91	\$ 37,116.93	240,433.91	0.55%	86.15	2,268.52
			Nov-09	2009	Q4	240,433.91	\$ 3,013.50	\$ 39,474.79	282,922.20	0.55%	110.20	2,378.72
			Dec-09	2009	Q4	282,922.20	\$ 13,483.29	\$ 38,926.85	308,365.76	0.55%	129.67	2,508.39
			Jan-10	2010	Q1	308,365.76	\$ 1,837.73	\$ 40,898.56	351,102.05	0.55%	141.33	2,649.72
			Feb-10	2010	Q1	351,102.05	\$ 9,323.96	\$ 41,292.32	401,718.33	0.55%	160.92	2,810.65
			Mar-10	2010	Q1	401,718.33	\$ 7,134.41	\$ 40,368.80	449,221.54	0.55%	184.12	2,994.77
			Apr-10	2010	Q2	449,221.54	\$ 4,420.37	\$ 40,956.52	494,598.43	0.55%	205.89	3,200.66
			May-10	2010	Q2	494,598.43	\$ 5,846.27	\$ 41,531.42	541,976.12	0.55%	226.69	3,427.35
			Jun-10	2010	Q2	541,976.12	\$ 16,498.55	\$ 41,997.14	600,471.81	0.55%	248.41	3,675.76
			Jul-10	2010	Q3	600,471.81	\$ 17,080.99	\$ 42,253.16	659,805.96	0.89%	445.35	4,121.11
			Aug-10	2010	Q3	659,805.96	\$ 31,807.70	\$ 42,369.24	733,982.90	0.89%	489.36	4,610.46
			Sep-10	2010	Q3	733,982.90	\$ 21,626.50	\$ 42,513.16	798,122.56	0.89%	544.37	5,154.83
			Oct-10	2010	Q4	798,122.56	\$ 25,606.82	\$ 42,811.28	866,540.66	1.20%	798.12	5,952.96
			Nov-10	2010	Q4	866,540.66	\$ 29,346.99	\$ 42,947.38	938,835.03	1.20%	866.54	6,819.50
			Dec-10	2010	Q4	938,835.03	\$ 22,865.17	\$ 42,845.17	1,004,345.37	1.20%	938.84	7,758.33
			Jan-11	2011	Q1	1,004,345.37	\$ 12,028.86	\$ 42,987.25	1,059,361.48	1.47%	1,230.32	8,988.65
			Feb-11	2011	Q1	1,059,361.48	\$ 27,537.02	\$ 43,158.98	1,130,057.48	1.47%	1,297.72	10,286.37
			Mar-11	2011	Q1	1,130,057.48	\$ 19,614.44	\$ 43,244.31	1,192,916.23	1.47%	1,384.32	11,670.69
			Apr-11	2011	Q2	1,192,916.23	\$ 34,195.17	\$ 43,244.32	1,270,355.72	1.47%	1,461.32	13,132.02
			May-11	2011	Q2	1,270,355.72	\$ 33,391.84	\$ 43,376.38	1,347,123.04	1.47%	1,556.19	14,688.20
			Jun-11	2011	Q2	1,347,123.04	\$ 17,515.96	\$ 43,428.29	1,408,068.18	1.47%	1,650.23	16,338.43
			Jul-11	2011	Q3	1,408,068.18	\$ 34,314.13	\$ 43,458.62	1,485,840.93	1.47%	1,724.88	18,063.31
			Aug-11	2011	Q3	1,485,840.93	\$ 34,159.92	\$ 43,507.31	1,563,508.16	1.47%	1,820.16	19,883.47
			Sep-11	2011	Q3	1,563,508.16	\$ 22,056.20	\$ 43,606.69	1,629,171.05	1.47%	1,915.30	21,798.76
			Oct-11	2011	Q4	1,629,171.05	\$ 22,671.46	\$ 43,334.68	1,695,177.19	1.47%	1,995.73	23,794.50
			Nov-11	2011	Q4	1,695,177.19	\$ 25,748.50	\$ 43,334.68	1,764,260.37	1.47%	2,076.59	25,871.09
			Dec-11	2011	Q4	1,764,260.37	\$ 25,748.50	\$ 43,334.68	1,833,343.56	1.47%	2,161.22	28,032.31
			Jan-12	2012	Q1	1,833,343.56	-	-	1,833,343.56	1.47%	2,245.85	30,278.16
			Feb-12	2012	Q1	1,833,343.56	-	-	1,833,343.56	1.47%	2,245.85	32,524.00
			Mar-12	2012	Q1	1,833,343.56	-	-	1,833,343.56	1.47%	2,245.85	34,769.85
			Apr-12	2012	Q2	1,833,343.56	-	-	1,833,343.56	1.47%	2,245.85	37,015.69
			May-12	2012	Q2	1,833,343.56	-	-	1,833,343.56	1.47%	2,245.85	39,261.54
			Jun-12	2012	Q2	1,833,343.56	-	-	1,833,343.56	1.47%	2,245.85	41,507.38
			Jul-12	2012	Q3	1,833,343.56	-	-	1,833,343.56	0.00%	-	41,507.38
			Aug-12	2012	Q3	1,833,343.56	-	-	1,833,343.56	0.00%	-	41,507.38
			Sep-12	2012	Q3	1,833,343.56	-	-	1,833,343.56	0.00%	-	41,507.38
			Oct-12	2012	Q4	1,833,343.56	-	-	1,833,343.56	0.00%	-	41,507.38
			Nov-12	2012	Q4	1,833,343.56	-	-	1,833,343.56	0.00%	-	41,507.38
			Dec-12	2012	Q4	1,833,343.56	-	-	1,833,343.56	0.00%	-	41,507.38
						\$ 588,705.10	\$ 1,244,638.46	\$ 1,833,343.56				



Ontario Energy Board
Smart Meter Model

Thunder Bay Hydro Electricity Distribution Inc.

This worksheet calculates the interest on OM&A and amortization/depreciation expense, in the absence of monthly data.

Year	OM&A (from Sheet 5)	Amortization Expense (from Sheet 5)	Cumulative OM&A and Amortization Expense	Average Cumulative OM&A and Amortization Expense	Average Annual Prescribed Interest Rate for Deferral and Variance Accounts (from Sheets 8A and 8B)	Simple Interest on OM&A and Amortization Expenses
2006	\$ -	\$ -	\$ -	\$ -	4.37%	\$ -
2007	\$ -	\$ -	\$ -	\$ -	4.73%	\$ -
2008	\$ 59,359.70	\$ -	\$ 59,359.70	\$ 29,679.85	3.98%	\$ 1,181.26
2009	\$ 22,776.03	\$ 265,491.54	\$ 347,627.27	\$ 203,493.48	1.14%	\$ 2,314.74
2010	\$ 196,571.79	\$ 549,918.86	\$ 1,094,117.92	\$ 720,872.60	0.80%	\$ 5,748.96
2011	\$ 348,361.02	\$ 579,442.32	\$ 2,021,921.26	\$ 1,558,019.59	1.47%	\$ 22,902.89
2012	\$ 387,840.00	\$ 590,030.00	\$ 2,999,791.26	\$ 2,510,856.26	1.47%	\$ 36,909.59
Cumulative Interest to 2011						\$ 32,147.84
Cumulative Interest to 2012						\$ 69,057.43



Ontario Energy Board Smart Meter Model

Thunder Bay Hydro Electricity Distribution Inc.

This worksheet calculates the Smart Meter Disposition Rider and the Smart Meter Incremental Revenue Requirement Rate Rider, if applicable. This worksheet also calculates any new Smart Meter Funding Adder that a distributor may wish to request. However, please note that in many 2011 IRM decisions, the Board noted that current funding adders will cease on April 30, 2011 and that the Board's expectation is that distributors will file for a final review of prudence at the earliest opportunity. The Board also noted that the SMFA is a tool designed to provide advance funding and to mitigate the anticipated rate impact of smart meter costs when recovery of those costs is approved by the Board. The Board observed that the SMFA was not intended to be compensatory (return on and of capital) on a cumulative basis over the term the SMFA was in effect. The SMFA was initially designed to fund future investment, and not fully fund prior capital investment. Distributors that seek a new SMFA should provide evidence to support its proposal. This would include documentation of where the distributor is with respect to its smart meter deployment program, and reasons as to why the distributor's circumstances are such that continuation of the SMFA is warranted. Press the "UPDATE WORKSHEET" button after choosing the applicable adders/riders.

Check if applicable



Smart Meter Funding Adder (SMFA)



Smart Meter Disposition Rider (SMDR)

The SMDR is calculated based on costs to December 31, 2011



Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)

The SMIRR is calculated based on the incremental revenue requirement associated with the recovery of capital related costs to December 31, 2012 and associated OM&A.

	2005	2007	2008	2009	2010	2011	2012 and later	Total
Deferred and forecasted Smart Meter Incremental Revenue Requirement (from Sheet 5)	\$ -	\$ -	\$ 59,359.70	\$ 468,280.30	\$ 1,093,504.59	\$ 1,294,260.74	\$ 1,354,378.23	\$ 4,269,783.56
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B) (Check one of the boxes below)	\$ -	\$ -	\$ 1,456.29	\$ 1,052.10	\$ 5,249.94	\$ 20,273.98		\$ 28,032.31
<input checked="" type="checkbox"/> Sheet 8A (Interest calculated on monthly balances)	\$ -	\$ -	\$ 1,456.29	\$ 1,052.10	\$ 5,249.94	\$ 20,273.98		\$ 28,032.31
<input type="checkbox"/> Sheet 8B (Interest calculated on average annual balances)								\$ -
SMFA Revenues (from Sheet 8)	\$ 83,718.06	\$ 158,300.85	\$ 160,306.19	\$ 695,168.99	\$ 1,148,618.30	\$ 1,160,622.75	\$ 580,311.38	\$ 3,987,136.52
SMFA Interest (from Sheet 8)	\$ 888.76	\$ 7,534.12	\$ 12,287.30	\$ 5,615.60	\$ 13,805.26	\$ 40,912.78	\$ 29,817.38	\$ 107,861.16
Net Deferred Revenue Requirement	-\$ 84,006.82	-\$ 165,834.97	-\$ 111,867.50	-\$ 231,452.19	-\$ 63,669.03	\$ 112,669.21	\$ 747,249.49	\$ 202,818.20

Number of Metered Customers (average for 2012 test year)

49508

Calculation of Smart Meter Disposition Rider (per metered customer per month)

Years for collection or refunding

2

Deferred Incremental Revenue Requirement from 2006 to December 31, 2011

\$ 2,943,437.64

plus Interest on OM&A and Amortization

SMFA Revenues collected from 2006 to 2012 test year (inclusive)

\$ 4,084,997.68

Plus Simple Interest on SMFA Revenues

Net Deferred Revenue Requirement

-\$ 1,151,560.03

SMDR

May 1, 2012 to April 30, 2014

-\$ 0.07

Match

Check: Forecasted SMDR Revenues

\$ 1,153,943.04

Calculation of Smart Meter Incremental Revenue Requirement Rate Rider (per metered customer per month)

Incremental Revenue Requirement for 2012

\$ 1,354,378.23

SMIRR

\$ 2.28

Match

Check: Forecasted SMIRR Revenues

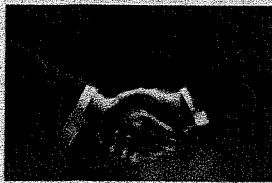
\$ 1,356,180.48

Smart Meter Disposition Rate Rider as at December 31, 2011

Revenue Requirement 2008	\$60,816
Revenue Requirement 2009	\$469,332
Revenue Requirement 2010	\$1,098,755
Revenue Requirement 2011	<u>\$1,314,535</u>
Total Revenue Requirement	<u>\$2,943,438</u>
Smart Meter Rate Adder	-\$3,987,137
Carrying Charges	<u>-\$107,861</u>
Smart Meter True-Up	<u>-\$1,151,560</u>
Average # of Metered Customers Jan. to Nov. 2011	49,568
Rate rider \$/month/metered customer	-\$0.97

Smart Meter Incremental Revenue Requirement Rate Rider

Revenue Requirement 2012	\$ 1,354,378
Total Revenue Requirement	<u>\$ 1,354,378</u>
Smart Meter Rate Adder	\$ -
Carrying Charges	\$ -
Smart Meter True-Up	<u>\$1,354,378</u>
Average # of Metered Customers Jan. to Nov. 2011	49,568
Rate rider \$/month/metered customer	\$2.28



PRP International, Inc.

Fairness Advisory Services

May 30, 2008

Mr. Tim Wilson
Vice-President, Customer Service & Conservation
Thunder Bay Hydro Electricity Distribution
34 Cumberland Street North
Thunder Bay, ON P7A 4L4

Dear Mr. Wilson:

Subject: Attestation of the Fairness Commissioner
Advanced Metering Infrastructure RFP, August 2007
London Hydro & Consortium of LDCs Smartmetering Project

PRP International, Inc. is pleased to submit its letter report of the Fairness Commissioner for the noted Request for Proposal (RFP) evaluation and selection phase. This judgment is being provided for the information and use of each Consortium LDC Sponsor, in their consideration of the report from the Evaluation Phase, for this competitive transaction.

"It is the judgment of PRP International, Inc., as the Fairness Commissioner, that the determinations of the two (2) highest ranked Proponents for the "Group of the Northern Five LDCs" (Thunder Bay Hydro Electricity Distribution, Atikokan Hydro Inc., Fort Francis Hydro Power Corporation, Kenora Hydro Electric Corporation Ltd, and Sioux Lookout Hydro Inc.,) requirements are:

- Elster Metering, as the recommended Preferred Proponent, based on its highest ranking, and*
- KTI/Sensus Limited being the second ranked Proponent.*

These determinations were made in a fair (objective and competent) manner and consistent with the evaluation and selection processes set out in the RFP, issued August 14, 2007."

A detailed report for your records will be submitted to you, by August 31, 2008. Should you have any questions or require clarification of any matter contained in this letter report, please contact the undersigned.

Yours truly,

Peter Sorensen

President

cc: Mr. Gary Rains, RFP Project Director

Bill Impacts

Customer Class:

Residential

Consumption **800** kWh

Charge Unit	Current Board-Approved			Proposed			Impact	
	Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change
Monthly Service Charge	\$ 9.8800	1	\$ 9.88	\$ 9.8800	1	\$ 9.88	\$ -	0.00%
Smart Meter Rate Adder	\$ 1.9700	1	\$ 1.97	\$ -	1	\$ -	-\$ 1.97	-100.00%
Distribution Volumetric Rate	\$ 0.0124	800	\$ 9.92	\$ 0.0124	800	\$ 9.92	\$ -	0.00%
Shared Tax Savings Rider	\$ 0.0003	800	\$ 0.24	\$ 0.0003	800	\$ 0.24	\$ -	0.00%
LRAM & SSM Rate Rider	\$ 0.0010	800	\$ 0.80	\$ 0.0010	800	\$ 0.80	\$ -	0.00%
Deferral/Variance Account Disposition Rate Rider	\$ 0.0010	800	\$ 0.80	\$ 0.0010	800	\$ 0.80	\$ -	0.00%
Smart Meter Disposition Rider			\$ -	\$ 0.9700	1	\$ 0.97	-\$ 0.97	#DIV/0!
Smart Meter Incremental Revenue Requirement Rider			\$ -	\$ 2.2800	1	\$ 2.28	\$ 2.28	#DIV/0!
Sub-Total A - Distribution			\$ 23.13			\$ 22.47	-\$ 0.66	-2.85%
RTSR - Network	\$ 0.0058	835.84	\$ 4.85	\$ 0.0058	835.84	\$ 4.85	\$ -	0.00%
RTSR - Line and Transformation Connection	\$ 0.0047	835.84	\$ 3.93	\$ 0.0047	835.84	\$ 3.93	\$ -	0.00%
Sub-Total B - Delivery (including Sub-Total A)			\$ 31.91			\$ 31.25	-\$ 0.66	-2.07%
Wholesale Market Service Charge (WMSC)	\$ 0.0052	835.84	\$ 4.35	\$ 0.0052	835.84	\$ 4.35	\$ -	0.00%
Rural and Remote Rate Protection (RRRP)	\$ 0.0013	835.84	\$ 1.09	\$ 0.0013	835.84	\$ 1.09	\$ -	0.00%
		835.84	\$ -		835.84	\$ -	\$ -	
Standard Supply Service Charge	\$ 0.2500	1	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%
Debt Retirement Charge (DRC)	\$ 0.0070	835.84	\$ 5.85	\$ 0.0070	835.84	\$ 5.85	\$ -	0.00%
Energy Tier 1	\$ 0.0710	835.84	\$ 59.34	\$ 0.0710	835.84	\$ 59.34	\$ -	0.00%
Energy Tier 2	\$ 0.0830		\$ -	\$ 0.0830		\$ -	\$ -	
			\$ -			\$ -	\$ -	
Total Bill (before Taxes)			\$ 102.78			\$ 102.12	-\$ 0.66	-0.64%
HST	13%		\$ 13.36	13%		\$ 13.28	-\$ 0.09	-0.64%
Total Bill (including Sub-total B)			\$ 116.15			\$ 115.40	-\$ 0.75	-0.65%
Ontario Clean Energy Benefit ¹			-\$ 11.62			-\$ 11.54	\$ 0.08	-0.69%
Total Bill (including OCEB)			\$ 104.53			\$ 103.86	-\$ 0.67	-0.64%
Loss Factor (%)			4.48%			4.48%		

¹ Applicable to eligible customers only. Refer to the *Ontario Clean Energy Benefit Act, 2010*.

Note that the "Charge \$" columns provide breakdowns of the amounts that each bill component contributes to the total monthly bill at the referenced consumption level at existing and proposed rates.

Applicants must provide bill impacts for residential at 800 kWh and GS<50kW at 2000 kWh. In addition, their filing should cover the range that is relevant to their service territory, class by class. A general guideline of consumption levels follows:

Residential (kWh) - 100, 250, 500, 800, 1000, 1500, 2000

GS<50kW (kWh) - 1000, 2000, 5000, 10000, 15000

GS>50kW (kW) - 60, 100, 500, 1000

Large User - range appropriate for utility

Lighting Classes and USL - 150 kWh and 1 kW, range appropriate for utility.

Bill Impacts

Customer Class: **General Service < 50 kW**

Consumption **2000** kWh

	Charge Unit	Current Board-Approved			Proposed			Impact	
		Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change
Monthly Service Charge	Monthly	\$ 17.8900	1	\$ 17.89	\$ 17.8900	1	\$ 17.89	\$ -	0.00%
Smart Meter Rate Adder	Monthly	\$ 1.9700	1	\$ 1.97	\$ -	1	\$ -	-\$ 1.97	-100.00%
Distribution Volumetric Rate	per kWh	\$ 0.0131	2000	\$ 26.20	\$ 0.0131	2000	\$ 26.20	\$ -	0.00%
Shared Tax Savings Rider	per kWh	-\$ 0.0002	2000	-\$ 0.40	-\$ 0.0002	2000	-\$ 0.40	\$ -	0.00%
LRAM & SSM Rate Rider	per kWh	\$ 0.0001	2000	\$ 0.20	\$ 0.0001	2000	\$ 0.20	\$ -	0.00%
Deferral/Variance Account Disposition Rate Rider	per kWh	\$ 0.0010	2000	\$ 2.00	\$ 0.0010	2000	\$ 2.00	\$ -	0.00%
Smart Meter Disposition Rider	Monthly			\$ -	-\$ 0.9700	1	-\$ 0.97	-\$ 0.97	#DIV/0!
Smart Meter Incremental Revenue Requirement Rider	Monthly			\$ -	\$ 2.2800	1	\$ 2.28	\$ 2.28	#DIV/0!
Sub-Total A - Distribution				\$ 47.86			\$ 47.20	-\$ 0.66	-1.38%
RTSR - Network	per kWh	\$ 0.0055	2089.6	\$ 11.49	\$ 0.0055	2089.6	\$ 11.49	\$ -	0.00%
RTSR - Line and Transformation Connection	per kWh	\$ 0.0044	2089.6	\$ 9.19	\$ 0.0044	2089.6	\$ 9.19	\$ -	0.00%
Sub-Total B - Delivery (including Sub-Total A)				\$ 68.55			\$ 67.89	-\$ 0.66	-0.96%
Wholesale Market Service Charge (WMSC)	per kWh	\$ 0.0052	2089.6	\$ 10.87	\$ 0.0052	2089.6	\$ 10.87	\$ -	0.00%
Rural and Remote Rate Protection (RRRP)	per kWh	\$ 0.0013	2089.6	\$ 2.72	\$ 0.0013	2089.6	\$ 2.72	\$ -	0.00%
			2089.6	\$ -		2089.6	\$ -	\$ -	
Standard Supply Service Charge	Monthly	\$ 0.2500	1	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%
Debt Retirement Charge (DRC)		\$ 0.0070	2089.6	\$ 14.63	\$ 0.0070	2089.6	\$ 14.63	\$ -	0.00%
Energy Tier 1	per kWh	\$ 0.0710	750	\$ 53.25	\$ 0.0710	750	\$ 53.25	\$ -	0.00%
Energy Tier 2	per kWh	\$ 0.0830	1339.6	\$ 111.19	\$ 0.0830	1339.6	\$ 111.19	\$ -	0.00%
				\$ -			\$ -	\$ -	
Total Bill (before Taxes)				\$ 261.44			\$ 260.78	-\$ 0.66	-0.25%
HST		13%		\$ 33.99	13%		\$ 33.90	-\$ 0.09	-0.25%
Total Bill (including Sub-total B)				\$ 295.43			\$ 294.69	-\$ 0.74	-0.25%
Ontario Clean Energy Benefit ¹				-\$ 29.54			-\$ 29.47	\$ 0.07	-0.24%
Total Bill (including OCEB)				\$ 265.89			\$ 265.22	-\$ 0.67	-0.25%
Loss Factor (%)			4.48%				4.48%		

¹ Applicable to eligible customers only. Refer to the *Ontario Clean Energy Benefit Act, 2010*.

Note that the "Charge \$" columns provide breakdowns of the amounts that each bill component contributes to the total monthly bill at the referenced consumption level at existing and proposed rates.

Applicants must provide bill impacts for residential at 800 kWh and GS<50kW at 2000 kWh. In addition, their filing should cover the range that is relevant to their service territory, class by class. A general guideline of consumption levels follows:

Residential (kWh) - 100, 250, 500, 800, 1000, 1500, 2000

GS<50kW (kWh) - 1000, 2000, 5000, 10000, 15000

GS>50kW (kW) - 60, 100, 500, 1000

Large User - range appropriate for utility

Lighting Classes and USL - 150 kWh and 1 kW, range appropriate for utility.