

May 3, 2012

Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: Thunder Bay Hydro Electricity Distribution Inc. ("TBHEDI")
2012 Smart Meter Cost Recovery
Board File No. EB-2012-0015**

This letter acknowledges receipt of the OEB Board Staff Submission dated April 20, 2012. TBHEDI submits two (2) paper copies of its responses to the Board Staff Submission for the 2012 Smart Meter Cost Recovery and encloses the following:

- Responses to the OEB Board Staff Submission
- Appendix A: Response to OEB Board Staff Interrogatory Question#15(b) dated Feb. 11, 2009
- Appendix B: 2012 Smart Meter Model_FINAL_2.17_20120503_V1 2009 COS.xls
- Appendix C: 2012 Smart Meter Model_FINAL_2.17_20120503_V2 2009 COS.xls
- Appendix D: Cost of Long Term Debt
- Appendix E: Bill Impacts

An electronic copy has been submitted through the OEB's RESS on-line filing system and via email, including a copy to all Intervenor. Please note that the excel versions of Appendix B and C have been included as well.

Should you require any additional information, please do not hesitate to contact the undersigned.

Yours truly,



Cindy Speziale, CA
Vice President, Finance

Encl.

cc: Robert Mace, President, Thunder Bay Hydro Electricity Distribution Inc.
Michael Buonaguro, Counsel for Vulnerable Energy Consumers Coalition (VECC)

Responses to Board Staff Submission

2012 Smart Meter Cost Recovery Thunder Bay Hydro Electricity Distribution Inc. ("TBHEDI") EB-2012-0015

Introduction

TBHEDI originally filed an application with the Ontario Energy Board ("OEB") on January 13, 2012 in a stand-alone Smart Meter Cost Recovery Application (the "Application") requesting a Smart Meter Disposition Rider ("SMDR") and a Smart Meter Incremental Revenue Requirement Rider ("SMIRR"). The proposed effective date for both rate riders is May 1, 2012, with the SMDR to remain in effect for 24 months and 12 month for the SMIRR. The Application is based on the Board's Guideline G-2008-0002: Smart Meter Funding and Cost Recovery and Guideline G-2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition.

The purpose of this document is to provide responses to OEB Board Staff's Submission which is based on its review of the evidence submitted by TBHEDI in its original application and interrogatory process.

Below you will find TBHEDI's responses on the following matters:

- Approvals Sought
- Updated Evidence
- Prudence of Smart Meter Costs
 - Smart Meter Installation Costs
 - PILs
 - Smart Meter Unit Costs
- Costs Incurred for Beyond Minimum Functionality
- Rate Rider Calculations
 - Smart Meter Funding Adder Revenues
 - Cost Allocation
- Bill Impacts

Approvals Sought

TBHEDI confirms that in its original application filed on January 13, 2012 it had requested the following:

- A SMDR for all capital and operating, maintenance, and administrative expense for meters installed up to December 31, 2011 of (\$0.97) per metered customer per month for 24 months commencing May 1, 2012; and
- A SMIRR for the revenue requirement for smart meters installed up to December 31, 2011 of \$2.28 per metered customer per month for 12 months commencing May 1, 2012.

In response to VECC's Interrogatory question #7d, TBHEDI revised its rate riders to allocate the costs based on the methodology in PowerStream's application EB-2011-0128.

Based on OEB Board Staff's suggestion in their Final Submission regarding allocation of revenue requirement, TBHEDI further revised the amounts to better align with Cost Allocation methodologies. TBHEDI's final approval sought is Column 3 and 6 (Board Staff's 2nd Method) in the chart below.

Class	SMDR (\$/month for 24 mths)			SMIRR (\$/month) for 12 mths		
	Original	Revised VECC IR #7d	Board Staff's 2nd Method*	Original	Revised VECC IR #7d	Board Staff's 2nd Method*
Fixed	-\$0.97			\$2.28		
Residential		-\$0.78	-\$1.45		\$1.87	\$1.87
GS<50 kW		-\$2.85	\$3.84		\$6.84	\$6.84

** Second method discussed on page 8 of Board Staff's Final Submission April 20, 2012*

Updated Evidence

TBHEDI acknowledges that Board Staff has no concerns with the revisions made to the Smart Meter Model in the interrogatory process as listed below:

- A reduction of \$25,730 in reported smart meter capital expenditures to reflect actual 2011 year end balances;
- A reduction of \$5,565 in reported operating, maintenance and administration smart meter expenses to reflect actual 2011 year end balances and a revised 2012 forecast;
- Revisions of the aggregate Federal and provincial corporate tax rates for 2009 through to 2012;
- A revision of the estimated SMFA revenues for 2012.

A few concerns Board Staff have noted are addressed below.

Prudence of Smart Meter Costs

Smart Meter Installation Costs

TBHEDI acknowledges that Board Staff is satisfied with the explanations for the variances between budget and actual costs for its smart meters project; however, Board Staff was unable to reconcile costs in TBHEDI's response to its Interrogatory #2c. Both variances are discussed in the following paragraph; however, the underlying reason is the difference of grouping in the variance analyses and the Smart Meter Model.

The 2010 OM&A Cost variance Board Staff noted in its April 20, 2012 submission is broken out and explained below.

Report/Variance Line Item	\$	Description of Costs
O&M and Admin Costs 2010*	\$587,269	
within "TOU Billing Budget"	\$764	TOU bill modifications
within "Smart Meter Other Unit Costs"	\$9,850	legal services
within "Utility Safety and Mtce"	<u>\$2,198</u>	operational costs for meter base repairs
Total Smart Meter O&M Costs (2010)**	<u>\$600,081</u>	

*Per TBHEDI's response to Board Staff Interrogatory #2c

** Per Total Smart Meter OM&A Costs in Tab 2 of the Smart Meter Model

TBHEDI submits that its 2011 Forecast & Unaudited balances presented in Column B of its response to Board Staff Interrogatory #2c is the 2011 yearend balance that have now been audited and are approved by the Board of Directors (approved April 26, 2012). A variance as provided above for 2010 OM&A is provided below for the 2011 Forecast & Unaudited balances.

Report/Variance Line Item	\$	Description of Costs
O&M and Admin Costs 2011*	\$669,875	
within "Smart Meter Installation Costs"	\$534	operational metering installation costs
within "TOU Billing Budget"	\$30,176	customer education
within "Smart Meter Other Unit Costs"	<u>\$14,539</u>	legal services
Total Smart Meter O&M Costs (2011)**	<u>\$715,124</u>	

*Per TBHEDI's response to Board Staff Interrogatory #2c

** Per Total Smart Meter OM&A Costs in Tab 2 of the Smart Meter Model

PILs

Board Staff indicates that TBHEDI's Smart Meter Model does not reflect the Board's Decision on TBHEDI's cost of capital in its 2009 COS application, EB-2008-0245, nor does it comply with the Board's practice to use the Applicant's most recently approved cost of capital. TBHEDI submits that the Smart Meter Model included in EB-2008-0245 assumed 100% for the Deemed Debt (in response to OEB Board Staff Interrogatory Question#15(b) dated February 11, 2009) and was the basis for the \$1.97 OEB Board Approved Smart Meter Adder. As noted in that response (see **Appendix A**) and reiterated in this application, the rationale for support of the Smart Meter Model as filed by TBHEDI is the fact that TBHEDI operates under a "Rate Minimization Model". The "Rate Minimization Model" is defined in TBHEDI's Shareholder Declaration (updated May 2011) as follows:

Rate Minimization Model means a Shareholder philosophy of minimizing electricity rates for customers of DistributionCo by having these rates reflect the Shareholder forgoing its allowable regulated return on shareholder equity from DistributionCo and forgoing payment of interest or principal on long term debt held in DistributionCo by the Shareholder.

The debt incurred (\$8M at 5.27%) for the Smart Meter project was not included in the Cost of Capital calculations in the 2009 COS application but rather was incorporated in the Smart Meter Model filed with the 2009 COS application filed in support of the Smart Meter Adder. Had the debt been included outside the Smart Meter Model, the Revenue Requirement would have increased sufficiently to fund the interest expense on this debt. TBHEDI customers are in a more favourable position as a result of our treatment of the Smart Meter Loan. They are receiving the benefit of lower distribution rates due to a lower interest rate on the loan than would have been settled in EB-2008-0245 (5.27% versus the 7.62% -the February 26, 2009 updated deemed LTD rate or the 6.0% TBHEDI used in its application). The savings to TBHEDI's customer is approximately \$188,000 calculated as the interest differential using a simple interest calculation (\$8M @ 7.62% less \$8M @ 5.27%).

TBHEDI has provided a table below summarizing the difference between the Smart Meter Model as filed by TBHEDI and using the 2009 COS application Cost of Capital parameters (V1 uses the rate of return on long-term debt of 0.21% and V2 uses the rate of return on long-term debt of 6%). See **Appendix B** and **Appendix C** respectively for the Smart Meter Models. As can be seen from the table below, TBHEDI would be in a significantly underfunded position if the Cost Parameter for the Rate of Return on Long-term Debt of 0.21% is used (TBHEDI notes this is substantially lower due to the 0% interest on the City of Thunder Bay debt). TBHEDI's understanding of the Smart Meter Funding is that "in substance" it is meant to represent a proxy of the revenue requirement the Smart Meter investment transactions would have produced if such had been recognized in rate base. TBHEDI had considered the Smart Meter Loan interest to be part of the Smart Meter deferral account 1555 until the December 2010 FAQ#11 clearly indicated that such should not be recorded in the smart meter accounts. (This date is well beyond the date of TBHEDI filing its 2009 COS application). TBHEDI continues to believe that the Smart Meter Model as filed best represents such. If the Board does not support TBHEDI's judgment and rules that the Board should not vary from its past practice, TBHEDI believes that using the 2009 COS application cost parameter for interest on LTD should be the 6% used as the interest rate on the 2009 Capital Funding – see **Appendix D** (so as not to double-up on the impact of the 0% City debt as a result of "Rate Minimization").

Summary of Key Information

	ROE-0%, STD-0%, LTD-5.27%	2009 Cost of Capital Parameters		2009 Cost of Capital Parameters	
		ROE-3.75%, ROD_STD-1.33%, ROD_LTD-.21%		ROE-3.75%, ROD_STD-1.33%, ROD_LTD-6.0%	
	Smart Meter Model, Version 2.17TB	Smart Meter Model, Version 2.17	Difference from Model as filed by Thunder Bay	Smart Meter Model, Version 2.17	Difference from Model as filed by Thunder Bay
Operating Expenses	1,009,739	1,009,739	-	1,009,739	-
Amortization	1,981,948	1,981,948	-	1,981,948	-
Return on Equity	-	368,084	368,084	368,084	368,084
Return on Debt	1,361,635	41,141	(1,320,494)	819,997	(541,638)
PILs	(86,576)	58,863	145,438	58,863	145,438
Total Revenue Requirement*	4,266,747	3,459,775	(806,972)	4,238,631	(28,116)

*As per Tab 5 of the Smart Meter Model row 72

TBHEDI notes that the revised approvals sought are based on the Smart Meter Model filed in TBHEDI's response to Board Staff Interrogatories dated April 11, 2012.

Board Staff have also raised a concern regarding the impact of the negative PILs. TBHEDI responded that the PILs reflected in the model reflect a fair proxy; however, it does not reflect the tax treatment given that the funding adder and revenue requirement do not match. As noted previously, TBHEDI did not include the Smart Meter Loan in Revenue Requirement in its 2009 COS application and as such, did not claim the interest on such for purposes of the PILs calculation. The tax impact of the interest on the LTD was considered in the Smart Meter Model as filed in its 2009 COS application and as such is incorporated in this stand-alone Smart Meter Cost Recovery application. TBHEDI provides the following table which should provide Board Staff with the clarification required.

Thunder Bay Hydro							
Review of PILs -Smart Meter(SM) Disposition Adder (000's)							
Year ended December 31st	2012	2011	2010	2009	2008	2007	2006
Adder(Repayment)	(1,139)	1,171	1,153	854	172	146	85
Expenses							
Operating & Administrative		328	197	23	59		
Amortization		521	503	222			
	\$ -	849	699	245	59		
Net SM Income	(1,139)	322	454	609	113	146	85
Interest-SM Loan	0	387	404	209			
	(1,139)	(65)	50	401	113	146	85
Amortization	0	521	503	222			
CCA	0	(578)	(550)	(265)			
Taxable SM Income	(1,139)	(123)	3	357	113	146	85
Tax Rates underpinning Rates	25.74%	25.74%	29.61%	32.83%	33.50%	36.12%	36.12%
PILs, excluding Ontario							
Capital Tax (OCT)	(293)	(32)	1	117	38	53	31
Cummulative-A	(86)	208	239	238	121	83	31
Grossed up Taxes/PILs per							
Smart Meter Model	11	(16)	(53)	(29)		0	0
Cummulative -B	(87)	(97)	(81)	(29)		0	0
A-B	1						

Smart Meter Unit Costs

TBHEDI acknowledges that Board Staff does not consider its total OPEX & CAPEX unit cost of \$212.25 to be out of line when considering the unit costs found in other applications and considers the documented costs to be prudently incurred.

Costs Incurred for Beyond Minimum Functionality

TBHEDI concurs that it has identified a total of \$21,362 for capital expenditures and an estimated total OM&A for 2011 and 2012 of \$114,912 for expenditures for functionality that is beyond the defined minimum. These costs translate to an impact of \$2.75 per meter. TBHEDI acknowledges that Board Staff believes these costs are necessary to realize the capabilities of smart meters through the implementation of TOU rates and has no objections to including these costs in the SMDR and SMIRR.

Rate Rider Calculations

Smart Meter Funding Adder Revenues

TBHEDI concurs that in its Application, SMFA revenues and interest are recorded in Account 1555 up to and including June 2012 since that is the last month it will receive revenues from its customers for the SMFA which has a sunset date of April 30, 2012 as the majority are billed bi-monthly. TBHEDI acknowledges that Board Staff agrees with its recording of the calculated interest as completed in the Smart Meter Model.

Cost Allocation

In its original application, TBHEDI applied for a single SMDR and a single SMIRR to be billed to its residential and GS<50 kW customers and did not do an allocation to determine class specific riders as it does not have sufficient evidence to support an allocation to the rate classes. TBHEDI has recorded the SMFA by class and provided such information in response to VECC's Interrogatory #7c; however, costs were not recorded by class for the smart meter program, and thus, could not calculate rate riders based on full cost causality but did do an allocation based on the methodology in PowerStream's application EB-2011-0128. TBHEDI acknowledges that Board Staff submits that this allocation is reasonable and better reflects the costs for each class, and therefore a more appropriate rate rider by class than an average rider for both classes.

In its submission, Board Staff stated that it is unclear how the SMDR is calculated as TBHEDI does not set out the determination of the net revenue requirement in the response to VECC interrogatory #7d. TBHEDI respectfully submits that on page 8 of its response to VECC's interrogatory #7d it states that "the percentages calculated (in the chart) above were used to allocate the net deferred revenue requirement as at December 31, 2011 between the customer classes." To clarify, the allocation of the net revenue requirement for the SMDR is determined using the same allocation approach for costs in the SMIRR. (Both the SMIRR and SMDR allocated the revenue requirement by a 73%/27% split between residential and the GS<50kW customer classes).

TBHEDI acknowledges that Board Staff submits that there are two approaches that could be used to allocate the total collected revenues to the residential and GS<50 kW classes. The first is to allocate the revenues from the GS 50-999 kW, and the GS>1000 kW on a 50:50 basis to the residential and GS<50 kW classes. The second method is to allocate the revenues from the GS 50-999 kW, and the GS>1000 kW to the residential and GS<50 kW classes based on number of meters, since the SMFA was collected on a per meter basis. Board Staff stated that the latter approach provides an equal allocation back to the residential and GS<50 kW customer.

TBHEDI has considered this latter approach and provides the calculation below:

<u>Class</u>	<u>SMFA \$ per VECC #7c</u>	<u>Allocation</u>	<u>Revised \$</u>	<u>%</u>	<u>Total Revenues & carrying charges*</u>
Residential	\$3,059,082	\$33,558	\$3,092,639	90.8% A	\$ 3,691,745
GS < 50 kW	\$310,752	\$3,434	\$314,186	9.2% B	\$ 375,050
Subtotal	\$3,369,833				
GS > 50 kW	\$35,625				
GS > 1000 kW	\$1,367				
Subtotal	\$36,992				
Total Revenue	\$3,406,825	\$36,992	\$3,406,825	100.0%	\$ 4,066,795

Meters Installed

Residential	44,891	90.7%
GS < 50 kW	4,594	9.3%
	49,485	100.0%

*Please note that the total revenues and carrying charges as reported on Tab 8 of the Smart Meter Model are allocated based on the % labeled as "A" and "B".

Total Costs as at
Dec. 31/11 (per
Tab 9 of the
"Model")

\$2,930,658

Residential	\$2,144,735	73%	} per response to VECC IR#7d
GS < 50 kW	\$785,923	27%	

	<u>Revenues</u>	<u>%</u>	<u>Costs</u>	<u>%</u>	<u>Net Rev Req't</u>
Residential	-\$3,691,745	91%	\$2,144,735	73%	-\$1,547,010
GS < 50 kW	-\$375,050	9%	\$785,923	27%	\$410,873
	-\$4,066,795	100%	\$2,930,658	100%	-\$1,136,137

2012 Forecasted customers (E) SMDR \$

Residential	44,605	-\$1.45
GS < kW	4,457	\$3.84

A summary of the rate riders proposed in this smart meter application are listed below:

Class	SMDR (\$/month for 24 mths)			SMIRR (\$/month) for 12 mths		
	Original	Revised VECC IR #7d	Board Staff's 2nd Method*	Original	Revised VECC IR #7d	Board Staff's 2nd Method*
Fixed	-\$0.97			\$2.28		
Residential		-\$0.78	-\$1.45		\$1.87	\$1.87
GS<50 kW		-\$2.85	\$3.84		\$6.84	\$6.84

** Second method discussed on page 8 of Board Staff's Submission April 20, 2012*

TBHEDI concurs that the rate riders listed in the "Board Staff's 2nd Method" columns is the most equitable method to allocate the revenue requirement as it best reflects the cost causality in this application.

Bill Impacts

Attached please find **Appendix E** - the revised Bill Impacts for TBHEDI. Please note that the current Board-approved column includes rates effective May 1, 2011 and the proposed column includes rates effective May 1, 2012 along with the SMDR and SMIRR. The proposed rate riders have a total bill impact of (2.0)% and 4.4% on the residential and GS < 50kW customers, respectively, which is below the Board's 10% Bill Impact Allowance.

All of which is respectfully submitted

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.

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

Copyright

This Workbook Model is protected by copyright and is being made available to you solely for the purpose of filing your application. You may use and copy this model for that purpose, and provide a copy of this model to any person that is advising or assisting you in that regard. Except as indicated above, any copying, reproduction, publication, sale, adaptation, translation, modification, reverse engineering or other use or dissemination of this model without the express written consent of the Ontario Energy Board is prohibited. If you provide a copy of this model to a person that is advising or assisting you in preparing the application or reviewing your draft rate order, you must ensure that the person understands and agrees to the restrictions noted above.

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 revenues recovered to date in the applicable tabs 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	2006	2007	2008	2009	2010	2011	2012 and later	Total
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Unaudited Actual	Forecast	
Smart Meter Installation Plan								
Actual/Planned number of Smart Meters installed during the Calendar Year								
Residential	0	0	0	43,168	1,400	323	0	44891
General Service < 50 kW	0	0	0	3,781	671	142	0	4594
Actual/Planned number of Smart Meters installed (Residential and GS < 50 kW only)	0	0	0	46949	2071	465	0	49485
Percentage of Residential and GS < 50 kW Smart Meter Installations Completed	0.00%	0.00%	0.00%	94.88%	99.06%	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
Total Number of Smart Meters installed or planned to be installed	0	0	0	46949	2071	465	0	49485
1 Capital Costs								
1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)								
Asset Type <i>Asset type must be selected to enable calculations</i>								
1.1.1 Smart Meters (may include new meters and modules, etc.)	Smart Meter			5,649,205	80,956	62,302		\$ 5,772,463
1.1.2 Installation Costs (may include socket kits, labour, vehicle, benefits, etc.)	Smart Meter			665,347	174,796	74,923		\$ 915,065
1.1.3a Workforce Automation Hardware (may include fieldwork handhelds, barcode hardware, etc.)	Computer Hardware			28,529				\$ 28,529
1.1.3b Workforce Automation Software (may include fieldwork handhelds, barcode hardware, etc.)	Computer Software			46,767	233			\$ 47,000
Total Advanced Metering Communications Devices (AMCD)				\$ 6,389,848	\$ 235,985	\$ 137,224		\$ 6,763,057
1.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)								
Asset Type								
1.2.1 Collectors	Smart Meter			204,436				\$ 204,436
1.2.2 Repeaters (may include radio licence, etc.)	Smart Meter				4,693			\$ 4,693
1.2.3 Installation (may include meter seals and rings, collector computer hardware, etc.)	Smart Meter			386,589	-5,451	6,269		\$ 387,407
Total Advanced Metering Regional Collector (AMRC) (includes LAN)				\$ 591,026	\$ 758	\$ 6,269		\$ 598,537
1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)								
Asset Type								
1.3.1 Computer Hardware	Computer Hardware							\$ -
1.3.2 Computer Software	Computer Software							\$ -
1.3.3 Computer Software Licences & Installation (includes hardware and software) (may include AS400 disk space, backup and recovery computer, UPS, etc.)	Computer Software			172,961	72,472	2,408		\$ 247,840
Total Advanced Metering Control Computer (AMCC)				\$ 172,961	\$ 72,472	\$ 2,408		\$ 247,840
1.4 WIDE AREA NETWORK (WAN)								
Asset Type								
1.4.1 Activation Fees	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								
Asset Type								
1.5.1 Customer Equipment (including repair of damaged equipment)	Smart Meter			29,910	14,560			\$ 44,470
1.5.2 AMI Interface to CIS	Computer Software							\$ -
1.5.3 Professional Fees	Smart Meter			63,210		70,000		\$ 133,210
1.5.4 Integration	Smart Meter							\$ -
1.5.5 Program Management	Smart Meter			162,549	23,848	3,481		\$ 189,878
1.5.6 Other AMI Capital	Smart Meter			19,946	32,115			\$ 52,061
Total Other AMI Capital Costs Related to Minimum Functionality				\$ 275,615	\$ 70,523	\$ 73,481		\$ 419,620
Total Capital Costs Related to Minimum Functionality				\$ 7,468,233	\$ 422,663	\$ 219,382		\$ 8,110,278
1.6 CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY <i>(Please provide a descriptive title and identify nature of beyond minimum functionality costs)</i>								
Asset Type								
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	Smart Meter							\$ -
1.6.2 Costs for deployment of smart meters to customers other than residential and small general service	Applications Software							\$ -
1.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDMR, etc.	Applications Software					21,362		\$ 21,362
Total Capital Costs Beyond Minimum Functionality				\$ -	\$ -	\$ 21,362		\$ 21,362
Total Smart Meter Capital Costs				\$ 7,468,233	\$ 422,663	\$ 240,744		\$ 8,131,640
2 OM&A Expenses								
2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)								
2.1.1 Maintenance (may include meter revalidation costs, etc.)				7,021	2,198	533		\$ 9,752
2.1.2 Other (please specify)								\$ -
Total Incremental AMCD OM&A Costs				\$ 7,021	\$ 2,198	\$ 533		\$ 9,752
2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)								
2.2.1 Maintenance								\$ -
2.2.2 Other (please specify)	Cellular communication to AMI Network fees				33,025	77,571	70,000	\$ 180,596
Total Incremental AMRC OM&A Costs				\$ -	\$ 33,025	\$ 77,571	\$ 70,000	\$ 180,596
2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)								
2.3.1 Hardware Maintenance (may include server support, etc.)								\$ -
2.3.2 Software Maintenance (may include maintenance support, etc.)				4,772	49,591	87,563	140,016	\$ 281,941
2.3.2 Other (please specify)								\$ -
Total Incremental AMCC OM&A Costs				\$ 4,772	\$ 49,591	\$ 87,563	\$ 140,016	\$ 281,941
2.4 WIDE AREA NETWORK (WAN)								
2.4.1 WAN Maintenance								\$ -
2.4.2 Other (please specify)								\$ -
Total Incremental AMRC OM&A Costs				\$ -	\$ -	\$ -	\$ -	\$ -
2.5 OTHER AMI OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY								
2.5.1 Business Process Redesign								\$ -
2.5.2 Customer Communication (may include project communication, etc.)								\$ -
2.5.3 Program Management			52,193	-5,536	51,111	25,256	8,800	\$ 131,824
2.5.4 Change Management (may include training, etc.)								\$ -
2.5.5 Administration Costs						11,307	8,000	\$ 19,307
2.5.6 Other AMI Expenses (please specify)			7,167	16,520	60,647	96,048	91,024	\$ 271,406
Total Other AMI OM&A Costs Related to Minimum Functionality			\$ 59,360	\$ 10,984	\$ 111,758	\$ 132,612	\$ 107,824	\$ 422,538
TOTAL OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY			\$ 59,360	\$ 22,776	\$ 196,572	\$ 288,279	\$ 317,840	\$ 884,827
2.6 OM&A COSTS RELATED TO BEYOND MINIMUM FUNCTIONALITY <i>(Please provide a descriptive title and identify nature of beyond minimum functionality costs)</i>								
Asset Type								
2.6.1 Costs related to technical capabilities in the smart meters or related communications infrastructure that exceed those specified in O.Reg 425/06								\$ -
2.6.2 Costs for deployment of smart meters to customers other than residential and small general service								\$ -

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

Total OM&A Costs Beyond Minimum Functionality

Total Smart Meter OM&A Costs

					30,177	84,736	\$	114,912	
\$	-	\$	-	\$	-	\$	30,177	\$	114,912
\$	-	\$	-	\$	59,360	\$	22,776	\$	196,572
\$	-	\$	-	\$	328,456	\$	402,576	\$	1,009,739

3 Aggregate Smart Meter Costs by Category

3.1 Capital

3.1.1 Smart Meter

3.1.2 Computer Hardware

3.1.3 Computer Software

3.1.4 Tools & Equipment

3.1.5 Other Equipment

3.1.6 Applications Software

3.1.7 Total Capital Costs

3.2 OM&A Costs

3.2.1 Total OM&A Costs

\$	-	\$	-	\$	-	\$	7,219,977	\$	349,958	\$	216,974	\$	-	\$	7,786,909
\$	-	\$	-	\$	-	\$	28,529	\$	-	\$	-	\$	-	\$	28,529
\$	-	\$	-	\$	-	\$	219,728	\$	72,705	\$	2,408	\$	-	\$	294,841
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
\$	-	\$	-	\$	-	\$	-	\$	-	\$	21,362	\$	-	\$	21,362
\$	-	\$	-	\$	-	\$	7,468,233	\$	422,663	\$	240,744	\$	-	\$	8,131,640
\$	-	\$	-	\$	59,360	\$	22,776	\$	196,572	\$	328,456	\$	402,576	\$	1,009,739



	2006	2007	2008	2009	2010	2011	2012 and later
Cost of Capital							
Capital Structure¹							
Deemed Short-term Debt Capitalization			0.0%	4.0%	4.0%	4.0%	4.0%
Deemed Long-term Debt Capitalization	50.0%	50.0%	53.3%	52.7%	56.0%	56.0%	56.0%
Deemed Equity Capitalization	50.0%	50.0%	46.7%	43.3%	40.0%	40.0%	40.0%
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				1.33%	1.33%	1.33%	1.33%
Long-term Debt Rate (actual/embedded/deemed) ²		0.00%		0.21%	0.21%	0.21%	0.21%
Target Return on Equity (ROE)	2.9%	2.93%	2.93%	3.75%	3.75%	3.75%	3.75%
Return on Preferred Shares							
WACC	1.47%	1.47%	1.37%	1.79%	1.67%	1.67%	1.67%
Working Capital Allowance							
Working Capital Allowance Rate (% of the sum of Cost of Power + controllable expenses)	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
Taxes/PILs							
Aggregate Corporate Income Tax Rate	36.12%	36.12%	33.50%	32.83%	29.61%	25.74%	23.91%
Capital Tax (until July 1st, 2010)	0.30%	0.225%	0.225%	0.225%	0.075%	0.00%	0.00%
Depreciation Rates (expressed as expected useful life in years)							
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							

Assumptions¹ 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.



	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	\$ 7,786,909
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ 7,219,977	\$ 349,958	\$ 216,974	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ 7,219,977	\$ 7,569,935	\$ 7,786,909	\$ 7,786,909
Accumulated Depreciation							
Opening Balance		\$ -	\$ -	\$ -	\$ 240,666	\$ 733,663	\$ 1,245,558
Amortization expense during year	\$ -	\$ -	\$ -	\$ 240,666	\$ 492,997	\$ 511,895	\$ 519,127
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ 240,666	\$ 733,663	\$ 1,245,558	\$ 1,764,685
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 6,979,311	\$ 6,836,272	\$ 6,541,351
Closing Balance	\$ -	\$ -	\$ -	\$ 6,979,311	\$ 6,836,272	\$ 6,541,351	\$ 6,022,224
Average Net Book Value	\$ -	\$ -	\$ -	\$ 3,489,655	\$ 6,907,791	\$ 6,688,811	\$ 6,281,787
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	\$ 316,203
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ 219,728	\$ 72,705	\$ 23,770	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ 219,728	\$ 292,433	\$ 316,203	\$ 316,203
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 21,973	\$ 73,189	\$ 134,052
Amortization expense during year	\$ -	\$ -	\$ -	\$ 21,973	\$ 51,216	\$ 60,864	\$ 63,241
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ 21,973	\$ 73,189	\$ 134,052	\$ 197,293
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 197,755	\$ 219,244	\$ 182,151
Closing Balance	\$ -	\$ -	\$ -	\$ 197,755	\$ 219,244	\$ 182,151	\$ 118,910
Average Net Book Value	\$ -	\$ -	\$ -	\$ 98,878	\$ 208,500	\$ 200,697	\$ 150,530
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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



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	\$ 6,688,811	\$ 6,281,787
Computer Hardware	\$ -	\$ -	\$ -	\$ 12,838	\$ 22,823	\$ 17,117	\$ 11,411
Computer Software	\$ -	\$ -	\$ -	\$ 98,878	\$ 208,500	\$ 200,697	\$ 150,530
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Net Fixed Assets	\$ -	\$ -	\$ -	\$ 3,601,371	\$ 7,139,114	\$ 6,906,626	\$ 6,443,729
Working Capital							
Operating Expenses (from Sheet 2)	\$ -	\$ -	\$ 59,360	\$ 22,776	\$ 196,572	\$ 328,456	\$ 402,576
Working Capital Factor (from Sheet 3)	15%	15%	15%	15%	15%	15%	15%
Working Capital Allowance	\$ -	\$ -	\$ 8,904	\$ 3,416	\$ 29,486	\$ 49,268	\$ 60,386
Incremental Smart Meter Rate Base	\$ -	\$ -	\$ 8,904	\$ 3,604,787	\$ 7,168,600	\$ 6,955,894	\$ 6,504,115
Return on Rate Base							
Capital Structure							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 144,191	\$ 286,744	\$ 278,236	\$ 260,165
Deemed Long Term Debt	\$ -	\$ -	\$ 4,746	\$ 1,899,723	\$ 4,014,416	\$ 3,895,301	\$ 3,642,305
Equity	\$ -	\$ -	\$ 4,158	\$ 1,560,873	\$ 2,867,440	\$ 2,782,358	\$ 2,601,646
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ -	\$ -	\$ 8,904	\$ 3,604,787	\$ 7,168,600	\$ 6,955,894	\$ 6,504,115
Return on							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 1,918	\$ 3,814	\$ 3,701	\$ 3,460
Deemed Long Term Debt	\$ -	\$ -	\$ -	\$ 3,989	\$ 8,430	\$ 8,180	\$ 7,649
Equity	\$ -	\$ -	\$ 122	\$ 58,533	\$ 107,529	\$ 104,338	\$ 97,562
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ -	\$ -	\$ 122	\$ 64,440	\$ 119,773	\$ 116,219	\$ 108,671
Operating Expenses	\$ -	\$ -	\$ 59,360	\$ 22,776	\$ 196,572	\$ 328,456	\$ 402,576
Debt Financing Expenses (Thunder Bay Hydro-specific)							
Amortization Expenses (from Sheet 4)							
Smart Meters	\$ -	\$ -	\$ -	\$ 240,666	\$ 492,997	\$ 511,895	\$ 519,127
Computer Hardware	\$ -	\$ -	\$ -	\$ 2,853	\$ 5,706	\$ 5,706	\$ 5,706
Computer Software	\$ -	\$ -	\$ -	\$ 21,973	\$ 51,216	\$ 60,864	\$ 63,241
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Amortization Expense in Year	\$ -	\$ -	\$ -	\$ 265,492	\$ 549,919	\$ 578,464	\$ 588,074
Incremental Revenue Requirement before Taxes/IPILs	\$ -	\$ -	\$ 59,482	\$ 352,707	\$ 866,264	\$ 1,023,139	\$ 1,099,320
Calculation of Taxable Income							
Incremental Operating Expenses	\$ -	\$ -	\$ 59,360	\$ 22,776	\$ 196,572	\$ 328,456	\$ 402,576
Amortization Expense	\$ -	\$ -	\$ -	\$ 265,492	\$ 549,919	\$ 578,464	\$ 588,074
Interest Expense	\$ -	\$ -	\$ -	\$ 5,907	\$ 12,244	\$ 11,881	\$ 11,109
Net Income for Taxes/IPILs	\$ -	\$ -	\$ 122	\$ 58,533	\$ 107,529	\$ 104,338	\$ 97,562
Grossed-up Taxes/IPILs (from Sheet 7)	\$ -	\$ -	\$ 61.37	\$ 54.93	\$ 7,326.06	\$ 21,806.67	\$ 44,265.76
Revenue Requirement, including Grossed-up Taxes/IPILs	\$ -	\$ -	\$ 59,543	\$ 352,762	\$ 858,938	\$ 1,044,946	\$ 1,143,586



For PILs Calculation

UCC - Smart Meters

	2006 Audited Actua	2007 Audited Actua	2008 Audited Actua	2009 Audited Actua	2010 Audited Actua	2011 Unaudited Actua	2012 and later Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ 6,931,177.51	\$ 6,712,643.08	\$ 6,383,926.71
Capital Additions	\$ -	\$ -	\$ -	\$ 7,219,976.57	\$ 349,958.09	\$ 216,974.04	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ 7,219,976.57	\$ 7,281,135.60	\$ 6,929,617.12	\$ 6,383,926.71
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ 3,609,988.29	\$ 174,979.05	\$ 108,487.02	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ 3,609,988.29	\$ 7,106,156.56	\$ 6,821,130.10	\$ 6,383,926.71
CCA Rate Class	47	47	47	47	47	47	47
CCA Rate	8%	8%	8%	8%	8%	8%	8%
CCA	\$ -	\$ -	\$ -	\$ 288,799.06	\$ 568,492.52	\$ 545,690.41	\$ 510,714.14
Closing UCC	\$ -	\$ -	\$ -	\$ 6,931,177.51	\$ 6,712,643.08	\$ 6,383,926.71	\$ 5,873,212.57

UCC - Computer Equipment

	2006 Audited Actua	2007 Audited Actua	2008 Audited Actua	2009 Audited Actua	2010 Audited Actua	2011 Unaudited Actua	2012 and later Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ 179,985.98	\$ 133,704.93	\$ 61,912.74
Capital Additions Computer Hardware	\$ -	\$ -	\$ -	\$ 28,528.68	\$ -	\$ -	\$ -
Capital Additions Computer Software	\$ -	\$ -	\$ -	\$ 219,727.85	\$ 72,705.15	\$ 2,407.62	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ 248,256.53	\$ 252,691.14	\$ 136,112.55	\$ 61,912.74
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ 124,128.26	\$ 36,352.58	\$ 1,203.81	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ 124,128.26	\$ 216,338.56	\$ 134,908.74	\$ 61,912.74
CCA Rate Class	50	50	50	50	50	50	50
CCA Rate	55%	55%	55%	55%	55%	55%	55%
CCA	\$ -	\$ -	\$ -	\$ 68,270.55	\$ 118,986.21	\$ 74,199.81	\$ 34,052.01
Closing UCC	\$ -	\$ -	\$ -	\$ 179,985.98	\$ 133,704.93	\$ 61,912.74	\$ 27,860.73

UCC - General Equipment

	2006 Audited Actua	2007 Audited Actua	2008 Audited Actua	2009 Audited Actua	2010 Audited Actua	2011 Unaudited Actua	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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA Rate Class	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



PILs Calculation

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Unaudited Actual	2012 and later Forecast
INCOME TAX							
Net Income	\$ -	\$ -	\$ 121.83	\$ 58,532.73	\$ 107,528.99	\$ 104,338.41	\$ 97,561.73
Amortization	\$ -	\$ -	\$ -	\$ 265,491.54	\$ 549,918.86	\$ 578,464.12	\$ 588,073.58
CCA - Smart Meters	\$ -	\$ -	\$ -	\$ 288,799.06	\$ 568,492.52	\$ 545,690.41	\$ 510,714.14
CCA - Computers	\$ -	\$ -	\$ -	\$ 68,270.55	\$ 118,986.21	\$ 74,199.81	\$ 34,052.01
CCA - Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Change in taxable income	\$ -	\$ -	\$ 121.83	\$ 33,045.34	\$ 30,030.88	\$ 62,912.32	\$ 140,869.17
Tax Rate (from Sheet 3)	36.12%	36.12%	33.50%	32.83%	29.61%	25.74%	23.91%
Income Taxes Payable	\$ -	\$ -	\$ 40.81	\$ 10,848.78	\$ 8,892.14	\$ 16,193.63	\$ 33,681.82
ONTARIO CAPITAL TAX							
Smart Meters	\$ -	\$ -	\$ -	\$ 6,979,310.69	\$ 6,836,271.74	\$ 6,541,351.00	\$ 6,022,223.75
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	\$ 182,150.53	\$ 118,909.93
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rate Base	\$ -	\$ -	\$ -	\$ 7,202,741.56	\$ 7,075,485.95	\$ 6,737,765.87	\$ 6,149,692.29
Less: Exemption							
Deemed Taxable Capital	\$ -	\$ -	\$ -	\$ 7,202,741.56	\$ 7,075,485.95	\$ 6,737,765.87	\$ 6,149,692.29
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	\$ -	\$ -	\$ 40.81	\$ 10,848.78	\$ 8,892.14	\$ 16,193.63	\$ 33,681.82
Change in OCT	\$ -	\$ -	\$ -	\$ 16,206.17	\$ 5,306.61	\$ -	\$ -
PILs	\$ -	\$ -	\$ 40.81	\$ 5,357.38	\$ 3,585.53	\$ 16,193.63	\$ 33,681.82
Gross Up PILs							
Tax Rate	36.12%	36.12%	33.50%	32.83%	29.61%	25.74%	23.91%
Change in Income Taxes Payable	\$ -	\$ -	\$ 61.37	\$ 16,151.23	\$ 12,632.68	\$ 21,806.67	\$ 44,265.76
Change in OCT	\$ -	\$ -	\$ -	\$ 16,206.17	\$ 5,306.61	\$ -	\$ -
PILs	\$ -	\$ -	\$ 61.37	\$ 54.93	\$ 7,326.06	\$ 21,806.67	\$ 44,265.76





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	4.59%	4.72%				May-06	2006	Q2	\$ -	\$ 587.46	4.14%	\$ -	\$ 587.46		
2007 Q2	4.59%	4.72%				Jun-06	2006	Q2	\$ 587.46	\$ 6,566.57	4.14%	\$ 2.03	\$ 7,156.06		
2007 Q3	4.59%	5.18%				Jul-06	2006	Q3	\$ 7,154.03	\$ 10,982.38	4.59%	\$ 27.36	\$ 18,163.77		
2007 Q4	5.14%	5.18%				Aug-06	2006	Q3	\$ 18,136.41	\$ 14,470.34	4.59%	\$ 69.37	\$ 32,676.12		
2008 Q1	5.14%	5.18%				Sep-06	2006	Q3	\$ 32,606.75	\$ 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%	5.43%				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	\$ 15,066.21	4.59%	\$ 420.46	\$ 125,411.60		
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	\$ 15,877.34	4.59%	\$ 522.53	\$ 153,009.33		
2010 Q2	0.55%	4.34%				Jun-07	2007	Q2	\$ 152,486.80	\$ 12,301.38	4.59%	\$ 583.26	\$ 165,371.44		
2010 Q3	0.89%	4.66%				Jul-07	2007	Q3	\$ 164,788.18	\$ 14,189.22	4.59%	\$ 630.31	\$ 179,607.71		
2010 Q4	1.20%	4.01%				Aug-07	2007	Q3	\$ 178,977.40	\$ 12,946.82	4.59%	\$ 684.59	\$ 192,608.81		
2011 Q1	1.47%	4.29%				Sep-07	2007	Q3	\$ 191,924.22	\$ 10,592.08	4.59%	\$ 734.11	\$ 203,250.41		
2011 Q2	1.47%	4.29%				Oct-07	2007	Q4	\$ 202,516.30	\$ 14,163.62	5.14%	\$ 867.44	\$ 217,547.36		
2011 Q3	1.47%	4.29%				Nov-07	2007	Q4	\$ 216,679.92	\$ 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	\$ 165,834.97	
2012 Q1	1.47%	4.29%				Jan-08	2008	Q1	\$ 242,018.91	\$ 16,018.68	5.14%	\$ 1,036.65	\$ 259,074.24		
2012 Q2	1.47%	4.29%				Feb-08	2008	Q1	\$ 258,037.59	\$ 11,640.01	5.14%	\$ 1,105.26	\$ 270,782.86		
2012 Q3		4.29%				Mar-08	2008	Q1	\$ 269,677.60	\$ 12,192.00	5.14%	\$ 1,155.12	\$ 283,024.72		
2012 Q4		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	\$ 310,260.59		
						Jun-08	2008	Q2	\$ 309,253.48	\$ 14,480.28	4.08%	\$ 1,051.46	\$ 324,785.22		
						Jul-08	2008	Q3	\$ 323,733.76	\$ 14,691.11	3.35%	\$ 903.76	\$ 339,328.63		
						Aug-08	2008	Q3	\$ 338,424.87	\$ 10,897.02	3.35%	\$ 944.77	\$ 350,266.66		
						Sep-08	2008	Q3	\$ 349,321.89	\$ 13,660.77	3.35%	\$ 975.19	\$ 363,957.85		
						Oct-08	2008	Q4	\$ 362,982.66	\$ 13,492.53	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	\$ 388,765.31	\$ 13,649.79	3.35%	\$ 1,085.30	\$ 403,500.40	\$ 172,683.49	
						Jan-09	2009	Q1	\$ 402,415.10	\$ 14,420.31	2.45%	\$ 821.60	\$ 417,657.01		
						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	\$ 456,450.64	\$ 12,323.68	1.00%	\$ 380.38	\$ 469,154.70		
						Jun-09	2009	Q2	\$ 468,774.32	\$ 14,742.13	1.00%	\$ 390.65	\$ 483,907.10		
						Jul-09	2009	Q3	\$ 483,516.45	\$ 25,762.44	0.55%	\$ 221.61	\$ 509,500.50		
						Aug-09	2009	Q3	\$ 509,278.89	\$ 72,838.60	0.55%	\$ 233.42	\$ 582,350.91		
						Sep-09	2009	Q3	\$ 582,117.49	\$ 166,920.98	0.55%	\$ 266.80	\$ 749,305.27		
						Oct-09	2009	Q4	\$ 749,038.47	\$ 141,021.06	0.55%	\$ 343.31	\$ 890,402.84		
						Nov-09	2009	Q4	\$ 890,059.53	\$ 105,171.46	0.55%	\$ 407.94	\$ 995,638.93		
						Dec-09	2009	Q4	\$ 995,230.99	\$ 102,353.10	0.55%	\$ 456.15	\$ 1,098,040.24	\$ 700,784.59	
						Jan-10	2010	Q1	\$ 1,097,584.09	\$ 101,005.31	0.55%	\$ 503.06	\$ 1,199,092.46		
						Feb-10	2010	Q1	\$ 1,198,589.40	\$ 75,747.45	0.55%	\$ 549.35	\$ 1,274,886.20		
						Mar-10	2010	Q1	\$ 1,274,336.85	\$ 119,231.13	0.55%	\$ 584.07	\$ 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	\$ 106,622.69	0.55%	\$ 722.10	\$ 1,682,843.13		
						Jul-10	2010	Q3	\$ 1,682,121.03	\$ 92,941.15	0.89%	\$ 1,247.57	\$ 1,776,309.75		
						Aug-10	2010	Q3	\$ 1,775,062.18	\$ 92,248.54	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	\$ 2,051,476.94	\$ 103,388.94	1.20%	\$ 2,051.48	\$ 2,156,917.36		
						Dec-10	2010	Q4	\$ 2,154,865.88	\$ 91,336.51	1.20%	\$ 2,154.87	\$ 2,248,357.26	\$ 1,162,423.56	
						Jan-11	2011	Q1	\$ 2,246,202.39	\$ 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%	\$ 2,976.39	\$ 2,547,860.05		
						Apr-11	2011	Q2	\$ 2,544,883.66	\$ 79,882.59	1.47%	\$ 3,117.48	\$ 2,627,883.73		
						May-11	2011	Q2	\$ 2,624,766.25	\$ 105,224.63	1.47%	\$ 3,215.34	\$ 2,733,206.22		
						Jun-11	2011	Q2	\$ 2,729,990.88	\$ 101,688.50	1.47%	\$ 3,344.24	\$ 2,835,023.62		
						Jul-11	2011	Q3	\$ 2,831,679.38	\$ 102,902.03	1.47%	\$ 3,468.81	\$ 2,938,050.22		
						Aug-11	2011	Q3	\$ 2,934,581.41	\$ 92,413.22	1.47%	\$ 3,594.86	\$ 3,030,589.49		
						Sep-11	2011	Q3	\$ 3,026,994.63	\$ 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	\$ 3,226,153.59		
						Nov-11	2011	Q4	\$ 3,222,318.05	\$ 103,998.80	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	\$ 125,039.16	1.47%	\$ 4,173.36	\$ 3,536,037.66		
						Feb-12	2012	Q1	\$ 3,531,864.30	\$ 81,304.99	1.47%	\$ 4,326.53	\$ 3,617,495.82		
						Mar-12	2012	Q1	\$ 3,613,169.29	\$ 69,171.67	1.47%	\$ 4,426.13	\$ 3,686,767.09		
						Apr-12	2012	Q2	\$ 3,682,340.96	\$ 79,882.59	1.47%	\$ 4,510.87	\$ 3,766,734.42		
						May-12	2012	Q2	\$ 3,762,223.55	\$ 105,224.63	1.47%	\$ 4,608.72	\$ 3,872,056.90		
						Jun-12	2012	Q2	\$ 3,867,448.18	\$ 91,519.65	1.47%	\$ 4,737.62	\$ 3,963,705.45		
						Jul-12	2012	Q3	\$ 3,958,967.83	\$ -	0.00%	\$ -	\$ 3,958,967.83		
						Aug-12	2012	Q3	\$ 3,958,967.83	\$ -	0.00%	\$ -	\$ 3,958,967.83		
						Sep-12	2012	Q3	\$ 3,958,967.83	\$ -	0.00%	\$ -	\$ 3,958,967.83		
						Oct-12	2012	Q4	\$ 3,958,967.83	\$ -	0.00%	\$ -	\$ 3,958,967.83		
						Nov-12	2012	Q4	\$ 3,958,967.83	\$ -	0.00%	\$ -	\$ 3,958,967.83		
						Dec-12	2012	Q4	\$ 3,958,967.83	\$ -	0.00%	\$ -	\$ 3,958,967.83	\$ 578,925.92	
Total Funding Adder Revenues Collected										\$ 3,958,967.83		\$ 107,827.03	\$ 4,066,794.86	\$ 4,066,794.86	





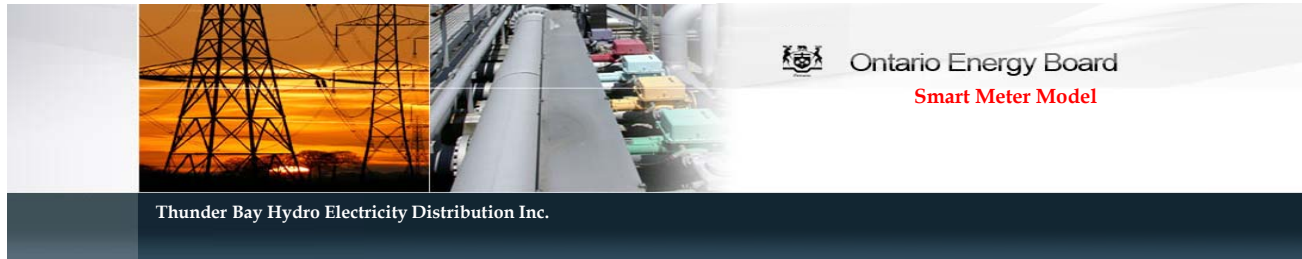
Ontario Energy Board

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	\$ 8,834.54	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	\$ 22,665.17	\$ 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	1,347,123.94	1.47%	1,556.19	14,688.20
			Jun-11	2011	Q2	1,347,123.94	\$ 17,515.96	\$ 43,428.28	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	\$ 43,619.24	1,695,461.75	1.47%	1,995.73	23,794.50
			Nov-11	2011	Q4	1,695,461.75	\$ 29,948.64	\$ 43,686.81	1,769,097.20	1.47%	2,076.94	25,871.44
			Dec-11	2011	Q4	1,769,097.20	\$ 41,461.26	\$ 43,686.82	1,854,245.28	1.47%	2,167.14	28,038.58
			Jan-12	2012	Q1	1,854,245.28			1,854,245.28	1.47%	2,271.45	30,310.03
			Feb-12	2012	Q1	1,854,245.28			1,854,245.28	1.47%	2,271.45	32,581.48
			Mar-12	2012	Q1	1,854,245.28			1,854,245.28	1.47%	2,271.45	34,852.93
			Apr-12	2012	Q2	1,854,245.28			1,854,245.28	1.47%	2,271.45	37,124.39
			May-12	2012	Q2	1,854,245.28			1,854,245.28	1.47%	2,271.45	39,395.84
			Jun-12	2012	Q2	1,854,245.28			1,854,245.28	1.47%	2,271.45	41,667.29
			Jul-12	2012	Q3	1,854,245.28			1,854,245.28	0.00%	-	41,667.29
			Aug-12	2012	Q3	1,854,245.28			1,854,245.28	0.00%	-	41,667.29
			Sep-12	2012	Q3	1,854,245.28			1,854,245.28	0.00%	-	41,667.29
			Oct-12	2012	Q4	1,854,245.28			1,854,245.28	0.00%	-	41,667.29
			Nov-12	2012	Q4	1,854,245.28			1,854,245.28	0.00%	-	41,667.29
			Dec-12	2012	Q4	1,854,245.28			1,854,245.28	0.00%	-	41,667.29
						\$ 608,618.00	\$ 1,245,627.28	\$ 1,854,245.28				



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	\$ 328,455.95	\$ 578,464.12	\$ 2,001,037.99	\$ 1,547,577.95	1.47%	\$ 22,749.40
2012	\$ 402,575.83	\$ 588,073.58	\$ 2,991,687.40	\$ 2,496,362.69	1.47%	\$ 36,696.53
Cumulative Interest to 2011						\$ 31,994.35
Cumulative Interest to 2012						\$ 68,690.88





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)
- ☒ Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)

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

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.

	2006	2007	2008	2009	2010	2011	2012 and later	Total
Deferred and forecasted Smart Meter Incremental Revenue Requirement (from Sheet 5)	\$ -	\$ -	\$ 59,542.91	\$ 352,762.40	\$ 858,937.55	\$ 1,044,945.81	\$ 1,143,585.94	\$ 3,459,774.61
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	\$ 20,280.25		\$ 28,038.58
☒ Sheet 8A (Interest calculated on monthly balances)	\$ -	\$ -	\$ 1,456.29	\$ 1,052.10	\$ 5,249.94	\$ 20,280.25		\$ 28,038.58
☐ Sheet 8B (Interest calculated on average annual balances)								\$ -
SMFA Revenues (from Sheet 8)	\$ 83,718.06	\$ 158,300.85	\$ 160,396.19	\$ 695,168.99	\$ 1,148,618.30	\$ 1,160,622.75	\$ 552,142.69	\$ 3,958,967.83
SMFA Interest (from Sheet 8)	\$ 888.76	\$ 7,534.12	\$ 12,287.30	\$ 5,615.60	\$ 13,805.26	\$ 40,912.76	\$ 26,783.23	\$ 107,827.03
Net Deferred Revenue Requirement	-\$ 84,606.82	-\$ 165,834.97	-\$ 111,684.29	-\$ 346,970.09	-\$ 298,236.07	-\$ 136,309.44	\$ 564,660.02	-\$ 578,981.67
Number of Metered Customers (average for 2012 test year)							49062	

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 plus Interest on OM&A and Amortization	\$ 2,344,227.25	
SMFA Revenues collected from 2006 to 2012 test year (inclusive) Plus Simple Interest on SMFA Revenues	\$ 4,066,794.86	
Net Deferred Revenue Requirement	-\$ 1,722,567.61	} Match
SMDR May 1, 2012 to April 30, 2014	-\$ 1.46	
Check: Forecasted SMDR Revenues	-\$ 1,719,132.48	

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

Incremental Revenue Requirement for 2012	\$ 1,143,585.94	} Match
SMIRR	\$ 1.94	
Check: Forecasted SMIRR Revenues	\$ 1,142,163.36	

Smart Meter Disposition Rate Rider as at December 31, 2011

Revenue Requirement 2008	\$60,999
Revenue Requirement 2009	\$353,814
Revenue Requirement 2010	\$864,187
Revenue Requirement 2011	<u>\$1,065,226</u>
Total Revenue Requirement	<u>\$2,344,227</u>
Smart Meter Rate Adder	-\$3,958,968
Carrying Charges	<u>-\$107,827</u>
Smart Meter True-Up	<u>-\$1,722,568</u>
Average # of Metered Customers Jan. to Dec. 2011	49,062
Rate rider \$/month/metered customer	-\$1.46

Smart Meter Incremental Revenue Requirement Rate Rider

Revenue Requirement 2012	\$ 1,143,586
Total Revenue Requirement	<u>\$ 1,143,586</u>
Smart Meter Rate Adder	\$ -
Carrying Charges	\$ -
Smart Meter True-Up	<u>\$1,143,586</u>
Average # of Metered Customers Jan. to Dec. 2011	49,062
Rate rider \$/month/metered customer	\$1.94

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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

Copyright

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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 revenues recovered to date in the applicable tabs 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	2006	2007	2008	2009	2010	2011	2012 and later	Total
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Unaudited Actual	Forecast	
Smart Meter Installation Plan								
Actual/Planned number of Smart Meters installed during the Calendar Year								
Residential	0	0	0	43,168	1,400	323	0	44891
General Service < 50 kW	0	0	0	3,781	671	142	0	4594
Actual/Planned number of Smart Meters installed (Residential and GS < 50 kW only)	0	0	0	46949	2071	465	0	49485
Percentage of Residential and GS < 50 kW Smart Meter Installations Completed	0.00%	0.00%	0.00%	94.88%	99.06%	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
Total Number of Smart Meters installed or planned to be installed	0	0	0	46949	2071	465	0	49485
1 Capital Costs								
1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)								
Asset Type <i>Asset type must be selected to enable calculations</i>								
1.1.1 Smart Meters (may include new meters and modules, etc.)	Smart Meter			5,649,205	80,956	62,302		\$ 5,772,463
1.1.2 Installation Costs (may include socket kits, labour, vehicle, benefits, etc.)	Smart Meter			665,347	174,796	74,923		\$ 915,065
1.1.3a Workforce Automation Hardware (may include fieldwork handhelds, barcode hardware, etc.)	Computer Hardware			28,529				\$ 28,529
1.1.3b Workforce Automation Software (may include fieldwork handhelds, barcode hardware, etc.)	Computer Software			46,767	233			\$ 47,000
Total Advanced Metering Communications Devices (AMCD)				\$ 6,389,848	\$ 235,985	\$ 137,224		\$ 6,763,057
1.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)								
Asset Type								
1.2.1 Collectors	Smart Meter			204,436				\$ 204,436
1.2.2 Repeaters (may include radio licence, etc.)	Smart Meter				4,693			\$ 4,693
1.2.3 Installation (may include meter seals and rings, collector computer hardware, etc.)	Smart Meter			386,589	-5,451	6,269		\$ 387,407
Total Advanced Metering Regional Collector (AMRC) (includes LAN)				\$ 591,026	\$ 758	\$ 6,269		\$ 598,537
1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)								
Asset Type								
1.3.1 Computer Hardware	Computer Hardware							\$ -
1.3.2 Computer Software	Computer Software							\$ -
1.3.3 Computer Software Licences & Installation (includes hardware and software) (may include AS-400 disk space, backup and recovery computer, UPS, etc.)	Computer Software			172,961	72,472	2,408		\$ 247,840
Total Advanced Metering Control Computer (AMCC)				\$ 172,961	\$ 72,472	\$ 2,408		\$ 247,840
1.4 WIDE AREA NETWORK (WAN)								
Asset Type								
1.4.1 Activation Fees	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								
Asset Type								
1.5.1 Customer Equipment (including repair of damaged equipment)	Smart Meter			29,910	14,560			\$ 44,470
1.5.2 AMI Interface to CIS	Computer Software							\$ -
1.5.3 Professional Fees	Smart Meter			63,210		70,000		\$ 133,210
1.5.4 Integration	Smart Meter							\$ -
1.5.5 Program Management	Smart Meter			162,549	23,848	3,481		\$ 189,878
1.5.6 Other AMI Capital	Smart Meter			19,946	32,115			\$ 52,061
Total Other AMI Capital Costs Related to Minimum Functionality				\$ 275,615	\$ 70,523	\$ 73,481		\$ 419,620
Total Capital Costs Related to Minimum Functionality				\$ 7,468,233	\$ 422,663	\$ 219,382		\$ 8,110,278
1.6 CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY <i>(Please provide a descriptive title and identify nature of beyond minimum functionality costs)</i>								
Asset Type								
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	Smart Meter							\$ -
1.6.2 Costs for deployment of smart meters to customers other than residential and small general service	Applications Software							\$ -
1.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDMR, etc.	Applications Software					21,362		\$ 21,362
Total Capital Costs Beyond Minimum Functionality				\$ -	\$ -	\$ 21,362		\$ 21,362
Total Smart Meter Capital Costs				\$ 7,468,233	\$ 422,663	\$ 240,744		\$ 8,131,640
2 OM&A Expenses								
2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)								
2.1.1 Maintenance (may include meter revalidation costs, etc.)				7,021	2,198	533		\$ 9,752
2.1.2 Other (please specify)								\$ -
Total Incremental AMCD OM&A Costs				\$ 7,021	\$ 2,198	\$ 533		\$ 9,752
2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)								
2.2.1 Maintenance								\$ -
2.2.2 Other (please specify)	Cellular communication to AMI Network fees				33,025	77,571	70,000	\$ 180,596
Total Incremental AMRC OM&A Costs				\$ -	\$ 33,025	\$ 77,571	\$ 70,000	\$ 180,596
2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)								
2.3.1 Hardware Maintenance (may include server support, etc.)								\$ -
2.3.2 Software Maintenance (may include maintenance support, etc.)				4,772	49,591	87,563	140,016	\$ 281,941
2.3.2 Other (please specify)								\$ -
Total Incremental AMCC OM&A Costs				\$ 4,772	\$ 49,591	\$ 87,563	\$ 140,016	\$ 281,941
2.4 WIDE AREA NETWORK (WAN)								
2.4.1 WAN Maintenance								\$ -
2.4.2 Other (please specify)								\$ -
Total Incremental AMRC OM&A Costs				\$ -	\$ -	\$ -	\$ -	\$ -
2.5 OTHER AMI OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY								
2.5.1 Business Process Redesign								\$ -
2.5.2 Customer Communication (may include project communication, etc.)								\$ -
2.5.3 Program Management			52,193	-5,536	51,111	25,256	8,800	\$ 131,824
2.5.4 Change Management (may include training, etc.)								\$ -
2.5.5 Administration Costs						11,307	8,000	\$ 19,307
2.5.6 Other AMI Expenses (please specify)			7,167	16,520	60,647	96,048	91,024	\$ 271,406
Total Other AMI OM&A Costs Related to Minimum Functionality			\$ 59,360	\$ 10,984	\$ 111,758	\$ 132,612	\$ 107,824	\$ 422,538
TOTAL OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY			\$ 59,360	\$ 22,776	\$ 196,572	\$ 288,279	\$ 317,840	\$ 884,827
2.6 OM&A COSTS RELATED TO BEYOND MINIMUM FUNCTIONALITY <i>(Please provide a descriptive title and identify nature of beyond minimum functionality costs)</i>								
Asset Type								
2.6.1 Costs related to technical capabilities in the smart meters or related communications infrastructure that exceed those specified in O.Reg 425/06								\$ -
2.6.2 Costs for deployment of smart meters to customers other than residential and small general service								\$ -

2.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDMR, etc:

Total OM&A Costs Beyond Minimum Functionality

Total Smart Meter OM&A Costs

					30,177	84,736	\$	114,912	
\$	-	\$	-	\$	-	\$	30,177	\$	114,912
\$	-	\$	-	\$	59,360	\$	22,776	\$	196,572
\$	-	\$	-	\$	328,456	\$	402,576	\$	1,009,739

3 Aggregate Smart Meter Costs by Category

3.1 Capital

3.1.1 Smart Meter

3.1.2 Computer Hardware

3.1.3 Computer Software

3.1.4 Tools & Equipment

3.1.5 Other Equipment

3.1.6 Applications Software

3.1.7 Total Capital Costs

3.2 OM&A Costs

3.2.1 Total OM&A Costs

\$	-	\$	-	\$	-	\$	7,219,977	\$	349,958	\$	216,974	\$	-	\$	7,786,909
\$	-	\$	-	\$	-	\$	28,529	\$	-	\$	-	\$	-	\$	28,529
\$	-	\$	-	\$	-	\$	219,728	\$	72,705	\$	2,408	\$	-	\$	294,841
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
\$	-	\$	-	\$	-	\$	-	\$	-	\$	21,362	\$	-	\$	21,362
\$	-	\$	-	\$	-	\$	7,468,233	\$	422,663	\$	240,744	\$	-	\$	8,131,640
\$	-	\$	-	\$	59,360	\$	22,776	\$	196,572	\$	328,456	\$	402,576	\$	1,009,739



	2006	2007	2008	2009	2010	2011	2012 and later
Cost of Capital							
Capital Structure¹							
Deemed Short-term Debt Capitalization			0.0%	4.0%	4.0%	4.0%	4.0%
Deemed Long-term Debt Capitalization	50.0%	50.0%	53.3%	52.7%	56.0%	56.0%	56.0%
Deemed Equity Capitalization	50.0%	50.0%	46.7%	43.3%	40.0%	40.0%	40.0%
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				1.33%	1.33%	1.33%	1.33%
Long-term Debt Rate (actual/embedded/deemed) ²		0.00%		6.00%	6.00%	6.00%	6.00%
Target Return on Equity (ROE)	2.9%	2.93%	2.93%	3.75%	3.75%	3.75%	3.75%
Return on Preferred Shares							
WACC	1.47%	1.47%	1.37%	4.84%	4.91%	4.91%	4.91%
Working Capital Allowance							
Working Capital Allowance Rate <i>(% of the sum of Cost of Power + controllable expenses)</i>	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
Taxes/PILs							
Aggregate Corporate Income Tax Rate	36.12%	36.12%	33.50%	32.83%	29.61%	25.74%	23.91%
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.



	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	\$ 7,786,909
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ 7,219,977	\$ 349,958	\$ 216,974	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ 7,219,977	\$ 7,569,935	\$ 7,786,909	\$ 7,786,909
Accumulated Depreciation							
Opening Balance		\$ -	\$ -	\$ -	\$ 240,666	\$ 733,663	\$ 1,245,558
Amortization expense during year	\$ -	\$ -	\$ -	\$ 240,666	\$ 492,997	\$ 511,895	\$ 519,127
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ 240,666	\$ 733,663	\$ 1,245,558	\$ 1,764,685
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 6,979,311	\$ 6,836,272	\$ 6,541,351
Closing Balance	\$ -	\$ -	\$ -	\$ 6,979,311	\$ 6,836,272	\$ 6,541,351	\$ 6,022,224
Average Net Book Value	\$ -	\$ -	\$ -	\$ 3,489,655	\$ 6,907,791	\$ 6,688,811	\$ 6,281,787
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	\$ 316,203
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ 219,728	\$ 72,705	\$ 23,770	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ 219,728	\$ 292,433	\$ 316,203	\$ 316,203
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 21,973	\$ 73,189	\$ 134,052
Amortization expense during year	\$ -	\$ -	\$ -	\$ 21,973	\$ 51,216	\$ 60,864	\$ 63,241
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ 21,973	\$ 73,189	\$ 134,052	\$ 197,293
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 197,755	\$ 219,244	\$ 182,151
Closing Balance	\$ -	\$ -	\$ -	\$ 197,755	\$ 219,244	\$ 182,151	\$ 118,910
Average Net Book Value	\$ -	\$ -	\$ -	\$ 98,878	\$ 208,500	\$ 200,697	\$ 150,530
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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



	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	\$ 6,688,811	\$ 6,281,787
Computer Hardware	\$ -	\$ -	\$ -	\$ 12,838	\$ 22,823	\$ 17,117	\$ 11,411
Computer Software	\$ -	\$ -	\$ -	\$ 98,878	\$ 208,500	\$ 200,697	\$ 150,530
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Net Fixed Assets	\$ -	\$ -	\$ -	\$ 3,601,371	\$ 7,139,114	\$ 6,906,626	\$ 6,443,729
Working Capital							
Operating Expenses (from Sheet 2)	\$ -	\$ -	\$ 59,360	\$ 22,776	\$ 196,572	\$ 328,456	\$ 402,576
Working Capital Factor (from Sheet 3)	15%	15%	15%	15%	15%	15%	15%
Working Capital Allowance	\$ -	\$ -	\$ 8,904	\$ 3,416	\$ 29,486	\$ 49,268	\$ 60,386
Incremental Smart Meter Rate Base	\$ -	\$ -	\$ 8,904	\$ 3,604,787	\$ 7,168,600	\$ 6,955,894	\$ 6,504,115
Return on Rate Base							
Capital Structure							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 144,191	\$ 286,744	\$ 278,236	\$ 260,165
Deemed Long Term Debt	\$ -	\$ -	\$ 4,746	\$ 1,899,723	\$ 4,014,416	\$ 3,895,301	\$ 3,642,305
Equity	\$ -	\$ -	\$ 4,158	\$ 1,560,873	\$ 2,867,440	\$ 2,782,358	\$ 2,601,646
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ -	\$ -	\$ 8,904	\$ 3,604,787	\$ 7,168,600	\$ 6,955,894	\$ 6,504,115
Return on							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 1,918	\$ 3,814	\$ 3,701	\$ 3,460
Deemed Long Term Debt	\$ -	\$ -	\$ -	\$ 113,983	\$ 240,865	\$ 233,718	\$ 218,538
Equity	\$ -	\$ -	\$ 122	\$ 58,533	\$ 107,529	\$ 104,338	\$ 97,562
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ -	\$ -	\$ 122	\$ 174,434	\$ 352,208	\$ 341,757	\$ 319,560
Operating Expenses	\$ -	\$ -	\$ 59,360	\$ 22,776	\$ 196,572	\$ 328,456	\$ 402,576
Debt Financing Expenses (Thunder Bay Hydro-specific)							
Amortization Expenses (from Sheet 4)							
Smart Meters	\$ -	\$ -	\$ -	\$ 240,666	\$ 492,997	\$ 511,895	\$ 519,127
Computer Hardware	\$ -	\$ -	\$ -	\$ 2,853	\$ 5,706	\$ 5,706	\$ 5,706
Computer Software	\$ -	\$ -	\$ -	\$ 21,973	\$ 51,216	\$ 60,864	\$ 63,241
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Amortization Expense in Year	\$ -	\$ -	\$ -	\$ 265,492	\$ 549,919	\$ 578,464	\$ 588,074
Incremental Revenue Requirement before Taxes/PILs	\$ -	\$ -	\$ 59,482	\$ 462,701	\$ 1,098,698	\$ 1,248,677	\$ 1,310,210
Calculation of Taxable Income							
Incremental Operating Expenses	\$ -	\$ -	\$ 59,360	\$ 22,776	\$ 196,572	\$ 328,456	\$ 402,576
Amortization Expense	\$ -	\$ -	\$ -	\$ 265,492	\$ 549,919	\$ 578,464	\$ 588,074
Interest Expense	\$ -	\$ -	\$ -	\$ 115,901	\$ 244,679	\$ 237,419	\$ 221,998
Net Income for Taxes/PILs	\$ -	\$ -	\$ 122	\$ 58,533	\$ 107,529	\$ 104,338	\$ 97,562
Grossed-up Taxes/PILs (from Sheet 7)	\$ -	\$ -	\$ 61.37	\$ 54.93	\$ 7,326.06	\$ 21,806.67	\$ 44,265.76
Revenue Requirement, including Grossed-up Taxes/PILs	\$ -	\$ -	\$ 59,543	\$ 462,756	\$ 1,091,372	\$ 1,270,484	\$ 1,354,475



For PILs Calculation

UCC - Smart Meters

	2006 Audited Actua	2007 Audited Actua	2008 Audited Actua	2009 Audited Actua	2010 Audited Actua	2011 Unaudited Actua	2012 and later Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ 6,931,177.51	\$ 6,712,643.08	\$ 6,383,926.71
Capital Additions	\$ -	\$ -	\$ -	\$ 7,219,976.57	\$ 349,958.09	\$ 216,974.04	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ 7,219,976.57	\$ 7,281,135.60	\$ 6,929,617.12	\$ 6,383,926.71
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ 3,609,988.29	\$ 174,979.05	\$ 108,487.02	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ 3,609,988.29	\$ 7,106,156.56	\$ 6,821,130.10	\$ 6,383,926.71
CCA Rate Class	47	47	47	47	47	47	47
CCA Rate	8%	8%	8%	8%	8%	8%	8%
CCA	\$ -	\$ -	\$ -	\$ 288,799.06	\$ 568,492.52	\$ 545,690.41	\$ 510,714.14
Closing UCC	\$ -	\$ -	\$ -	\$ 6,931,177.51	\$ 6,712,643.08	\$ 6,383,926.71	\$ 5,873,212.57

UCC - Computer Equipment

	2006 Audited Actua	2007 Audited Actua	2008 Audited Actua	2009 Audited Actua	2010 Audited Actua	2011 Unaudited Actua	2012 and later Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ 179,985.98	\$ 133,704.93	\$ 61,912.74
Capital Additions Computer Hardware	\$ -	\$ -	\$ -	\$ 28,528.68	\$ -	\$ -	\$ -
Capital Additions Computer Software	\$ -	\$ -	\$ -	\$ 219,727.85	\$ 72,705.15	\$ 2,407.62	\$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ 248,256.53	\$ 252,691.14	\$ 136,112.55	\$ 61,912.74
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ 124,128.26	\$ 36,352.58	\$ 1,203.81	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ 124,128.26	\$ 216,338.56	\$ 134,908.74	\$ 61,912.74
CCA Rate Class	50	50	50	50	50	50	50
CCA Rate	55%	55%	55%	55%	55%	55%	55%
CCA	\$ -	\$ -	\$ -	\$ 68,270.55	\$ 118,986.21	\$ 74,199.81	\$ 34,052.01
Closing UCC	\$ -	\$ -	\$ -	\$ 179,985.98	\$ 133,704.93	\$ 61,912.74	\$ 27,860.73

UCC - General Equipment

	2006 Audited Actua	2007 Audited Actua	2008 Audited Actua	2009 Audited Actua	2010 Audited Actua	2011 Unaudited Actua	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	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA Rate Class	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



PILs Calculation

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Unaudited Actual	2012 and later Forecast
INCOME TAX							
Net Income	\$ -	\$ -	\$ 121.83	\$ 58,532.73	\$ 107,528.99	\$ 104,338.41	\$ 97,561.73
Amortization	\$ -	\$ -	\$ -	\$ 265,491.54	\$ 549,918.86	\$ 578,464.12	\$ 588,073.58
CCA - Smart Meters	\$ -	\$ -	\$ -	\$ 288,799.06	\$ 568,492.52	\$ 545,690.41	\$ 510,714.14
CCA - Computers	\$ -	\$ -	\$ -	\$ 68,270.55	\$ 118,986.21	\$ 74,199.81	\$ 34,052.01
CCA - Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Change in taxable income	\$ -	\$ -	\$ 121.83	\$ 33,045.34	\$ 30,030.88	\$ 62,912.32	\$ 140,869.17
Tax Rate (from Sheet 3)	36.12%	36.12%	33.50%	32.83%	29.61%	25.74%	23.91%
Income Taxes Payable	\$ -	\$ -	\$ 40.81	\$ 10,848.78	\$ 8,892.14	\$ 16,193.63	\$ 33,681.82
ONTARIO CAPITAL TAX							
Smart Meters	\$ -	\$ -	\$ -	\$ 6,979,310.69	\$ 6,836,271.74	\$ 6,541,351.00	\$ 6,022,223.75
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	\$ 182,150.53	\$ 118,909.93
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Rate Base	\$ -	\$ -	\$ -	\$ 7,202,741.56	\$ 7,075,485.95	\$ 6,737,765.87	\$ 6,149,692.29
Less: Exemption							
Deemed Taxable Capital	\$ -	\$ -	\$ -	\$ 7,202,741.56	\$ 7,075,485.95	\$ 6,737,765.87	\$ 6,149,692.29
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	\$ -	\$ -	\$ 40.81	\$ 10,848.78	\$ 8,892.14	\$ 16,193.63	\$ 33,681.82
Change in OCT	\$ -	\$ -	\$ -	\$ 16,206.17	\$ 5,306.61	\$ -	\$ -
PILs	\$ -	\$ -	\$ 40.81	\$ 5,357.38	\$ 3,585.53	\$ 16,193.63	\$ 33,681.82
Gross Up PILs							
Tax Rate	36.12%	36.12%	33.50%	32.83%	29.61%	25.74%	23.91%
Change in Income Taxes Payable	\$ -	\$ -	\$ 61.37	\$ 16,151.23	\$ 12,632.68	\$ 21,806.67	\$ 44,265.76
Change in OCT	\$ -	\$ -	\$ -	\$ 16,206.17	\$ 5,306.61	\$ -	\$ -
PILs	\$ -	\$ -	\$ 61.37	\$ 54.93	\$ 7,326.06	\$ 21,806.67	\$ 44,265.76





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	4.59%	4.72%	May-06	2006	Q2	\$ -	\$ 587.46	4.14%	\$ -	\$ 587.46		
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	\$ 587.46	\$ 6,566.57	4.14%	\$ 2.03	\$ 7,156.06		
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	\$ 7,154.03	\$ 10,982.38	4.59%	\$ 27.36	\$ 18,163.77		
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	\$ 18,136.41	\$ 14,470.34	4.59%	\$ 69.37	\$ 32,676.12		
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	\$ 32,606.75	\$ 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%	5.43%	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	\$ 15,066.21	4.59%	\$ 420.46	\$ 125,411.60		
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	\$ 15,877.34	4.59%	\$ 522.53	\$ 153,009.33		
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	\$ 152,486.80	\$ 12,301.38	4.59%	\$ 583.26	\$ 165,371.44		
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	\$ 164,788.18	\$ 14,189.22	4.59%	\$ 630.31	\$ 179,607.71		
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	\$ 178,977.40	\$ 12,946.82	4.59%	\$ 684.59	\$ 192,608.81		
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	\$ 191,924.22	\$ 10,592.08	4.59%	\$ 734.11	\$ 203,250.41		
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	\$ 202,516.30	\$ 14,163.62	5.14%	\$ 867.44	\$ 217,547.36		
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	\$ 216,679.92	\$ 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	\$ 165,834.97	
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	\$ 242,018.91	\$ 16,018.68	5.14%	\$ 1,036.65	\$ 259,074.24		
2012 Q2	1.47%	4.29%	Feb-08	2008	Q1	\$ 258,037.59	\$ 11,640.01	5.14%	\$ 1,105.26	\$ 270,782.86		
2012 Q3		4.29%	Mar-08	2008	Q1	\$ 269,677.60	\$ 12,192.00	5.14%	\$ 1,155.12	\$ 283,024.72		
2012 Q4		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	\$ 310,260.59		
			Jun-08	2008	Q2	\$ 309,253.48	\$ 14,480.28	4.08%	\$ 1,051.46	\$ 324,785.22		
			Jul-08	2008	Q3	\$ 323,733.76	\$ 14,691.11	3.35%	\$ 903.76	\$ 339,328.63		
			Aug-08	2008	Q3	\$ 338,424.87	\$ 10,897.02	3.35%	\$ 944.77	\$ 350,266.66		
			Sep-08	2008	Q3	\$ 349,321.89	\$ 13,660.77	3.35%	\$ 975.19	\$ 363,957.85		
			Oct-08	2008	Q4	\$ 362,982.66	\$ 13,492.53	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	\$ 388,765.31	\$ 13,649.79	3.35%	\$ 1,085.30	\$ 403,500.40	\$ 172,683.49	
			Jan-09	2009	Q1	\$ 402,415.10	\$ 14,420.31	2.45%	\$ 821.60	\$ 417,657.01		
			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	\$ 456,450.64	\$ 12,323.68	1.00%	\$ 380.38	\$ 469,154.70		
			Jun-09	2009	Q2	\$ 468,774.32	\$ 14,742.13	1.00%	\$ 390.65	\$ 483,907.10		
			Jul-09	2009	Q3	\$ 483,516.45	\$ 25,762.44	0.55%	\$ 221.61	\$ 509,500.50		
			Aug-09	2009	Q3	\$ 509,278.89	\$ 72,838.60	0.55%	\$ 233.42	\$ 582,350.91		
			Sep-09	2009	Q3	\$ 582,117.49	\$ 166,920.98	0.55%	\$ 266.80	\$ 749,305.27		
			Oct-09	2009	Q4	\$ 749,038.47	\$ 141,021.06	0.55%	\$ 343.31	\$ 890,402.84		
			Nov-09	2009	Q4	\$ 890,059.53	\$ 105,171.46	0.55%	\$ 407.94	\$ 995,638.93		
			Dec-09	2009	Q4	\$ 995,230.99	\$ 102,353.10	0.55%	\$ 456.15	\$ 1,098,040.24	\$ 700,784.59	
			Jan-10	2010	Q1	\$ 1,097,584.09	\$ 101,005.31	0.55%	\$ 503.06	\$ 1,199,092.46		
			Feb-10	2010	Q1	\$ 1,198,589.40	\$ 75,747.45	0.55%	\$ 549.35	\$ 1,274,886.20		
			Mar-10	2010	Q1	\$ 1,274,336.85	\$ 119,231.13	0.55%	\$ 584.07	\$ 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	\$ 106,622.69	0.55%	\$ 722.10	\$ 1,682,843.13		
			Jul-10	2010	Q3	\$ 1,682,121.03	\$ 92,941.15	0.89%	\$ 1,247.57	\$ 1,776,309.75		
			Aug-10	2010	Q3	\$ 1,775,062.18	\$ 92,248.54	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	\$ 2,051,476.94	\$ 103,388.94	1.20%	\$ 2,051.48	\$ 2,156,917.36		
			Dec-10	2010	Q4	\$ 2,154,865.88	\$ 91,336.51	1.20%	\$ 2,154.87	\$ 2,248,357.26	\$ 1,162,423.56	
			Jan-11	2011	Q1	\$ 2,246,202.39	\$ 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%	\$ 2,976.39	\$ 2,547,860.05		
			Apr-11	2011	Q2	\$ 2,544,883.66	\$ 79,882.59	1.47%	\$ 3,117.48	\$ 2,627,883.73		
			May-11	2011	Q2	\$ 2,624,766.25	\$ 105,224.63	1.47%	\$ 3,215.34	\$ 2,733,206.22		
			Jun-11	2011	Q2	\$ 2,729,990.88	\$ 101,688.50	1.47%	\$ 3,344.24	\$ 2,835,023.62		
			Jul-11	2011	Q3	\$ 2,831,679.38	\$ 102,902.03	1.47%	\$ 3,468.81	\$ 2,938,050.22		
			Aug-11	2011	Q3	\$ 2,934,581.41	\$ 92,413.22	1.47%	\$ 3,594.86	\$ 3,030,589.49		
			Sep-11	2011	Q3	\$ 3,026,994.63	\$ 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	\$ 3,226,153.59		
			Nov-11	2011	Q4	\$ 3,222,318.05	\$ 103,998.80	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	\$ 125,039.16	1.47%	\$ 4,173.36	\$ 3,536,037.66		
			Feb-12	2012	Q1	\$ 3,531,864.30	\$ 81,304.99	1.47%	\$ 4,326.53	\$ 3,617,495.82		
			Mar-12	2012	Q1	\$ 3,613,169.29	\$ 69,171.67	1.47%	\$ 4,426.13	\$ 3,686,767.09		
			Apr-12	2012	Q2	\$ 3,682,340.96	\$ 79,882.59	1.47%	\$ 4,510.87	\$ 3,766,734.42		
			May-12	2012	Q2	\$ 3,762,223.55	\$ 105,224.63	1.47%	\$ 4,608.72	\$ 3,872,056.90		
			Jun-12	2012	Q2	\$ 3,867,448.18	\$ 91,519.65	1.47%	\$ 4,737.62	\$ 3,963,705.45		
			Jul-12	2012	Q3	\$ 3,958,967.83	\$ -	0.00%	\$ -	\$ 3,958,967.83		
			Aug-12	2012	Q3	\$ 3,958,967.83	\$ -	0.00%	\$ -	\$ 3,958,967.83		
			Sep-12	2012	Q3	\$ 3,958,967.83	\$ -	0.00%	\$ -	\$ 3,958,967.83		
			Oct-12	2012	Q4	\$ 3,958,967.83	\$ -	0.00%	\$ -	\$ 3,958,967.83		
			Nov-12	2012	Q4	\$ 3,958,967.83	\$ -	0.00%	\$ -	\$ 3,958,967.83		
			Dec-12	2012	Q4	\$ 3,958,967.83	\$ -	0.00%	\$ -	\$ 3,958,967.83	\$ 578,925.92	
Total Funding Adder Revenues Collected							\$ 3,958,967.83		\$ 107,827.03	\$ 4,066,794.86	\$ 4,066,794.86	

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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	\$ 8,834.54	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	\$ 22,665.17	\$ 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	1,347,123.94	1.47%	1,556.19	14,688.20
			Jun-11	2011	Q2	1,347,123.94	\$ 17,515.96	\$ 43,428.28	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	\$ 43,619.24	1,695,461.75	1.47%	1,995.73	23,794.50
			Nov-11	2011	Q4	1,695,461.75	\$ 29,948.64	\$ 43,686.81	1,769,097.20	1.47%	2,076.94	25,871.44
			Dec-11	2011	Q4	1,769,097.20	\$ 41,461.26	\$ 43,686.82	1,854,245.28	1.47%	2,167.14	28,038.58
			Jan-12	2012	Q1	1,854,245.28			1,854,245.28	1.47%	2,271.45	30,310.03
			Feb-12	2012	Q1	1,854,245.28			1,854,245.28	1.47%	2,271.45	32,581.48
			Mar-12	2012	Q1	1,854,245.28			1,854,245.28	1.47%	2,271.45	34,852.93
			Apr-12	2012	Q2	1,854,245.28			1,854,245.28	1.47%	2,271.45	37,124.39
			May-12	2012	Q2	1,854,245.28			1,854,245.28	1.47%	2,271.45	39,395.84
			Jun-12	2012	Q2	1,854,245.28			1,854,245.28	1.47%	2,271.45	41,667.29
			Jul-12	2012	Q3	1,854,245.28			1,854,245.28	0.00%	-	41,667.29
			Aug-12	2012	Q3	1,854,245.28			1,854,245.28	0.00%	-	41,667.29
			Sep-12	2012	Q3	1,854,245.28			1,854,245.28	0.00%	-	41,667.29
			Oct-12	2012	Q4	1,854,245.28			1,854,245.28	0.00%	-	41,667.29
			Nov-12	2012	Q4	1,854,245.28			1,854,245.28	0.00%	-	41,667.29
			Dec-12	2012	Q4	1,854,245.28			1,854,245.28	0.00%	-	41,667.29
						\$ 608,618.00	\$ 1,245,627.28	\$ 1,854,245.28				





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	\$ 328,455.95	\$ 578,464.12	\$ 2,001,037.99	\$ 1,547,577.95	1.47%	\$ 22,749.40
2012	\$ 402,575.83	\$ 588,073.58	\$ 2,991,687.40	\$ 2,496,362.69	1.47%	\$ 36,696.53
Cumulative Interest to 2011						\$ 31,994.35
Cumulative Interest to 2012						\$ 68,690.88



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)
- ☒ Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)

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

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.

	2006	2007	2008	2009	2010	2011	2012 and later	Total
Deferred and forecasted Smart Meter Incremental Revenue Requirement (from Sheet 5)	\$ -	\$ -	\$ 59,542.91	\$ 462,756.35	\$ 1,091,372.22	\$ 1,270,483.73	\$ 1,354,475.38	\$ 4,238,630.59
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	\$ 20,280.25		\$ 28,038.58
☒ Sheet 8A (Interest calculated on monthly balances)	\$ -	\$ -	\$ 1,456.29	\$ 1,052.10	\$ 5,249.94	\$ 20,280.25		\$ 28,038.58
☐ Sheet 8B (Interest calculated on average annual balances)								\$ -
SMFA Revenues (from Sheet 8)	\$ 83,718.06	\$ 158,300.85	\$ 160,396.19	\$ 695,168.99	\$ 1,148,618.30	\$ 1,160,622.75	\$ 552,142.69	\$ 3,958,967.83
SMFA Interest (from Sheet 8)	\$ 888.76	\$ 7,534.12	\$ 12,287.30	\$ 5,615.60	\$ 13,805.26	\$ 40,912.76	\$ 26,783.23	\$ 107,827.03
Net Deferred Revenue Requirement	-\$ 84,606.82	-\$ 165,834.97	-\$ 111,684.29	-\$ 236,976.14	-\$ 65,801.40	\$ 89,228.47	\$ 775,549.46	\$ 199,874.31
Number of Metered Customers (average for 2012 test year)							49062	
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 plus Interest on OM&A and Amortization	\$ 2,912,193.79							
SMFA Revenues collected from 2006 to 2012 test year (inclusive) Plus Simple Interest on SMFA Revenues	\$ 4,066,794.86							
Net Deferred Revenue Requirement	-\$ 1,154,601.07							
SMDR	May 1, 2012 to April 30, 2014							
	-\$ 0.98							
Check: Forecasted SMDR Revenues	-\$ 1,153,938.24							
Calculation of Smart Meter Incremental Revenue Requirement Rate Rider (per metered customer per month)								
Incremental Revenue Requirement for 2012	\$ 1,354,475.38							
SMIRR	\$ 2.30							
Check: Forecasted SMIRR Revenues	\$ 1,354,111.20							

Smart Meter Disposition Rate Rider as at December 31, 2011

Revenue Requirement 2008	\$60,999
Revenue Requirement 2009	\$463,808
Revenue Requirement 2010	\$1,096,622
Revenue Requirement 2011	<u>\$1,290,764</u>
Total Revenue Requirement	<u>\$2,912,194</u>
Smart Meter Rate Adder	-\$3,958,968
Carrying Charges	<u>-\$107,827</u>
Smart Meter True-Up	<u>-\$1,154,601</u>
Average # of Metered Customers Jan. to Dec. 2011	49,062
Rate rider \$/month/metered customer	-\$0.98

Smart Meter Incremental Revenue Requirement Rate Rider

Revenue Requirement 2012	\$ 1,354,475
Total Revenue Requirement	<u>\$ 1,354,475</u>
Smart Meter Rate Adder	\$ -
Carrying Charges	\$ -
Smart Meter True-Up	<u>\$1,354,475</u>
Average # of Metered Customers Jan. to Dec. 2011	49,062
Rate rider \$/month/metered customer	\$2.30

COST OF LONG TERM DEBT

	2006 Board Approved			2006 Actual			2007 Actual			2008 Bridge			2009 Test Year		
	Principal	Carrying Costs	Calculated Cost Rate	Principal	Carrying Costs	Calculated Cost Rate	Principal	Carrying Costs	Calculated Cost Rate	Principal	Carrying Costs	Calculated Cost Rate	Principal	Carrying Costs	Calculated Cost Rate
Long Term Debt															
Note															
Payable to Shareholder	33,490,500	0	0%	33,490,500	0	0%	33,490,500	0	0%	33,490,500	0	0%	33,490,500	0	0%
Capital Lease Obligation				46,209	2,025	3.13%	9,385	908	3.13%	0	48	3.13%			
2009 Capital Funding													1,153,142	72,000	6.0%
TOTAL	33,490,500	0	0%	33,536,709	2,025	0%	33,499,885	908	0%	33,490,500	48	0%	34,643,642	72,000	21%

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	Monthly	\$ 9.8800	1	\$ 9.88	\$ 9.8500	1	\$ 9.85	-\$ 0.03	-0.30%
Smart Meter Rate Adder	Monthly	\$ 1.9700	1	\$ 1.97		1	\$ -	-\$ 1.97	-100.00%
Distribution Volumetric Rate	per kWh	\$ 0.0124	800	\$ 9.92	\$ 0.0124	800	\$ 9.92	\$ -	0.00%
Shared Tax Savings Rider	per kWh	-\$ 0.0003	800	-\$ 0.24	-\$ 0.0003	800	-\$ 0.24	\$ -	0.00%
LRAM & SSM Rate Rider	per kWh	\$ 0.0010	800	\$ 0.80	\$ 0.00004	800	\$ 0.03	-\$ 0.77	-96.00%
Deferral/Variance Account Disposition Rate Rider	per kWh	\$ 0.0010	800	\$ 0.80	-\$ 0.0034	800	-\$ 2.72	-\$ 3.52	-440.00%
Smart Meter Disposition Rider	Monthly			\$ -	-\$ 1.4500	1	-\$ 1.45	-\$ 1.45	#DIV/0!
Smart Meter Incremental Revenue Requirement Rider	Monthly			\$ -	\$ 1.8700	1	\$ 1.87	\$ 1.87	#DIV/0!
Sub-Total A - Distribution				\$ 23.13			\$ 17.26	-\$ 5.87	-25.37%
RTSR - Network	per kWh	\$ 0.0058	835.84	\$ 4.85	\$ 0.0064	835.84	\$ 5.35	\$ 0.50	10.34%
RTSR - Line and Transformation Connection	per kWh	\$ 0.0047	835.84	\$ 3.93	\$ 0.0049	835.84	\$ 4.10	\$ 0.17	4.26%
Sub-Total B - Delivery (including Sub-Total A)				\$ 31.91			\$ 26.71	-\$ 5.20	-16.30%
Wholesale Market Service Charge (WMSC)	per kWh	\$ 0.0052	835.84	\$ 4.35	\$ 0.0052	835.84	\$ 4.35	\$ -	0.00%
Rural and Remote Rate Protection (RRRP)	per kWh	\$ 0.0013	835.84	\$ 1.09	\$ 0.0011	835.84	\$ 0.92	-\$ 0.17	-15.38%
			835.84	\$ -		835.84	\$ -	\$ -	
Standard Supply Service Charge	Monthly	\$ 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	per kWh	\$ 0.0710	835.84	\$ 59.34	\$ 0.0750	835.84	\$ 62.69	\$ 3.34	5.63%
Energy Tier 2	per kWh	\$ 0.0830		\$ -	\$ 0.0880		\$ -	\$ -	
				\$ -			\$ -	\$ -	
Total Bill (before Taxes)				\$ 102.78			\$ 100.76	-\$ 2.02	-1.97%
HST		13%		\$ 13.36	13%		\$ 13.10	-\$ 0.26	-1.97%
Total Bill (including Sub-total B)				\$ 116.15			\$ 113.86	-\$ 2.29	-1.97%
Ontario Clean Energy Benefit ¹				-\$ 11.62			-\$ 11.39	\$ 0.23	-1.98%
Total Bill (including OCEB)				\$ 104.53			\$ 102.47	-\$ 2.06	-1.97%
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	\$ 17.8900	1	\$ 17.89	\$ 17.8400	1	\$ 17.84	-\$ 0.05	-0.28%
Smart Meter Rate Adder	\$ 1.9700	1	\$ 1.97		1	\$ -	-\$ 1.97	-100.00%
Distribution Volumetric Rate	\$ 0.0131	2000	\$ 26.20	\$ 0.0130	2000	\$ 26.00	-\$ 0.20	-0.76%
Shared Tax Savings Rider	-\$ 0.0002	2000	-\$ 0.40	-\$ 0.0002	2000	-\$ 0.40	\$ -	0.00%
LRAM & SSM Rate Rider	\$ 0.0001	2000	\$ 0.20	\$ 0.00020	2000	\$ 0.40	\$ 0.20	100.00%
Deferral/Variance Account Disposition Rate Rider	\$ 0.0010	2000	\$ 2.00	-\$ 0.0030	2000	-\$ 6.00	-\$ 8.00	-400.00%
Smart Meter Disposition Rider			\$ -	\$ 3.8400	1	\$ 3.84	\$ 3.84	#DIV/0!
Smart Meter Incremental Revenue Requirement Rider			\$ -	\$ 6.8400	1	\$ 6.84	\$ 6.84	#DIV/0!
Sub-Total A - Distribution			\$ 47.86			\$ 48.52	\$ 0.66	1.38%
RTSR - Network	\$ 0.0055	2089.6	\$ 11.49	\$ 0.0061	2089.6	\$ 12.75	\$ 1.25	10.91%
RTSR - Line and Transformation Connection	\$ 0.0044	2089.6	\$ 9.19	\$ 0.0046	2089.6	\$ 9.61	\$ 0.42	4.55%
Sub-Total B - Delivery (including Sub-Total A)			\$ 68.55			\$ 70.88	\$ 2.33	3.40%
Wholesale Market Service Charge (WMSC)	\$ 0.0052	2089.6	\$ 10.87	\$ 0.0052	2089.6	\$ 10.87	\$ -	0.00%
Rural and Remote Rate Protection (RRRP)	\$ 0.0013	2089.6	\$ 2.72	\$ 0.0011	2089.6	\$ 2.30	-\$ 0.42	-15.38%
		2089.6	\$ -		2089.6	\$ -	\$ -	
Standard Supply Service Charge	\$ 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	\$ 0.0710	750	\$ 53.25	\$ 0.0750	750	\$ 56.25	\$ 3.00	5.63%
Energy Tier 2	\$ 0.0830	1339.6	\$ 111.19	\$ 0.0880	1339.6	\$ 117.88	\$ 6.70	6.02%
			\$ -			\$ -	\$ -	
Total Bill (before Taxes)			\$ 261.44			\$ 273.06	\$ 11.61	4.44%
HST	13%		\$ 33.99	13%		\$ 35.50	\$ 1.51	4.44%
Total Bill (including Sub-total B)			\$ 295.43			\$ 308.55	\$ 13.12	4.44%
Ontario Clean Energy Benefit ¹			-\$ 29.54			-\$ 30.86	-\$ 1.32	4.47%
Total Bill (including OCEB)			\$ 265.89			\$ 277.69	\$ 11.80	4.44%
Loss Factor (%)			4.48%			4.48%		

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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.

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