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July 20, 2012

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

Attention: Ms. Kirsten Walli, Board Secretary

Dear Ms Walli:

**Re: November 1, 2012 Smart Meter Disposition Interrogatory Response
EB-2012-0266**

Waterloo North Hydro Inc. (WNH) hereby submits its Response to the July 6, 2012 Board Staff Interrogatories. We enclose two (2) hard copies of the Responses and Attachments. WNH has also attached its Response to the July 9, 2012 Vulnerable Energy Consumer Coalition Interrogatories.

WNH has previously forwarded the PDF version and an Excel File containing Interrogatory Responses and the Smart Meter Model via the Board's web portal.

If there are any questions, please contact Chris Amos at 519-888-5541, camos@wnhydro.com or myself at 519-888-5542, asingh@wnhydro.com.

Yours truly,

Original Signed By

Albert P. Singh, MBA, CGA
Vice-President, Finance and CFO

**Waterloo North Hydro Inc.
2012 Smart Meter Cost Recovery
EB-2012-0266**

Interrogatory Responses to Board Staff

General

1. Letters of Comment

Following publication of the Notice of Application, the Board has, to date, received no letters of comment.

Please confirm whether Waterloo North Hydro Inc. (“WNH”) has received any letters of comment. If so, please file a copy of any letters of comment. For each, please confirm whether a reply was sent from WNH to the author of the letter. If confirmed, please file that reply with the Board. Please ensure that the author’s contact information except for the name is redacted. If not confirmed, please explain why a response was not sent and confirm if WNH intends to respond to the commenter.

WNH has not received any letters of comment.

Manager’s Summary

2. Ref: Application, page 9 – Contracted Services

On pages 9 and 10 of its Application, WNH provides a summary of services contracted from external suppliers used in WNH’s smart meter deployment. On page 10, WNH provides the following description of one contracted service:

- ***Commercial Installments Service Provider (2009 – 2011) this work was included in the tender and award for the Residential Installation Service Provider. WNH also leveraged some of its own metering staff to complete a portion of the work.***
- a) ***Has WNH included the costs related to the work completed by WNH’s own metering staff for recovery in this Application? If yes, please provide the costs related to the work done by WNH’s own staff.***

WNH has included costs related to the work done by WNH's own staff.
The breakdown is provided in the table below.

Table IR # 2a – Staff Costs – Capital

Year	Total \$*	Overtime	Regular
2008	71,184	5,223	65,961
2009	181,374	9,789	171,585
2010	375,214	90,672	284,543
2011	194,127	52,678	141,449
Total	821,899	158,361	663,538

* Total includes Overtime

The OM&A Costs for internal staff are included in Section 2.6.3 of the Smart Meter Model.

Table IR # 2a – Staff Costs– OM&A

2010	2011	2012 and Later
\$ 29,190	\$ 95,982	\$ 96,500

- b) What are WNH's reasons for including the costs of its own staff for recovery in this Application? Specifically, how were these costs incremental (e.g., overtime) to the costs for WNH's own staff that are factored into its revenue requirement in its last cost of service application and hence recovered through its Board-approved distribution rates?**

In WNH's 2011 Cost of Service application it specifically excluded its Internal Staff Costs (Regular and Overtime), for Smart Meter Capital and OM&A for the Bridge Year and Test Year, thus, these costs are not captured in its Board-approved distribution rates.

Ref: Application, page 17 – Customer-Owned-Equipment

On page 17 of its Application, WNH documents the capitalized and expensed costs related to repair or replacement of customer-owned equipment. Table 9 is replicated below:

Table 9 – Costs for Customer Owned Equipment			
Year	Capital #1555	OM&A #1556	Total
2008	4042	700	700
2009	21,394	4,007	61,401
2010	55,446	32,312	87,758
2011	5,500	5,309	10,809
2012	563	919	1,482
Total	86,945	43,247	162,150

- a) ***There appear to be errors in the totals shown in Table 9. For example, total capital costs are shown as \$86,945 and total OM&A costs are \$43,247. However, the sum of the two is listed as \$162,150, about \$30,000 more than the actual sum should be. Please confirm the entries and calculations and provide an updated Table 9 as required.***

WNH had incorrect formulas in its 'Total' column and has corrected this error. The Capital has not changed, however, upon review of the information for this IR, WNH has corrected the 2011 and 2012 OM&A Amounts. WNH has presented the corrected Table 9 below.

Table IR # 3a - Updated Table 9

Year	Capital # 1555	OM&A # 1556	Total
2008	4,042	700	4,742
2009	21,394	4,007	25,401
2010	55,446	32,312	87,758
2011	5,500	-	5,500
2012	563	-	563
Total	86,945	37,019	123,964

- b) Board staff observes that WNH's documented costs related to repair and replacement of customer-owned equipment seem to be higher than has been observed in many applications for smart meter cost recovery to date. Please provide further description of the capitalized and expensed costs, including examples, for the work and costs incurred by WNH for repair and replacement of customer-owned equipment as part of smart meter deployment.**

WNH has a high number of meters bases that have been installed in its service area longer than 30 years ago, some of these meter bases were already in poor condition which was not discovered until the existing meter was removed. These pre-existing conditions included rotted wood on the wall which would not support the meter or broken lugs which hold the meter in place.

As these conditions were discovered, the following decision tree was used:

- If the existing meter could be re-installed and it was safe for the customer and the customer would retain power – WNH sent the customer a letter with the deficiencies advising the customer to have these fixed prior to the installation of the Smart Meter at their cost
- If the existing meter could not be reinstalled as it was not safe for the customer or the customer would be left without power, WNH had an electrician repair the work at its cost

Smart Meter Model

4. Ref: Smart Meter Model – Sheet 2

Please explain the entry of (\$13,242) for smart meter capital costs for 2012 on Sheet 2, cell S42.

In 2012 WNH received a credit from its Smart Meter Supplier in the amount of \$13,242 to reimburse WNH for 314 smart meters that failed when installed. WNH initially installed the meters at the customer's premise, the meters failed and were removed and a new Smart Meter was installed. WNH's system did not remove the initial meter's costs, thus, the capital cost was recorded twice (once for each meter). The credit received was applied to the Smart Meter Capital Cost in order to ensure that the capital cost for each customer premise was only recorded once.

5. Ref: Smart Meter Model – Sheet 2

On sheet 2, in cell S134, WNH has an entry of \$149,738, described as “User fees to Software Provider”, related to the Advanced Metering Control Computer (“AMCC”) for 2012. No similar entries are shown for prior years.

a) Please provide further explanation of this cost.

WNH has included \$8,323 per month, for an annual amount of \$99,876, for payments to its Smart Meter Provider for 4 TGB Towers. The Towers are used to collect smart meter readings and transmit to the central MDM/R.

WNH has included \$.08/month x 51,940 customers, for an annual amount of \$49,862, for payments to its Smart Meter Provider for a Meter Reading Transaction Fee.

b) Why does this cost not occur before 2012?

WNH had previously included any TGB Tower amounts in Smart Meter Capital as it was a cost of implementing the Smart Meter system. As the system is operational, it is now considered an OM&A cost.

The Transactional Fee is a new fee that is payable only upon achievement of specified operational conditions. These conditions had not been met prior to 2012.

c) Is this a one-time cost, or is it expected to recur past 2012?

These costs are expected to recur beyond 2012.

6. Ref: Smart Meter Model, Sheet 2 and 8A – Amortization/Depreciation Expense

Board staff has prepared the following table that compares the documented amortization/depreciation expense by year from sheets 5 and 8A of the Smart Meter model.

Amortization/Depreciation Expense by Year		
Year	Sheet 5	Sheet 8A
2006		
2007		
2008	\$45,681	\$21,004
2009	\$228,574	\$185,507
2010	\$492,719	\$447,954
2011	\$660,004	\$598,823
2012	\$741,828	\$631,706

The data from Sheet 5 are calculated from the model based on the average Gross Book Value of assets in service and using the half year rule for the year that new assets enter service.

The annual data for Sheet 8A are the sum of the monthly data entries shown in Column L of that page, and are entered by WNH based on its Account 1556 sub-account entries.

a) *Please confirm or correct the data shown in the above table.*

WNH has corrected the monthly data entries in Sheet 8A, column L, the annual amounts now agree to Sheet 5 as detailed in Board Staff's Table above.

b) *Please explain the differences shown between the annual data on sheets 5 and 8A.*

Please refer to IR # 6 a) above.

Cost Allocation

7. *Ref: Application, Sections 8.0 and 9.0 – Cost Allocation*

a) *If WNH has made revisions to its Smart Meter Model, Version 2.17 as a result of its responses to interrogatories, please update its proposed class-specific SMDRs.*

WNH has made revisions to its Smart Meter Model, Version 2.17 as a result of its response to IR # 6 a). WNH has attached the revised model to this IR Response as Attachment A and has provided the updated proposed class-specific SMDRs in the Tables below. The only amount that was revised, which affected the SMDRs, was the Interest on Deferred and Forecasted OM&A and Amortization Expense. The resulting revision did not change the rate for Residential customers and it increased the rate \$0.01 for the GS < 50 kW customers to \$7.06 per customer per month from \$7.05 per customer per month.

Tables IR # 7a – Update SMDR by Rate Class

Summary

	Component of Revenue Requirement	Allocate between classes based on	Residential	GS < 50	Total
A	Return (Deemed interest plus return on equity) & Amortization	Capital costs of the meters installed for each class	\$ 1,949,252	713,467	\$ 2,662,719
B	OM&A	# Meters installed for each class	\$ 170,520	19,859	\$ 190,379
C	PILs	Revenue Requirement allocated to each class before PILs	\$ (460,079)	(159,162)	\$ (619,242)
	Total Revenue Requirement		\$ 1,659,693	\$ 574,164	\$ 2,233,857
	Interest on Deferred and forecasted OM&A and Amortization Expense	Total Revenue Requirement to each class	\$ 18,006	\$ 6,229	\$ 24,234
	SMFA Revenue including Carrying Charges		(2,433,495)	(300,341)	(2,733,836)
	Net Deferred Revenue Requirement Before Foregone Revenue		\$ (755,797)	\$ 280,052	\$ (475,745)
	Number of Metered Customers		46,522	5,418	51,940
	Calculation of Smart Meter Disposition Rider before Foregone Revenue	Per metered customer per month	\$ (1.35)	\$ 4.31	\$ (0.76)
	Foregone Revenue for 6 months	One-half of 2012 Revenue Requirement	588,329	179,026	767,355
	Net Deferred Revenue Requirement including Foregone Revenue		\$ (167,468)	\$ 459,078	\$ 291,610
	Number of Metered Customers		46,522	5,418	51,940
	Calculation of Smart Meter Disposition Rider	Per metered customer per month	\$ (0.30)	\$ 7.06	\$ 0.47

Details

	Component	Allocator		Return	Amortization	OM&A	PILs	Total	Residential	GS < 50	Total
A	Return Amortization	Capital costs of the meters installed for each class	%						73.2%	26.8%	100.0%
			\$	\$ 1,235,741	\$ 1,426,978			\$ 2,662,719	\$ 1,949,252	\$ 713,467	\$ 2,662,719
B	OM&A	# Meters installed for each class	%						89.6%	10.4%	100.0%
			\$			\$ 190,379		\$ 190,379	\$ 170,520	\$ 19,859	\$ 190,379
		Revenue Requirement Before PILs Allocation							\$ 2,119,772	\$ 733,326	\$ 2,853,098
C	PILs	Revenue Requirement allocated to each class before PILs (A+B)	\$						\$ 2,119,772	\$ 733,326	\$ 2,853,098
			%						74.3%	25.7%	100.0%
			\$				\$ (619,242)	\$ (619,242)	\$ (460,079)	\$ (159,162)	\$ (619,242)
	Total Revenue Requirement		\$	\$ 1,235,741	\$ 1,426,978	\$ 190,379	\$ (619,242)	\$ 2,233,857	\$ 1,659,693	\$ 574,164	\$ 2,233,857
			%						74.3%	25.7%	100.0%
	Interest on Deferred and forecasted OM&A and Amortization Expense		\$					\$ 24,234	\$ 18,006	\$ 6,229	\$ 24,234
			%						74.3%	25.7%	100.0%

Allocators

	Allocator		Residential	GS < 50	Total
a	Capital Costs of Meters Installed - AMCD 1.1	\$	\$ 5,716,320	\$ 2,092,294	\$ 7,808,614
		%	73.2%	26.8%	100.0%
b	# Meters Installed	#	46,522	5,418	51,940
		%	89.6%	10.4%	100.0%
	Total Revenue Requirement	\$	1,659,693	574,164	2,233,857
		%	74.3%	25.7%	100.0%

b) Similarly, please update the calculation of class-specific SMIRRs.

No updates were required to the calculation of the class-specific SMIRRs, as no revisions were made in the IR Responses that affected the SMIRRs.

Attachment A

Smart Meter Model

IR # 7 Board Staff



Ontario Energy Board

Smart Meter Model

Choose Your Utility:

Waterloo North Hydro Inc.
Welland Hydro-Electric System Corp.

Application Contact Information

Name: Albert P. Singh

Title: Vice President Finance & CFO

Phone Number: 519-888-5542

Email Address: asingh@wnhydro.com

We are applying for rates effective: November 1, 2012

Last COS Re-based Year: 2011

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

Waterloo North Hydro 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

Smart Meter Installation Plan

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

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 and later Forecast	Total
Residential			1,797	18,356	25,683	686		46522
General Service < 50 kW			64	571	2,593	2,037	153	5418
Actual/Planned number of Smart Meters installed (Residential and GS < 50 kW only)	0	0	1861	18927	28276	2723	153	51940
Percentage of Residential and GS < 50 kW Smart Meter Installations Completed	0.00%	0.00%	3.58%	40.02%	94.46%	99.71%	100.00%	100.00%
Actual/Planned number of GS > 50 kW meters installed								0
Other (please identify)								0
Total Number of Smart Meters installed or planned to be installed	0	0	1861	18927	28276	2723	153	51940

1 Capital Costs

1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)

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

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

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

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

Total Advanced Metering Communications Devices (AMCD)

Asset Type
Asset type must be
selected to enable
calculations

	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
Smart Meter			208,965	3,258,562	1,472,783	453,115	-13,242	\$ 5,380,183
Smart Meter			58,368	310,884	1,755,969	239,351	42,544	\$ 2,407,116
								\$ -
Computer Software			677	6,404	2,898	11,336		\$ 21,315
	\$ -	\$ -	\$ 268,010	\$ 3,575,850	\$ 3,231,650	\$ 703,802	\$ 29,302	\$ 7,808,614

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

1.2.1 Collectors

1.2.2 Repeaters (may include radio licence, etc.)

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

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

Asset Type

	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
Other Equipment			304,083	354,464	107,348	103,882		\$ 869,777
								\$ -
Other Equipment			7,854					\$ 7,854
	\$ -	\$ -	\$ 311,937	\$ 354,464	\$ 107,348	\$ 103,882	\$ -	\$ 877,631

1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)

1.3.1 Computer Hardware

1.3.2 Computer Software

1.3.3 Computer Software Licences & Installation (includes hardware and software)
(may include AS/400 disk space, backup and recovery computer, UPS, etc.)**Total Advanced Metering Control Computer (AMCC)**

Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
Computer Hardware			221,399					\$ 221,399
Computer Software			19,119		6,912	2,369		\$ 28,400
Computer Software			5,805	630	630			\$ 7,065
	\$ -	\$ -	\$ 246,323	\$ 630	\$ 7,542	\$ 2,369	\$ -	\$ 256,864

1.4 WIDE AREA NETWORK (WAN)

1.4.1 Activation Fees

Total Wide Area Network (WAN)

Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
Other Equipment			20,485	7,072	32,728	2,932		\$ 63,217
	\$ -	\$ -	\$ 20,485	\$ 7,072	\$ 32,728	\$ 2,932	\$ -	\$ 63,217

1.5 OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNCTIONALITY

1.5.1 Customer Equipment (including repair of damaged equipment)

1.5.2 AMI Interface to CIS

1.5.3 Professional Fees

1.5.4 Integration

1.5.5 Program Management

1.5.6 Other AMI Capital

Total Other AMI Capital Costs Related to Minimum Functionality**Total Capital Costs Related to Minimum Functionality**

Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
Other Equipment			4,042	21,395	55,446	5,685		\$ 86,568
Computer Software					4,662			\$ 4,662
Other Equipment			25,242	44,893	25,491	2,556		\$ 98,182
Computer Software				20,937				\$ 20,937
								\$ -
Other Equipment			401	35,159	7,918	8,991		\$ 52,469
	\$ -	\$ -	\$ 29,685	\$ 122,384	\$ 93,517	\$ 17,232	\$ -	\$ 262,818
	\$ -	\$ -	\$ 876,440	\$ 4,060,400	\$ 3,472,785	\$ 830,217	\$ 29,302	\$ 9,269,144

1.6 CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY

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

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

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

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

Total Capital Costs Beyond Minimum Functionality**Total Smart Meter Capital Costs**

Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
Computer Software								\$ -
Applications Software								\$ -
Applications Software					101,672	117,637	12,278	\$ 231,587
	\$ -	\$ -	\$ -	\$ -	\$ 101,672	\$ 117,637	\$ 12,278	\$ 231,587
	\$ -	\$ -	\$ 876,440	\$ 4,060,400	\$ 3,574,457	\$ 947,854	\$ 41,580	\$ 9,500,731

2 OM&A Expenses

2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)

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

2.1.2 Other (please specify)

Total Incremental AMCD OM&A Costs

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

2.2.1 Maintenance

2.2.2 Other (please specify)

Total Incremental AMRC OM&A Costs

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.)

2.3.2 Other (please specify)

Total Incremental AMCC OM&A Costs

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

2.5.4 Change Management (may include training, etc.)

2.5.5 Administration Costs

2.5.6 Other AMI Expenses

(please specify)

Total Other AMI OM&A Costs Related to Minimum Functionality

TOTAL OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY

2.6 OM&A COSTS RELATED TO BEYOND MINIMUM FUNCTIONALITY

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

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 MDM/R, etc.

Total OM&A Costs Beyond Minimum Functionality

Total Smart Meter OM&A Costs

	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
							92,686	\$ 92,686
								\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 92,686	\$ 92,686
								\$ -
			1,728					\$ 1,728
	\$ -	\$ -	\$ 1,728	\$ -	\$ -	\$ -	\$ -	\$ 1,728
								\$ -
								\$ -
							149,738	\$ 149,738
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 149,738	\$ 149,738
								\$ -
								\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
								\$ -
				15,024				\$ 15,024
								\$ -
								\$ -
			23		79			\$ 102
			1,400	6,172	33,947	6,834	2,546	\$ 50,899
	\$ -	\$ -	\$ 1,423	\$ 21,196	\$ 34,026	\$ 6,834	\$ 2,546	\$ 66,025
	\$ -	\$ -	\$ 3,151	\$ 21,196	\$ 34,026	\$ 6,834	\$ 244,970	\$ 310,177
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual		
								\$ -
								\$ -
					29,190	95,982	96,500	\$ 221,672
	\$ -	\$ -	\$ -	\$ -	\$ 29,190	\$ 95,982	\$ 96,500	\$ 221,672
	\$ -	\$ -	\$ 3,151	\$ 21,196	\$ 63,216	\$ 102,816	\$ 341,470	\$ 531,849

3 Aggregate Smart Meter Costs by Category

3.1	Capital																
3.1.1	Smart Meter	\$	-	\$	-	\$	267,333	\$	3,569,446	\$	3,228,752	\$	692,466	\$	29,302	\$	7,787,299
3.1.2	Computer Hardware	\$	-	\$	-	\$	221,399	\$	-	\$	-	\$	-	\$	-	\$	221,399
3.1.3	Computer Software	\$	-	\$	-	\$	25,601	\$	27,971	\$	15,102	\$	13,705	\$	-	\$	82,379
3.1.4	Tools & Equipment	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
3.1.5	Other Equipment	\$	-	\$	-	\$	362,107	\$	462,983	\$	228,931	\$	124,046	\$	-	\$	1,178,067
3.1.6	Applications Software	\$	-	\$	-	\$	-	\$	-	\$	101,672	\$	117,637	\$	12,278	\$	231,587
3.1.7	Total Capital Costs	\$	-	\$	-	\$	876,440	\$	4,060,400	\$	3,574,457	\$	947,854	\$	41,580	\$	9,500,731
3.2	OM&A Costs																
3.2.1	Total OM&A Costs	\$	-	\$	-	\$	3,151	\$	21,196	\$	63,216	\$	102,816	\$	341,470	\$	531,849



Ontario Energy Board

Smart Meter Model

Waterloo North Hydro Inc.

	2006	2007	2008	2009	2010	2011	2012 and later
Cost of Capital							
Capital Structure¹							
Deemed Short-term Debt Capitalization						4.0%	4.0%
Deemed Long-term Debt Capitalization	50.0%	50.0%	53.3%	56.7%	60.0%	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						2.46%	2.46%
Long-term Debt Rate (actual/embedded/deemed) ²	6.28%	6.28%	6.28%	6.28%	6.28%	5.22%	5.22%
Target Return on Equity (ROE)	9.0%	9.00%	9.00%	9.00%	9.00%	9.58%	9.58%
Return on Preferred Shares							
WACC	7.64%	7.64%	7.55%	7.46%	7.37%	6.85%	6.85%
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%	33.00%	30.99%	28.25%	26.50%
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
- rate (%)	0.00%	0.00%	6.67%	6.67%	6.67%	6.67%	6.67%
Computer Hardware - years			5	5	5	5	5
- rate (%)	0.00%	0.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Computer Software - years			5	5	5	5	5
- rate (%)	0.00%	0.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Tools & Equipment - years			10	10	10	10	7
- rate (%)	0.00%	0.00%	10.00%	10.00%	10.00%	10.00%	14.29%
Other Equipment - years			15	15	15	15	10
- rate (%)	0.00%	0.00%	6.67%	6.67%	6.67%	6.67%	10.00%
CCA Rates							
Smart Meters - CCA Class			8	8	8	8	8
Smart Meters - CCA Rate			20%	20%	20%	20%	20%
Computer Equipment - CCA Class			50	50	50	50	50
Computer Equipment - CCA Rate			55%	55%	55%	55%	55%
General Equipment - CCA Class			8	8	8	8	8
General Equipment - CCA Rate			20%	20%	20%	20%	20%
Applications Software - CCA Class			12	12	12	12	12
Applications Software - CCA Rate			100%	100%	100%	100%	100%

Assumptions

¹ Planned smart meter installations occur evenly throughout the year.

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

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



Ontario Energy Board

Smart Meter Model

Waterloo North Hydro Inc.

	2006	2007	2008	2009	2010	2011	2012 and later
Net Fixed Assets - Smart Meters							
Gross Book Value							
Opening Balance		\$ -	\$ -	\$ 267,333	\$ 3,836,779	\$ 7,065,531	\$ 7,757,997
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ 267,333	\$ 3,569,446	\$ 3,228,752	\$ 692,466	\$ 29,302
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ 267,333	\$ 3,836,779	\$ 7,065,531	\$ 7,757,997	\$ 7,787,299
Accumulated Depreciation							
Opening Balance		\$ -	\$ -	\$ 8,911	\$ 145,715	\$ 509,125	\$ 1,003,243
Amortization expense during year	\$ -	\$ -	\$ 8,911	\$ 136,804	\$ 363,410	\$ 494,118	\$ 518,177
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ 8,911	\$ 145,715	\$ 509,125	\$ 1,003,243	\$ 1,521,419
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ 258,422	\$ 3,691,064	\$ 6,556,406	\$ 6,754,754
Closing Balance	\$ -	\$ -	\$ 258,422	\$ 3,691,064	\$ 6,556,406	\$ 6,754,754	\$ 6,265,880
Average Net Book Value	\$ -	\$ -	\$ 129,211	\$ 1,974,743	\$ 5,123,735	\$ 6,655,580	\$ 6,510,317
Net Fixed Assets - Computer Hardware							
Gross Book Value							
Opening Balance		\$ -	\$ -	\$ 221,399	\$ 221,399	\$ 221,399	\$ 221,399
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ 221,399	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ 221,399	\$ 221,399	\$ 221,399	\$ 221,399	\$ 221,399
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ 22,140	\$ 66,420	\$ 110,700	\$ 154,979
Amortization expense during year	\$ -	\$ -	\$ 22,140	\$ 44,280	\$ 44,280	\$ 44,280	\$ 44,280
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ 22,140	\$ 66,420	\$ 110,700	\$ 154,979	\$ 199,259
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ 199,259	\$ 154,979	\$ 110,700	\$ 66,420
Closing Balance	\$ -	\$ -	\$ 199,259	\$ 154,979	\$ 110,700	\$ 66,420	\$ 22,140
Average Net Book Value	\$ -	\$ -	\$ 99,630	\$ 177,119	\$ 132,839	\$ 88,560	\$ 44,280
Net Fixed Assets - Computer Software (including Applications Software)							
Gross Book Value							
Opening Balance		\$ -	\$ -	\$ 25,601	\$ 53,572	\$ 170,346	\$ 301,688
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ 25,601	\$ 27,971	\$ 116,774	\$ 131,342	\$ 12,278
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ 25,601	\$ 53,572	\$ 170,346	\$ 301,688	\$ 313,966
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ 2,560	\$ 10,477	\$ 32,869	\$ 80,073
Amortization expense during year	\$ -	\$ -	\$ 2,560	\$ 7,917	\$ 22,392	\$ 47,203	\$ 61,565
Retirements/Removals (if applicable)							
Closing Balance	\$ -	\$ -	\$ 2,560	\$ 10,477	\$ 32,869	\$ 80,073	\$ 141,638
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ 23,041	\$ 43,095	\$ 137,477	\$ 221,615
Closing Balance	\$ -	\$ -	\$ 23,041	\$ 43,095	\$ 137,477	\$ 221,615	\$ 172,328
Average Net Book Value	\$ -	\$ -	\$ 11,520	\$ 33,068	\$ 90,286	\$ 179,546	\$ 196,972

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		\$ -	\$ -	\$ 362,107	\$ 362,107	\$ 825,090	\$ 1,054,021	\$ 1,178,067
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ 362,107	\$ 462,983	\$ 228,931	\$ 124,046	\$ -	\$ -
Retirements/Removals (if applicable)								\$ 10,170
Closing Balance	\$ -	\$ -	\$ 362,107	\$ 825,090	\$ 1,054,021	\$ 1,178,067	\$ 1,167,897	\$ 1,167,897

Accumulated Depreciation

Opening Balance	\$ -	\$ -	\$ -	\$ 12,070	\$ 51,643	\$ 114,281	\$ 188,683	\$ 188,683
Amortization expense during year	\$ -	\$ -	\$ 12,070	\$ 39,573	\$ 62,637	\$ 74,403	\$ 117,807	\$ 117,807
Retirements/Removals (if applicable)								\$ 2,034
Closing Balance	\$ -	\$ -	\$ 12,070	\$ 51,643	\$ 114,281	\$ 188,683	\$ 304,456	\$ 304,456

Net Book Value

Opening Balance	\$ -	\$ -	\$ -	\$ 350,037	\$ 773,447	\$ 939,741	\$ 989,384	\$ 989,384
Closing Balance	\$ -	\$ -	\$ 350,037	\$ 773,447	\$ 939,741	\$ 989,384	\$ 863,441	\$ 863,441
Average Net Book Value	\$ -	\$ -	\$ 175,018	\$ 561,742	\$ 856,594	\$ 964,562	\$ 926,412	\$ 926,412



Ontario Energy Board

Smart Meter Model

Waterloo North Hydro Inc.

	2006	2007	2008	2009	2010	2011	2012 and Later
Average Net Fixed Asset Values (from Sheet 4)							
Smart Meters	\$ -	\$ -	\$ 129,211	\$ 1,974,743	\$ 5,123,735	\$ 6,655,580	\$ 6,510,317
Computer Hardware	\$ -	\$ -	\$ 99,630	\$ 177,119	\$ 132,839	\$ 88,560	\$ 44,280
Computer Software	\$ -	\$ -	\$ 11,520	\$ 33,068	\$ 90,286	\$ 179,546	\$ 196,972
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ 175,018	\$ 561,742	\$ 856,594	\$ 964,562	\$ 926,412
Total Net Fixed Assets	\$ -	\$ -	\$ 415,379	\$ 2,746,672	\$ 6,203,454	\$ 7,888,248	\$ 7,677,981
Working Capital							
Operating Expenses (from Sheet 2)	\$ -	\$ -	\$ 3,151	\$ 21,196	\$ 63,216	\$ 102,816	\$ 341,470
Working Capital Factor (from Sheet 3)	15%	15%	15%	15%	15%	15%	15%
Working Capital Allowance	\$ -	\$ -	\$ 473	\$ 3,179	\$ 9,482	\$ 15,422	\$ 51,221
Incremental Smart Meter Rate Base	\$ -	\$ -	\$ 415,852	\$ 2,749,851	\$ 6,212,936	\$ 7,903,670	\$ 7,729,201
Return on Rate Base							
Capital Structure							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 316,147	\$ 309,168
Deemed Long Term Debt	\$ -	\$ -	\$ 221,649	\$ 1,559,166	\$ 3,727,762	\$ 4,426,055	\$ 4,326,353
Equity	\$ -	\$ -	\$ 194,203	\$ 1,190,685	\$ 2,485,174	\$ 3,161,468	\$ 3,091,680
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ -	\$ -	\$ 415,852	\$ 2,749,851	\$ 6,212,936	\$ 7,903,670	\$ 7,729,201
Return on							
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,777	\$ 7,606
Deemed Long Term Debt	\$ -	\$ -	\$ 13,920	\$ 97,916	\$ 234,103	\$ 230,851	\$ 225,755
Equity	\$ -	\$ -	\$ 17,478	\$ 107,162	\$ 223,666	\$ 302,869	\$ 296,183
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ -	\$ -	\$ 31,398	\$ 205,077	\$ 457,769	\$ 541,497	\$ 529,544
Operating Expenses	\$ -	\$ -	\$ 3,151	\$ 21,196	\$ 63,216	\$ 102,816	\$ 341,470
Amortization Expenses (from Sheet 4)							
Smart Meters	\$ -	\$ -	\$ 8,911	\$ 136,804	\$ 363,410	\$ 494,118	\$ 518,177
Computer Hardware	\$ -	\$ -	\$ 22,140	\$ 44,280	\$ 44,280	\$ 44,280	\$ 44,280
Computer Software	\$ -	\$ -	\$ 2,560	\$ 7,917	\$ 22,392	\$ 47,203	\$ 61,565
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ 12,070	\$ 39,573	\$ 62,637	\$ 74,403	\$ 117,807
Total Amortization Expense in Year	\$ -	\$ -	\$ 45,681	\$ 228,574	\$ 492,719	\$ 660,004	\$ 741,828
Incremental Revenue Requirement before Taxes/PILs	\$ -	\$ -	\$ 80,230	\$ 454,847	\$ 1,013,704	\$ 1,304,317	\$ 1,612,842
Calculation of Taxable Income							
Incremental Operating Expenses	\$ -	\$ -	\$ 3,151	\$ 21,196	\$ 63,216	\$ 102,816	\$ 341,470
Amortization Expense	\$ -	\$ -	\$ 45,681	\$ 228,574	\$ 492,719	\$ 660,004	\$ 741,828
Interest Expense	\$ -	\$ -	\$ 13,920	\$ 97,916	\$ 234,103	\$ 238,628	\$ 233,361
Net Income for Taxes/PILs	\$ -	\$ -	\$ 17,478	\$ 107,162	\$ 223,666	\$ 302,869	\$ 296,183
Grossed-up Taxes/PILs (from Sheet 7)	\$ -	\$ -	\$ 32,240.04	\$ 130,862.28	\$ 244,017.49	\$ 212,121.81	\$ 78,132.86
Revenue Requirement, including Grossed-up Taxes/PILs	\$ -	\$ -	\$ 47,990	\$ 323,985	\$ 769,687	\$ 1,092,195	\$ 1,534,709



Ontario Energy Board

Smart Meter Model

Waterloo North Hydro Inc.

For PILs Calculation

UCC - Smart Meters

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 and later Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ 240,599.70	\$ 3,404,981.16	\$ 5,629,861.73	\$ 5,127,108.78
Capital Additions	\$ -	\$ -	\$ 267,333.00	\$ 3,569,446.00	\$ 3,228,752.00	\$ 692,466.00	\$ 29,302.00
Retirements/Removals (if applicable)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
UCC Before Half Year Rule	\$ -	\$ -	\$ 267,333.00	\$ 3,810,045.70	\$ 6,633,733.16	\$ 6,322,327.73	\$ 5,156,410.78
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ 133,666.50	\$ 1,784,723.00	\$ 1,614,376.00	\$ 346,233.00	\$ 14,651.00
Reduced UCC	\$ -	\$ -	\$ 133,666.50	\$ 2,025,322.70	\$ 5,019,357.16	\$ 5,976,094.73	\$ 5,141,759.78
CCA Rate Class	0	0	8	8	8	8	8
CCA Rate	0%	0%	20%	20%	20%	20%	20%
CCA	\$ -	\$ -	\$ 26,733.30	\$ 405,064.54	\$ 1,003,871.43	\$ 1,195,218.95	\$ 1,028,351.96
Closing UCC	\$ -	\$ -	\$ 240,599.70	\$ 3,404,981.16	\$ 5,629,861.73	\$ 5,127,108.78	\$ 4,128,058.83

UCC - Computer Equipment

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 and later Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ 179,075.00	\$ 100,862.73	\$ 56,337.18	\$ 35,287.85
Capital Additions Computer Hardware	\$ -	\$ -	\$ 221,399.00	\$ -	\$ -	\$ -	\$ -
Capital Additions Computer Software	\$ -	\$ -	\$ 25,601.00	\$ 27,971.00	\$ 15,102.00	\$ 13,705.00	\$ -
Retirements/Removals (if applicable)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
UCC Before Half Year Rule	\$ -	\$ -	\$ 247,000.00	\$ 207,046.00	\$ 115,964.73	\$ 70,042.18	\$ 35,287.85
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ 123,500.00	\$ 13,985.50	\$ 7,551.00	\$ 6,852.50	\$ -
Reduced UCC	\$ -	\$ -	\$ 123,500.00	\$ 193,060.50	\$ 108,413.73	\$ 63,189.68	\$ 35,287.85
CCA Rate Class	0	0	50	50	50	50	50
CCA Rate	0%	0%	55%	55%	55%	55%	55%
CCA	\$ -	\$ -	\$ 67,925.00	\$ 106,183.28	\$ 59,627.55	\$ 34,754.32	\$ 19,408.32
Closing UCC	\$ -	\$ -	\$ 179,075.00	\$ 100,862.73	\$ 56,337.18	\$ 35,287.85	\$ 15,879.53

UCC - General Equipment

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 and later Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ 325,896.30	\$ 677,401.74	\$ 747,959.29	\$ 710,008.83
Capital Additions Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions Other Equipment	\$ -	\$ -	\$ 362,107.00	\$ 462,983.00	\$ 228,931.00	\$ 124,046.00	\$ -
Retirements/Removals (if applicable)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
UCC Before Half Year Rule	\$ -	\$ -	\$ 362,107.00	\$ 788,879.30	\$ 906,332.74	\$ 872,005.29	\$ 710,008.83
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ 181,053.50	\$ 231,491.50	\$ 114,465.50	\$ 62,023.00	\$ -
Reduced UCC	\$ -	\$ -	\$ 181,053.50	\$ 557,387.80	\$ 791,867.24	\$ 809,982.29	\$ 710,008.83
CCA Rate Class	0	0	8	8	8	8	8
CCA Rate	0%	0%	20%	20%	20%	20%	20%
CCA	\$ -	\$ -	\$ 36,210.70	\$ 111,477.56	\$ 158,373.45	\$ 161,996.46	\$ 142,001.77
Closing UCC	\$ -	\$ -	\$ 325,896.30	\$ 677,401.74	\$ 747,959.29	\$ 710,008.83	\$ 568,007.07



PILs Calculation

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 and later Forecast
INCOME TAX							
Net Income	\$ -	\$ -	\$ 17,478.26	\$ 107,161.69	\$ 223,665.70	\$ 302,868.64	\$ 296,182.99
Amortization	\$ -	\$ -	\$ 45,681.33	\$ 228,574.07	\$ 492,718.97	\$ 660,003.73	\$ 741,828.43
CCA - Smart Meters	\$ -	\$ -	\$ 26,733.30	\$ 405,064.54	\$ 1,003,871.43	\$ 1,195,218.95	\$ 1,028,351.96
CCA - Computers	\$ -	\$ -	\$ 67,925.00	\$ 106,183.28	\$ 59,627.55	\$ 34,754.32	\$ 19,408.32
CCA - Applications Software	\$ -	\$ -	\$ -	\$ -	\$ 50,836.00	\$ 109,654.50	\$ 64,957.50
CCA - Other Equipment	\$ -	\$ -	\$ 36,210.70	\$ 111,477.56	\$ 158,373.45	\$ 161,996.46	\$ 142,001.77
Change in taxable income	\$ -	\$ -	\$ 67,709.41	\$ 286,989.61	\$ 556,323.77	\$ 538,751.85	\$ 216,708.12
Tax Rate (from Sheet 3)	36.12%	36.12%	33.50%	33.00%	30.99%	28.25%	26.50%
Income Taxes Payable	\$ -	\$ -	\$ 22,682.65	\$ 94,706.57	\$ 172,404.73	\$ 152,197.40	\$ 57,427.65
ONTARIO CAPITAL TAX							
Smart Meters	\$ -	\$ -	\$ 258,421.90	\$ 3,691,064.17	\$ 6,556,405.83	\$ 6,754,754.23	\$ 6,265,879.70
Computer Hardware	\$ -	\$ -	\$ 199,259.10	\$ 154,979.30	\$ 110,699.50	\$ 66,419.70	\$ 22,139.90
Computer Software (Including Application Software)	\$ -	\$ -	\$ 23,040.90	\$ 43,094.60	\$ 137,476.80	\$ 221,615.40	\$ 172,328.00
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ 350,036.77	\$ 773,446.53	\$ 939,740.50	\$ 989,383.57	\$ 863,440.87
Rate Base	\$ -	\$ -	\$ 830,758.67	\$ 4,662,584.60	\$ 7,744,322.63	\$ 8,032,172.90	\$ 7,323,788.47
Less: Exemption							
Deemed Taxable Capital	\$ -	\$ -	\$ 830,758.67	\$ 4,662,584.60	\$ 7,744,322.63	\$ 8,032,172.90	\$ 7,323,788.47
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)	\$ -	\$ -	\$ 1,869.21	\$ 10,490.82	\$ 5,808.24	\$ -	\$ -
Change in Income Taxes Payable	\$ -	\$ -	\$ 22,682.65	\$ 94,706.57	\$ 172,404.73	\$ 152,197.40	\$ 57,427.65
Change in OCT	\$ -	\$ -	\$ 1,869.21	\$ 10,490.82	\$ 5,808.24	\$ -	\$ -
PILs	\$ -	\$ -	\$ 20,813.44	\$ 84,215.76	\$ 166,596.49	\$ 152,197.40	\$ 57,427.65
Gross Up PILs							
Tax Rate	36.12%	36.12%	33.50%	33.00%	30.99%	28.25%	26.50%
Change in Income Taxes Payable	\$ -	\$ -	\$ 34,109.25	\$ 141,353.09	\$ 249,825.73	\$ 212,121.81	\$ 78,132.86
Change in OCT	\$ -	\$ -	\$ 1,869.21	\$ 10,490.82	\$ 5,808.24	\$ -	\$ -
PILs	\$ -	\$ -	\$ 32,240.04	\$ 130,862.28	\$ 244,017.49	\$ 212,121.81	\$ 78,132.86



Ontario Energy Board

Smart Meter Model

Waterloo North Hydro 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	\$ -	\$ 12,339.68	4.14%	\$ -	\$ 12,339.68		\$ 0.26
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	\$ 12,339.68	\$ 12,347.18	4.14%	\$ 42.57	\$ 24,729.44		\$ 0.26
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	\$ 24,686.87	\$ 12,367.36	4.59%	\$ 94.43	\$ 37,148.65		\$ 0.26
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	\$ 37,054.22	\$ 12,387.57	4.59%	\$ 141.73	\$ 49,583.52		\$ 0.26
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	\$ 49,441.79	\$ 12,407.81	4.59%	\$ 189.11	\$ 62,038.71		\$ 0.26
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	\$ 61,849.60	\$ 12,428.09	4.59%	\$ 236.57	\$ 74,514.26		\$ 0.26
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	\$ 74,277.69	\$ 12,906.72	4.59%	\$ 284.11	\$ 87,468.52		\$ 0.26
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	\$ 87,184.41	\$ 13,225.73	4.59%	\$ 333.48	\$ 100,743.62	\$ 101,732.14	\$ 0.26
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	\$ 100,410.14	\$ 13,708.83	4.59%	\$ 384.07	\$ 114,503.04		\$ 0.26
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	\$ 114,118.97	\$ 10,668.95	4.59%	\$ 436.51	\$ 125,224.43		\$ 0.26
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	\$ 124,787.92	\$ 13,519.88	4.59%	\$ 477.31	\$ 138,785.11		\$ 0.26
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	\$ 138,307.80	\$ 14,126.61	4.59%	\$ 529.03	\$ 152,963.44		\$ 0.26
2010 Q1	0.55%	4.34%	May-07	2007	Q2	\$ 152,434.41	\$ 12,387.14	4.59%	\$ 583.06	\$ 165,404.61		\$ 0.26
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	\$ 164,821.55	\$ 11,616.13	4.59%	\$ 630.44	\$ 177,068.12		\$ 0.26
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	\$ 176,437.68	\$ 13,293.62	4.59%	\$ 674.87	\$ 190,406.17		\$ 0.26
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	\$ 189,731.30	\$ 12,149.67	4.59%	\$ 725.72	\$ 202,606.69		\$ 0.26
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	\$ 201,880.97	\$ 13,114.30	4.59%	\$ 772.19	\$ 215,767.46		\$ 0.26
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	\$ 214,995.27	\$ 12,921.83	5.14%	\$ 920.90	\$ 228,838.00		\$ 0.26
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	\$ 227,917.10	\$ 12,263.06	5.14%	\$ 976.24	\$ 241,156.40		\$ 0.26
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	\$ 240,180.16	\$ 13,039.95	5.14%	\$ 1,028.77	\$ 254,248.88	\$ 160,949.08	\$ 0.26
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	\$ 253,220.11	\$ 13,672.08	5.14%	\$ 1,084.63	\$ 267,976.82		\$ 0.26
2012 Q2	1.47%	4.29%	Feb-08	2008	Q1	\$ 266,892.19	\$ 12,105.39	5.14%	\$ 1,143.19	\$ 280,140.77		\$ 0.26
2012 Q3	1.47%	4.29%	Mar-08	2008	Q1	\$ 278,997.58	\$ 13,293.24	5.14%	\$ 1,195.04	\$ 293,485.86		\$ 0.26
2012 Q4	1.47%	4.29%	Apr-08	2008	Q2	\$ 292,290.82	\$ 12,139.90	4.08%	\$ 993.79	\$ 305,424.51		\$ 0.26
			May-08	2008	Q2	\$ 304,430.72	\$ 13,293.38	4.08%	\$ 1,035.06	\$ 318,759.12		\$ 0.26
			Jun-08	2008	Q2	\$ 317,724.10	\$ 12,524.58	4.08%	\$ 1,080.26	\$ 331,328.94		\$ 0.26
			Jul-08	2008	Q3	\$ 330,248.68	\$ 13,202.39	3.35%	\$ 921.94	\$ 344,373.01		\$ 0.26
			Aug-08	2008	Q3	\$ 343,451.07	\$ 12,924.50	3.35%	\$ 958.80	\$ 357,334.37		\$ 0.26
			Sep-08	2008	Q3	\$ 356,375.57	\$ 13,018.84	3.35%	\$ 994.88	\$ 370,389.29		\$ 0.26
			Oct-08	2008	Q4	\$ 369,394.41	\$ 12,908.86	3.35%	\$ 1,031.23	\$ 383,335.50		\$ 0.26
			Nov-08	2008	Q4	\$ 382,304.27	\$ 12,794.78	3.35%	\$ 1,067.27	\$ 396,166.32		\$ 0.26
			Dec-08	2008	Q4	\$ 395,099.05	\$ 13,768.91	3.35%	\$ 1,102.98	\$ 409,970.94	\$ 168,256.92	\$ 0.26
			Jan-09	2009	Q1	\$ 408,867.96	\$ 13,964.84	2.45%	\$ 834.77	\$ 423,667.57		\$ 0.26
			Feb-09	2009	Q1	\$ 422,832.80	\$ 12,152.29	2.45%	\$ 863.28	\$ 435,848.37		\$ 0.26
			Mar-09	2009	Q1	\$ 434,985.09	\$ 13,011.36	2.45%	\$ 888.09	\$ 448,884.54		\$ 0.26
			Apr-09	2009	Q2	\$ 447,996.45	\$ 13,026.64	1.00%	\$ 373.33	\$ 461,396.42		\$ 0.26
			May-09	2009	Q2	\$ 461,023.09	\$ 50,984.68	1.00%	\$ 384.19	\$ 512,391.96		\$ 1.00
			Jun-09	2009	Q2	\$ 512,007.77	\$ 50,471.82	1.00%	\$ 426.67	\$ 562,906.26		\$ 1.00
			Jul-09	2009	Q3	\$ 562,479.59	\$ 51,059.12	0.55%	\$ 257.80	\$ 613,796.51		\$ 1.00
			Aug-09	2009	Q3	\$ 613,538.71	\$ 48,737.92	0.55%	\$ 281.21	\$ 662,557.84		\$ 1.00
			Sep-09	2009	Q3	\$ 662,276.63	\$ 51,501.72	0.55%	\$ 303.54	\$ 714,081.88		\$ 1.00
			Oct-09	2009	Q4	\$ 713,778.34	\$ 49,508.86	0.55%	\$ 327.15	\$ 763,614.36		\$ 1.00
			Nov-09	2009	Q4	\$ 763,287.21	\$ 49,499.05	0.55%	\$ 349.84	\$ 813,136.10		\$ 1.00
			Dec-09	2009	Q4	\$ 812,786.26	\$ 53,559.22	0.55%	\$ 372.53	\$ 866,718.00	\$ 463,139.91	\$ 1.00
			Jan-10	2010	Q1	\$ 866,345.47	\$ 48,725.48	0.55%	\$ 397.08	\$ 915,468.03		\$ 1.00
			Feb-10	2010	Q1	\$ 915,070.95	\$ 53,383.66	0.55%	\$ 419.41	\$ 968,874.02		\$ 1.00
			Mar-10	2010	Q1	\$ 968,454.61	\$ 51,089.95	0.55%	\$ 443.88	\$ 1,019,988.44		\$ 1.00
			Apr-10	2010	Q2	\$ 1,019,544.56	\$ 50,283.10	0.55%	\$ 467.29	\$ 1,070,294.94		\$ 1.00
			May-10	2010	Q2	\$ 1,069,827.65	\$ 53,921.91	0.55%	\$ 490.34	\$ 1,124,239.90		\$ 1.00
			Jun-10	2010	Q2	\$ 1,123,749.56	\$ 50,966.91	0.55%	\$ 515.05	\$ 1,175,231.52		\$ 1.00
			Jul-10	2010	Q3	\$ 1,174,716.47	\$ 51,775.71	0.89%	\$ 871.25	\$ 1,227,363.43		\$ 1.00
			Aug-10	2010	Q3	\$ 1,226,492.18	\$ 51,422.05	0.89%	\$ 909.65	\$ 1,278,823.88		\$ 1.00
			Sep-10	2010	Q3	\$ 1,277,914.23	\$ 49,742.97	0.89%	\$ 947.79	\$ 1,328,604.98		\$ 1.00
			Oct-10	2010	Q4	\$ 1,327,657.19	\$ 52,950.27	1.20%	\$ 1,327.66	\$ 1,381,935.12		\$ 1.00
			Nov-10	2010	Q4	\$ 1,380,607.46	\$ 51,866.54	1.20%	\$ 1,380.61	\$ 1,433,854.62		\$ 1.00
			Dec-10	2010	Q4	\$ 1,432,474.01	\$ 54,232.90	1.20%	\$ 1,432.47	\$ 1,488,139.38	\$ 629,963.91	\$ 1.00
			Jan-11	2011	Q1	\$ 1,486,706.91	\$ 55,463.27	1.47%	\$ 1,821.22	\$ 1,543,991.40		\$ 1.00
			Feb-11	2011	Q1	\$ 1,542,170.18	\$ 46,272.47	1.47%	\$ 1,889.16	\$ 1,590,331.80		\$ 1.00
			Mar-11	2011	Q1	\$ 1,588,442.64	\$ 52,107.41	1.47%	\$ 1,945.84	\$ 1,642,495.89		\$ 1.00
			Apr-11	2011	Q2	\$ 1,640,550.05	\$ 51,993.99	1.47%	\$ 2,009.67	\$ 1,694,553.71		\$ 1.00
			May-11	2011	Q2	\$ 1,692,544.04	\$ 55,124.89	1.47%	\$ 2,073.37	\$ 1,749,742.31		\$ 1.00
			Jun-11	2011	Q2	\$ 1,747,668.94	\$ 51,407.21	1.47%	\$ 2,140.89	\$ 1,801,217.04		\$ 1.00
			Jul-11	2011	Q3	\$ 1,799,076.15	\$ 52,214.93	1.47%	\$ 2,203.87	\$ 1,853,494.94		\$ 1.00
			Aug-11	2011	Q3	\$ 1,851,291.07	\$ 52,711.07	1.47%	\$ 2,267.83	\$ 1,906,269.97		\$ 1.00
			Sep-11	2011	Q3	\$ 1,904,002.14	\$ 52,021.43	1.47%	\$ 2,332.40	\$ 1,958,355.97		\$ 1.00
			Oct-11	2011	Q4	\$ 1,956,023.57	\$ 52,106.25	1.47%	\$ 2,396.13	\$ 2,010,525.95		\$ 1.00
			Nov-11	2011	Q4	\$ 2,008,129.82	\$ 51,299.09	1.47%	\$ 2,459.96	\$ 2,061,888.87		\$ 1.00
			Dec-11	2011	Q4	\$ 2,059,428.91	\$ 54,188.09	1.47%	\$ 2,522.80	\$ 2,116,139.80	\$ 652,973.24	\$ 1.00
			Jan-12	2012	Q1	\$ 2,113,617.00	\$ 52,252.51	1.47%	\$ 2,589.18	\$ 2,168,458.69		\$ 1.00
			Feb-12	2012	Q1	\$ 2,165,869.51	\$ 52,320.15	1.47%	\$ 2,653.19	\$ 2,220,842.85		\$ 1.00



This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

Interest Rates	Approved Deferral and Variance Accounts	CWIP			Opening Balance	Funding Adder	Interest				Annual amounts	Board Approved
			Date	Year	Quarter	(Principal)	Revenues	Rate	Interest	Closing Balance		Smart Meter Funding Adder (from Tariff)
			Mar-12	2012	Q1	\$ 2,218,189.66	\$ 55,021.95	1.47%	\$ 2,717.28	\$ 2,275,928.89		\$ 1.00
			Apr-12	2012	Q2	\$ 2,273,211.61	\$ 50,568.44	1.47%	\$ 2,784.68	\$ 2,326,564.72		\$ 1.00
			May-12	2012	Q2	\$ 2,323,780.04	\$ 52,976.67	1.47%	\$ 2,846.63	\$ 2,379,603.34		\$ 1.00
			Jun-12	2012	Q2	\$ 2,376,756.71	\$ 52,976.67	1.47%	\$ 2,911.53	\$ 2,432,644.91		\$ 1.00
			Jul-12	2012	Q3	\$ 2,429,733.38	\$ 52,976.67	1.47%	\$ 2,976.42	\$ 2,485,686.46		\$ 1.00
			Aug-12	2012	Q3	\$ 2,482,710.04	\$ 52,976.67	1.47%	\$ 3,041.32	\$ 2,538,728.03		\$ 1.00
			Sep-12	2012	Q3	\$ 2,535,686.71	\$ 52,976.67	1.47%	\$ 3,106.22	\$ 2,591,769.60		\$ 1.00
			Oct-12	2012	Q4	\$ 2,588,663.38	\$ 52,976.67	1.47%	\$ 3,171.11	\$ 2,644,811.15		\$ 1.00
			Nov-12	2012	Q4	\$ 2,641,640.04		0.00%	\$ -	\$ 2,641,640.04		
			Dec-12	2012	Q4	\$ 2,641,640.04		0.00%	\$ -	\$ 2,641,640.04	\$ 556,820.60	
Total Funding Adder Revenues Collected						\$ 2,641,640.04			\$ 92,195.76	\$ 2,733,835.80	\$ 2,733,835.80	



Ontario Energy Board

Smart Meter Model

Waterloo North Hydro 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	1.47%	4.29%	Mar-08	2008	Q1	-			-	5.14%	-	-
2012 Q4	0.00%	4.29%	Apr-08	2008	Q2	-	\$ 1,750.83		1,750.83	4.08%	-	-
			May-08	2008	Q2	1,750.83	\$ -		1,750.83	4.08%	5.95	5.95
			Jun-08	2008	Q2	1,750.83	\$ -	\$ 6,525.90	8,276.73	4.08%	5.95	11.91
			Jul-08	2008	Q3	8,276.73	\$ -	\$ 6,525.90	14,802.64	3.35%	23.11	35.01
			Aug-08	2008	Q3	14,802.64	\$ -	\$ 6,525.90	21,328.54	3.35%	41.32	76.34
			Sep-08	2008	Q3	21,328.54	\$ -	\$ 6,525.90	27,854.45	3.35%	59.54	135.88
			Oct-08	2008	Q4	27,854.45	\$ -	\$ 6,525.90	34,380.35	3.35%	77.76	213.64
			Nov-08	2008	Q4	34,380.35	\$ 875.00	\$ 6,525.90	41,781.26	3.35%	95.98	309.62
			Dec-08	2008	Q4	41,781.26	\$ 525.00	\$ 6,525.90	48,832.16	3.35%	116.64	426.26
			Jan-09	2009	Q1	48,832.16	\$ -	\$ 19,047.84	67,880.00	2.45%	99.70	525.95
			Feb-09	2009	Q1	67,880.00	\$ -	\$ 19,047.84	86,927.84	2.45%	138.59	664.54
			Mar-09	2009	Q1	86,927.84	\$ -	\$ 19,047.84	105,975.68	2.45%	177.48	842.02
			Apr-09	2009	Q2	105,975.68	\$ 175.00	\$ 19,047.84	125,198.52	1.00%	88.31	930.33
			May-09	2009	Q2	125,198.52	\$ 525.00	\$ 19,047.84	144,771.36	1.00%	104.33	1,034.67
			Jun-09	2009	Q2	144,771.36	\$ 1,225.00	\$ 19,047.84	165,044.20	1.00%	120.64	1,155.31
			Jul-09	2009	Q3	165,044.20	\$ 350.00	\$ 19,047.84	184,442.04	0.55%	75.65	1,230.95
			Aug-09	2009	Q3	184,442.04	\$ 14,124.11	\$ 19,047.84	217,613.98	0.55%	84.54	1,315.49
			Sep-09	2009	Q3	217,613.98	\$ 1,925.00	\$ 19,047.84	238,586.82	0.55%	99.74	1,415.23
			Oct-09	2009	Q4	238,586.82	\$ 2,768.19	\$ 19,047.84	260,402.85	0.55%	109.35	1,524.58
			Nov-09	2009	Q4	260,402.85	\$ 103.66	\$ 19,047.84	279,554.35	0.55%	119.35	1,643.93
			Dec-09	2009	Q4	279,554.35	\$ -	\$ 19,047.84	298,602.19	0.55%	128.13	1,772.06
			Jan-10	2010	Q1	298,602.19	\$ 1,614.48	\$ 41,059.91	341,276.58	0.55%	136.86	1,908.92
			Feb-10	2010	Q1	341,276.58	\$ 100.33	\$ 41,059.91	382,436.83	0.55%	156.42	2,065.34
			Mar-10	2010	Q1	382,436.83	\$ 1,756.75	\$ 41,059.91	425,253.49	0.55%	175.28	2,240.62
			Apr-10	2010	Q2	425,253.49	\$ 4,931.61	\$ 41,059.91	471,245.02	0.55%	194.91	2,435.53
			May-10	2010	Q2	471,245.02	\$ 12,760.50	\$ 41,059.91	525,065.43	0.55%	215.99	2,651.52
			Jun-10	2010	Q2	525,065.43	\$ 9,270.00	\$ 41,059.91	575,395.34	0.55%	240.65	2,892.17
			Jul-10	2010	Q3	575,395.34	\$ 910.21	\$ 41,059.91	617,365.47	0.89%	426.75	3,318.93
			Aug-10	2010	Q3	617,365.47	\$ 1,054.04	\$ 41,059.91	659,479.42	0.89%	457.88	3,776.80
			Sep-10	2010	Q3	659,479.42	\$ 8,126.75	\$ 41,059.91	708,666.08	0.89%	489.11	4,265.92
			Oct-10	2010	Q4	708,666.08	\$ 7,732.41	\$ 41,059.91	757,458.40	1.20%	708.67	4,974.58
			Nov-10	2010	Q4	757,458.40	\$ 7,530.05	\$ 41,059.91	806,048.37	1.20%	757.46	5,732.04
			Dec-10	2010	Q4	806,048.37	\$ 7,428.41	\$ 41,059.91	854,536.69	1.20%	806.05	6,538.09
			Jan-11	2011	Q1	854,536.69	\$ 8,043.32	\$ 55,000.31	917,580.32	1.47%	1,046.81	7,584.90
			Feb-11	2011	Q1	917,580.32	\$ 8,807.48	\$ 55,000.31	981,388.11	1.47%	1,124.04	8,708.93
			Mar-11	2011	Q1	981,388.11	\$ 8,074.94	\$ 55,000.31	1,044,463.37	1.47%	1,202.20	9,911.14
			Apr-11	2011	Q2	1,044,463.37	\$ 9,337.64	\$ 55,000.31	1,108,801.32	1.47%	1,279.47	11,190.60
			May-11	2011	Q2	1,108,801.32	\$ 8,920.74	\$ 55,000.31	1,172,722.37	1.47%	1,358.28	12,548.88
			Jun-11	2011	Q2	1,172,722.37	\$ 8,240.98	\$ 55,000.31	1,235,963.67	1.47%	1,436.58	13,985.47
			Jul-11	2011	Q3	1,235,963.67	\$ 8,041.95	\$ 55,000.31	1,299,005.93	1.47%	1,514.06	15,499.53
			Aug-11	2011	Q3	1,299,005.93	\$ 9,149.98	\$ 55,000.31	1,363,156.22	1.47%	1,591.28	17,090.81
			Sep-11	2011	Q3	1,363,156.22	\$ 8,726.59	\$ 55,000.31	1,426,883.13	1.47%	1,669.87	18,760.67
			Oct-11	2011	Q4	1,426,883.13	\$ 7,234.12	\$ 55,000.31	1,489,117.56	1.47%	1,747.93	20,508.61
			Nov-11	2011	Q4	1,489,117.56	\$ 8,306.88	\$ 55,000.31	1,552,424.75	1.47%	1,824.17	22,332.77
			Dec-11	2011	Q4	1,552,424.75	\$ 9,931.39	\$ 55,000.31	1,617,356.45	1.47%	1,901.72	24,234.49
			Jan-12	2012	Q1	1,617,356.45	\$ 28,455.87	\$ 61,819.04	1,707,631.35	1.47%	1,981.26	26,215.76
			Feb-12	2012	Q1	1,707,631.35	\$ 28,455.87	\$ 61,819.04	1,797,906.26	1.47%	2,061.85	28,307.60
			Mar-12	2012	Q1	1,797,906.26	\$ 28,455.87	\$ 61,819.04	1,888,181.16	1.47%	2,202.44	30,510.04
			Apr-12	2012	Q2	1,888,181.16	\$ 28,455.87	\$ 61,819.04	1,978,456.06	1.47%	2,313.02	32,823.06
			May-12	2012	Q2	1,978,456.06	\$ 28,455.87	\$ 61,819.04	2,068,730.96	1.47%	2,423.61	35,246.67
			Jun-12	2012	Q2	2,068,730.96	\$ 28,455.87	\$ 61,819.04	2,159,005.87	1.47%	2,534.20	37,780.87
			Jul-12	2012	Q3	2,159,005.87	\$ 28,455.87	\$ 61,819.04	2,249,280.77	1.47%	2,644.78	40,425.65
			Aug-12	2012	Q3	2,249,280.77	\$ 28,455.87	\$ 61,819.04	2,339,555.67	1.47%	2,755.37	43,181.02
			Sep-12	2012	Q3	2,339,555.67	\$ 28,455.87	\$ 61,819.04	2,429,830.58	1.47%	2,865.96	46,046.97
			Oct-12	2012	Q4	2,429,830.58	\$ 28,455.87	\$ 61,819.04	2,520,105.48	1.47%	2,976.54	49,023.52
			Nov-12	2012	Q4	2,520,105.48	\$ 28,455.87	\$ 61,819.04	2,610,380.38	0.00%	-	49,023.52
			Dec-12	2012	Q4	2,610,380.38	\$ 28,455.87	\$ 61,819.04	2,700,655.28	0.00%	-	49,023.52
						\$	531,848.75	\$ 2,168,806.53	\$ 2,700,655.28			



Ontario Energy Board

Smart Meter Model

Waterloo North Hydro 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	\$ 3,151.00	\$ 45,681.33	\$ 48,832.33	\$ 24,416.17	3.98%	\$ 971.76
2009	\$ 21,196.00	\$ 228,574.07	\$ 298,602.40	\$ 173,717.37	1.14%	\$ 1,976.04
2010	\$ 63,216.00	\$ 492,718.97	\$ 854,537.37	\$ 576,569.88	0.80%	\$ 4,598.14
2011	\$ 102,816.00	\$ 660,003.73	\$ 1,617,357.10	\$ 1,235,947.23	1.47%	\$ 18,168.42
2012	\$ 341,470.00	\$ 741,828.43	\$ 2,700,655.53	\$ 2,159,006.32	1.47%	\$ 31,737.39
Cumulative Interest to 2011						\$ 25,714.37
Cumulative Interest to 2012						\$ 57,451.76



Ontario Energy Board

Smart Meter Model

Waterloo North Hydro Inc.

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

Check if
applicable

☐

Smart Meter Funding Adder (SMFA)

☒

Smart Meter Disposition Rider (SMDR)

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

☒

Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)

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

	2006	2007	2008	2009	2010	2011	2012 and later	Total
Deferred and forecasted Smart Meter Incremental Revenue Requirement (from Sheet 5)	\$ -	\$ -	\$ 47,990.11	\$ 323,985.08	\$ 769,686.61	\$ 1,092,194.94	\$ 1,534,709.35	\$ 3,768,566.09
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B) (Check one of the boxes below)	\$ -	\$ -	\$ 426.26	\$ 1,345.81	\$ 4,766.03	\$ 17,696.40		\$ 24,234.49
<input checked="" type="checkbox"/> Sheet 8A (Interest calculated on monthly balances)	\$ -	\$ -	\$ 426.26	\$ 1,345.81	\$ 4,766.03	\$ 17,696.40		\$ 24,234.49
<input type="checkbox"/> Sheet 8B (Interest calculated on average annual balances)								\$ -

SMFA Revenues (from Sheet 8)	\$ 100,410.14	\$ 152,809.97	\$ 155,647.85	\$ 457,477.51	\$ 620,361.43	\$ 626,910.10	\$ 528,023.04	\$ 2,641,640.04
SMFA Interest (from Sheet 8)	\$ 1,322.00	\$ 8,139.11	\$ 12,609.07	\$ 5,662.40	\$ 9,602.48	\$ 26,063.14	\$ 28,797.56	\$ 92,195.76
Net Deferred Revenue Requirement	-\$ 101,732.14	-\$ 160,949.08	-\$ 119,840.55	-\$ 137,809.03	\$ 144,488.72	\$ 456,918.11	\$ 977,888.75	\$ 1,058,964.78

Number of Metered Customers (average for 2012 test year) 51940

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

Years for collection or refunding	1		
Deferred Incremental Revenue Requirement from 2006 to December 31, 2011 plus Interest on OM&A and Amortization	\$ 2,258,091.23		
SMFA Revenues collected from 2006 to 2012 test year (inclusive) Plus Simple Interest on SMFA Revenues	\$ 2,733,835.80		
Net Deferred Revenue Requirement	-\$ 475,744.57		
SMDR November 1, 2012 to October 31, 2013	-\$ 0.76		} Match
Check: Forecasted SMDR Revenues	-\$ 473,692.80		

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

Incremental Revenue Requirement for 2012	\$ 1,534,709.35		
SMIRR	\$ 2.46		} Match
Check: Forecasted SMIRR Revenues	\$ 1,533,268.80		