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May 31, 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 Rate Filing

Pursuant to G-2011-0001, *Guideline, Smart Meter Funding and Cost Recovery – Final Disposition*, date December 15, 2011, policies and Instructions for filing of a Smart Meter Disposition Rate Application, Waterloo North Hydro Inc. hereby submits its November 1, 2012 Smart Meter Rate Adjustment Application together with all relevant working papers. We enclose two (2) hard copies of the Manager's Summary and Attachments and a CD ROM containing an electronic format of the PDF documentation electronically submitted to the Board.

WNH has previously forwarded the PDF version and an Excel File containing Supporting Documentation 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

IN THE MATTER OF the *Ontario Energy Board Act, 1998*,
Schedule B to the *Energy Competition Act, 1998*, S.O. 1998,
c.15;

AND IN THE MATTER OF a Stand Alone Application by
Waterloo North Hydro Inc. to the Ontario Energy Board for an
Order or Orders approving rate riders for the recovery of Smart
Meter costs as of November 1, 2012.

APPLICATION

Waterloo North Hydro Inc. (the “Applicant” or “WNH”) is a corporation incorporated pursuant to the Ontario *Business Corporations Act* with its head office in the City of Waterloo, Ontario. The Applicant carries on the business of distributing electricity within the City of Waterloo and the Townships of Wellesley and Woolwich, as a licensed electricity distributor operating pursuant to license ED-2002-0575.

The Applicant hereby applies to the Ontario Energy Board (the “OEB” or “the Board”) pursuant to Section 78 of the *Ontario Energy Board Act, 1998* (the “OEB Act”) for approval of Smart Meter Rate Riders to effect the recovery of its Smart Meter costs effective November 1, 2012.

Specifically, WNH hereby applies for an order or orders in accordance with the G-2011-0001 *Guideline, Smart Meter Funding and Cost Recovery – Final Disposition*, December 15, 2011, including the following:

- a) Elimination of the existing Smart Meter Funding Adder of \$1.00 per metered customer per month effective October 31, 2012;
- b) Addition of a Smart Meter Disposition Rate Rider of (\$0.30) per metered Residential customer per month and \$7.05 per metered General Service < 50 kW customer per month, effective November 1, 2012; and
- c) Addition of a Smart Meter Incremental Revenue Requirement Rate Rider of \$2.11 per metered Residential customer per month and \$5.51 per metered General Service < 50 kW customer per month, effective November 1, 2012.

This Application is supported by written evidence that may be amended from time to time, prior to the Board's final decision on this Application.

The Applicant requests that, pursuant to Section 34.01 of the Board's *Rules of Practice and Procedure*, this proceeding be conducted by way of written hearing.

The Applicant requests that a copy of all documents filed with the Board in this proceeding be served on the Applicant as follows:

Waterloo North Hydro Inc.
526 Country Squire Rd.
Waterloo, Ontario
N2J 4A3

Attention:
Mr. Albert P. Singh
Vice President Finance & CFO
Phone: (519) 888-5542
Fax: (519) 886-8592
E-mail: asingh@wnhydro.com

DATED at Waterloo, Ontario, this 31st day of May, 2012.

All of which is respectfully submitted. WATERLOO

NORTH HYDRO INC.

Original signed by

Albert P.Singh, MBA, CGA
Vice President Finance & CFO

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MANAGER'S SUMMARY

INTRODUCTION

WNH is submitting this stand-alone application for the recovery of the costs the utility incurred in implementing its Smart Meter Program. In the Board's Decision on WNH's 2012 IRM Rate Application (EB-2011-0201), the Board set a sunset date of October 31, 2012 for WNH's current Smart Meter Funding Adder (SMFA) and directed WNH to file a standalone application to dispose of its final smart meter costs.

As of end of 2011, WNH had installed all of its Smart Meters except 153 of General Service < 50 kW Smart Meters which were not installed until 2012, as discussed below in the Section 'Status of Smart Meter and Time of Use Implementation' on page 11 below. The Total Smart Meter cost claimed in this application is \$10.0 million as indicated in Table 1 below.

Table 1 – Summary of Cost Claim

Total Smart Meter Capital Costs	\$ 9,500,731
Total Smart Meter OM&A Costs	\$ 531,849
Total Smart Meter Costs	\$ 10,032,580

The Allocation methodology is detailed in the Section 'Determination of Specific Smart Meter Rate Riders and Adders' commencing on page 18 below.

The incurred smart meter costs are partially offset (to October 31, 2012) by the Smart Meter Funding Adder – including simple interest – in the amount of \$2.7 million (see Table 11). The resulting rate riders and adders being proposed are presented in Table 2 below.

Table 2 – Summary of Rate Riders and Adders

Rate Rider	Residential			GS < 50		
	Current	Proposed	Change	Current	Proposed	Change
Smart Meter Funding Adder (SMFA)	\$ 1.00	\$ -	\$ (1.00)	\$ 1.00	\$ -	\$ (1.00)
Smart Meter Disposition Rate Rider (SMDR)	\$ -	\$ (0.30)	\$ (0.30)	\$ -	\$ 7.05	\$ 7.05
Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)	\$ -	\$ 2.11	\$ 2.11	\$ -	\$ 5.51	\$ 5.51
Total Smart Meter Rate Change	\$ 1.00	\$ 1.81	\$ 0.81	\$ 1.00	\$ 12.56	\$ 11.56

The SMDR recovers, over a specified time period, the variance between: 1) the deferred revenue requirement for the installed smart meters up to the time of disposition; and 2) the SMFA revenues collected and associated interest.¹

When smart meter disposition occurs in a stand-alone application, a SMIRR is calculated as the proxy for the incremental change in the distribution rates that would have occurred if the assets and operating expenses were incorporated into the rate base and the revenue requirement. The SMIRR is calculated as the annualized revenue requirement for the test years for the capital and operating costs for smart meters².

The Board's report, "Sector Smart Meter Audit Review Report", dated March 31, 2010, indicates a sector Average Capital Cost of \$186.76 per Meter [based on 3,053,931 meters (64% complete) with a capital cost of \$570,339,200 as at September 30, 2009]. The review period was January 1, 2006 to September 30, 2009. The Average Total Cost per Meter (capital and OM&A) is \$207.37 [based on 3,503,931 meters (64% complete) with a total cost of \$633,294,140 as at September 30, 2009].

All costs incurred in completing WNH's Smart Meter Program have been prudently incurred as is evidenced by a \$178.46 per meter Average Capital Cost and a \$184.43 Average Total Cost per Meter, both which exclude costs exceeding minimum functionality in order to be comparable to the sector average cost per meter. The calculations are presented in Tables 3A and 3B below and demonstrate that WNH compares favourably to the sector average of \$186.76 capital cost per meter and \$207.37 total cost per meter discussed above.

Table 3A –Average Capital Cost per Meter

Smart Meter Capital Costs, Includes Costs Exceeding Minimum Functionality	9,500,731
Remove Smart Capital Costs Exceeding Minimum Functionality	(231,587)
Smart Meter Capital Costs, Excludes Costs Exceeding Minimum Functionality	9,269,144
Number of Meters Installed	51,940
Average Cost per Meter, Excludes Costs Exceeding Minimum Functionality	\$ 178.46

Table 3B – Average Total Cost per Meter

Smart Meter Capital Costs, Includes Costs Exceeding Minimum Functionality	9,500,731
Remove Smart Capital Costs Exceeding Minimum Functionality	(231,587)
Smart Meter OM&A Costs, Includes Costs Exceeding Minimum Functionality	531,849
Remove Smart OM&A Costs Exceeding Minimum Functionality	(221,672)
Total Smart Meter Costs, Excludes Costs Exceeding Minimum Functionality	9,579,321
Number of Meters Installed	51,940
Average Cost per Meter, Excludes Costs Exceeding Minimum Functionality	\$ 184.43

¹ G-2011-0001, Page 11

² G-2011-0001, Page 11

No cost associated with stranded meters has been included in the application in accordance with the *Board's Smart Meter Funding and Cost Recovery – Final Disposition Guideline (G-2011-001)*, Section 3.7. Section 3.7 states “*The Board therefore expects that stranded meter costs will be left in rate base until the distributor's next cost of service application.*” WNH's next cost of service application (COS) is scheduled for 2015. WNH estimates its stranded meter cost at December 31, 2011 to be approximately \$1.9 million and \$1.4 million at December 31, 2014.

WNH's implementation of Time of Use (TOU) rates was mandated for June 2011. Due to improper time-alignment of the consumption intervals of certain General Service < 50 kW customers, the Board granted WNH an extension until January 31, 2012 for these customers only. WNH has now implemented TOU for all of its customers.

This application is structured in six distinct sections, specifically;

- 1) Background - Procurement
- 2) Status of Smart Meter and Time of Use Implementation
- 3) Capital and Operating Cost
- 4) Determination of Specific Smart Meter Rate Riders and Adders
- 5) Rate Change Summary
- 6) Conclusion

1) BACKGROUND - PROCUREMENT

SMART METER PILOT AND INVESTMENT PLAN

The approval of the final or third tranche installment of WNH's allowable return on equity beginning March 1, 2005 contained funding for a Smart Metering Pilot Project. The pilot involved 500 locations retrofitted with Smart Meters. Installation of these smart meters occurred in 2007. Lessons learned from the pilot project were applied when WNH commenced its full scale roll out of Smart Meter installations.

Tantalus Smart Meters were used in the pilot project, however, these meters were not chosen as the preferred Smart Meter during the Smart Meter Procurement process. The Tantalus meters were removed, and sold in 2009 and did not form part of the rate base in WNH's 2011 COS, nor have any of these costs been included in this application.

SMART METER PROCUREMENT

LONDON HYDRO RFP

The London Hydro RFP which was structured in phases was comprehensive and asked respondents to showcase their entire range of capabilities.

The first phase required installation of smart meters in a variety of challenging environments:

- Reading Water Meters
- Networked Meters in Apartment Buildings
- Non-networked Meters in Apartment Buildings
- Load Shifting in Social Housing Townhouses (electric hot water heaters)
- Difficult Access Meters (Basements)
- Retail Malls (abandonment of Networked Meters)
- Rural
- New Energy Star Homes
- Residential Areas with Known Voltage Regulation Problems

The second phase involved LDC-wide implementation of smart metering. Proponents were asked to evaluate their responses in a tier of four levels:

- Basic Meter Requirements (as per London Hydro’s purchasing guidelines and specifications.
- Ontario Ministry of Energy Technical Requirements for Advanced Metering Infrastructure
- London Hydro Supplementary Requirements (i.e. inter-device communication, protocol, security, etc.)
- London Hydro Mandatory and Discretionary Value-added Functionality (Outage management, voltage monitoring, bi-directional meter support), meter tampering notification, demand response, etc.)

LONDON RFP REVIEW OF PROPONENTS

WNH is authorized to procure and deploy smart meters under O. Reg. 427/08 and pursuant to the London Hydro RFP process. The first step in the deployment process was selection of an appropriate metering technology. Along with a consortium of Local Distribution Companies (“LDCs”), WNH participated in the London Hydro RFP process. WNH concluded negotiations with its number one ranked proponent, KTI/Sensus Ltd. The negotiations and contract award were undertaken in accordance with the principles for such negotiations and contract award set out in the Advanced Metering Infrastructure RFP, issued August 14, 2007. A copy of the confirmation letter from the Fairness Commissioner is provided in Appendix A as evidence of procurement compliance.

In the agreement, Sensus agreed to perform site selection survey and propagation analysis to determine the regional collector sites, perform project management of collector siting and installation, and complete Advanced Metering Infrastructure (“AMI”) network tuning, which establishes the meter communication configuration between the Smart Meter and collectors. This is required for effective communication within an AMI system, thus adhering to the meter data transfer requirements of an AMI system.

Project Management

WNH also retained the services of Util-Assist to assist in the management of its AMI implementation. Util-Assist is a Canadian owned and operated consulting firm with extensive experience dealing with AMI technologies in a cost effective manner. Util-Assist was also involved with the London RFP process, fully demonstrating competency with, and understanding of AMI technologies. In addition, Waterloo North Hydro took advantages of synergies working with Kitchener-Wilmot Hydro Inc. and Cambridge & North Dumfries Hydro Inc. to utilize Util-Assist's services and experience to ensure a smooth transition to AMI.

SMART METER PROJECT OVERVIEW OF SERVICES

WNH contracted with various suppliers for supporting services:

- *WAN RFP and award of Contract (2008)* – WNH leveraged some of its own communications systems for the Wide Area Network (WAN) Communications for the Smart Meter project. Sensus provided communications for two of the rural locations.
- *Meter Disposal (2008)* – Util-Assist lead a competitive process on behalf of a number of Sensus clients, including Waterloo North Hydro, for the disposal of old meter assets. Meter Green Port Environmental Ltd. was the successful bidder on the price per pound for the meter quotation submitted.
- *Meter Base Repairs (2009)* – WNH issued an RFP to eight (8) proponents and received proposals for meter base repairs for smart meter deployment. Gary Erb Electric was successful based on pricing, safety and qualifications.
- *Paperless Work Orders (2009 – 2010)* – WNH choose Fieldworker Mobile Technology Solutions based on a CLD member's utilization of the same Daffron Billing System as WNH. The software moved the field work file in the correct format to the Daffron system thus improving efficiency of operation. Because the software was already operational on the other utility's Daffron System, it was acquired for a nominal sum.

- *Sky Energy (2010 – 2011)* Sky Energy was chosen after discussions with other utilities regarding their experiences working with Sky Energy. Sky Energy assisted on a part-time basis with Project Management (scheduling) relating to the new Business Processes, startup of the installation, TOU billing and integration with the MDM/R.
- *Residential Installation Service Provider (2009 – 2011)* – WNH issued an RFP to Olameter, OZZ, Force Field Services and Honeywell. The contract was awarded on pricing to OZZ who was eventually purchased by Olameter. Olameter honoured the contract pricing for the term of the new agreement. WNH also leveraged some of its own metering staff to complete a portion of the work.
- *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.
- *Web Presentment (2011)* – After WNH reviewed presentations from four vendors (Whitecap, eSolutions, Lowfoot and Paymentus), it was decided to award the contract to Whitecap. This decision was based on an internal evaluation by the WNH leadership team.
- *Security Audit* - In 2011 WNH participated in consortium sponsored by Util-Assist and Bell wurldtech that consisted of 30 LDCs using Sensus meters. This consortium was formed to retain the services of a cyber-security company, specifically for the purpose of auditing data transmission security of customer data across the Sensus network. Since the greater the number of participating LDCs then the lower the per utility cost and, always wanting to ensure the safety and integrity of WNH customer data, together with endeavoring to prove the utility's continuing due diligence on this very high profile and sensitive subject, the Leadership Team elected to join the consortium. No costs have been included for 2012.

2) STATUS OF SMART METER AND TIME OF USE IMPLEMENTATION

WNH's full-scale smart meter deployment commenced in 2008 and the installation activity is detailed in Table 4 below. The installation of 153 General Service < 50 kW (GS < 50 kW) Smart Meters in 2012 was a result of the vendor not being able to supply these meters until late in 2011. WNH recorded the costs in 2011 under the accrual method of accounting, and installation of the meters in 2012.

Table 4 – Smart Meter Installations by Year and by Rate Class

Year of Installation	Smart Meters Installed			% Converted in Year	% Converted Life-To-Date
	Residential	GS < 50 kW	Total		
2008	1,797	64	1,861	3.6%	3.6%
2009	18,356	571	18,927	36.4%	40.0%
2010	25,683	2,593	28,276	54.4%	94.5%
2011	686	2,037	2,723	5.2%	99.7%
2012		153	153	0.3%	100.0%
Total	46,522	5,418	51,940	100.0%	100.0%

WNH installed a total of 51,787 smart meters as December 2011 which represents 100% of its Residential and 97.2% of its GS < 50 kW rate classes.

During contract negotiations, WNH decided on the purchasing option to own its AMI system and to have it operated by the AMI Vendor.

Projected 2012 operating costs include monthly user fees for meter reading and communication costs, meter maintenance, salary and expenses for an incremental Settlement Analyst staff position to administer the Smart Meter and TOU programs. WNH notes that this staff position was created in September 2010 solely due the installation of Smart Meters and implementation of TOU billing. The salary and expenses were not included in WNH's approved 2011 COS filing, thus, these costs are not included in WNH's current rates.

WNH has not included any 2012 installations of Smart Meters based on growth of Residential and GS < 50 kW customers. Neither the capital cost nor the operating cost of these meters is included for recovery sought in this application. For 2012 and beyond, the capital and operating costs for smart meters will be included in the 2015 Cost of Service Rate Application.

In an effort to meet its mandated TOU implementation deadlines of June 2011 and January 31, 2012, the installation of smart meters was given very high priority by the company's senior management.

WNH's implementation of Time of Use (TOU) rates was mandated for June 2011. Due to improper time-alignment of the consumption intervals of certain General Service < 50 kW customers (detailed below), the Board granted WNH an extension until January 31, 2012 for these customers only. WNH has now implemented TOU for all of its customers.

WNH filed an application (EB-2011-0240) dated June 14, 2011 with the Ontario Energy Board under section 74 of the *Ontario Energy Board Act, 1998* for a licence amendment granting an extension in relation to the mandated date for the implementation of time-of-use ("TOU") pricing rates for certain Regulated Price Plan ("RPP") consumers.

WNH stated that an extension was necessary due to an issue with certain new three phase meters that are delivering suspect interval data due to improper time alignment of the consumption intervals. WNH provided the June 3, 2011 letter from the Smart Meter Provider confirming the problem. The issue affected 2,957 of its GS < 50 kW customers.

On August 30, 2011 the Board granted WNH an exemption on the above noted GS < 50 kW customers, which expired on January 31, 2012.

WNH commenced TOU rates for these GS < 50 kW customers in February 2012 and all customers are now on TOU rates.

The Guideline G-2011-0001, Section 3.5 states that *“The Board expects the majority (i.e. 90% or more) of the total program costs for which the distributor is seeking recovery will be audited.”*

WNH has included costs up to and including its audited December 31, 2011 financial statement results and forecasted 2012 costs.

WNH has 96.2% of its costs audited, as shown in Table 5 below. This table presents that 2012 has costs of \$383,050 which represents 3.8% of the total cost of \$10,032,580. WNH, thus, exceeds the 90% threshold set in the Smart Meter Guideline and all costs should be considered for disposition.

Table 5 – 2012 Costs as % of Total Costs

2012 Capital Costs	\$ 41,580
2012 Operating Costs	\$ 341,470
2012 Total Costs	\$ 383,050
Total Capital Costs	\$ 9,500,731
Total Operating Costs	\$ 531,849
Total Costs	\$ 10,032,580
2012 % of Total Costs	3.8%

CAPITAL AND OPERATING COSTS

In this application, WNH is seeking recovery for the 51,940 smart meters installed in its service area by early 2012. Apart from installing meters for new customers in 2012 and beyond, smart meter installation is complete. The cost of the post-2011 new smart meters – both capital and operations – is not included in this application.

WNH notes that while 153 GS < 50 kW Smart Meters were installed in 2012 (as discussed above), the Capital Costs are recorded in 2011. WNH accounts for the purchases on an accrual basis and as such the costs were required to be included in 2011.

Full details of the various cost components by year are shown in Sheet 2 of the Smart Meter Model attached as Appendix B. Table 6 below provides an intermediate-level break down of the summary costs shown above.

Table 6 - Smart Meter Costs Claimed for Recovery

Cost Element	Cost Sub-Element	Total Costs
Capital	1.1 Advanced Metering Communications Devices (AMCD)	\$ 7,808,614
	1.2 Advanced Metering Regional Collector (AMRC) (Includes LAN)	\$ 877,631
	1.3 Advanced Metering Control Computer (AMCC)	\$ 256,864
	1.4 Wide Area Network (WAN)	\$ 63,217
	1.5 Other AMI Capital Costs Related to Minimum Functionality	\$ 262,818
	1.6 Capital Costs Beyond Minimum Functionality	\$ 231,587
	Total Smart Meter Capital Costs	\$ 9,500,731
OM&A	2.1 Incremental AMCD OM&A Costs	\$ 92,686
	2.2 Incremental AMRC OM&A Costs	\$ 1,728
	2.3 Incremental AMCC OM&A Costs	\$ 149,738
	2.4 Incremental AMRC OM&A Costs	\$ -
	2.5 Other AMI OM&A Costs Related to Minimum Functionality	\$ 66,025
	2.6 OM&A Costs Beyond Minimum Functionality	\$ 221,672
	Total Smart Meter OM&A Costs	\$ 531,849
Total	Total Smart Meter Costs	\$ 10,032,580

As presented in Tables 3A and 3B and discussed on Page 5 above, all costs incurred in completing WNH's Smart Meter Program have been prudently incurred as is evidenced by a \$178.46 per meter Average Capital Cost and a \$184.43 Average Total per Meter cost, both which exclude costs exceeding minimum functionality in order to be comparable to the sector average cost per meter. The calculations are presented in Tables 3A and 3B below, demonstrate that WNH compares favourably to the sector average of \$186.76 capital cost per meter and \$207.37 total cost per meter discussed above.

WNH submits that its total program costs and thus its cost per installed meter are reasonable and were prudently incurred.

INCREMENTAL COST SAVINGS

While the installation of smart meters has increased the operating cost of WNH, certain offsets have resulted. The most significant of these is the elimination of much of the manual meter reading. (Please note that not all manual meter reading costs have been eliminated; Measurement Canada requires LDCs to perform one manual “verification” reading on all smart meters per year.)

WNH has not reflected the reduction of the manual meter reading costs in this application as this reduction is already reflected in its rates, through the approved 2011 COS costs. In Section 4.1 of WNH’s Settlement Agreement it states “*A reduction of \$113,750 in Meter Reading Expenses from \$260,318 in the application to \$146,568. The reduction removes manual meter reading costs to reflect the implementation of smart meter reads and was calculated based on a \$65,000 reduction for one half of 2011 and \$135,000 for the full years 2012 to 2014 and amortized over four years*”.

VARIANCE ANALYSIS

WNH has not previously applied to the Board for partial recovery of its smart meter costs after installation of 50% of the meters. Accordingly, a variance analysis comparing actual costs to previously-approved recovery of costs has not been performed.

MINIMUM FUNCTIONALITY

The costs exceeding minimum functionality that WNH has incurred are for OM&A TOU rate implementation, CIS system changes, web presentment, bill presentment, integration with MDM/R, etc. were incremental costs necessary for implementing the Smart Meter program and a functioning TOU system.

All costs claimed in this application are strictly incremental, they have been incurred solely for the purpose of implementing the Smart Meter and TOU programs, they otherwise would not have been incurred. No cost is included for which the Smart Meter Entity has exclusive authority to act pursuant to O. Reg. 393/07.

WNH has provided details of costs exceeding minimum functionality in Tables 7 and 8 below.

Table 7 - Capital Costs Exceeding Minimum Functionality

Expenditure	2010	2011	2012	Total
MDM/R Integration Costs	78,719	82,959	12,028	173,706
MDM/R Licence & Training	1,546	6,988		8,534
AMI Analyst	21,407			21,407
Web Presentment and Consumption Data Presentation		27,690	250	27,940
Total Capital Costs Exceeding Minimum Functionality	101,672	117,637	12,278	231,587

Table 8 - OM&A Costs Exceeding Minimum Functionality

Expenditure	2010	2011	2012	Total
Salary and Expenses	29,190	95,982	96,500	221,672
Total OM&A Costs Exceeding Minimum Functionality	29,190	95,982	96,500	221,672

CUSTOMER OWNED EQUIPMENT

In the combined Smart Meter Proceeding EB-2007-0063, the Board directed that all labour and associated costs incurred, with the exception of material and parts costs for customer owned equipment, shall be capitalized and tracked in a sub-account of the Smart Meter Capital and Recovery Offset Variance Account 1555. The actual material and part costs to repair or replace any customer owned equipment shall be expensed and also tracked separately in a different sub-account of the Smart Meter OM&A Variance Account 1556. WNH has presented these costs in Table 9 below.

Table 9 – Costs for Customer Owned Equipment

Year	Capital # 1555	OM&A # 1556	Total
2008	4,042	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

Neither the capital cost nor the operating cost of new (growth) smart meter installations post 2011 have been included for recovery in this application. For 2012 and beyond, the capital and operating costs for smart meters will be included in the 2015 cost of service rate application.

4) DETERMINATION OF SPECIFIC RATE RIDERS AND ADDERS

In the Board's March 21, 2006 Decision (RP-2005-0020, EB-2005-0529) local distribution companies that had not already installed smart meters were allocated advance funding equivalent to \$0.30 per *residential* customer per month. The advance funding was provided in the form of a Smart Meter Funding Adder (SMFA) which was spread across all *metered* customers thus reducing the actual amount included in all metered customers' bills to generally between \$0.25 to \$0.28 per metered customer per month.

In the Board's April 12, 2006 Decision (RP-2005-0020, EB-2005-0448) on WNH's 2006 rates, a \$0.26 SMFA was applied to all metered customers and embedded in the monthly Service Charge commencing May 1, 2006.

The \$0.26 SMFA amount continued to be embedded in WNH's customers' rates until the Board's March 11, 2009 Decision and Order (EB-2008-0216) on WNH's 2009 rates when the amount for the embedded SMFA was adjusted to \$1.00 per metered customer per month effective May 1, 2009.

The \$1.00 SMFA amount was approved in the Board's March 25, 2010 Rate Order (EB-2009-0210) on WNH's 2010 rates when the amount was included explicitly on the tariff sheet effective May 1, 2010.

The \$1.00 SMFA amount was approved in the Board's May 19, 2011 Decision (EB-2010-0144) on WNH's 2011 rates, effective May 1, 2011.

The \$1.00 SMFA amount was approved in the Board's April 4, 2012 Decision (EB-2011-0201) on WNH's 2012 rates, effective May 1, 2012, with an expiry date of October 31, 2012.

In the Board’s Decision on PowerStream Inc., EB-2011-0128, it stated: “*The Board directs PowerStream to allocate the smart meter adder amounts collected from the GS > 50 kW and Large Use customer classes evenly to the residential and GS < 50 kW classes when calculating the true-up for the SMDR.*” WNH has complied with the methodology approved in the PowerStream Decision and the details are provided below. Table 10 below shows the actual and forecasted SMFA revenue. Simple interest is included and added to the revenue recovery. The GS > 50 kW and Large User revenue is re-allocated evenly to the Residential and GS < 50 kW rate classes and presented in Table 11. Details are included in the Smart Meter Model attached as Appendix B.

Table 10 - Actual and Forecasted Smart Meter Funding Adder Revenue by Rate Class (No Interest)

Rate Class	Actual						Forecast to Oct	Total
	2006	2007	2008	2009	2010	2011	2012	
Residential	88,560	134,925	137,383	404,058	548,578	553,986	467,087	2,334,577
GS < 50 kW	10,574	15,923	16,241	47,445	63,916	64,956	54,306	273,361
GS > 50 kW	1,272	1,955	2,017	5,961	7,856	7,956	6,620	33,638
Large User	4	6	6	14	12	12	10	65
Total for Year	100,410	152,810	155,648	457,478	620,361	626,910	528,023	2,641,640
Total Life-To-Date	100,410	253,220	408,868	866,345	1,486,707	2,113,617	2,641,640	2,641,640

Table 11 - Actual and Forecasted Smart Meter Funding Adder Revenue by Rate Class – Including Interest and Re-Allocation of GS > 50 kW and Large User Revenue

Rate Class	Smart Meter Recovery \$	Smart Meter Recovery % of Total	Total Carrying Charge per SM Model	Allocate Carrying Chg by % of Total Collected	Total Recovery by Rate Class Before Re-Allocation	Re-Allocate <50 & LU Evenly to Res & <50 *	Total Recovery by Rate Class Before Re-Allocation
			\$ 92,196				
Residential	2,334,577	88.4%		81,479	2,416,056	17,439	2,433,495
GS < 50 kW	273,361	10.3%		9,541	282,901	17,439	300,341
GS > 50 kW	33,638	1.3%		1,174	34,812	(34,812)	-
Large User	65	0.0%		2	67	(67)	-
Total	2,641,640	100.0%		92,196	2,733,836	(0)	2,733,836

* Re-Allocation Methodology as per Board Decision in PowerStream Inc. EB-2011-0128

COST ALLOCATION

WNH has used the following methodology:

- WNH tracked the costs of installing Single Phase and Poly Phase Meters separately, as well as tracking the number (not specific cost) installed of each phase type by Rate Class. The details of the number of Single and Poly Phase Meters by Rate Class are presented in Table 12 below.
- All 1.1 Costs for Poly Phase Meters are allocated to GS < 50 kW Rate Class except for 145 Residential Poly Phase Meters which were installed. The details of the allocation of Poly Phase Meters are presented in Table 13 below.
- All 1.1 Costs for Single Phase Meters were allocated on the proportional basis of the number of Single Phase Meters installed to each of the Residential and GS < 50 kW rate classes. The cost per Single Phase Meter did not materially differ between the rate classes, thus, the average cost per meter is calculated as the same. The details of the allocation of Single Phase Meters are presented in Table 13 below.

Table 12 – Number of Single and Poly Phase Meters by Rate Class

Allocation	Residential	GS < 50	Total
Total Customers Installed	46,522	5,418	51,940
Single Phase	46,377	2,459	48,836
Poly Phase	145	2,959	3,104
Total	46,522	5,418	51,940

Table 13 – Allocation of 1.1 Poly and Single Phase Meter Costs

Poly Phase	Res	<50	Total
Smart Meter Purchase	55,927	391,418	447,344
Installation Cost	2,949	1,394,522	1,397,471
Workforce Automation		6,386	6,386
Total	58,876	1,792,325	1,851,201

Single Phase	Res	<50	Total
Smart Meter Purchase	4,684,459	248,379	4,932,839
Installation Cost	958,807	50,838	1,009,645
Workforce Automation	14,178	752	14,930
Total	5,657,444	299,969	5,957,413

Total 1.1 Capital Costs	5,716,320	2,092,294	7,808,614
--------------------------------	------------------	------------------	------------------

WNH then applied the methodology approved by the Board in the EB-2010-0209 PowerStream Inc. Decision, in allocation for the purposes calculating the SMDR and SMIRR as follows:

- Return (deemed interest plus return on equity) and Amortization have been allocated between the customer classes based on the capital costs of the meters installed for each class.
- OM&A has been allocated based on the number of meters installed for each class.
- PILs have been allocated based on the revenue requirement allocated to each class before PILs.

WNH has presented the detailed calculation of the cost allocation for the proposed rate riders in the following section.

SMART METER DISPOSITION RATE RIDER (SMDR)

WNH is seeking Board approval for a Smart Meter Disposition Rate Rider in the amount of (\$0.30) per Residential customer per month and \$7.05 per GS < 50 kW customer per month, for the one year period November 1, 2012 to October 31, 2013. The calculation was made utilizing the Board's Smart Meter Model (Appendix B). WNH has used the Smart Meter Model that was on the Board's website, issued December 15, 2011. WNH notes that as no 2012 capital costs for new customer growth have been included, the Number of Metered Customers at December 31, 2011 has been used.

WNH has presented the WACC and Tax Rates reflected in its Smart Meter Model in Table 14 below. The WACC and Tax Rates agree to those approved in each year's respective approved rates for 2006 through 2012, except the tax rate for 2012 which reflects the tax rate currently applicable. The 2012 tax rate currently is 26.5%, which reflects the 2012 Provincial Budget which announced a freeze in the Provincial Corporate Tax Rate at 11.5%, in addition to the Federal Tax Rate of 15.0%.

Table 14 – WACC and Tax Rate Inputs

Year	2006 COS	2007 IRM	2008 IRM	2009 IRM	2010 IRM	2011 COS	2012 & On IRM
WACC	7.64%	7.64%	7.55%	7.46%	7.37%	6.85%	6.85%
Tax Rates	36.12%	36.12%	33.50%	33.00%	30.99%	28.25%	26.50%

WNH has included six months of Foregone Revenue in the calculation of the SMDR. It is WNH's understanding that the December 15, 2011 Smart Meter Model was intended for an implementation date of May 1, 2012, not a November 1, 2012 implementation date. In the December 15, 2011 Smart Meter Model the SMDR covers costs up to December 31, 2011 and the SMIRR is to capture 2012 costs (in essence a test year).

An implementation date of May 1, 2012 would result in 8 months of collection of SMIRR (the 2012 costs) in 2012 and 4 months (January to April) in the year that the SMIRR ceases, thus, the full 12 months of 2012 costs would be collected.

An implementation date of November 1, 2012, however, would result in 2 months of collection of SMIRR (the 2012 costs) in 2012 and 4 (January to April) in the year that the SMIRR ceases, thus, only 6 months of 2012 costs would be collected. WNH has included 6 months of Foregone Revenue in the SMDR to recover these 2012 costs. The Foregone Revenue was calculated as one-half (6/12 months) of the SMIRR, as calculated in the Smart Meter Model (see Appendix B), and has been added to the SMDR. WNH's rationale for inclusion in the SMDR is that it would be recovered over a one-year period which is a reasonable period for collecting 2012 costs. The calculation of the Foregone Revenue is presented in Table 15 below.

Table 15 – Calculation of Foregone Revenue

SMIRR Calculation - Total 2012 Revenue Requirement as per Smart Meter Model											
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%	
			\$	\$ 529,544	\$ 741,828			\$1,271,372	\$ 930,712	\$ 340,660	\$ 1,271,372
B	OM&A	# Meters installed for each class	%					89.6%	10.4%	100.0%	
			\$			\$ 341,470		\$ 341,470	\$ 305,850	\$ 35,620	\$ 341,470
Revenue Requirement Before PILs Allocation								\$1,236,562	\$ 376,280	\$1,612,842	
C	PILs	Revenue Requirement allocated to each class before PILs (A+B)	\$					\$1,236,562	\$ 376,280	\$1,612,842	
			%					76.7%	23.3%	100.0%	
			\$				\$ (78,133)	\$ (78,133)	\$ (59,904)	\$ (18,229)	\$ (78,133)
Total Revenue Requirement			\$	\$ 529,544	\$ 741,828	\$ 341,470	\$ (78,133)	\$1,534,709	\$ 1,176,658	\$ 358,051	\$ 1,534,709
			%					76.7%	23.3%	100.0%	
Foregone Revenue - Added to SMDR - Equal to 6 Months of SMIRR - One-Half of Total Revenue Requirement by Rate Class								588,329	179,026	767,355	

The value of the SMDR is based on the net amount resulting from:

- Deferred and forecasted Smart Meter Incremental Revenue Requirement from 2008 to December 31, 2011

Plus

- Interest on Deferred and forecasted OM&A and Amortization Expenses 2008 to October 31, 2012

Less

- SMFA Revenues collected (including carrying charges) and forecast from May 1, 2006 to October 31, 2012 (Table 11 above)

Plus

- Foregone Revenue for six months (Table 15 above)

Table 16 below shows the calculation of the SMDR for each rate class, including the cost allocation between the rate classes.

Table 16 - Smart Meter Disposition Rate Rider (SMDR)
SMDR - Summary Calculations

	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	\$ 15,456	\$ 5,347	\$ 20,803
	SMFA Revenue including Carrying Charges		(2,433,495)	(300,341)	(2,733,836)
	Net Deferred Revenue Requirement Before Foregone Revenue		\$ (758,346)	\$ 279,170	\$ (479,176)
	Number of Metered Customers		46,522	5,418	51,940
	Calculation of Smart Meter Disposition Rider before Foregone Revenue	Per metered customer per month	\$ (1.36)	\$ 4.29	\$ (0.77)
	Foregone Revenue for 6 months	One-half of 2012 Revenue Requirement	588,329	179,026	767,355
	Net Deferred Revenue Requirement including Foregone Revenue		\$ (170,017)	\$ 458,196	\$ 288,179
	Number of Metered Customers		46,522	5,418	51,940
	Calculation of Smart Meter Disposition Rider	Per metered customer per month	\$ (0.30)	\$ 7.05	\$ 0.46

SMDR Backup - Detailed Calculations

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			\$				\$ 20,803	\$ 15,456	\$ 5,347	\$ 20,803	
			%					74.3%	25.7%	100.0%	

SMDR Backup - Allocation of Costs

	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%

SMART METER INCREMENTAL REVENUE REQUIREMENT RATE RIDER (SMIRR)

WNH is seeking Board approval for Smart Meter Incremental Revenue Requirement Rate Rider in the amount of \$2.11 per metered Residential customer per month and \$5.51 per metered GS < 50 kW customer per month, for the two and one-half year period November 1, 2012 to April 30, 2015. The calculation is presented in Table 17 below. WNH notes that as no 2012 capital costs for new customer growth have been included, the Number of Metered Customers at December 31, 2011 has been used.

Table 17 - Smart Meter Incremental Revenue Requirement Rate (SMIRR)
SMIRRR - Summary Calculations

	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	\$ 930,712	340,660	\$ 1,271,372
B	OM&A	# Meters installed for each class	\$ 305,850	35,620	\$ 341,470
C	PILs	Revenue Requirement allocated to each class before PILs	\$ (59,904)	(18,229)	\$ (78,133)
	Revenue Requirement, including Grossed-up Taxes/PILs		\$ 1,176,658	\$ 358,051	\$ 1,534,709
	Number of Metered Customers		46,522	5,418	51,940
	Calculation of Smart Meter Incremental Revenue Requirement Rate Rider	Per metered customer per month	\$ 2.11	\$ 5.51	\$ 2.46

SMIRR Backup - Detailed Calculations

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%	
			\$	\$ 529,544	\$ 741,828		\$ 1,271,372	\$ 930,712	\$ 340,660	\$ 1,271,372	
B	OM&A	# Meters installed for each class	%					89.6%	10.4%	100.0%	
			\$			\$ 341,470	\$ 341,470	\$ 305,850	\$ 35,620	\$ 341,470	
		Revenue Requirement Before PILs Allocation						\$ 1,236,562	\$ 376,280	\$ 1,612,842	
C	PILs	Revenue Requirement allocated to each class before PILs (A+B)	\$					\$ 1,236,562	\$ 376,280	\$ 1,612,842	
			%					76.7%	23.3%	100.0%	
			\$				\$ (78,133)	\$ (78,133)	\$ (59,904)	\$ (18,229)	\$ (78,133)
		Total Revenue Requirement	\$	\$ 529,544	\$ 741,828	\$ 341,470	\$ (78,133)	\$ 1,534,709	\$ 1,176,658	\$ 358,051	\$ 1,534,709
			%					76.7%	23.3%	100.0%	

SMIRR Backup - Allocation of Costs

	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	\$	1,176,658	358,051	1,534,709
			%	76.7%	23.3%	100.0%

5) RATE CHANGE SUMMARY

Table 18 below shows the rate change WNH is seeking approval for in this application. The current value corresponds to the currently-approved rates as reflected in Appendix A to Decision and Order, Tariff of Rates and Charges, EB-2011-0201, dated April 4, 2012. The Energy cost reflects the average of May 2012 TOU rates (based on the Board's estimate of On-Peak, Off-Peak and Mid-Peaks percentages). The implementation of the SMDR and SMIRR would result in a rate impact of an increase of .72% for the Residential customers and 4.37% for the GS < 50 kW customers. WNH has provided the Rate Impacts are detailed in Table 19 below.

Table 18 - Summary of Smart Meter Rate

Rate Rider	Residential			GS < 50		
	Current	Proposed	Change	Current	Proposed	Change
Smart Meter Funding Adder (SMFA)	\$ 1.00	\$ -	\$ (1.00)	\$ 1.00	\$ -	\$ (1.00)
Smart Meter Disposition Rate Rider (SMDR)	\$ -	\$ (0.30)	\$ (0.30)	\$ -	\$ 7.05	\$ 7.05
Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)	\$ -	\$ 2.11	\$ 2.11	\$ -	\$ 5.51	\$ 5.51
Total Smart Meter Rate Change	\$ 1.00	\$ 1.81	\$ 0.81	\$ 1.00	\$ 12.56	\$ 11.56

Table 19 - Rate Impact by Rate Class

Customer Class:		Residential									
Consumption		800		kWh							
	Charge Unit	Current Board-Approved			Proposed			Impact			
		Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change		
1	Monthly Service Charge	monthly	\$ 14.7200	1	\$ 14.72	\$ 14.7200	1	\$ 14.72	\$ -	0.00%	
2	Smart Meter Rate Adder	monthly	\$ 1.0000	1	\$ 1.00	\$ -	1	\$ -	-\$ 1.00	-100.00%	
3	Smart Meter - SMDR	monthly		1	\$ -	-\$ 0.3000	1	-\$ 0.30	-\$ 0.30		
4	Smart Meter - SMIRR	monthly		1	\$ -	\$ 2.1100	1	\$ 2.11	\$ 2.11		
5	Distribution Volumetric Rate	per kWh	\$ 0.0186	800	\$ 14.88	\$ 0.0186	800	\$ 14.88	\$ -	0.00%	
6	Low Voltage Rate Adder	per kWh	\$ 0.0001	800	\$ 0.08	\$ 0.0001	800	\$ 0.08	\$ -	0.00%	
7	Volumetric Rate Adder(s)			800	\$ -		800	\$ -	\$ -		
8	Volumetric Rate Rider(s)			800	\$ -		800	\$ -	\$ -		
9	Smart Meter Disposition Rider			800	\$ -		800	\$ -	\$ -		
10	LRAM & SSM Rate Rider	per kWh	\$ 0.0003	800	\$ 0.24	\$ 0.0003	800	\$ 0.24	\$ -	0.00%	
11	Deferral/Variance Account Disposition Rate Rider	per kWh	-\$ 0.00493	800	-\$ 3.94	-\$ 0.00493	800	-\$ 3.94	\$ -	0.00%	
12					\$ -			\$ -	\$ -		
13	Capital Gains Rate Rider	per kWh	-\$ 0.0007	800	-\$ 0.56	-\$ 0.0007	800	-\$ 0.56	\$ -	0.00%	
14					\$ -			\$ -	\$ -		
15	Tax Change Rate Rider	per kWh	-\$ 0.0001	800	-\$ 0.08	-\$ 0.0001	800	-\$ 0.08	\$ -	0.00%	
16	Sub-Total A - Distribution				\$ 26.34			\$ 27.15	\$ 0.81	3.08%	
17	RTSR - Network	per kWh	\$ 0.0075	832.32	\$ 6.24	\$ 0.0075	832.32	\$ 6.24	\$ -	0.00%	
18	RTSR - Line and Transformation Connection	per kWh	\$ 0.0023	832.32	\$ 1.91	\$ 0.0023	832.32	\$ 1.91	\$ -	0.00%	
19	Sub-Total B - Delivery (including Sub-Total A)				\$ 34.49			\$ 35.30	\$ 0.81	2.35%	
20	Wholesale Market Service Charge (WMSC)	per kWh	\$ 0.0052	832.32	\$ 4.33	\$ 0.0052	832.32	\$ 4.33	\$ -	0.00%	
21	Rural and Remote Rate Protection (RRRP)	per kWh	\$ 0.0011	832.32	\$ 0.92	\$ 0.0011	832.32	\$ 0.92	\$ -	0.00%	
22	Special Purpose Charge	per kWh		832.32	\$ -		832.32	\$ -	\$ -		
23	Standard Supply Service Charge	monthly	\$ 0.2500	1	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%	
24	Debt Retirement Charge (DRC)	per kWh	\$ 0.0070	800	\$ 5.60	\$ 0.0070	800	\$ 5.60	\$ -	0.00%	
25	Energy - Average TOU Pricing	per kWh	\$ 0.08100	832.32	\$ 67.42	\$ 0.08100	832.32	\$ 67.42	\$ -	0.00%	
26		per kWh			\$ -			\$ -	\$ -		
27					\$ -			\$ -	\$ -		
28	Total Bill (before Taxes)				\$ 113.00			\$ 113.81	\$ 0.81	0.72%	
29	HST		13%		\$ 14.69	13%		\$ 14.80	\$ 0.11	0.72%	
30	Total Bill (including Sub-total B)				\$ 127.69			\$ 128.61	\$ 0.92	0.72%	
	Ontario Clean Energy Benefit (OCEB)		-10%		-\$ 12.77	-10%		-\$ 12.86	-\$ 0.09	0.72%	
	Total Bill (less OCEB)				\$ 114.92			\$ 115.75	\$ 0.83	0.72%	

31 Loss Factor (%) Note 1 4.04% 4.04%

Notes:

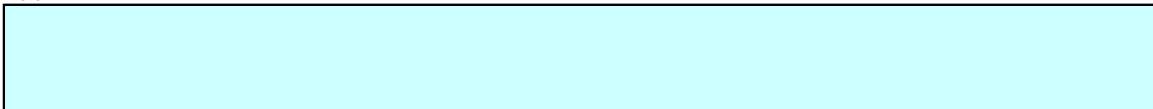
Note 1:

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General Service < 50 kW									
Consumption		2,000		kWh					
Charge Unit	Current Board-Approved			Proposed			Impact		
	Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change	
1 Monthly Service Charge	monthly	\$ 30.9600	1	\$ 30.96	\$ 30.9600	1	\$ 30.96	\$ -	0.00%
2 Smart Meter Rate Adder	monthly	\$ 1.0000	1	\$ 1.00	\$ -	1	\$ -	-\$ 1.00	-100.00%
3 Smart Meter - SMDR	monthly		1	\$ -	\$ 7.0500	1	\$ 7.05	\$ 7.05	
4 Smart Meter - SMIRR	monthly		1	\$ -	\$ 5.5100	1	\$ 5.51	\$ 5.51	
5 Distribution Volumetric Rate	per kWh	\$ 0.0138	2,000.0	\$ 27.60	\$ 0.0138	2,000.0	\$ 27.60	\$ -	0.00%
6 Low Voltage Rate Adder	per kWh	\$ 0.0001	2,000.0	\$ 0.20	\$ 0.0001	2,000.0	\$ 0.20	\$ -	0.00%
7 Volumetric Rate Adder(s)			2,000.0	\$ -		2,000.0	\$ -	\$ -	
8 Volumetric Rate Rider(s)			2,000.0	\$ -		2,000.0	\$ -	\$ -	
9 Smart Meter Disposition Rider			2,000.0	\$ -		2,000.0	\$ -	\$ -	
10 LRAM & SSM Rider	per kWh	\$ 0.0002	2,000.0	\$ 0.40	\$ 0.0002	2,000.0	\$ 0.40	\$ -	0.00%
11 Deferral/Variance Account Disposition Rate Rider	per kWh	-\$ 0.00453	2,000.0	-\$ 9.06	-\$ 0.00453	2,000.0	-\$ 9.06	\$ -	0.00%
12				\$ -			\$ -	\$ -	
13 Capital Gains Rate Rider	per kWh	-\$ 0.0004	2,000.0	-\$ 0.80	-\$ 0.0004	2,000.0	-\$ 0.80	\$ -	0.00%
14				\$ -			\$ -	\$ -	
15 Tax Change Rate Rider		-\$ 0.0001	2,000.0	\$ 0.20	-\$ 0.0001	2,000.0	\$ 0.20	\$ -	0.00%
16 Sub-Total A - Distribution				\$ 50.10			\$ 61.66	\$ 11.56	23.07%
17 RTSR - Network	per kWh	\$ 0.0068	2,080.8	\$ 14.15	\$ 0.0068	2,080.8	\$ 14.15	\$ -	0.00%
18 RTSR - Line and Transformation Connection	per kWh	\$ 0.0021	2,080.8	\$ 4.37	\$ 0.0021	2,080.8	\$ 4.37	\$ -	0.00%
19 Sub-Total B - Delivery (including Sub-Total A)				\$ 68.62			\$ 80.18	\$ 11.56	16.85%
20 Wholesale Market Service Charge (WMSC)	per kWh	\$ 0.0052	2,080.8	\$ 10.82	\$ 0.0052	2,080.8	\$ 10.82	\$ -	0.00%
21 Rural and Remote Rate Protection (RRRP)	per kWh	\$ 0.0011	2,080.8	\$ 2.29	\$ 0.0011	2,080.8	\$ 2.29	\$ -	0.00%
22 Special Purpose Charge	per kWh		2,080.8	\$ -		2,080.8	\$ -	\$ -	
23 Standard Supply Service Charge	monthly	\$ 0.2500	1.0	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%
24 Debt Retirement Charge (DRC)	per kWh	\$ 0.0070	2,000.0	\$ 14.00	\$ 0.0070	2,000.0	\$ 14.00	\$ -	0.00%
25 Energy - Average TOU Pricing	per kWh	\$ 0.08100	2,080.8	\$ 168.54	\$ 0.08100	2,080.8	\$ 168.54	\$ -	0.00%
26 Energy Second Block Avg TOU	per kWh			\$ -			\$ -	\$ -	
27				\$ -			\$ -	\$ -	
28 Total Bill (before Taxes)				\$ 264.52			\$ 276.08	\$ 11.56	4.37%
29 HST		13%		\$ 34.39		13%	\$ 35.89	\$ 1.50	4.37%
30 Total Bill (including Sub-total B)				\$ 298.91			\$ 311.97	\$ 13.06	4.37%
Ontario Clean Energy Benefit (OCEB)		-10%		-\$ 29.89		-10%	-\$ 31.20	-\$ 1.31	4.37%
Total Bill (less OCEB)				\$ 269.02			\$ 280.77	\$ 11.75	4.37%

31 Loss Factor Note 1 4.04% 4.04%

Notes:
Note 1:



6) CONCLUSION

It is respectfully submitted that the costs requested for recovery in this application have been necessary to fulfill WNH's obligations under the Provincially-mandated Smart Meter Initiative; have been prudently incurred in accordance with Board guidelines; the proposed rate riders are just and reasonable; the associated customer bill impacts are reasonable; and it is therefore appropriate that the Board approve the proposed rate riders for implementation effective November 1, 2012.

APPENDIX A

Letter from Fairness Commissioner



PRP International, Inc.

Fairness Advisory Services

May 30, 2008

Mr. Herbert Haller, P.Eng.
Vice-President, Engineering & Stations
Waterloo North Hydro Inc.
300 Northfield Drive,
Waterloo, ON N2J 4A3

Dear Mr. Haller:

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

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

"It is the judgment of PRP International, Inc., as the Fairness Commissioner, that the determinations of the two (2) highest ranked Proponents for the Waterloo North Hydro Inc. requirements are:

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

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

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

Yours truly,

Peter Sorensen
President

cc: Mr. Gary Rains, RFP Project Director

APPENDIX B

Smart Meter Model



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

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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

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	2006	2007	2008	2009	2010	2011	2012 and later	Total	
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast		
Smart Meter Installation Plan									
Actual/Planned number of Smart Meters installed during the Calendar Year									
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)									
	Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
1.1.1 Smart Meters (may include new meters and modules, etc.)	Smart Meter			208,965	3,258,562	1,472,783	453,115	-13,242	\$ 5,380,183
1.1.2 Installation Costs (may include socket kits, labour, vehicle, benefits, etc.)	Smart Meter			58,368	310,884	1,755,969	239,351	42,544	\$ 2,407,116
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.)	Computer Software			677	6,404	2,898	11,336		\$ 21,315
Total Advanced Metering Communications Devices (AMCD)		\$ -	\$ -	\$ 268,010	\$ 3,575,850	\$ 3,231,650	\$ 703,802	\$ 29,302	\$ 7,808,614
1.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)									
	Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
1.2.1 Collectors	Other Equipment			304,083	354,464	107,348	103,882		\$ 869,777
1.2.2 Repeaters (may include radio licence, etc.)									\$ -
1.2.3 Installation (may include meter seals and rings, collector computer hardware, etc.)	Other Equipment			7,854					\$ 7,854
Total Advanced Metering Regional Collector (AMRC) (Includes LAN)		\$ -	\$ -	\$ 311,937	\$ 354,464	\$ 107,348	\$ 103,882	\$ -	\$ 877,631

1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)

	Asset Type							
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
1.3.1 Computer Hardware	Computer Hardware		221,399					\$ 221,399
1.3.2 Computer Software	Computer Software		19,119		6,912	2,369		\$ 28,400
1.3.3 Computer Software Licences & Installation (includes hardware and software) <i>(may include AS/400 disk space, backup and recovery computer, UPS, etc.)</i>	Computer Software		5,805	630	630			\$ 7,065
Total Advanced Metering Control Computer (AMCC)		\$ -	\$ 246,323	\$ 630	\$ 7,542	\$ 2,369	\$ -	\$ 256,864

1.4 WIDE AREA NETWORK (WAN)

	Asset Type							
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
1.4.1 Activation Fees	Other Equipment		20,485	7,072	32,728	2,932		\$ 63,217
Total Wide Area Network (WAN)		\$ -	\$ 20,485	\$ 7,072	\$ 32,728	\$ 2,932	\$ -	\$ 63,217

1.5 OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNCTIONALITY

	Asset Type							
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
1.5.1 Customer Equipment <i>(including repair of damaged equipment)</i>	Other Equipment		4,042	21,395	55,446	5,685		\$ 86,568
1.5.2 AMI Interface to CIS	Computer Software				4,662			\$ 4,662
1.5.3 Professional Fees	Other Equipment		25,242	44,893	25,491	2,556		\$ 98,182
1.5.4 Integration	Computer Software			20,937				\$ 20,937
1.5.5 Program Management								\$ -
1.5.6 Other AMI Capital	Other Equipment		401	35,159	7,918	8,991		\$ 52,469
Total Other AMI Capital Costs Related to Minimum Functionality		\$ -	\$ 29,685	\$ 122,384	\$ 93,517	\$ 17,232	\$ -	\$ 262,818
Total Capital Costs Related to Minimum Functionality		\$ -	\$ 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)

	Asset Type							
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
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	Computer Software							\$ -
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 MDM/R, etc.	Applications Software				101,672	117,637	12,278	\$ 231,587
Total Capital Costs Beyond Minimum Functionality		\$ -	\$ -	\$ -	\$ 101,672	\$ 117,637	\$ 12,278	\$ 231,587
Total Smart Meter Capital Costs		\$ -	\$ 876,440	\$ 4,060,400	\$ 3,574,457	\$ 947,854	\$ 41,580	\$ 9,500,731

2 OM&A Expenses

	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)								
2.1.1 Maintenance (may include meter reverification costs, etc.)							92,686	\$ 92,686
2.1.2 Other (please specify)								\$ -
Total Incremental AMCD OM&A Costs	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 92,686</u>	<u>\$ 92,686</u>
2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)								
2.2.1 Maintenance								\$ -
2.2.2 Other (please specify) Licence Fee			1,728					\$ 1,728
Total Incremental AMRC OM&A Costs	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 1,728</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 1,728</u>
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) User fees to Software Provider							149,738	\$ 149,738
Total Incremental AMCC OM&A Costs	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 149,738</u>	<u>\$ 149,738</u>
2.4 WIDE AREA NETWORK (WAN)								
2.4.1 WAN Maintenance								\$ -
2.4.2 Other (please specify)								\$ -
Total Incremental AMRC OM&A Costs	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
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.)				15,024				\$ 15,024
2.5.3 Program Management								\$ -
2.5.4 Change Management (may include training, etc.)								\$ -
2.5.5 Administration Costs			23		79			\$ 102
2.5.6 Other AMI Expenses (please specify)			1,400	6,172	33,947	6,834	2,546	\$ 50,899
Total Other AMI OM&A Costs Related to Minimum Functionality	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 1,423</u>	<u>\$ 21,196</u>	<u>\$ 34,026</u>	<u>\$ 6,834</u>	<u>\$ 2,546</u>	<u>\$ 66,025</u>
TOTAL OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 3,151</u>	<u>\$ 21,196</u>	<u>\$ 34,026</u>	<u>\$ 6,834</u>	<u>\$ 244,970</u>	<u>\$ 310,177</u>
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>	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual		
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.					29,190	95,982	96,500	\$ 221,672
Total OM&A Costs Beyond Minimum Functionality	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 29,190</u>	<u>\$ 95,982</u>	<u>\$ 96,500</u>	<u>\$ 221,672</u>
Total Smart Meter OM&A Costs	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 3,151</u>	<u>\$ 21,196</u>	<u>\$ 63,216</u>	<u>\$ 102,816</u>	<u>\$ 341,470</u>	<u>\$ 531,849</u>

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	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 876,440</u>	<u>\$ 4,060,400</u>	<u>\$ 3,574,457</u>	<u>\$ 947,854</u>	<u>\$ 41,580</u>	<u>\$ 9,500,731</u>	
3.2	OM&A Costs									
3.2.1	Total OM&A Costs	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 3,151</u>	<u>\$ 21,196</u>	<u>\$ 63,216</u>	<u>\$ 102,816</u>	<u>\$ 341,470</u>	<u>\$ 531,849</u>	



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 <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%	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 <i>(expressed as expected useful life in years)</i>							
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.

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 (# 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 (# 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 (# 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 (# 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 (# 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 (# 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 (# applicable)							
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (# 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	\$ 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 (# applicable)							\$ 10,170
Closing Balance	\$ -	\$ -	\$ 362,107	\$ 825,090	\$ 1,054,021	\$ 1,178,067	\$ 1,167,897
Accumulated Depreciation							
Opening Balance	\$ -	\$ -	\$ -	\$ 12,070	\$ 51,643	\$ 114,281	\$ 188,683
Amortization expense during year	\$ -	\$ -	\$ 12,070	\$ 39,573	\$ 62,637	\$ 74,403	\$ 117,807
Retirements/Removals (# applicable)							\$ 2,034
Closing Balance	\$ -	\$ -	\$ 12,070	\$ 51,643	\$ 114,281	\$ 188,683	\$ 304,456
Net Book Value							
Opening Balance	\$ -	\$ -	\$ -	\$ 350,037	\$ 773,447	\$ 939,741	\$ 989,384
Closing Balance	\$ -	\$ -	\$ 350,037	\$ 773,447	\$ 939,741	\$ 989,384	\$ 863,441
Average Net Book Value	\$ -	\$ -	\$ 175,018	\$ 561,742	\$ 856,594	\$ 964,562	\$ 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



Waterloo North Hydro Inc.

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)
			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	\$ 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, 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



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)
- 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)	\$ -	\$ -	\$ 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)	\$ -	\$ -	\$ 219.58	\$ 923.34	\$ 4,030.10	\$ 15,630.30		\$ 20,803.33
<input checked="" type="checkbox"/> Sheet 8A (Interest calculated on monthly balances)	\$ -	\$ -	\$ 219.58	\$ 923.34	\$ 4,030.10	\$ 15,630.30		\$ 20,803.33
<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	-\$ 120,047.23	-\$ 138,231.50	\$ 143,752.80	\$ 454,852.01	\$ 977,888.75	\$ 1,055,533.61
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	\$ 2,254,660.06	
SMFA Revenues collected from 2006 to 2012 test year (inclusive) Plus Simple Interest on SMFA Revenues	\$ 2,733,835.80	
Net Deferred Revenue Requirement	-\$ 479,175.74	} Match
SMDR (November 1, 2012 to October 31, 2013)	-\$ 0.77	
Check: Forecasted SMDR Revenues	-\$ 479,925.60	

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

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