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April 3, 2012

Kirsten Walli
Board Secretary
Ontario Energy Board,
2300 Yonge St.
Suite 2700, P.O. Box 2319
Toronto, Ontario
M4P 1E4

Dear Ms. Walli:

Re: Oakville Hydro Electricity Distribution Inc.
Smart Meter Cost Recovery Application

Please find accompanying this letter, two copies of Oakville Hydro Electricity Distribution Inc.'s Application for approving or fixing just and reasonable rates with respect to Smart Meters effective May 1, 2012. Should there be any questions, please contact me at the number below.

Respectfully Submitted,

Maryanne Wilson

Maryanne Wilson
Manager, Regulatory Affairs
Oakville Hydro Electricity Distribution Inc.
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Oakville Hydro Electricity Distribution Inc.

Smart Meter Prudence Application

Filed: April 3, 2012

IN THE MATTER OF the *Ontario Energy Board*

Act, 1998, being Schedule B to the Energy

Competition Act, 1998, S.O. 1998, c.15;

AND IN THE MATTER OF an Application by

Oakville Hydro Electricity Distribution Inc. to the

Ontario Energy Board for an Order or Orders

approving or fixing just and reasonable rates with

respect to Smart Meters as of May 1, 2012.

Applicant's Name:	Oakville Hydro Electricity Distribution Inc.
Applicant's Address:	861 Redwood Square, Oakville, Ontario L6J 5E3
Contact Information:	Jim Collins CFO, Vice President Corporate and Regulatory Affairs Phone: 905-825-4444 JCollins@oakvillehydro.com

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Manager's Summary

Oakville Hydro Electricity Distribution Inc. (Oakville Hydro) is a corporation incorporated pursuant to the Ontario Business Corporations Act with its head office in the Town of Oakville. Oakville Hydro carries on the business of distributing electricity within the Town of Oakville.

On December 15, 2011, the Ontario Energy Board (the "Board") issued an update of the Guideline G-2008-0002, *Smart Meter Funding and Cost Recovery*. The updated version is entitled Guideline G-2011-0001, *Smart Meter Funding and Cost Recovery – Final Disposition* (the "Guideline"). The Guideline outlines the information that the Board expects electricity distributors to file regarding applications for final prudence review of smart meter costs. On December 15, 2011 the Board also issued an updated Smart Meter Model, version 2.17. Oakville Hydro has prepared its Application in accordance with the Board's Guideline and the revised Smart Meter Model version 2.1.7.

In this Smart Meter Prudence Application (the "Application"), Oakville Hydro hereby applies to the Ontario Energy Board (the "Board") for the following:

a) The Board's determination that all Smart Meter capital of $10,131,152 and operating expenditures of $1,106,201 to December 31, 2011 are prudent;
b) The addition of Smart Meter Disposition Rate Riders ("SMDRs") for its Residential and General Service customers effective May 1, 2012 to return the deferred revenue requirement for the installed meters through to December 31, 2011;
c) The approval of Smart Meter Incremental Revenue Requirement Rate Riders ("SMIRRs") for its Residential and General Service customers effective May 1, 2012 to recover the incremental change in distribution rates that would have occurred if the assets and operating expenses were incorporated into Oakville Hydro's rate base and revenue requirement;
d) Approval for the continuation of Oakville Hydro's approved funding of $1.69 per installed meter as a SMIRR in the event that there is a delay in the approval of Oakville Hydro's request for a SMIRR by April 30, 2012. Oakville Hydro is seeking the approval of this request due to the timing of this Application. Oakville Hydro's year-end audit

was finalized in mid-March and was approved by the Board of Directors on March 29, 2012. In accordance with the Board's letter regarding the updates to the Guideline G-2008-0002 Smart Meter Funding and Cost Recovery and Smart Meter Model, dated December 15, 2011, this Application is being submitted at Oakville Hydro's earliest opportunity following the availability of audited costs.

Oakville Hydro is seeking approval for the total smart meter costs of $12.0 million as set out in the following table.

Table 1

Summary of Smart Meter Cost Claim	
Total Smart Meter Capital Costs	$ 10,331,152
Total Smart Meter OM&A Costs	$ 1,691,349
Total Smart Meter Costs	$ 12,022,501

In 2007 the Board approved a Smart Meter Funding Adder ("SMFA") of $0.27 per metered customer (EB-2007-0563). In its 2009 IRM application, the Board approved Oakville request for an increase in the Smart Meter Rate Adder from the existing $0.27 per metered, to the standard Smart Meter Funding Adder of $1.00 per metered customer (EB-2008-0203). In 2010, as part of Oakville Hydro's cost of service application, the SMFA was revised to $1.69 per metered customer.

In accordance with the Guideline, Oakville Hydro is now seeking approval for separate rate riders for its Residential and General Services < 50 kW customers. The table below summarizes the impact of the current and requested rate adders and riders on customers.

Table 2

Summary of Rate Riders and Rate Adders				
	Residential		**GS < 50 kW**	
Discontinuation of the Smart meter Funding Adder	$	(1.69)	$	(1.69)
Smart Meter Disposition Rate Rider (SMDR)	$	(0.21)	$	(0.57)
Smart Meter Incremental Revenue Rate Rider (SMIRR)	$	2.49	$	7.25
Impact of the Smart Meter Rate Riders	$	0.59	$	4.99

Program Status

Oakville Hydro has completed the installation of smart meters for its Residential and General Service <50 kW customers. Oakville Hydro has installed 58,720 Residential smart meters and 5,014 General Service <50 kW customers.

Procurement

Smart Meter Pilot Project

On October 24, 2006, Oakville Hydro submitted a proposal for approval to implement a pilot project involving TOU electricity prices and eligible TOU meters for certain condominium residents that had recently changed from bulk metering to individual metering (EB-2006-0306). The proposal included an independent evaluation of the project results as well as a commitment to share the results of the proposed pilot project with the Board. The Board approved the pilot on December 1, 2006 on the condition that Oakville Hydro consult Board staff before the independent analysis was carried out in order to ensure consistency with the analytical approach being used by the Board and that Oakville Hydro agree to share the results from the proposed pilot project.

Over the course of the pilot, residents in three condominium buildings in Oakville changed from bulk metering with billing based on the overall building consumption to individual metering and billing under RPP tiered prices and subsequently to individual metering and billing under RPP

Time-of-Use ("TOU") prices. In total across the three buildings, 286 residents participated in the pilot.

In November 2007, Oakville Hydro engaged the services of Navigant Consulting to conduct an independent review of the smart meter pilot project. The report summarized the design, operation and outcomes of the Oakville Smart Metering and TOU pricing pilot study undertaken from January 2006 through the end of October 2007. On April 3, 2008, Oakville Hydro filed the Navigant report with the Board. The costs associated with this study are included in this Application.

Smart Meter Procurement

- **London RFP**

  Oakville Hydro 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"), Oakville Hydro participated in the London Hydro RFP process. In 2009, Oakville Hydro 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.

- **Operational Data Store**

  Oakville Hydro sought the services of an Operational Data Store ("ODS") for the purposes of housing, processing, and validating the large amounts of meter data characteristic of an AMI system. Through a procurement process, Savage Data Systems was selected as the preferred proponent for Oakville Hydro in 2009.

- **Project Management**

  Oakville Hydro 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. This prompted Oakville Hydro to utilize their services and experience to ensure a smooth transition to AMI. Today, Util-Assist continues to assist Oakville Hydro in optimizing its business practices as the AMI environment continually changes.

- **Smart Meter Installation**

  In 2009, Oakville Hydro assessed its internal resources, their expertise and their current workload and concluded that, due to the number of meters to be installed and the timeframe for installation, it required external resources for the installation. In 2009, Oakville Hydro issued an RFP and subsequently entered into a contract with Olameter Inc. to install its Residential meters. The agreement with Olameter included the project management and installation of single phase Residential, non-transformer rated smart meters beginning on October 5, 2009 and ending in August 2010. Olameter deployment averaged approximately 1,200 residential meter installations per week, allowing Oakville Hydro to complete the mass deployment of all residential installations in less than one year. To date, Oakville Hydro has installed 58,720 Residential smart meters.

  In 2010, Oakville Hydro entered into an agreement with Rodan Energy ("Rodan") to install polyphase meters for its General Service < 50 kW customers. Rodan was selected as the

preferred proponent subsequent to an RFP process. The installation of these commercial meters began in June 2010 and was completed in August 2011. To date, Oakville Hydro has installed 5,014 smart meters for its General Service <50 kW customers.

As the mass deployment of meters began, Oakville Hydro and Sensus were constantly working towards optimizing the AMI network communications. The original Sensus propagation study for Oakville Hydro's AMI network included three regional collectors. However, during the network tuning process Oakville Hydro worked with Sensus to establish a meter read success rate of 98%, the minimal permitted success rate according to the agreement between both parties. After extensive effort, it became evident that two additional collectors were required in order to obtain the minimum amount of daily meter reads. Sensus installed the two additional collectors without additional costs to Oakville Hydro as per a clause in their agreement. Through the continual network tuning process required to establish acceptable AMI communications, it became evident to Oakville that maintaining a success rate of 98% will be an enduring challenge as Oakville's population continues to grow, as more meters are installed in Oakville, and as commercial customers are added to Oakville's AMI network.

As Oakville Hydro's network began to stabilize and the appropriate meter readings were successfully being transmitted through the AMI network, efforts began to focus on the validity of the meter data to permit the transition from meter readers to automated meter reading. This first step in this process was the audit of the AMI data for a sample group of customers. Beginning in October 2010, Oakville Hydro began an audit of meter data received through the new AMI Network for various customer groups, totaling nearly 15,000 customers. The audit compared the data received through the AMI network against the manual meter readings that were provided by Olameter staff, who were still actively reading meters in the field. Once Oakville Hydro was satisfied that the meter data was correct after months of auditing and monitoring, the decision to commence the reduction of meter reading was put into effect, beginning in March 2011. This was a major milestone in the deployment of Oakville Hydro's AMI network.

Shortly thereafter, Oakville Hydro began testing with the Independent Electricity System Operator's ("IESO's") MDM/R. The testing and cutover to the MDM/R production environment began in September 2010 and was officially completed in January 2011. This process required extensive systems testing and software upgrades prior to the formal enrolment of meters in the MDM/R. Oakville Hydro successfully rolled out its smart meter implementation plan enabling it to begin TOU billing by its mandated TOU implementation date of July 2011.

- **Security Audit**

In accordance with paragraph 2.11.1 of the AMI functional specification, which requires that the AMI have security features to prevent unauthorized access to the AMI and meter data to ensure authentication to all AMI elements, Oakville Hydro took the necessary steps to protect AMI and metered data.

During the process of network deployment and network stabilization, challenges related to the Security and Privacy of data flowing through the AMI system began to emerge. After a customer complaint initiated a formal investigation into Oakville Hydro's AMI network by the Information and Privacy Commissioner of Ontario ("IPC") dated March 31, 2010, Oakville Hydro conducted internal Privacy Impact Assessments ("PIA") to ensure that all customer information was sufficiently protected. The outcome drove the requirement to change internal business process with respect to privacy and security, improve components of the Billing System, and implement encryption of meter data flowing from meter to the collectors. Oakville Hydro implemented all changes suggested, which closed the IPC inquiry. The rollout of encryption was the first initiative of its kind in North America. The rollout of encryption began with several small pilot groups in February 2011. Once a comfort level was established the encrypted meter data was communicating effectively with the collectors, incremental pilot groups were also encrypted until Oakville's entire residential smart meter population was encrypted by June 2011.

Oakville Hydro partnered with a consortium of LDCs to complete an end-to-end security audit of its Sensus AMI system in July 2010. The consortium completed an RFP in October

of 2010, whereby the group selected its preferred auditor. The audit is intended to span two full years and evaluate the security of the Sensus AMI system from meter to Advanced Meter Collector Computer (AMCC). Oakville Hydro is working with the auditor, Sensus, and the consortium to address any security concerns raised through the audit process.

Capital and OM&A Costs

The Guideline states that the Board expects that 90% or more of the total program costs for which a distributor is seeking recovery will be audited. As of December 31, 2010 Oakville Hydro incurred 77% of the total program costs. Oakville Hydro's Board of Directors have approved the Financial Statements for the year ended December 31, 2011 and it is expected that the audited financial statements will be released in April 2012 at which time 93% of the program costs will have been audited. Oakville Hydro requests that the Board accept this Application on the basis that Oakville Hydro's audited costs will have exceeded 90% of the total program costs prior to the approval of its Application. Should there be any change to Oakville Hydro's audited program costs as a result of subsequent events prior to the approval of this Application; Oakville Hydro will file the revised costs with the Board.

Capital Costs

Oakville Hydro will incur total costs of $10,331,152 or $162.10 per meter. Oakville Hydro's audited capital costs as at December 31, 2011 were $10,131,152. Oakville Hydro estimates that it will incur additional, incremental capital costs of $200,000 in 2012. As shown in the table below, the per meter cost is considered to be favourable to the sector average as reported in the *Sector Market Meter Audit Review Report* issued by the Regulatory Audit and Accounting group of the Board on March 31, 2010.

Table 3

Capital Cost Per Meter		
	Oakville Hydro	Audit Review
Capital Expenditures	$10,331,152	$570,339,200
Meters Installed	63,734	3,053,931
Cost Per Meter	$162.10	$186.76

The following table provides a breakdown of Oakville Hydro's forecast and actual capital spending by year. The majority of Oakville Hydro's capital expenditures relate to minimum functionality.

Table 4

Capital Costs							
	2009	2010	2011	Total Audited Expenditures	2012 and Later	Forecasted Expenditures	% of Total
Smart Meters	$ 924,190	$ 5,781,693	$ 1,058,039	$ 7,763,922	$ -	$ 7,763,922	75.2%
Smart Meter Installation	4,761	884,191	289,044	1,177,995	-	1,177,995	11.4%
Workforce Automation	4,109	63,444	1,824	69,378	-	69,378	0.7%
Regional Collectors	416,390	99,796	36,049	552,235	-	552,235	5.3%
Advanced Metering Control Systems	132,983	-	-	132,983	-	132,983	1.3%
AMI Interface to CIS	-	38,137	-	38,137	-	38,137	0.4%
Program Management	43,111	68,659	50,061	161,831	-	161,831	1.6%
Other AMI Capital	-	86,488	120,277	206,766	-	206,766	2.0%
Total Capital Costs Related to Minimum Functionality	1,525,544	7,022,409	1,555,293	10,103,247	-	10,103,247	97.8%
Capital Costs Beyond Minimum Functionality	-	-	27,905	27,905	200,000	227,905	2.2%
Total Capital Costs	$ 1,525,544	$ 7,022,409	$ 1,583,198	$ 10,131,152	$ 200,000	$ 10,331,152	100.0%

Capital Costs Related to Minimum Functionality

Oakville Hydro has incurred actual incremental capital costs of $10,131,152 in relation to the minimum functionality of its AMI as at December 31, 2011.

- **AMI Capital**

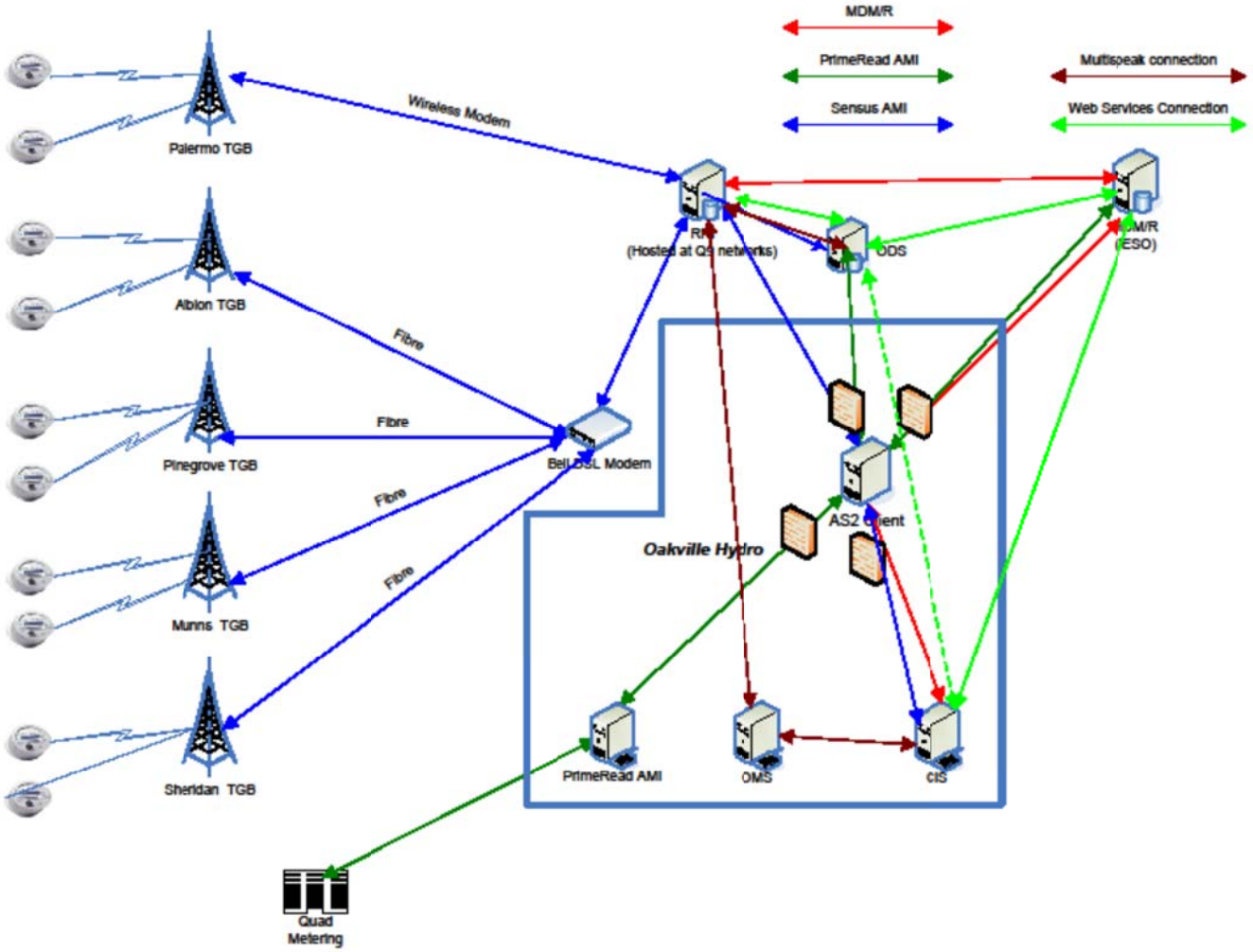
  Of Oakville Hydro's total incremental capital costs of $10,103,247 related to minimum functionality, $9,896,481 relate to the purchase and installation costs for Residential and General Service smart meters, the regional collectors and the AMCC. The remaining $206,766 relates to Other AMI Capital and is detailed in the following section.

- **Other AMI Capital**

  Oakville Hydro incurred incremental capital costs of $206,766 for Advanced Metering Control Computer functionality as depicted in the Smart Metering System Diagram in the Board's Guideline. This system is referred to as an Operational Data Store ("ODS") in the diagram on the following page and classified as Other AMI Capital in the preceding table.

  The implementation of Smart Metering has resulted in an extremely high volume of interval data. In order to manage this data effectively, Oakville Hydro contracted with a third party, Kinetiq / Savage Data Systems to manage its ODS. The ODS stores, validates and processes large volumes of data, for billing, settlements and other reporting and reconciliation obligations. Oakville Hydro considers this functionality to be critical to the success of the smart meter implementation plan.

  In addition, the MDM/R performs validation, estimation and editing rules and bill determinant calculations for TOU pricing. Currently, the operational scope of the MDM/R is limited to residential and general service < 50 kW customers metered on a single channel. Oakville Hydro has a number of general service < 50 kW with multiple channels of data for which Oakville Hydro requires an ODS.


MDM/R
PrimeRead AMI
Sensus AMI
Multispeak connection
Web Services Connection
Palermo TGB
Albion TGB
Pinegrove TGB
Munns TGB
Sheridan TGB
Wireless Modem
Fibre
Fibre
Fibre
Fibre
Bell DSL Modem
(Hosted at QS networks)
ODS
(ESO)
AS2 Client
Oakville Hydro
PrimeRead AMI
OMS
CIS
Quad
Metering

Operations, Maintenance and Administration ("OM&A") Costs

Oakville Hydro has incurred cumulative incremental OM&A costs of $1,106,201 for the deployment of smart meters and the rollout of Time-of-Use ("TOU ") billing as at December 31, 2011. Oakville Hydro estimates that it will incur additional incremental OM&A costs of $585,147 in 2012 and subsequent years. Forecast and actual costs are broken down by year and by OEB category in the following table.

Table 5

OM&A Costs

	2007	2008	2009	2010	2011	2012 and Later	Total
Regional Collectors	$ -	$ -	$ -	$ 91,701	$ 122,393	$ 138,775	$ 352,869
Advanced Metering Control Maintenance	76,232	20,811	50,169	38,153	51,806	127,848	365,018
Wide Area Network	13,601	43,148	33,541	18,654	7,582	-	116,526
Business Process Redesign	-	-	-	763	28,146	143,480	172,389
Customer Communication	-	-	43,884	7,485	-	-	51,369
Program Management	-	24,041	28,365	52,135	4,126	-	108,667
Change Management	-	-	-	2,475	-	-	2,475
Administration Costs	-	-	6,810	-	-	-	6,810
Other AMI Costs	-	-	3,393	18,870	12,509	116,794	151,565
OM&A Costs Related to Minimum Functionality	89,833	88,000	166,161	230,236	226,561	526,897	1,327,688
OM&A Above Minimum Functionality	-	-	-	147,811	157,599	58,250	363,660
Total OM&A Costs	$ 89,833	$ 88,000	$ 166,161	$ 378,048	$ 384,159	$ 585,147	$ 1,691,349
Cumulatvie OM&A Costs	$ 89,833	$ 177,833	$ 343,994	$ 722,042	$ 1,106,201	$ 1,691,349	

OM&A Costs Related to Minimum Functionality

Of the total incremental OM&S costs incurred, $800,791 is related to the minimum functionality of its AMI as at December 31, 2011 and $305,410 is related to functionality that is considered to be beyond minimum functionality but critical to the success of the smart meter rollout. The costs are broken down by category in the following table.

Table 6

Actual OM&A Costs	
As at December 31, 2011	
Regional Collectors	$ 214,094
Advanced Metering Control Maintenance	237,171
Wide Area Network	116,526
Business Process Redesign	28,909
Customer Communication	51,369
Program Management	108,667
Change Management	2,475
Administration Costs	6,810
Other AMI Costs	34,771
OM&A Costs Related to Minimum Functionality	800,791
OM&A Above Minimum Functionality	305,410
Total OM&A Costs	$ 1,106,201

- **Introduction - Smart Meter Deployment**

In order to successfully roll out the smart meter deployment and TOU billing, Oakville Hydro engaged the required incremental resources. In 2007, Oakville Hydro created a new position of Information Technology Analyst in order to research data communications requirements for smart meter reading and allocated 50 per cent of the incremental costs to the Smart Meter implementation. A resource from the meter department was also dedicated to the project in 2007 and was backfilled by the hiring of an apprentice Meter Reading Technician.

In 2009, Oakville Hydro created a new position for an AMI Analyst and placed the internal staff member that was partially devoted to the position of Information Technology Analyst to work fulltime on the Smart Meter implementation project. The Information Technology Analyst position was filled by a contractor to ensure that Oakville Hydro's Information Technology Department continued to function normally without interruption. In addition,

Oakville Hydro re-assigned an incremental employee to the Position of Project Manager to manage the Smart Meter implementation project. This employee had been hired in 2009 to assist with its 2010 Cost of Service Application. The 2009 costs for this employee were included in Oakville Hydro's one-time costs in its 2010 application and amortized over four years. In 2009, this employee was transferred and dedicated to the smart meter project. The incremental costs for this employee above the amortized costs included in the 2010 cost of service application have been included in this Application.

One of the challenges that Oakville Hydro encountered in its smart meter rollout project was the requirement to beta-test software. Additional testing was required to provide full encryption of smart meter data from customer homes to the regional collectors. This was required as a result of a concern regarding Smart Meter security that was filed with the IPC by one of Oakville Hydro's customers. In response, Oakville Hydro worked closely with the Commissioner's office and conducted a privacy impact assessment to ensure that it had implemented best practices for securing smart meter data. This included the implementation of encryption of smart meter data from customer homes to the regional collectors as recommended by the Commissioner’s office. The implementation of full encryption of smart meter data complicated the roll out of smart meters by necessitating additional software upgrades in the Advanced Metering Control Computer ("AMCC") and within the meters. Being the first distributor to implement full encryption, additional software testing was required. Oakville Hydro did not incur additional costs from its vendor for implementation of encryption however, this placed an increased burden on Oakville Hydro's staff to conduct the software testing.

- **Regional Collectors and Wide Area Network**

Oakville Hydro has incurred incremental OM&A costs of $214,094 for third party support for its collectors and incremental costs $116,526 for new data and phone lines required to monitor and capture reads for the smart meters. These costs will be ongoing.

- **Advanced Metering Control Maintenance**

  Oakville Hydro incurred incremental OM&A costs of $237,171 for the setup and testing of its AMCC. The majority of the OM&A costs recorded in this category relate to incremental employee costs.

- **Business Process Redesign**

  Oakville Hydro incurred incremental costs of $28,909 in relation to business process redesign. In 2011, Oakville Hydro contracted a third party to assist with a review of its meter-to-cash process, concentrating mainly on its Metering Solutions Department post smart meter implementation. Some of the findings of the review recommended that Oakville Hydro initiate a process improvement project to improve its processes, ensure data integrity and recover lost efficiencies as a result of the smart meter implementation. Oakville Hydro is undertaking to complete this project in 2012.

- **Smart Meter Communications**

  Oakville Hydro incurred incremental OM&A costs of $51,369 in relation to its Smart Meter Communications Strategy. This amount does not include the incremental costs associated with TOU communications; this has been included in the OM&A costs above minimum functionality and is discussed on page 20, Expenditures Beyond Minimum Functionality.

  Before Smart Meter installations began, Residential and General Service < 50 kW customers received a door hanger, *Your Smart Meter is Coming Soon* - Appendix B, Figure 1 to inform them that they were going to receive their new Smart Meter in the near future. To further notify customers, an advertisement containing the same information as the postcard, ran in Oakville's local newspapers. In addition to advertisements and door hangers, Olameter hand delivered the *Get Smart About Smart Meters Answer Book* to Residential customers containing detailed information about Smart Meters provided by the province when they installed the smart meter.

  Prior to and throughout the Smart Meter implementation, Oakville Hydro participated in a variety of community events. The events provided an effective opportunity to educate and

inform the community about Smart Meters and TOU, answer questions and provide take-home materials. The Province's *Get Smart About Smart Meters Answer Book* was distributed at a variety of community events.

Postcards entitled Y*our New Smart Meter Arrives Today* – Appendix B, Figure 2 were delivered to Residential customers when Smart Meter installations began. Door hangers entitled *Sorry we missed you! We were here to install your Smart Meter* – Appendix B, Figure 3 was left on doors of homes that were unable to have their Smart Meter installed. It provided contact information and instructions for customers to follow to book a Smart Meter installation appointment. Similarly, General Service < 50 kW customers received an information package containing a postcard entitled *Your Smart Meter Arrived Today*.

In addition to customer education, keeping Oakville Hydro employees informed and educated was important to the success of the smart meter rollout. Prior to the rollout of Smart Meters, Oakville Hydro engaged Util-Assist, a Canadian consulting firm, to train Oakville Hydro employees. Attendees were educated on a variety of topics, including why Smart Meters were being implemented, the benefits of TOU and the impact that TOU rates will have on customers.

- **Program Management, Change Management and Administration Costs**

  Oakville Hydro incurred operating costs of $117,952 related to program management, change management and administration costs. Of these costs $33,437 relate to the London RFP process and a Time-of-Use Pricing Pilot Project Evaluation prepared by an independent third party and on Oakville Hydro's TOU pilot project (EB-2006-0306).

Other AMI Costs

Oakville Hydro incurred incremental OM&A costs of $34,771 associated with the setup and testing of its ODS detailed in Other AMI capital.

Forecasted OM&A Costs

Oakville Hydro estimates that it will incur incremental normalized OM&A costs of $585,147 in 2012. Of these costs, it is estimated that $383,417 will be associated with the incremental costs for third party support for the monthly monitoring of its collectors, AMCC, and ODS and for incremental employee costs. Oakville Hydro has allocated a portion of the costs of a contract position of Project Consultant in its Information Technology department to assist both internal staff and third party service providers in administering the AMI system. In addition, a contract position will be created to provide additional support for the existing Information Technology Analyst so that this person can assist with the smart meter project.

It is estimated that Oakville Hydro will incur incremental costs of $143,480 for the implementation of Oakville Hydro's Business Process Redesign project in 2012. It was Oakville Hydro's position that a process review would be completed once the implementation of the Smart Meters was completed, and it had sufficient opportunity to develop an understanding of the requirements as a direct result of this implementation. In 2011, Oakville Hydro's initial step to the business process redesign was to have a third party assist in a review of its business processes with respect to post smart meter implementation. The smart meter initiative presents an opportunity for processes to be improved by reducing manual effort and inefficiencies which were implemented to fill the gaps created by the initial implementation process. Currently additional time, effort and resources are required to address problems and issues which arose from the requirement to make the new systems (i.e. AMI, MDM/R), fit into the existing framework. The many manual work-arounds required to support the AMI that have created lost efficiencies rather than eliminating them.

In 2012, Oakville Hydro is addressing the above noted business processes improvements. This is a vital project that will require a significant amount of time and resources to ensure the proper redesign is achieved.

This Business Process Redesign will consist of third party support for consulting and project management. Oakville Hydro has reassigned an internal staff member, with extensive industry

knowledge, on a full time basis to the project. This staff member's accountabilities will be covered by reassigning duties to two individuals on an acting management basis for which only the incremental costs are included. The smart meter project manager will continue to be involved in the project. Another existing staff member, experienced in process mapping, will devote a portion of their time to assist with the project. The incremental costs of hiring a contract position to perform the duties of this staff member have been included in this Application. Only incremental costs have been included in this Application.

It is estimated that Oakville Hydro will incur additional incremental expenditures of $58,250 for third party support for MDM/R integration, Customer Information System ("CIS") exceptions, security audits and project management support and for the incremental staffing costs for continued TOU communications.

Expenditures beyond Minimum Functionality

Oakville Hydro has not included any costs for technical capabilities beyond the minimum functionality as defined in O.Reg 425/06, *Criteria and Requirements for Meters and Metering Equipment, Systems and Technology*, or for the installation of smart meters to customers other than Residential and General Service < 50 kW customers. Oakville Hydro has not included the actual or projected costs for the use of the MDM/R in this Application.

Oakville Hydro has incurred incremental costs associated with TOU rate implementation, CIS upgrades, web presentation and integration with the MDM/R. As shown in Tables 4 and 5, Oakville Hydro incurred capital costs of $27,905 and OM&A costs of $305,410 for expenditures beyond minimum functionality. These expenditures, and their justifications, are described in detail below. While these costs are defined as being beyond minimum functionality, Oakville Hydro strongly believes that these functions are critical for a successful roll out of smart meters and TOU billing and requests approval for the recovery of these costs.

Capital

- **CIS Upgrades, TOU Billing & Integration with the MDM/R**

  Oakville Hydro incurred incremental capital costs of $27,905 for upgrades to its CIS and for web presentment. In 2010, Oakville Hydro had budgeted for capital expenditures associated with MDM/R Integration. However, in accordance with Board directives, Oakville Hydro excluded these costs from its 2010 Cost of Service application and is seeking recovery for these costs in this Application.

  Oakville Hydro estimates that it will incur incremental capital costs of $200,000 in the year 2012 to complete the required upgrades to Oakville Hydro's CIS. Oakville Hydro has included these costs in the calculation of its SMIRR.

OM&A

- **CIS Upgrades and MDM/R Integration**

  The total OM&A of $305,410 includes incremental OM&A costs of $77,486 related to TOU billing, integration with the MDM/R and upgrades to its CIS. These costs were related primarily to incremental costs of Oakville Hydro's AMI Analyst and Project Manager directly related to the testing of CIS upgrades and the integration of the CIS with the MDM/R.

- **Time-of-Use Communications**

  Oakville Hydro incurred incremental costs of $227,924 related to the development and delivery of its TOU Communications strategy. In 2010, Oakville Hydro engaged a third party consultant to develop and deliver its TOU communication strategy. Oakville Hydro developed a comprehensive communications strategy aimed at both customer and employee education.

  In October 2010, Oakville Hydro's third party consultant conducted a TOU Billing Survey. This survey included both Oakville Hydro's employees and Oakville Hydro's customers.

Participants were asked a variety of questions related to TOU pricing in order to obtain the following:

- customer and employee understanding of TOU billing and its impact on Residential energy use;
- customer knowledge gaps for TOU rates, factors influencing customers' energy use and preferred sources of non-billing information;
- benchmark customer and employee data about TOU billing;
- elements to be included in TOU and Smart Meter communication plans; and
- results that could be used to assess the success of the campaign.

Results of the survey helped shape the TOU communications strategy by identifying areas that Oakville Hydro should focus on, including: ensuring clear messaging when explaining TOU and TOU billing, clearly articulating the TOU billing start date and rollout plan, offering customers conservation and energy saving tips, keeping the Oakville Hydro website updated with TOU information and distributing direct mail pieces with TOU information to customers. Oakville Hydro believes that this preliminary step of assessing the communication needs of its customers and employees enabled it to gain the greatest value from its investment in TOU communications. Some of Oakville Hydro's key initiatives are described in the following paragraphs.

In February 2011, Oakville Hydro developed and hand delivered postcards to customers featuring it's *How Smart Are You*? tagline. The postcard included a link to Oakville Hydro's website for more information and included TOU hourly clocks for easy reference. A copy of the post card is provided as Appendix B, Figure 4.

As a follow-up to the postcards, bill inserts entitled *Get Smart About TOU Rates*, Appendix B – Figure 5, containing TOU and Smart Meter implementation information were sent to all customers. Beginning in March 2011, letters were also sent to all customers to inform them that TOU rates were beginning, providing them with helpful links and contact information. A copy of the letter is provided as Appendix B – Figure 6.

In May 2011, Oakville Hydro hired a new contract person as a TOU Communications Coordinator to assist the Customer Services Department with the anticipated increase in calls and questions from customers and to assist with the rollout of Oakville Hydro's communication strategy.

Once per month from of May to August 2011, Oakville Hydro ran an advertisement in local newspapers that focused on Oakville Hydro's commitment to ensuring that customers fully understand TOU and are given the tools they need to conserve energy. A copy of the advertisement entitled, *Message from Oakville Hydro,* is included as Appendix B – Figure 7.

In November and December of 2011, Oakville Hydro delivered a bill insert to its Residential and General Service < 50 kW customers with additional information on TOU pricing and instructions for viewing TOU information on Oakville Hydro's web presentment tool.

Upon completion of its communications plan, Oakville Hydro polled its customers and found that the majority of callers understood TOU pricing. Oakville Hydro's training enabled its employees to respond to customer requests for information in a knowledgeable and meaningful way.

Reduced Operating Costs

The Guideline requires that distributors provide evidence on operational efficiencies and cost savings that result from smart meter implementation. In its 2010 cost of service process, Oakville Hydro anticipated and budgeted operational savings related to the reduction of traditional, home to home, meter reading expenses with the activation of remote meter reading through the AMI network. However, the tuning process took longer than anticipated and Oakville Hydro continued to incur a portion of those costs to read the smart meters manually.

Stranded Meters

In accordance with the Guidelines, Oakville Hydro is not requesting approval for recovery of its stranded meters as part of this Application. Oakville Hydro will leave the stranded meters in its rate base until its next Cost of Service Application.

Variance Analysis

The Guideline requires that distributors include a variance analysis comparing actual costs to previously approved costs if applicable. While Oakville Hydro has applied to the Board for approval of a SMFA, it has not applied to the Board for approval of its smart meter costs prior to this Application and therefore has not included a variance analysis comparing actual costs to previously approved costs in this Application.

Additional Evidence

Smart Meter Disposition Rider Calculation

In keeping with the Guideline, Oakville Hydro has directly allocated class specific costs where reliable data is available. For costs that cannot be directly allocated by rate class, Oakville Hydro has allocated the costs on the basis of the number of installed smart meters. Also in keeping with the Guideline, Smart Meter Funding Adder revenues for General Service > 50 kW rate classes have been allocated equally to the revenues collected from the Residential and General Service < 50 kW classes.

Oakville Hydro proposes that the deferred incremental revenue requirement for the Residential and General Service < 50 kW rate classes be disposed of as detailed in Table 7 below. Oakville Hydro proposes a two-year disposition to coincide with its planned cost of service application for rates effective May 1, 2014. The number of metered customers is based upon Oakville Hydro's forecast of the average number of metered customers in 2012.

Table 7

Smart Meter Actual Cost Recovery Rate Rider - SMDR Calculated by Rate Class			
Allocators	**Total**	**Residential**	**GS < 50**
Average Smart Meter Unit Cost	$ 140.30	$ 114.82	$ 438.69
Smart Meter Cost	$8,941,917	$6,742,347	$2,199,570
Allocation of Smart Meter Costs	100.00%	75.40%	24.60%
Number of meters installed	63,734	58,720	5,014
Percentage of meters installed	100.00%	92.13%	7.87%
Total Return (deemed interest plus return on equity)	$1,040,018	$ 784,190	$ 255,828
Amortization	$1,139,463	$ 859,173	$ 280,290
OM&A	$1,106,201	$1,019,176	$ 87,026
Carrying Charges	$ 26,816	$ 24,706	$ 2,110
Total Before PILs	$3,312,498	$2,687,245	$ 625,253
PILs	$ 108,827	$ 88,286	$ 20,542
Total Revenue Requirement 2006 to 2011	$3,421,326	$2,775,531	$ 645,795
	100.00%	81.12%	18.88%
Smart Meter Rate Adder Revenues	($3,645,357)	($3,312,395)	($332,962)
Carrying Charge	($131,304)	($118,026)	($13,278)
Smart Meter True-up	($355,335)	($288,263)	($67,071)
Metered Customers	62,675	57,777	4,898
Rate Rider to Recover Smart Meter Costs - 2 yrs	$ (0.24)	$ (0.21)	$ (0.57)

Smart Meter Incremental Revenue Requirement Rider Calculation

Oakville Hydro is requesting approval for the recovery of the revenue requirement associated with the Smart Meter capital and OM&A costs as at December 31, 2011 through a SMIRR effective May 1, 2012 and continuing until its next cost of service application. Oakville Hydro proposes that the smart meter incremental revenue requirement for the Residential and General Service < 50 kW rate classes be allocated as detailed in Table 8 below.

Table 8

Smart Meter Actual Cost Recovery Rate Rider - SMIRR Calculated by Rate Class			
Allocators	**Total**	**Residential**	**GS < 50**
Average Smart Meter Costs	$ 140.30	$ 114.82	$ 438.69
Smart Meter Cost	$8,941,917	$6,742,347	$2,199,570
Allocaiton of Smart Meter Costs	100.00%	75.40%	24.60%
Number of meters installed	63,734	58,720	5,014
Percentage of meters installed	100.00%	92.13%	7.87%
Total Return (deemed interest plus return on equity)	$ 641,439	$ 483,655	$ 157,784
Amortization	$ 809,304	$ 610,228	$ 199,076
OM&A	$ 585,147	$ 539,113	$ 46,034
Total Before PILs	$2,035,889	$1,632,996	$ 402,894
PILs	$ 118,786	$ 95,279	$ 23,507
Total Revenue Requirement 2012	$2,154,675	$1,728,274	$ 426,401
Metered Customers	62,675	57,777	4,898
Rate Rider to Recover Smart Meter Costs	$ 2.86	$ 2.49	$ 7.25

Bill Impacts

As shown in the table below, the discontinuation of the current SMFA and the approval of the proposed SMDR and SMIRR will result in a total bill increase of $0.57 or 0.032% for residential customers and $4.51 or 1.69% for GS < 50 kW customers.

Table 9

Total Bill Impacts				
	Residential (800 kWh per month)		GS <50 kW (2000 kWh per month)	
	Rate ($)	Charge ($)	Rate ($)	Charge ($)
Energy First Tier (kWh)	0.07	44.21	0.07	44.21
Energy Second Tier (kWh)	0.08	17.23	0.08	103.35
Sub-Total: Energy		61.43		147.56
Service Charge	13.10	13.10	32.20	32.20
Service Charge Rate Rider(s)	1.69	1.69	1.69	1.68
Distribution Volumetric Rate	0.0143	11.44	0.0141	28.20
Low Voltage Volumetric Rate	0.0002	0.16	0.0002	0.40
Distribution Volumetric Rate Rider(s)	(0.0037)	(2.96)	(0.0039)	(7.80)
Total: Distribution		23.43		54.68
Network Service Rate	0.0065	5.20	0.0060	12.45
Line and Transformation Connection Service Rate	0.0046	3.68	0.0042	8.72
Total: Retail Transmission		84.86		202.24
Sub-Total: Delivery		108.29		256.92
Wholesale Market Service Rate	0.0052	4.16	0.0052	10.79
Rural Rate Protection Charge	0.0013	1.04	0.0013	2.70
Standard Supply Service – Administration Charge	0.25	0.25	0.25	0.25
Sub-Total: Regulatory		5.45		13.74
Debt Retirement Charge (DRC)	0.0007	0.56	0.0070	14.00
Total Bill before Taxes		175.73		261.59
HST	13%	22.85	13%	34.01
Total Bill		198.58		295.59
Ontario Clean Energy Benefit (OCEB)	-10%	(19.86)	-10%	(29.56)
Total Bill (less OCEB)		178.72		266.03
Expiry of Smart Meter Rate Adder		(1.69)		(1.69)
Proposed Smart Meter Dispostion Rate Rider		(0.21)		(0.57)
Proposed Smart Meter Rate Rider		2.49		7.25
Impact of Smart Meter Rate Adder and Rate Riders		0.59		4.99
Ontario Clean Energy Benefit (OCEB)		(0.06)		(0.50)
Total Bill		179.26		270.53
Change		0.54		4.49
Total Bill Impact		0.30%		1.69%

Conclusion

Oakville respectfully submits that the costs incurred to fulfill its obligations under the provincially mandated Smart Meter Initiative were and continue to be necessary and prudently incurred in accordance with Board guidelines. As referenced in Table 3, Oakville Hydro's cost per meter compares favourably to the provincial average and the associated bill impacts are minimal. Oakville Hydro respectfully requests approval for the following:

a) The Board's determination that all Smart Meter capital of $10,331,152 and operating expenditures of $585,147 to December 31, 2011 are prudent;
b) The approval of Smart Meter Disposition Rate Riders ("SMDRs") for its Residential and General Service customers effective May 1, 2012 to return the deferred revenue requirement for the installed meters up to December 31, 2011;
c) The addition of Smart Meter Incremental Revenue Requirement Rate Riders ("SMIRRs") for its Residential and General Service customers effective May 1, 2012 to recover the incremental change in distribution rates that would have occurred if the assets and operating expenses were incorporated into Oakville Hydro's rate base and revenue requirement;
d) Approval for the continuation of Oakville Hydro's approved funding of $1.69 per installed meter as a SMIRR in the event that there is a delay in the approval of Oakville Hydro's request for a SMIRR by April 30, 2012. Oakville Hydro is seeking the approval of this request due to the timing of this Application. Oakville Hydro's year-end audit was finalized in mid-March and was approved by the Board of Directors on March 29, 2012. In accordance with the Board's letter regarding the updates to the Guideline G-2008-0002 Smart Meter Funding and Cost Recovery and Smart Meter Model, dated December 15, 2011, this Application is being submitted at Oakville Hydro's earliest opportunity following the availability of audited costs.

All of which is respectfully submitted this 3rd day of April, 2012.

OAKVILLE HYDRO ELECTRICITY DISTRIBUTION INC.

Original Signed By

_____

Jim Collins

CFO, VP, Corporate and Regulatory Affairs

Appendix A - Letter from the Fairness Commissioner

PRP International, Inc.

Fairness Advisory Services

June 30, 2009

Mr. Alex Bystrin
President & CEO
Oakville Hydro Electricity Distribution Inc.
861 Redwood Square,
Oakville, ON L6L 5E3

Dear Mr. Bystrin:

Subject: Confirmation of the Fairness Commissioner
Oakville Hydro Electricity Distribution Inc.
– KTI/Sensus Limited Contract Award
Advanced Metering Infrastructure RFP, August 2007
London Hydro & Consortium of LDCs Smartmetering Project

PRP International, Inc. is pleased to submit its Confirming Letter of the Fairness Commissioner for the noted negotiations and contracting phase of the LH AMI Request for Proposal (RFP) procurement. This judgment is being provided for the information and use of Oakville Hydro Electricity Distribution Inc. ("OHEDI"), in its administration of the contract awarded to its #1 ranked Proponent, KTI/Sensus Limited.

"It is the judgment of PRP International, Inc., as the Fairness Commissioner engaged by OHEDI *for the phase of negotiations and contract award pursuant to the Fairness Protocols issued August 2008, that the successful conclusion of negotiations and contract between* Oakville Hydro Electricity Distribution Inc. *and* KTI/Sensus Limited, *were undertaken in accordance with the principle for such negotiations and contract award set out in the RFP, issued August 14, 2007."*

A backgrounder and summary of the Fairness Protocols is attached and forms part of this Confirming Letter.

Yours truly,

Peter Sorensen

Peter Sorensen
President

Attachment: Negotiations and Contract Phase Backgrounder

203 - 8 Queen Street, Summerside, PEI C1N 0A6
Direct telephone: 902.436.3930 Fax: 604-677-5409
Email: fairness@telus.net

BACKGROUNDER TO FAIRNESS CONFIRMATION / ATTESTATION
Advanced Metering Infrastructure Procurement

TO WHOM IT MAY CONCERN:

Background:

- A Request for Proposal procurement transaction was conducted by London Hydro Inc., as the lead sponsoring Local Distribution Company (LDC) and with a consortia of another 63 LDCs, during the period August 2007 to July, 2008;
- The evaluation and selection phase of the RFP provided for the determination of the #1 and #2 ranked Proponents for each LDC;
- RFP Provision 7.5.14[1] provides the framework (principle) for negotiations and contracting based on the principle of "first right to negotiation and execution of a contract" being accorded to the ranked order of Proponents commencing with the highest ranked Proponent and proceeding in a consecutive order thereafter; and
- Each LDC was provided the evaluation results for their #1 and #2 ranked Proponents supported by the Attestation Letter of the Fairness Commissioner as to those rankings.

Fairness Coverage Objective:

Normally, fairness coverage terminates with the determination of the ranked Proponents following the evaluation and selection phase of the RFP; however, certain LDCs expressed a wish to secure additional fairness coverage during the subsequent phase of negotiations and contract award. The objective for this second phase fairness coverage is to assure that LDCs undertook a phase of negotiations and contracting that meets the RFP provisions of consecutive negotiations where required, e.g. with their top two ranked Proponents and in the event of unsuccessful negotiations with the #1 ranked Proponent, a subsequent contract award to the next ranked Proponent would be on an equitable basis as was the requirements in the negotiations with the #1 ranked Proponent.

---

[1] 7.5.14 **Final Contract Negotiations**

Any conditions and provisions that a bidder seeks shall be a part of this proposal. Notwithstanding, nothing herein shall be interpreted to prohibit London Hydro from introducing or modifying contract terms and conditions during negotiation of the final contract.

London Hydro has scheduled no more than two weeks for contract negotiations (if necessary), and expects the successful bidder to maintain a prompt and responsive negotiation to accomplish and complete final contract agreement within that time period. If contract negotiations exceed an interval acceptable to London Hydro, London Hydro retains the option to terminate negotiations and continue to the next apparent successful bidder, at the sole discretion of London Hydro. Said interval shall in no event be less than three weeks.

BACKGROUNDER TO FAIRNESS CONFIRMATION / ATTESTATION
Advanced Metering Infrastructure Procurement

Fairness Protocols:

- A Fairness Protocol was developed and issued to all LDCs, in August 2008 that set forth the best practices for fair consecutive-based negotiations and contract award.
    - The fundamental principle of the Protocol was the requirement for the LDC to establish the negotiations agenda for their top ranked Proponents and submit a copy to the Fairness Commissioner prior to engagement of their #1 ranked Proponent, i.e. the agenda would demonstrate a common statement of work, a LDC standard for pass/fail in their negotiations and the negotiation issues would only differ to the extent of the respective Proponent's technical solution being offered.

Form of Fairness Confirmation / Attestation[2]:

1. A confirmation of fair negotiations and contract award would be issued if the LDC's #1 ranked Proponent was awarded a contract; the original Attestation Letter remains in effect.

2. An Attestation of fair negotiations and contract award would be issued if the LDC determined that their #1 Proponent was to be set aside and the LDC successfully contracted with their next ranked Proponent, e.g. their #2; the original Attestation Letter is thus superseded by the Negotiations and Contract Award Attestation Letter.

Local Distribution Company:

Oakville Hydro Electricity Distribution Inc

Mr. Alex Bystrin
President & CEO
Oakville Hydro Electricity Distribution Inc.
861 Redwood Square,
Oakville, ON L6L 5E3

---

[2] **Conditions on the rendering of this Confirmation / Attestation.**

- The two Negotiations Agenda were provided by OHEDI, via its agent Util-Assist;
- Fairness Commissioner undertook no direct participation or oversight in the negotiations between OHEDI and their #1 ranked Proponent;
- The successful contract award was based on the OHEDI criteria and no independent analysis nor any comparison with the evaluation results of the RFP process was carried out by the Fairness Commissioner; and
- The confirmation of the Fairness Commissioner was based on the progress report(s) provided by OHEDI, via its agent Util-Assist.

Appendix B - Smart Meter and Time-of-Use Communications

Figure 1


YOUR SMART METER
IS COMING SOON
Over the next 30 days, we'll be installing your new smart electricity meter.
To learn how SMART METERS work, how electricity pricing will change in the future, and how you can best take advantage of smart metering, please go to our website to review the SMART METER Answer Book or pick one up at our offices.
For now, your new meter will continue to work just like your current one. So, please be aware there will be no immediate change to your electricity rates, or how you are billed.
We'll ensure that you're kept informed.
Your SMART METER is the first step in building Ontario's new smart metering system – and a key step in building a culture of conservation. By 2010 every home and small business in Ontario will have a SMART METER.
SMART METERS enable electricity use to be measured on an hourly basis. In the future, that will allow different electricity rates to apply at different times of the day.
HOW WILL MY SMART METER BE INSTALLED?
You'll receive a visit from one of our service professionals.
If your meter is located outside, you don't need to be at home.
We'll need to turn your power off for a brief period, and apologize for any inconvenience.
If this location is a medical facility or is a critical care residence where medical equipment is essential, please contact our office at 905.825.9400 in advance to make arrangements.
Please be aware that Oakville Hydro does not have representatives going door to door selling electricity contracts. Visit our website for important tips before signing any contract.
IF YOU'D LIKE MORE INFORMATION, PLEASE CONTACT:
Oakville Hydro Electricity Distribution Inc
Tel: 905.825.9400 or visit
www.oakvillehydro.com
www.smartmetersontario.ca
OAKVILLE HYDRO
HELPING YOU SAVE ENERGY
Ontario

Figure 2


YOUR NEW SMART METER ARRIVED TODAY.
That's the first step in building Ontario's new smart metering system – and a key step in building a culture of conservation. By 2010 every home and small business will have a SMART METER.
SMART METERS enable electricity use to be measured on an hourly basis and, in the future, will allow for the introduction of different electricity rates at different times of the day


To learn how SMART METERS work, please review the enclosed copy of the SMART METERS Answer Book or view a copy on-line at www.oakvillehydro.com.
HERE'S WHAT YOU NEED TO KNOW RIGHT NOW:
For now, your new meter will continue to work just like your previous one. That means that there will be no immediate change to your electricity rates, or to how you are billed.
We'll ensure that you're kept informed. You will receive ample notice of changes that affect you, or how your rates work.
WHEN WE EXCHANGED YOUR METER:
We needed to shut off your power briefly. That means you may need to reset your digital clocks and other electronic equipment. We apologize for the inconvenience.
IF YOU'D LIKE MORE INFORMATION ABOUT YOUR METER INSTALLATION, PLEASE CONTACT OR VISIT:
Oakville Hydro Electricity Distribution Inc
Tel: 905.825.9400
www.oakvillehydro.com
www.smartmetersontario.ca
OAKVILLEHYDRO
HELPING YOU SAVE ENERGY
Ontario

Figure 3

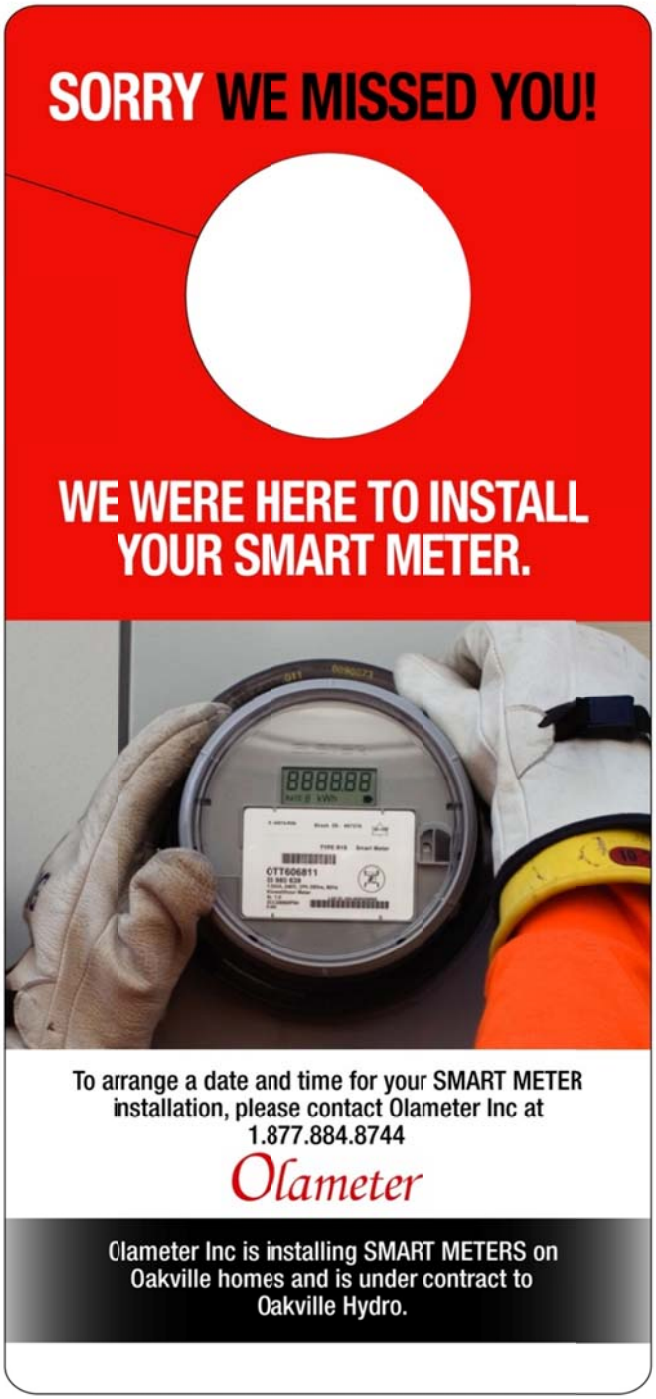
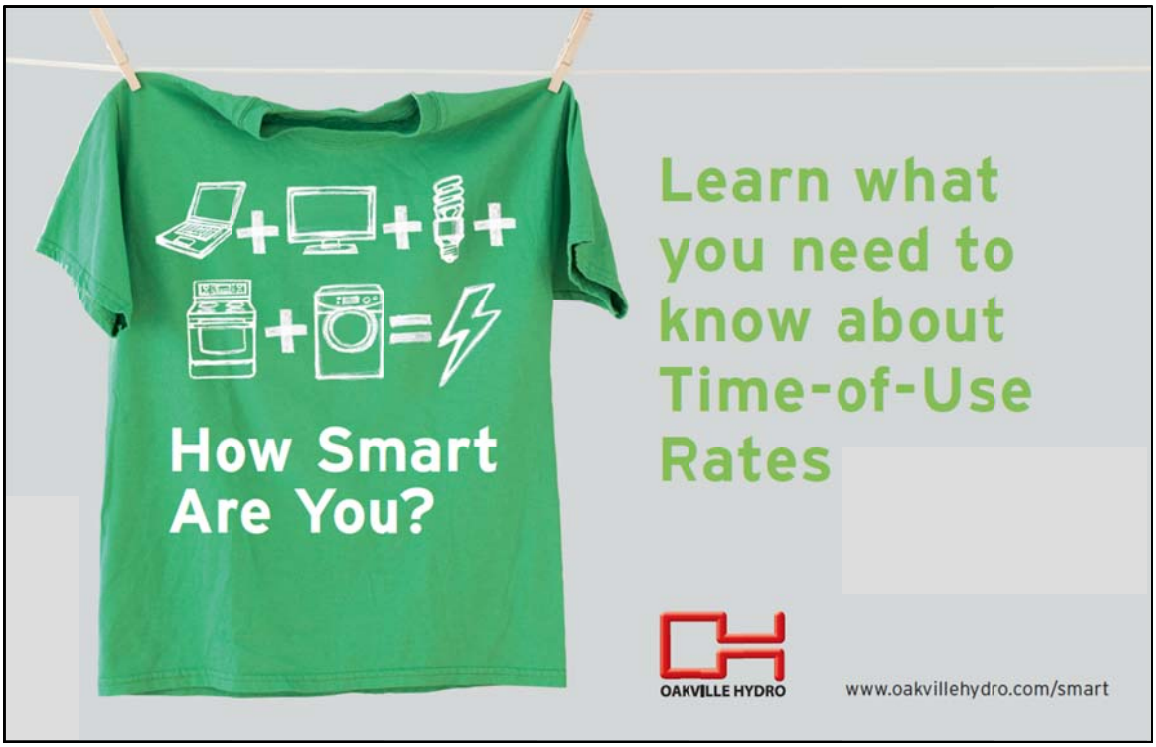

SORRY WE MISSED YOU!
WE WERE HERE TO INSTALL YOUR SMART METER.
To arrange a date and time for your SMART METER installation, please contact Olameter Inc at 1.877.884.8744
Olameter
Olameter Inc is installing SMART METERS on Oakville homes and is under contract to Oakville Hydro.

Figure 4


How Smart Are You?
Learn what you need to know about Time-of-Use Rates
OAKVILLE HYDRO
www.oakvillehydro.com/smart

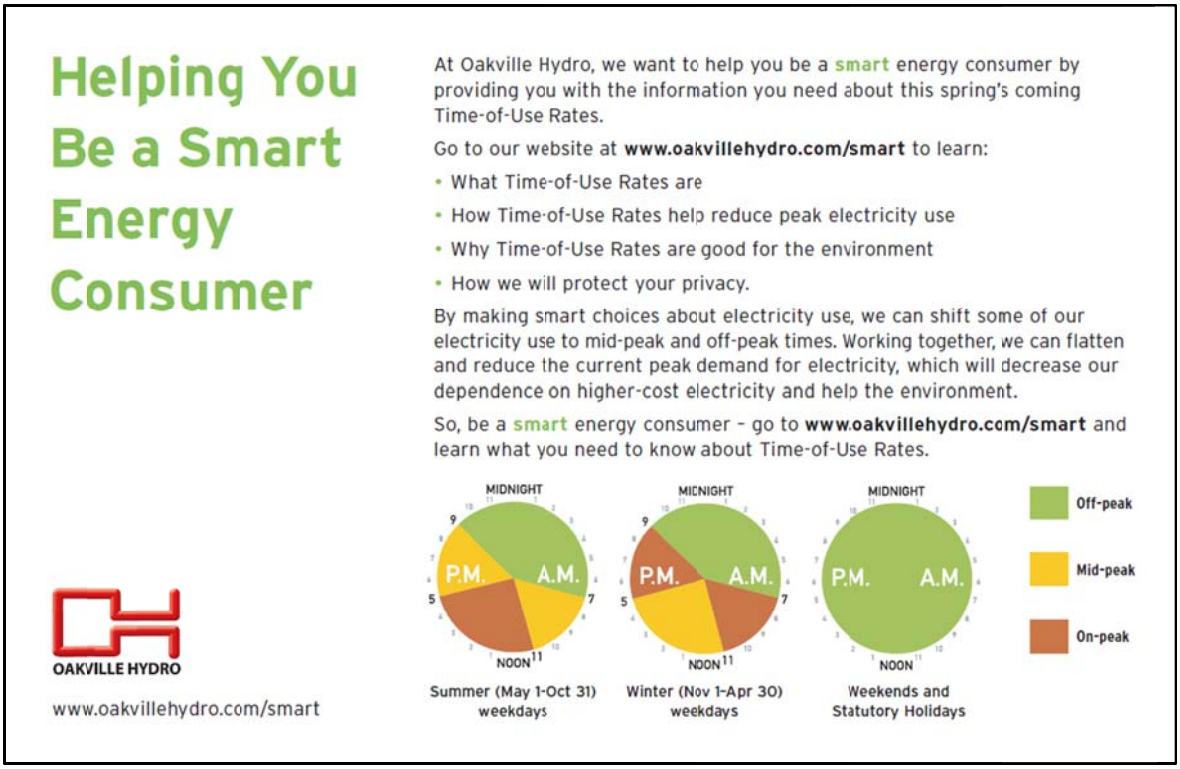

Helping You Be a Smart Energy Consumer
At Oakville Hydro, we want to help you be a smart energy consumer by providing you with the information you need about this spring's coming Time-of-Use Rates.
Go to our website at www.oakvillehydro.com/smart to learn:
• What Time-of-Use Rates are
• How Time-of-Use Rates help reduce peak electricity use
• Why Time-of-Use Rates are good for the environment
• How we will protect your privacy.
By making smart choices about electricity use, we can shift some of our electricity use to mid-peak and off-peak times. Working together, we can flatten and reduce the current peak demand for electricity, which will decrease our dependence on higher-cost electricity and help the environment.
So, be a smart energy consumer - go to www.oakvillehydro.com/smart and learn what you need to know about Time-of-Use Rates.
OAKVILLE HYDRO
www.oakvillehydro.com/smart
MIDNIGHT
P.M.
A.M.
NOON
Summer (May 1-Oct 31) weekdays
Winter (Nov 1-Apr 30) weekdays
Weekends and Statutory Holidays
Off-peak
Mid-peak
On-peak

Figure 5


Get Smart About Time-of-Use Rates
OAKVILLE HYDRO
www.oakvillehydro.com/smart

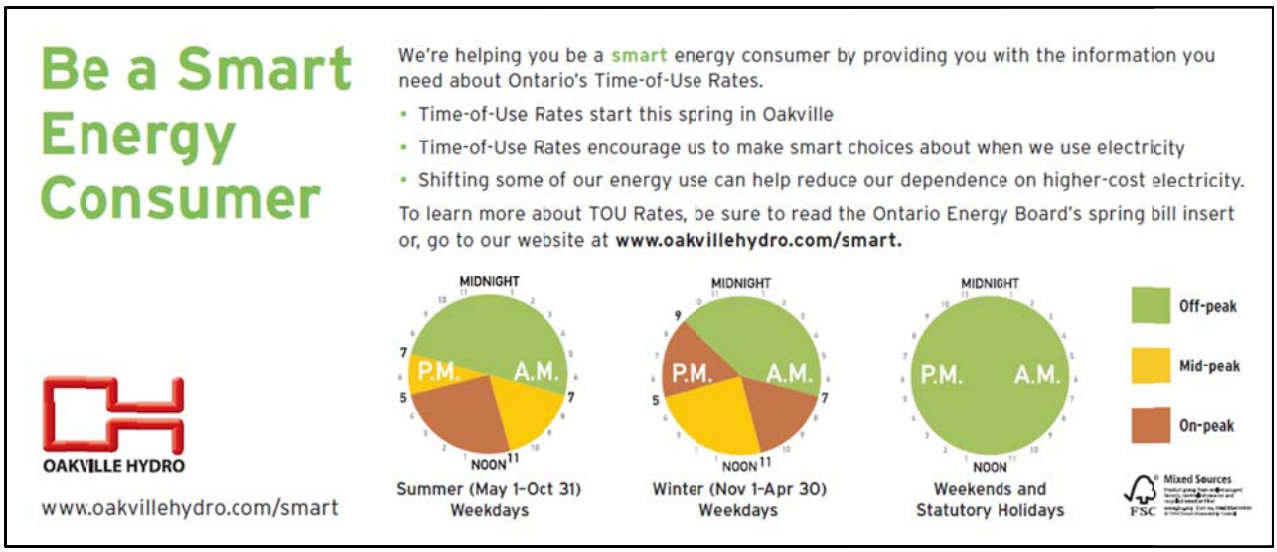

Be a Smart Energy Consumer
We're helping you be a smart energy consumer by providing you with the information you need about Ontario's Time-of-Use Rates.
• Time-of-Use Rates start this spring in Oakville
• Time-of-Use Rates encourage us to make smart choices about when we use electricity
• Shifting some of our energy use can help reduce our dependence on higher-cost electricity.
To learn more about TOU Rates, be sure to read the Ontario Energy Board's spring bill insert or, go to our website at www.oakvillehydro.com/smart.
OAKVILLE HYDRO
www.oakvillehydro.com/smart
MIDNIGHT
P.M.
A.M.
NOON
Summer (May 1-Oct 31) Weekdays
Winter (Nov 1-Apr 30) Weekdays
Weekends and Statutory Holidays
Off-peak
Mid-peak
On-peak
Mixed Sources
FSC

Figure 6

Oakville Hydro Electricity Distribution Inc.

«name»
«mail_addr1» «mail_addr2»
«mail_city» «mail_province»
«mail_postal_zip»

March 7, 2011

Re: Application of Time-of-Use Rates to Hourly Electricity Use Data to Your Account at «serv_street_no» «serv_street» «serv_un»

Dear Customer:

We will begin applying Time-of-Use Rates to your Smart Meter electricity use data as of «date_roll». Thus, your next bill after this date will be calculated using Time-of-Use Rates. Using our normal meter reading schedule, it will take 60 days for us to convert all of our customers to TOU Rates.

This change is part of the provincial government's energy conservation and electricity demand management initiatives and is mandated by the Ontario Energy Board (OEB).

To help you learn more, and prepare for Time-of-Use Rates, we recently launched the *"How Smart Are You?"* campaign. For more information, please go to our website at **www.oakvillehydro.com/smart** or Ontario's Independent Electricity System Operator (IESO) at **www.ieso.ca.**

You will find information outlining:

- What Time-of-Use Rates are
- How Time-of-Use Rates help reduce peak energy use
- Why Time-of-Use Rates are good for the environment
- What you can do to shift or reduce your electricity use, and
- How we will protect your privacy.

By making smart choices about electricity use, we can shift some of our electricity consumption away from Peak times to Mid-peak and Off-peak times. Working together, we can flatten and reduce Ontario's current peak demand for electricity. With this change, we can decrease our dependence on higher-cost electricity including coal-fired generating plants, and help the environment.

Our goal is to help you be a **smart** energy consumer.

Yours sincerely,

Rob Lister
President and CEO
Oakville Hydro Electricity Distribution Inc.

Figure 7

Message from Oakville Hydro

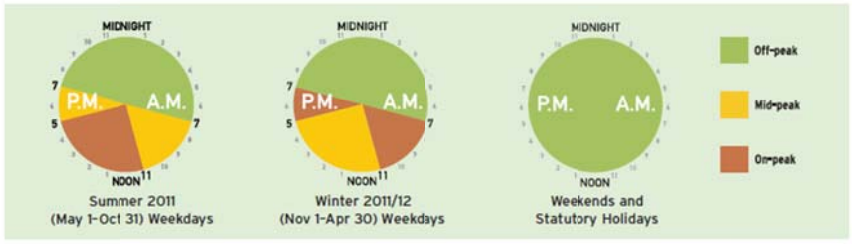
Oakville Hydro has started applying Time-of-Use (TOU) Rates to its customers' electricity use. TOU Rates will be applied using the normal meter reading schedule which will take 60 days to convert all customers to the new rates. Personalized letters have been sent to all customers informing them of the specific date TOU Rates will apply to them.

TOU Rates fall into three categories, On-Peak, Mid-Peak and Off-Peak. The start times of each period are shown below. Summer periods are in effect from May 1 to October 31, 2011; winter rates will begin November 1, 2011.

The installation of Smart Meters and the application of TOU Rates is part of the provincial government's Long-Term Energy Plan to promote energy conservation and manage electricity demand across Ontario. These changes to the way customers are charged for their electricity use are mandated by the Ontario Energy Board.

The government is using TOU Rates to encourage a change in energy use from On-Peak to Off-Peak periods whenever possible. This shift will reduce the strain on the electricity system, help the environment by reducing the need for coal-fired power, and give consumers a new way to manage their electricity use. TOU Rates encourage customers to reduce or shift usage to periods of lower demand (weekends or later in the evening), and away from times when electricity is most expensive. Customers will not be able to shift all electricity usage away from peak demands, but the more electricity a customer shifts, the more they can manage their costs and contribute to lower overall peak prices for everyone.

Oakville Hydro wants to help our customers to be smart energy consumers. We want our customers to understand how TOU Rates work so they can decide if they want to shift their electricity consumption to a less expensive time period. We also want to help them understand other choices that they can make to conserve energy and save money!



Oakville Hydro offers a number of programs and services that can help in making smart energy decisions: whether it's a switch to more energy efficient appliances, making changes in heating and cooling, conducting an energy audit or just providing tips on saving energy around the house every day. All this information - and more - can be found at www.oakvillehydro.com. Customers who don't have access to a computer or who would prefer to speak to one of our Customer Service Representatives can call us at 905-825-9400.

At Oakville Hydro, we are committed to helping our customers become smart energy consumers.

OAKVILLE HYDRO www.oakvillehydro.com/smart

Appendix C - Smart Meter Cost Recovery Model

V 2.17

Ontario Energy Board

Smart Meter Model

Choose Your Utility:

Oakville Hydro Electricity Distribution Inc.
Orangeville Hydro Limited

Application Contact Information

Name:	Maryanne Wilson
Title:	Manager, Regulatory Affairs
Phone Number:	905-825-4422
Email Address:	mwilson@oakvillehydro.com
We are applying for rates effective:	May 1, 2012
Last COS Re-based Year	2010

Legend

DROP-DOWN MENU

INPUT FIELD

CALCULATION FIELD

Copyright

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

Oakville Hydro Electricity Distribution Inc.

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

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

Smart Meter Capital Cost and Operational Expense Data

Smart Meter Installation Plan

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

	2006	2007	2008	2009	2010	2011	2012 and later	Total
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
Residential				11,996	44,916	1,808		58720
General Service < 50 kW					3,907	1,107		5014
Actual/Planned number of Smart Meters installed (Residential and GS < 50 kW only)	0	0	0	11996	48823	2915	0	63734
Percentage of Residential and GS < 50 kW Smart Meter Installations Completed	0.00%	0.00%	0.00%	18.82%	95.43%	100.00%	0.00%	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	0	11996	48823	2915	0	63734

1 Capital Costs

1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)

	Asset Type (Asset type must be selected to enable calculations)	2006	2007	2008	2009	2010	2011	2012 and later	Total
		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				924,190	5,781,693	1,058,039		$ 7,763,922
1.1.2 Installation Costs *(may include socket kits, labour, vehicle, benefits, etc.)*	Smart Meter				4,761	884,191	289,044		$ 1,177,995
1.1.3a Workforce Automation Hardware *(may include fieldwork handhelds, barcode hardware, etc.)*	Computer Hardware				4,109	63,444	1,824		$ 69,378
1.1.3b Workforce Automation Software *(may include fieldwork handhelds, barcode hardware, etc.)*									$ -
Total Advanced Metering Communications Devices (AMCD)		$ -	$ -	$ -	$ 933,061	$ 6,729,328	$ 1,348,907	$ -	$ 9,011,295

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

	Asset Type	2006	2007	2008	2009	2010	2011	2012 and later	Total
		Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
1.2.1 Collectors	Smart Meter				416,390	91,322	36,049		$ 543,761
1.2.2 Repeaters *(may include radio licence, etc.)*									$ -
1.2.3 Installation *(may include meter seals and rings, collector computer hardware, etc.)*	Smart Meter					8,474			$ 8,474
Total Advanced Metering Regional Collector (AMRC) (Includes LAN)		$ -	$ -	$ -	$ 416,390	$ 99,796	$ 36,049	$ -	$ 552,235

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				126,756				$ 126,756
1.3.2 Computer Software	Computer Software				6,227				$ 6,227
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		$ -	$ -	$ -	$ 132,983	$ -	$ -	$ -	$ 132,983

1.4 WIDE AREA NETWORK (WAN)	Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
1.4.1 Activiation Fees									$ -
Total Wide Area Network (WAN)		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

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 *(including repair of damaged equipment)*									$ -
1.5.2 AMI Interface to CIS	Computer Software					38,137			$ 38,137
1.5.3 Professional Fees									$ -
1.5.4 Integration	Smart Meter								$ -
1.5.5 Program Management	Smart Meter				43,111	68,659	50,061		$ 161,831
1.5.6 Other AMI Capital	Computer Software					86,488	120,277		$ 206,766
Total Other AMI Capital Costs Related to Minimum Functionalit		$ -	$ -	$ -	$ 43,111	$ 193,285	$ 170,338	$ -	$ 406,734
Total Capital Costs Related to Minimum Functionalit		$ -	$ -	$ -	$ 1,525,544	$ 7,022,409	$ 1,555,293	$ -	$ 10,103,247

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									$ -
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.	Computer Software						27,905	200,000	$ 227,905
Total Capital Costs Beyond Minimum Functionalit		$ -	$ -	$ -	$ -	$ -	$ 27,905	$ 200,000	$ 227,905
Total Smart Meter Capital Costs		$ -	$ -	$ -	$ 1,525,544	$ 7,022,409	$ 1,583,198	$ 200,000	$ 10,331,152

2 OM&A Expenses

2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)		Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
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						91,701	122,393	138,775	$ 352,869
2.2.2 Other *(please specify)*	Transformers								$ -
Total Incremental AMRC OM&A Costs		$ -	$ -	$ -	$ -	$ 91,701	$ 122,393	$ 138,775	$ 352,869
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.)*			76,232	20,811	50,169	38,153	51,806	127,848	$ 365,018
2.3.2 Other *(please specify)*									$ -
Total Incremental AMCC OM&A Costs		$ -	$ 76,232	$ 20,811	$ 50,169	$ 38,153	$ 51,806	$ 127,848	$ 365,018
2.4 WIDE AREA NETWORK (WAN)									
2.4.1 WAN Maintenance			13,601	43,148	33,541	18,654	7,582		$ 116,526
2.4.2 Other *(please specify)*									$ -
Total Incremental AMRC OM&A Costs		$ -	$ 13,601	$ 43,148	$ 33,541	$ 18,654	$ 7,582	$ -	$ 116,526
2.5 OTHER AMI OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY									
2.5.1 Business Process Redesign						763	28,146	143,480	$ 172,389
2.5.2 Customer Communication (may include project communication, etc.)					43,884	7,485			$ 51,369
2.5.3 Program Management				24,041	28,365	52,135	4,126		$ 108,667
2.5.4 Change Management (may include training, etc.)						2,475			$ 2,475
2.5.5 Administration Costs					6,810				$ 6,810
2.5.6 Other AMI Expenses *(please specify)*					3,393	18,870	12,509	116,794	$ 151,565
Total Other AMI OM&A Costs Related to Minimum Functionality		$ -	$ -	$ 24,041	$ 82,451	$ 81,729	$ 44,780	$ 260,274	$ 493,275
TOTAL OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY		$ -	$ 89,833	$ 88,000	$ 166,161	$ 230,236	$ 226,561	$ 526,897	$ 1,327,688
2.6 OM&A COSTS RELATED TO BEYOND MINIMUM FUNCTIONALITY		Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual		
(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.						147,811	157,599	58,250	$ 363,660
Total OM&A Costs Beyond Minimum Functionality		$ -	$ -	$ -	$ -	$ 147,811	$ 157,599	$ 58,250	$ 363,660
Total Smart Meter OM&A Costs		$ -	$ 89,833	$ 88,000	$ 166,161	$ 378,048	$ 384,159	$ 585,147	$ 1,691,348

3 Aggregate Smart Meter Costs by Category

3.1	**Capital**								
3.1.1	Smart Meter	$ -	$ -	$ -	$ 1,388,452	$ 6,834,339	$ 1,433,192	$ -	$ 9,655,983
3.1.2	Computer Hardware	$ -	$ -	$ -	$ 130,865	$ 63,444	$ 1,824	$ -	$ 196,133
3.1.3	Computer Software	$ -	$ -	$ -	$ 6,227	$ 124,626	$ 148,182	$ 200,000	$ 479,035
3.1.4	Tools & Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3.1.5	Other Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3.1.6	Applications Software	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3.1.7	**Total Capital Costs**	**$ -**	**$ -**	**$ -**	**$ 1,525,544**	**$ 7,022,409**	**$ 1,583,198**	**$ 200,000**	**$ 10,331,152**
3.2	**OM&A Costs**								
3.2.1	**Total OM&A Costs**	**$ -**	**$ 89,833**	**$ 88,000**	**$ 166,161**	**$ 378,048**	**$ 384,159**	**$ 585,147**	**$ 1,691,348**

	2006	2007	2008	2009	2010	2011	2012 and later
Cost of Capital							
Capital Structure[1]							
Deemed Short-term Debt Capitalization			0.0%	0.0%	4.0%	4.0%	4.0%
Deemed Long-term Debt Capitalization	55.0%	55.0%	57.5%	60.0%	56.0%	56.0%	56.0%
Deemed Equity Capitalization	45.0%	45.0%	42.5%	40.0%	40.0%	40.0%	40.0%
Preferred Shares	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of Capital Parameters							
Deemed Short-term Debt Rate			0.00%	0.00%	2.07%	2.07%	2.07%
Long-term Debt Rate (actual/embedded/deemed)[2]	6.00%	6.00%	6.00%	6.00%	5.87%	5.87%	5.87%
Target Return on Equity (ROE)	9.0%	9.00%	9.00%	9.00%	9.85%	9.85%	9.85%
Return on Preferred Shares	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
WACC	7.35%	7.35%	7.28%	7.20%	7.31%	7.31%	7.31%
Working Capital Allowance							
Working Capital Allowance Rate	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
(% of the sum of Cost of Power + controllable expenses)							
Taxes/PILs							
Aggregate Corporate Income Tax Rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
Capital Tax (until July 1st, 2010)	0.30%	0.225%	0.225%	0.225%	0.075%	0.00%	0.00%
Depreciation Rates							
(expressed as expected useful life in years)							
Smart Meters - years	15	15	15	15	15	15	15
- rate (%)	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%
Computer Hardware - years	5	5	5	5	5	5	5
- rate (%)	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Computer Software - years	3	3	3	3	3	3	3
- rate (%)	33.33%	33.33%	33.33%	33.33%	33.33%	33.33%	33.33%
Tools & Equipment - years	10	10	10	10	10	10	10
- rate (%)	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Other Equipment - years	10	10	10	10	10	10	10
- rate (%)	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
CCA Rates							
Smart Meters - CCA Class	47	47	47	47	47	47	47
Smart Meters - CCA Rate	8%	8%	8%	8%	8%	8%	8%
Computer Equipment - CCA Class	45	50	50	52	52	50	50
Computer Equipment - CCA Rate	45%	55%	55%	100%	100%	55%	55%
General Equipment - CCA Class	8	8	8	8	8	8	8
General Equipment - CCA Rate	20%	20%	20%	20%	20%	20%	20%
Applications Software - CCA Class	45	50	50	52	52	50	50
Applications Software - CCA Rate	45%	55%	55%	100%	100%	55%	55%

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 striaght line basis and has the "half-year" rule applied.*

Ontario Energy Board

Smart Meter Model

Oakville Hydro Electricity Distribution Inc.

	2006	2007	2008	2009	2010	2011	2012 and later
Net Fixed Assets - Smart Meters							
Gross Book Value							
Opening Balance		$ -	$ -	$ -	$ 1,388,452	$ 8,222,791	$ 9,655,983
Capital Additions during year (from Smart Meter Costs)	$ -	$ -	$ -	$ 1,388,452	$ 6,834,339	$ 1,433,192	$ -
Retirements/Removals (if applicable)							
Closing Balance	$ -	$ -	$ -	$ 1,388,452	$ 8,222,791	$ 9,655,983	$ 9,655,983
Accumulated Depreciation							
Opening Balance		$ -	$ -	$ -	-$ 46,282	-$ 366,656	-$ 962,616
Amortization expense during year	$ -	$ -	$ -	-$ 46,282	-$ 320,375	-$ 595,959	-$ 643,732
Retirements/Removals (if applicable)							
Closing Balance	$ -	$ -	$ -	-$ 46,282	-$ 366,656	-$ 962,616	-$ 1,606,348
Net Book Value							
Opening Balance	$ -	$ -	$ -	$ -	$ 1,342,170	$ 7,856,134	$ 8,693,367
Closing Balance	$ -	$ -	$ -	$ 1,342,170	$ 7,856,134	$ 8,693,367	$ 8,049,635
Average Net Book Value	$ -	$ -	$ -	$ 671,085	$ 4,599,152	$ 8,274,751	$ 8,371,501
Net Fixed Assets - Computer Hardware							
Gross Book Value							
Opening Balance		$ -	$ -	$ -	$ 130,865	$ 194,310	$ 196,133
Capital Additions during year (from Smart Meter Costs)	$ -	$ -	$ -	$ 130,865	$ 63,444	$ 1,824	$ -
Retirements/Removals (if applicable)							
Closing Balance	$ -	$ -	$ -	$ 130,865	$ 194,310	$ 196,133	$ 196,133
Accumulated Depreciation							
Opening Balance	$ -	$ -	$ -	$ -	-$ 13,087	-$ 45,604	-$ 84,648
Amortization expense during year	$ -	$ -	$ -	-$ 13,087	-$ 32,518	-$ 39,044	-$ 39,227
Retirements/Removals (if applicable)							
Closing Balance	$ -	$ -	$ -	-$ 13,087	-$ 45,604	-$ 84,648	-$ 123,875
Net Book Value							
Opening Balance	$ -	$ -	$ -	$ -	$ 117,779	$ 148,706	$ 111,485
Closing Balance	$ -	$ -	$ -	$ 117,779	$ 148,706	$ 111,485	$ 72,258
Average Net Book Value	$ -	$ -	$ -	$ 58,889	$ 133,242	$ 130,095	$ 91,872
Net Fixed Assets - Computer Software (including Applications Software)							
Gross Book Value							
Opening Balance		$ -	$ -	$ -	$ 6,227	$ 130,853	$ 279,035
Capital Additions during year (from Smart Meter Costs)	$ -	$ -	$ -	$ 6,227	$ 124,626	$ 148,182	$ 200,000
Retirements/Removals (if applicable)							
Closing Balance	$ -	$ -	$ -	$ 6,227	$ 130,853	$ 279,035	$ 479,035
Accumulated Depreciation							
Opening Balance	$ -	$ -	$ -	$ -	-$ 1,038	-$ 23,885	-$ 92,199
Amortization expense during year	$ -	$ -	$ -	-$ 1,038	-$ 22,847	-$ 68,315	-$ 126,345
Retirements/Removals (if applicable)							
Closing Balance	$ -	$ -	$ -	-$ 1,038	-$ 23,885	-$ 92,199	-$ 218,544
Net Book Value							
Opening Balance	$ -	$ -	$ -	$ -	$ 5,189	$ 106,968	$ 186,836
Closing Balance	$ -	$ -	$ -	$ 5,189	$ 106,968	$ 186,836	$ 260,491
Average Net Book Value	$ -	$ -	$ -	$ 2,595	$ 56,079	$ 146,902	$ 223,663

Net Fixed Assets - Tools and Equipmen

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 yea	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Retirements/Removals (if applicable)								
Closing Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Book Value								
Opening Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Closing Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Average Net Book Value	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Net Fixed Assets - Other Equipment

Gross Book Value								
Opening Balance		$ -	$ -	$ -	$ -	$ -	$ -	$ -
Capital Additions during year (from Smart Meter Costs'	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Retirements/Removals (if applicable)								
Closing Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Accumulated Depreciation								
Opening Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Amortization expense during yea	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Retirements/Removals (if applicable)								
Closing Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Book Value								
Opening Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Closing Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Average Net Book Value	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Ontario Energy Board

Smart Meter Model

Oakville Hydro Electricity Distribution Inc.

	2006	2007	2008	2009	2010	2011	2012 and Later
Average Net Fixed Asset Values (from Sheet 4)							
Smart Meters	$ -	$ -	$ -	$ 671,085	$ 4,599,152	$ 8,274,751	$ 8,371,501
Computer Hardware	$ -	$ -	$ -	$ 58,889	$ 133,242	$ 130,095	$ 91,872
Computer Software	$ -	$ -	$ -	$ 2,595	$ 56,079	$ 146,902	$ 223,663
Tools & Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Net Fixed Assets	**$ -**	**$ -**	**$ -**	**$ 732,569**	**$ 4,788,473**	**$ 8,551,749**	**$ 8,687,037**
Working Capital							
Operating Expenses (from Sheet 2)	$ -	$ 89,833	$ 88,000	$ 166,161	$ 378,048	$ 384,159	$ 585,147
Working Capital Factor (from Sheet 3)	15%	15%	15%	15%	15%	15%	15%
Working Capital Allowance	$ -	$ 13,475	$ 13,200	$ 24,924	$ 56,707	$ 57,624	$ 87,772
Incremental Smart Meter Rate Base	**$ -**	**$ 13,475**	**$ 13,200**	**$ 757,493**	**$ 4,845,180**	**$ 8,609,372**	**$ 8,774,809**
Return on Rate Base							
Capital Structure							
Deemed Short Term Debt	$ -	$ -	$ -	$ -	$ 193,807	$ 344,375	$ 350,992
Deemed Long Term Debt	$ -	$ 7,411	$ 7,590	$ 454,496	$ 2,713,301	$ 4,821,249	$ 4,913,893
Equity	$ -	$ 6,064	$ 5,610	$ 302,997	$ 1,938,072	$ 3,443,749	$ 3,509,923
Preferred Shares	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Capitalization	$ -	$ 13,475	$ 13,200	$ 757,493	$ 4,845,180	$ 8,609,372	$ 8,774,809
Return on							
Deemed Short Term Debt	$ -	$ -	$ -	$ -	$ 4,012	$ 7,129	$ 7,266
Deemed Long Term Debt	$ -	$ 445	$ 455	$ 27,270	$ 159,271	$ 283,007	$ 288,446
Equity	$ -	$ 546	$ 505	$ 27,270	$ 190,900	$ 339,209	$ 345,727
Preferred Shares	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Return on Capital	$ -	$ 990	$ 960	$ 54,540	$ 354,183	$ 629,345	$ 641,439
Operating Expenses	$ -	$ 89,833	$ 88,000	$ 166,161	$ 378,048	$ 384,159	$ 585,147
Amortization Expenses (from Sheet 4)							
Smart Meters	$ -	$ -	$ -	$ 46,282	$ 320,375	$ 595,959	$ 643,732
Computer Hardware	$ -	$ -	$ -	$ 13,087	$ 32,518	$ 39,044	$ 39,227
Computer Software	$ -	$ -	$ -	$ 1,038	$ 22,847	$ 68,315	$ 126,345
Tools & Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Amortization Expense in Year	$ -	$ -	$ -	$ 60,406	$ 375,739	$ 703,318	$ 809,304
Incremental Revenue Requirement before Taxes/PILs	$ -	$ 90,823	$ 88,960	$ 281,107	$ 1,107,969	$ 1,716,823	$ 2,035,889
Calculation of Taxable Income							
Incremental Operating Expenses	$ -	$ 89,833	$ 88,000	$ 166,161	$ 378,048	$ 384,159	$ 585,147
Amortization Expense	$ -	$ -	$ -	$ 60,406	$ 375,739	$ 703,318	$ 809,304
Interest Expense	$ -	$ 445	$ 455	$ 27,270	$ 163,283	$ 290,136	$ 295,711
Net Income for Taxes/PILs	$ -	$ 546	$ 505	$ 27,270	$ 190,900	$ 339,209	$ 345,727
Grossed-up Taxes/PILs (from Sheet 7)	$ -	$ 308.58	$ 254.35	-$ 14,635.96	$ 16,889.40	$ 106,010.96	$ 118,786.10
Revenue Requirement, including Grossed-up Taxes/PILs	$ -	$ 91,132	$ 89,215	$ 266,471	$ 1,124,859	$ 1,822,834	$ 2,154,675

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	$ -	$ -	$ -	$ -	$ 1,332,913.59	$ 7,787,246.08	$ 8,540,130.93
Capital Additions	$ -	$ -	$ -	$ 1,388,451.66	$ 6,834,339.14	$ 1,433,192.22	$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	$ -	$ -	$ -	$ 1,388,451.66	$ 8,167,252.73	$ 9,220,438.30	$ 8,540,130.93
Half Year Rule (1/2 Additions - Disposals)	$ -	$ -	$ -	$ 694,225.83	$ 3,417,169.57	$ 716,596.11	$ -
Reduced UCC	$ -	$ -	$ -	$ 694,225.83	$ 4,750,083.16	$ 8,503,842.19	$ 8,540,130.93
CCA Rate Class	47	47	47	47	47	47	47
CCA Rate	8%	8%	8%	8%	8%	8%	8%
CCA	$ -	$ -	$ -	$ 55,538.07	$ 380,006.65	$ 680,307.38	$ 683,210.47
Closing UCC	$ -	$ -	$ -	$ 1,332,913.59	$ 7,787,246.08	$ 8,540,130.93	$ 7,856,920.45

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	$ -	$ -	$ -	$ -	$ 68,546.26	$ 94,035.11	$ 151,070.19
Capital Additions Computer Hardware	$ -	$ -	$ -	$ 130,865.31	$ 63,444.49	$ 1,823.68	$ -
Capital Additions Computer Software	$ -	$ -	$ -	$ 6,227.20	$ 124,625.73	$ 148,182.38	$ 200,000.00
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	$ -	$ -	$ -	$ 137,092.51	$ 256,616.48	$ 244,041.17	$ 351,070.19
Half Year Rule (1/2 Additions - Disposals)	$ -	$ -	$ -	$ 68,546.26	$ 94,035.11	$ 75,003.03	$ 100,000.00
Reduced UCC	$ -	$ -	$ -	$ 68,546.26	$ 162,581.37	$ 169,038.14	$ 251,070.19
CCA Rate Class	45	50	50	52	52	50	50
CCA Rate	45%	55%	55%	100%	100%	55%	55%
CCA	$ -	$ -	$ -	$ 68,546.26	$ 162,581.37	$ 92,970.98	$ 138,088.61
Closing UCC	$ -	$ -	$ -	$ 68,546.26	$ 94,035.11	$ 151,070.19	$ 212,981.59

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	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Capital Additions Tools & Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Capital Additions Other Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Retirements/Removals (if applicable)							
UCC Before Half Year Rule	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Half Year Rule (1/2 Additions - Disposals)	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Reduced UCC	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CCA Rate Class	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%
CCA	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Closing UCC	$ -	$ -	$ -	$ -	$ -	$ -	$ -

PILs Calculation

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 and later Forecast
INCOME TAX							
Net Income	$ -	$ 545.73	$ 504.90	$ 27,269.76	$ 190,900.11	$ 339,209.27	$ 345,727.46
Amortization	$ -	$ -	$ -	$ 60,406.12	$ 375,738.95	$ 703,318.16	$ 809,304.00
CCA - Smart Meters	$ -	$ -	$ -	-$ 55,538.07	-$ 380,006.65	-$ 680,307.38	-$ 683,210.47
CCA - Computers	$ -	$ -	$ -	-$ 68,546.26	-$ 162,581.37	-$ 92,970.98	-$ 138,088.61
CCA - Applications Software	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CCA - Other Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Change in taxable income	$ -	$ 545.73	$ 504.90	-$ 36,408.45	$ 24,051.04	$ 269,249.08	$ 333,732.38
Tax Rate (from Sheet 3)	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
Income Taxes Payable	$ -	$ 197.12	$ 169.14	-$ 12,014.79	$ 7,455.82	$ 76,062.87	$ 87,604.75
ONTARIO CAPITAL TAX							
Smart Meters	$ -	$ -	$ -	$ 1,342,169.94	$ 7,856,134.33	$ 8,693,367.42	$ 8,049,635.22
Computer Hardware	$ -	$ -	$ -	$ 117,778.78	$ 148,705.76	$ 111,485.11	$ 72,258.41
Computer Software (Including Application Software)	$ -	$ -	$ -	$ 5,189.33	$ 106,968.38	$ 186,836.05	$ 260,490.95
Tools & Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Equipment	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Rate Base	$ -	$ -	$ -	$ 1,465,138.05	$ 8,111,808.46	$ 8,991,688.58	$ 8,382,384.58
Less: Exemption							
Deemed Taxable Capital	$ -	$ -	$ -	$ 1,465,138.05	$ 8,111,808.46	$ 8,991,688.58	$ 8,382,384.58
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)	$ -	$ -	$ -	$ 3,296.56	$ 6,083.86	$ -	$ -
Change in Income Taxes Payable	$ -	$ 197.12	$ 169.14	-$ 12,014.79	$ 7,455.82	$ 76,062.87	$ 87,604.75
Change in OCT	$ -	$ -	$ -	$ 3,296.56	$ 6,083.86	$ -	$ -
PILs	$ -	$ 197.12	$ 169.14	-$ 8,718.23	$ 13,539.68	$ 76,062.87	$ 87,604.75
Gross Up PILs							
Tax Rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
Change in Income Taxes Payable	$ -	$ 308.58	$ 254.35	-$ 17,932.52	$ 10,805.54	$ 106,010.96	$ 118,786.10
Change in OCT	$ -	$ -	$ -	$ 3,296.56	$ 6,083.86	$ -	$ -
PILs	**$ -**	**$ 308.58**	**$ 254.35**	**-$ 14,635.96**	**$ 16,889.40**	**$ 106,010.96**	**$ 118,786.10**

Ontario Energy Board

Smart Meter Model

Oakville Hydro Electricity Distribution Inc.

This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

Interest Rates	Approved Deferral and Variance Accounts	CWIP	Date	Year	Quarter	Opening Balance (Principal)	Funding Adder Revenues	Interest Rate	Interest	Closing Balance	Annual amounts	Board Approved Smart Meter Funding Adder (from Tariff)
2006 Q1			Jan-06	2006	Q1	$ -		0.00%	$ -	$ -		
2006 Q2	4.14%	4.68%	Feb-06	2006	Q1	$ -		0.00%	$ -	$ -		
2006 Q3	4.59%	5.05%	Mar-06	2006	Q1	$ -		0.00%	$ -	$ -		
2006 Q4	4.59%	4.72%	Apr-06	2006	Q2	$ -		4.14%	$ -	$ -		
2007 Q1	4.59%	4.72%	May-06	2006	Q2	$ -		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	$ -	$ 3,106.07	4.59%	$ -	$ 3,106.07		$ 0.30
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	$ 3,106.07	$ 14,665.20	4.59%	$ 11.88	$ 17,783.15		$ 0.30
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	$ 17,771.27	$ 14,916.15	4.59%	$ 67.98	$ 32,755.40		$ 0.30
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	$ 32,687.42	$ 49,261.65	4.59%	$ 125.03	$ 82,074.10		$ 0.30
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	$ 81,949.07	$ 13,201.87	4.59%	$ 313.46	$ 95,464.40	$ 95,669.29	$ 0.30
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	$ 95,150.94	$ 16,465.46	4.59%	$ 363.95	$ 111,980.35		$ 0.30
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	$ 111,616.40	$ 14,431.75	4.59%	$ 426.93	$ 126,475.08		$ 0.30
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	$ 126,048.15	$ 16,916.79	4.59%	$ 482.13	$ 143,447.07		$ 0.30
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	$ 142,964.94	$ 13,695.97	4.59%	$ 546.84	$ 157,207.75		$ 0.30
2010 Q1	0.55%	4.34%	May-07	2007	Q2	$ 156,660.91	$ 17,987.65	4.59%	$ 599.23	$ 175,247.79		$ 0.27
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	$ 174,648.56	$ 13,947.06	4.59%	$ 668.03	$ 189,263.65		$ 0.27
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	$ 188,595.62	$ 16,964.33	4.59%	$ 721.38	$ 206,281.33		$ 0.27
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	$ 205,559.95	$ 15,697.51	4.59%	$ 786.27	$ 222,043.73		$ 0.27
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	$ 221,257.46	$ 16,126.20	4.59%	$ 846.31	$ 238,229.97		$ 0.27
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	$ 237,383.66	$ 14,431.22	5.14%	$ 1,016.79	$ 252,831.67		$ 0.27
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	$ 251,814.88	$ 18,036.92	5.14%	$ 1,078.61	$ 270,930.41		$ 0.27
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	$ 269,851.80	$ 13,586.25	5.14%	$ 1,155.87	$ 284,593.92	$ 196,979.45	$ 0.27
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	$ 283,438.05	$ 17,768.19	5.14%	$ 1,214.06	$ 302,420.30		$ 0.27
2012 Q2	1.47%	4.29%	Feb-08	2008	Q1	$ 301,206.24	$ 13,811.35	5.14%	$ 1,290.17	$ 316,307.76		$ 0.27
2012 Q3	1.47%	4.29%	Mar-08	2008	Q1	$ 315,017.59	$ 16,026.03	5.14%	$ 1,349.33	$ 332,392.95		$ 0.27
2012 Q4	1.47%	4.29%	Apr-08	2008	Q2	$ 331,043.62	$ 15,552.92	4.08%	$ 1,125.55	$ 347,722.09		$ 0.27
			May-08	2008	Q2	$ 346,596.54	$ 16,321.15	4.08%	$ 1,178.43	$ 364,096.12		$ 0.27
			Jun-08	2008	Q2	$ 362,917.69	$ 16,299.55	4.08%	$ 1,233.92	$ 380,451.16		$ 0.27
			Jul-08	2008	Q3	$ 379,217.24	$ 17,638.62	3.35%	$ 1,058.65	$ 397,914.51		$ 0.27
			Aug-08	2008	Q3	$ 396,855.86	$ 14,679.92	3.35%	$ 1,107.89	$ 412,643.67		$ 0.27
			Sep-08	2008	Q3	$ 411,535.78	$ 17,181.66	3.35%	$ 1,148.87	$ 429,866.31		$ 0.27
			Oct-08	2008	Q4	$ 428,717.44	$ 15,639.91	3.35%	$ 1,196.84	$ 445,554.19		$ 0.27
			Nov-08	2008	Q4	$ 444,357.35	$ 16,780.43	3.35%	$ 1,240.50	$ 462,378.28		$ 0.27
			Dec-08	2008	Q4	$ 461,137.78	$ 15,312.23	3.35%	$ 1,287.34	$ 477,737.35	$ 207,443.51	$ 0.27
			Jan-09	2009	Q1	$ 476,450.01	$ 17,231.22	2.45%	$ 972.75	$ 494,653.98		$ 0.27
			Feb-09	2009	Q1	$ 493,681.23	$ 15,229.21	2.45%	$ 1,007.93	$ 509,918.37		$ 0.27
			Mar-09	2009	Q1	$ 508,910.44	$ 17,905.46	2.45%	$ 1,039.03	$ 527,854.93		$ 0.27
			Apr-09	2009	Q2	$ 526,815.90	$ 14,693.96	1.00%	$ 439.01	$ 541,948.87		$ 0.27
			May-09	2009	Q2	$ 541,509.86	$ 17,765.01	1.00%	$ 451.26	$ 559,726.13		$ 1.00
			Jun-09	2009	Q2	$ 559,274.87	$ 37,176.85	1.00%	$ 466.06	$ 596,917.78		$ 1.00
			Jul-09	2009	Q3	$ 596,451.72	$ 57,385.12	0.55%	$ 273.37	$ 654,110.21		$ 1.00
			Aug-09	2009	Q3	$ 653,836.84	$ 60,825.63	0.55%	$ 299.68	$ 714,962.15		$ 1.00
			Sep-09	2009	Q3	$ 714,662.47	$ 62,757.24	0.55%	$ 327.55	$ 777,747.26		$ 1.00
			Oct-09	2009	Q4	$ 777,419.71	$ 61,114.22	0.55%	$ 356.32	$ 838,890.25		$ 1.00
			Nov-09	2009	Q4	$ 838,533.93	$ 45,877.70	0.55%	$ 384.33	$ 884,795.96		$ 1.00
			Dec-09	2009	Q4	$ 884,411.63	$ 72,639.51	0.55%	$ 405.36	$ 957,456.50	$ 487,023.78	$ 1.00
			Jan-10	2010	Q1	$ 957,051.14	$ 62,412.16	0.55%	$ 438.65	$ 1,019,901.95		$ 1.00
			Feb-10	2010	Q1	$ 1,019,463.30	$ 60,702.82	0.55%	$ 467.25	$ 1,080,633.37		$ 1.00
			Mar-10	2010	Q1	$ 1,080,166.12	$ 61,458.52	0.55%	$ 495.08	$ 1,142,119.72		$ 1.00
			Apr-10	2010	Q2	$ 1,141,624.64	$ 63,583.16	0.55%	$ 523.24	$ 1,205,731.04		$ 1.00
			May-10	2010	Q2	$ 1,205,207.80	$ 59,867.58	0.55%	$ 552.39	$ 1,265,627.77		$ 1.69
			Jun-10	2010	Q2	$ 1,265,075.38	$ 88,386.79	0.55%	$ 579.83	$ 1,354,042.00		$ 1.69
			Jul-10	2010	Q3	$ 1,353,462.17	$ 101,389.09	0.89%	$ 1,003.82	$ 1,455,855.08		$ 1.69
			Aug-10	2010	Q3	$ 1,454,851.26	$ 103,830.29	0.89%	$ 1,079.01	$ 1,559,760.56		$ 1.69
			Sep-10	2010	Q3	$ 1,558,681.55	$ 105,532.91	0.89%	$ 1,156.02	$ 1,665,370.48		$ 1.69
			Oct-10	2010	Q4	$ 1,664,214.46	$ 104,414.76	1.20%	$ 1,664.21	$ 1,770,293.43		$ 1.69
			Nov-10	2010	Q4	$ 1,768,629.22	$ 98,322.29	1.20%	$ 1,768.63	$ 1,868,720.14		$ 1.69
			Dec-10	2010	Q4	$ 1,866,951.51	$ 95,302.16	1.20%	$ 1,866.95	$ 1,964,120.62	$ 1,016,797.61	$ 1.69
			Jan-11	2011	Q1	$ 1,962,253.67	$ 115,480.66	1.47%	$ 2,403.76	$ 2,080,138.09		$ 1.69
			Feb-11	2011	Q1	$ 2,077,734.33	$ 105,310.18	1.47%	$ 2,545.22	$ 2,185,589.73		$ 1.69
			Mar-11	2011	Q1	$ 2,183,044.51	$ 99,870.99	1.47%	$ 2,674.23	$ 2,285,589.73		$ 1.69
			Apr-11	2011	Q2	$ 2,282,915.50	$ 109,523.56	1.47%	$ 2,796.57	$ 2,395,235.63		$ 1.69
			May-11	2011	Q2	$ 2,392,439.06	$ 86,751.97	1.47%	$ 2,930.74	$ 2,482,121.77		$ 1.69
			Jun-11	2011	Q2	$ 2,479,191.03	$ 127,075.99	1.47%	$ 3,037.01	$ 2,609,304.03		$ 1.69
			Jul-11	2011	Q3	$ 2,606,267.02	$ 76,752.83	1.47%	$ 3,192.68	$ 2,686,212.53		$ 1.69
			Aug-11	2011	Q3	$ 2,683,019.85	$ 100,108.29	1.47%	$ 3,286.70	$ 2,786,414.84		$ 1.69
			Sep-11	2011	Q3	$ 2,783,128.14	$ 132,232.33	1.47%	$ 3,409.33	$ 2,918,769.80		$ 1.69
			Oct-11	2011	Q4	$ 2,915,360.47	$ 109,189.79	1.47%	$ 3,571.32	$ 3,028,121.58		$ 1.69
			Nov-11	2011	Q4	$ 3,024,550.26	$ 88,276.91	1.47%	$ 3,705.07	$ 3,116,532.24		$ 1.69
			Dec-11	2011	Q4	$ 3,112,827.17	$ 105,466.99	1.47%	$ 3,813.21	$ 3,222,107.37	$ 1,293,406.33	$ 1.69
			Jan-12	2012	Q1	$ 3,218,294.16	$ 106,549.71	1.47%	$ 3,942.41	$ 3,328,786.28		$ 1.69
			Feb-12	2012	Q1	$ 3,324,843.87	$ 106,693.64	1.47%	$ 4,072.93	$ 3,435,610.45		$ 1.69
			Mar-12	2012	Q1	$ 3,431,537.52	$ 106,837.58	1.47%	$ 4,203.63	$ 3,542,578.72		$ 1.69
			Apr-12	2012	Q2	$ 3,538,375.09	$ 106,981.51	1.47%	$ 4,334.51	$ 3,649,691.11		$ 1.69
			May-12	2012	Q2	$ 3,645,356.60		1.47%	$ 4,465.56	$ 3,649,822.16		
			Jun-12	2012	Q2	$ 3,645,356.60		1.47%	$ 4,465.56	$ 3,649,822.16		
			Jul-12	2012	Q3	$ 3,645,356.60		1.47%	$ 4,465.56	$ 3,649,822.16		
			Aug-12	2012	Q3	$ 3,645,356.60		1.47%	$ 4,465.56	$ 3,649,822.16		
			Sep-12	2012	Q3	$ 3,645,356.60		1.47%	$ 4,465.56	$ 3,649,822.16		
			Oct-12	2012	Q4	$ 3,645,356.60		1.47%	$ 4,465.56	$ 3,649,822.16		
			Nov-12	2012	Q4	$ 3,645,356.60		1.47%	$ 4,465.56	$ 3,649,822.16		
			Dec-12	2012	Q4	$ 3,645,356.60		1.47%	$ 4,465.56	$ 3,649,822.16	$ 479,340.40	
			Total Funding Adder Revenues Collected				**$ 3,645,356.60**		**$ 131,303.77**	**$ 3,776,660.37**	**$ 3,776,660.37**	


Ontario Energy Board

Smart Meter Model

Oakville Hydro Electricity Distribution Inc.

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

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

Prescribed Interest Rates	Approved Deferral and Variance Accounts	CWIP	Date	Year	Quarter	Opening Balance (Principal)	OM&A Expenses	Amortization / Depreciation Expense	Closing Balance (Principal)	(Annual) Interest Rate	Interest (on opening balance)	Cumulative Interest
2006 Q1	0.00%	0.00%	Jan-06	2006	Q1	$ -			-	0.00%	-	-
2006 Q2	4.14%	4.68%	Feb-06	2006	Q1	-			-	0.00%	-	-
2006 Q3	4.59%	5.05%	Mar-06	2006	Q1	-			-	0.00%	-	-
2006 Q4	4.59%	4.72%	Apr-06	2006	Q2	-			-	4.14%	-	-
2007 Q1	4.59%	4.72%	May-06	2006	Q2	-			-	4.14%	-	-
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	-			-	4.14%	-	-
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	-			-	4.59%	-	-
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	-			-	4.59%	-	-
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	-			-	4.59%	-	-
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	-			-	4.59%	-	-
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	-			-	4.59%	-	-
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	-			-	4.59%	-	-
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	-			-	4.59%	-	-
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	-			-	4.59%	-	-
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	-			-	4.59%	-	-
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	-			-	4.59%	-	-
2010 Q1	0.55%	4.34%	May-07	2007	Q2	-			-	4.59%	-	-
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	-			-	4.59%	-	-
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	-			-	4.59%	-	-
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	-			-	4.59%	-	-
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	-			-	4.59%	-	-
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	-			-	5.14%	-	-
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	-			-	5.14%	-	-
2011 Q4	1.47%	4.29%	Dec-07	2007	Q4	-	$ 89,832.76		89,832.76	5.14%	-	-
2012 Q1	1.47%	4.29%	Jan-08	2008	Q1	89,832.76	$ 4,563.00		94,395.76	5.14%	384.78	384.78
2012 Q2	1.47%	4.29%	Feb-08	2008	Q1	94,395.76	$ 4,563.00		98,958.77	5.14%	404.33	789.11
2012 Q3	1.47%	4.29%	Mar-08	2008	Q1	98,958.77	$ 4,563.00		103,521.77	5.14%	423.87	1,212.99
2012 Q4	1.47%	4.29%	Apr-08	2008	Q2	103,521.77	$ 4,563.00		108,084.77	4.08%	351.97	1,564.96
			May-08	2008	Q2	108,084.77	$ 30,164.54		138,249.31	4.08%	367.49	1,932.45
			Jun-08	2008	Q2	138,249.31	$ 4,442.08		142,691.39	4.08%	470.05	2,402.50
			Jul-08	2008	Q3	142,691.39	$ 4,860.78		147,552.17	3.35%	398.35	2,800.84
			Aug-08	2008	Q3	147,552.17	$ 4,424.48		151,976.65	3.35%	411.92	3,212.76
			Sep-08	2008	Q3	151,976.65	$ 4,118.34		156,094.99	3.35%	424.27	3,637.03
			Oct-08	2008	Q4	156,094.99	$ 5,963.55		162,058.54	3.35%	435.77	4,072.79
			Nov-08	2008	Q4	162,058.54	$ 9,119.78		171,178.32	3.35%	452.41	4,525.21
			Dec-08	2008	Q4	171,178.32	$ 6,654.47		177,832.79	3.35%	477.87	5,003.08
			Jan-09	2009	Q1	177,832.79	$ 5,341.51		183,174.30	2.45%	363.08	5,366.15
			Feb-09	2009	Q1	183,174.30	$ 5,575.43		188,749.73	2.45%	373.98	5,740.13
			Mar-09	2009	Q1	188,749.73	$ 5,805.69		194,555.42	2.45%	385.36	6,125.50
			Apr-09	2009	Q2	194,555.42	$ 13,157.70		207,713.12	1.00%	162.13	6,287.63
			May-09	2009	Q2	207,713.12	$ 5,093.64		212,806.76	1.00%	173.09	6,460.72
			Jun-09	2009	Q2	212,806.76	$ 6,466.28		219,273.04	1.00%	177.34	6,638.06
			Jul-09	2009	Q3	219,273.04	$ 5,568.76		224,841.80	0.55%	100.50	6,738.56
			Aug-09	2009	Q3	224,841.80	$ 9,398.03		234,239.83	0.55%	103.05	6,841.61
			Sep-09	2009	Q3	234,239.83	$ 40,686.37		274,926.20	0.55%	107.36	6,948.97
			Oct-09	2009	Q4	274,926.20	$ 26,770.34		301,696.54	0.55%	126.01	7,074.98
			Nov-09	2009	Q4	301,696.54	$ 20,677.88		322,374.42	0.55%	138.28	7,213.26
			Dec-09	2009	Q4	322,374.42	$ 21,619.23		343,993.65	0.55%	147.75	7,361.01
			Jan-10	2010	Q1	343,993.65	$ 25,320.56		369,314.21	0.55%	157.66	7,518.68
			Feb-10	2010	Q1	369,314.21	$ 23,027.80		392,342.02	0.55%	169.27	7,687.95
			Mar-10	2010	Q1	392,342.02	$ 28,798.02		421,140.04	0.55%	179.82	7,867.77
			Apr-10	2010	Q2	421,140.04	$ 25,145.92		446,285.96	0.55%	193.02	8,060.79
			May-10	2010	Q2	446,285.96	$ 19,918.73		466,204.69	0.55%	204.55	8,265.34
			Jun-10	2010	Q2	466,204.69	$ 28,482.10		494,686.80	0.55%	213.68	8,479.02
			Jul-10	2010	Q3	494,686.80	$ 18,423.72		513,110.52	0.89%	366.89	8,845.91
			Aug-10	2010	Q3	513,110.52	$ 16,365.09		529,475.61	0.89%	380.56	9,226.47
			Sep-10	2010	Q3	529,475.61	$ 45,208.98		574,684.59	0.89%	392.69	9,619.16
			Oct-10	2010	Q4	574,684.59	$ 38,423.77		613,108.37	1.20%	574.68	10,193.85
			Nov-10	2010	Q4	613,108.37	$ 66,717.48		679,825.85	1.20%	613.11	10,806.95
			Dec-10	2010	Q4	679,825.85	$ 42,215.80		722,041.65	1.20%	679.83	11,486.78
			Jan-11	2011	Q1	722,041.65	$ 24,583.62		746,625.27	1.47%	884.50	12,371.28
			Feb-11	2011	Q1	746,625.27	$ 21,054.04	$ 47,935.80	815,615.10	1.47%	914.62	13,285.90
			Mar-11	2011	Q1	815,615.10	$ 51,213.00	$ 24,733.50	891,561.60	1.47%	999.13	14,285.03
			Apr-11	2011	Q2	891,561.60	$ 7,478.89	$ 25,260.98	924,301.46	1.47%	1,092.16	15,377.19
			May-11	2011	Q2	924,301.46	$ 45,937.47	$ 32,515.12	1,002,754.05	1.47%	1,132.27	16,509.46
			Jun-11	2011	Q2	1,002,754.05	$ 43,194.57	$ 32,016.27	1,077,964.89	1.47%	1,228.37	17,737.83
			Jul-11	2011	Q3	1,077,964.89	$ 32,190.25	$ 29,022.49	1,139,177.62	1.47%	1,320.51	19,058.34
			Aug-11	2011	Q3	1,139,177.62	$ 28,726.81	$ 28,195.10	1,196,099.53	1.47%	1,395.49	20,453.83
			Sep-11	2011	Q3	1,196,099.53	$ 46,845.24	$ 37,519.96	1,280,464.72	1.47%	1,465.22	21,919.05
			Oct-11	2011	Q4	1,280,464.72	$ 24,356.40	$ 30,031.12	1,334,852.24	1.47%	1,568.57	23,487.62
			Nov-11	2011	Q4	1,334,852.24	$ 18,722.19	$ 28,352.85	1,381,927.27	1.47%	1,635.19	25,122.82
			Dec-11	2011	Q4	1,381,927.27	$ 39,856.57	$ 29,258.33	1,451,042.17	1.47%	1,692.86	26,815.68
			Jan-12	2012	Q1	1,451,042.17			1,451,042.17	1.47%	1,777.53	28,593.20
			Feb-12	2012	Q1	1,451,042.17			1,451,042.17	1.47%	1,777.53	30,370.73
			Mar-12	2012	Q1	1,451,042.17			1,451,042.17	1.47%	1,777.53	32,148.26
			Apr-12	2012	Q2	1,451,042.17			1,451,042.17	1.47%	1,777.53	33,925.78
			May-12	2012	Q2	1,451,042.17			1,451,042.17	1.47%	1,777.53	35,703.31
			Jun-12	2012	Q2	1,451,042.17			1,451,042.17	1.47%	1,777.53	37,480.84
			Jul-12	2012	Q3	1,451,042.17			1,451,042.17	1.47%	1,777.53	39,258.36
			Aug-12	2012	Q3	1,451,042.17			1,451,042.17	1.47%	1,777.53	41,035.89
			Sep-12	2012	Q3	1,451,042.17			1,451,042.17	1.47%	1,777.53	42,813.42
			Oct-12	2012	Q4	1,451,042.17			1,451,042.17	1.47%	1,777.53	44,590.94
			Nov-12	2012	Q4	1,451,042.17			1,451,042.17	1.47%	1,777.53	46,368.47
			Dec-12	2012	Q4	1,451,042.17			1,451,042.17	1.47%	1,777.53	48,146.00
							$ 1,106,200.65	$ 344,841.52	$ 1,451,042.17			

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	$ 89,832.76	$ -	$ 89,832.76	$ 44,916.38	4.73%	$ 2,123.42
2008	$ 88,000.03	$ -	$ 177,832.79	$ 133,832.78	3.98%	$ 5,326.54
2009	$ 166,161.40	$ 60,406.12	$ 404,400.31	$ 291,116.55	1.14%	$ 3,311.45
2010	$ 378,047.77	$ 375,738.95	$ 1,158,187.03	$ 781,293.67	0.80%	$ 6,230.82
2011	$ 384,159.46	$ 703,318.16	$ 2,245,664.65	$ 1,701,925.84	1.47%	$ 25,018.31
2012	$ 585,146.61	$ 809,304.00	$ 3,640,115.26	$ 2,942,889.96	1.47%	$ 43,260.48

Cumulative Interest to 2011	$ 42,010.54
Cumulative Interest to 2012	$ 85,271.03

Ontario Energy Board

Smart Meter Model

Oakville Hydro Electricity Distribution Inc.

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

Check if applicable		
	Smart Meter Funding Adder (SMFA)	
X	Smart Meter Disposition Rider (SMDR)	**The SMDR is calculated based on costs to December 31, 2011**
X	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)	$ -	$ 91,131.74	$ 89,214.68	$ 266,471.08	$ 1,124,858.80	$ 1,822,833.71	$ 2,154,675.22	$ 5,549,185.23
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B) (Check **one** of the boxes below)	$ -	$ -	$ 5,003.08	$ 2,357.94	$ 4,125.77	$ 15,328.90		$ 26,815.68
X Sheet 8A (Interest calculated on monthly balances)	$ -	$ -	$ 5,003.08	$ 2,357.94	$ 4,125.77	$ 15,328.90		$ 26,815.68
Sheet 8B (Interest calculated on average annual balances)								$ -
SMFA Revenues (from Sheet 8)	$ 95,150.94	$ 188,287.11	$ 193,011.96	$ 480,601.13	$ 1,005,202.53	$ 1,256,040.49	$ 427,062.44	$ 3,645,356.60
SMFA Interest (from Sheet 8)	$ 518.35	$ 8,692.34	$ 14,431.55	$ 6,422.65	$ 11,595.08	$ 37,365.84	$ 52,277.96	$ 131,303.77
Net Deferred Revenue Requirement	-$ 95,669.29	-$ 105,847.71	-$ 113,225.75	-$ 218,194.77	$ 112,186.96	$ 544,756.28	$ 1,675,334.82	$ 1,799,340.54
Number of Metered Customers (average for 2012 test year)							62675	

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

Years for collection or refunding	2	
Deferred Incremental Revenue Requirement from 2006 to December 31, 2011 plus Interest on OM&A and Amortization	$ 3,421,325.69	
SMFA Revenues collected from 2006 to 2012 test year (inclusive) Plus Simple Interest on SMFA Revenues	$ 3,776,660.37	
Net Deferred Revenue Requirement	-$ 355,334.68	
SMDR May 1, 2012 to April 30, 2014	-$ 0.24	Match
Check: Forecasted SMDR Revenues	-$ 361,008.00	

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

Incremental Revenue Requirement for 2012	$ 2,154,675.22	
SMIRR	$ 2.86	Match
Check: Forecasted SMIRR Revenues	$ 2,151,006.00	