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July 25, 2012

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

Re: EB-2012-0263 Bluewater Power Responses to Board Staff and VECC Interrogatories

Dear Ms. Walli:

Please find attached the responses of Bluewater Power to the OEB Board Staff Interrogatories and VECC Interrogatories.

Two hard copies will follow.

Sincerely,

A handwritten signature in blue ink that reads "L. Dugas".

Leslie Dugas
Manager of Regulatory Affairs
Bluewater Power Distribution Corporation
Phone: 519-337-8201 Ext 2255
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CC via email:

Mr. Michael Janigan, mjanigan@piac.ca
Ms. Shelley Grice, shelley.grice@rogers.com

**Bluewater Power Distribution Corporation
2012 Smart Meter Cost Recovery
EB-2012-0263
Responses to Board Staff Interrogatories**

General

1. Letters of Comment

Following publication of the Notice of Application, the Board has, to date, received no letters of comment. Please confirm whether Bluewater Power Distribution Corporation ("Bluewater Power") has received any letters of comment. If so, please file a copy of any letters of comment. For each, please confirm whether a reply was sent from Bluewater Power to the author of the letter. If confirmed, please file that reply with the Board. Please ensure that the author's contact information except for the name is redacted. If not confirmed, please explain why a response was not sent and confirm if Bluewater Power intends to respond.

1 Response

Bluewater Power has not received any letters of comment following publication of the Notice of Application that was published on Saturday June 30, 2012 in the Sarnia newspaper 'The Observer'.

Application

2. Ref: Application p10 and p21 – Smart Meters Installed

Table 3.1 on p10 indicates that 4 GS < 50 kW smart meters were installed in 2012. However, on p21 of the application, it states that installation of polyphase GS<50 kW smart meters began in November 2010 and the project was completed in November 2011. Bluewater shows no additions to residential smart meters in 2012 in Table 3.1 on p10. Please explain the additional 4 GS < 50 kW meters in 2012.

2 Response

There were 4 meters related to GS<50 customers installed between January and March 2012. These meters were not installed until 2012 due to either limited access or safety issues that were required to be resolved by the property owner prior to Bluewater Power completing the installation.

3. Ref: Application p13 – Pilot Study

In 2006, Bluewater Power completed a pilot study in the town of Watford using funds sourced from the 3rd MARR as a CDM program. Bluewater Power states that it is not seeking any costs for the pilot in the current application. On p13 of the application, Bluewater Power also states that it “spent a significant amount of time researching technologies, pilot programs and approaches taken by other utilities in the province.”

- a) With the exception of the Watford pilot, are the costs for the research included in the current application?

3(a) Response

Confirmed; the costs for researching technologies through conferences, vendor presentations, and utility visits are included in the current application.

Approximately \$28,958 of the \$38,263 is internal labour cost, the remainder being third-party costs such as conference fees and travel.

Our reference to ‘pilot programs’ in our pre-filed evidence was intended to include research on other utilities’ pilot programs, rather than carrying out our own pilot programs.

- b) If yes, what is the estimated cost for this activity, and when was the research conducted? Where are these costs represented in Sheet 2 of the smart meter model?

3(b) Response

The cost of research activities included in the current application is \$38,263 and those costs relate to activities that took place in the years 2006 through 2009. The majority of the cost relates to internal labour for the following efforts:

- Seven smart meter conferences were attended in the year’s 2007 and 2008 by the Smart Meter Project Coordinator for research and advancement of the Smart Meter project
- Two vendor sessions were attended in 2009 by one staff member each
- Four utility visits occurred in 2009 and attended by one or two staff members each

These costs have been included as research costs in section 2.5.3 ‘Program Management’ found in the Smart Meter Model.

- c) Have any of these costs been previously reviewed and approved in previous applications (i.e. Bluewater Power's 2009 cost of service application)?

3(c) Response

None of the costs claimed have been reviewed or approved in previous applications. Bluewater Power reached a settlement in its 2009 Cost of Service application, so we cannot point to any costs as being approved or denied, however the application did not include any forecast costs related to smart meters.

4. Ref: Application p12-32 – Procurement and Installation

Bluewater Power has provided a full commentary on its progression through procurement and installation of AMI related to minimum functionality and beyond minimum functionality. Please confirm whether the additional costs of each of the following is included in the costs that Bluewater Power is seeking approval for recovery in this Application. If yes, please quantify the costs.

a) P15 – AMI Selection

A preliminary vendor matrix was developed internally to compare the technical aspects of each vendor based on a needs analysis completed by all affected departments within Bluewater Power. Although the analysis revealed that there were clearly only two vendors that met the criteria the team identified in the departmental needs analysis, we felt it was important to continue to evaluate all vendors.

4(a) Response

The vendor matrix that was developed internally was intended to screen technologies and, ultimately, no vendors were disqualified because of issues identified in preparing the vendor matrix. Accordingly, the effort was truly preliminary because we decided to entertain proposals from all vendors. The cost associated with this effort was less than \$1000 and has been included in the capital costs for which we are seeking recovery.

b) P 17 – Meter Installation Vendor

In order to benefit from further sharing opportunities, Bluewater Power continued to work with London Hydro on the development of a Statement of Work for a possible Third Party Installation service provider RFQ. Bluewater Power was not satisfied with the pace of progress, so we turned to the OUSM Working Group to find alternative ways to work with other utilities. Bluewater Power utilized the Installation Service Provider RFQ template developed by the OUSM group.

4(b) Response

The proposal to work with London on the development of a Statement of Work was minimal. In fact, the primary reason for moving forward with the OUSM group was the lack of progress on the joint effort. Accordingly, the cost associated with this effort was less than \$1000 and has been included in the capital costs for which we are seeking recovery.

c) P17 – Meter Installation Vendor

The Smart Meter Installation Services RFP 433-08 was issued November 5, 2008 to five vendors. However, after a thorough evaluation of the proponent's responses to the RFP, Bluewater Power made the decision to terminate the process. The initial RFP had a limited response, which resulted in a lack of comparative data. In addition, concerns with health & safety could not be resolved by the proponents. Accordingly, the proponents were notified on January 29, 2009 that we would not be awarding the contract under that RFP.

4(c) Response

The labour associated with the development and analysis of the initial Installation vendor RFP was associated with the review of the two bids received. A team of six staff was put together to independently review the submissions and discuss the results. The decision was clear to the team that we could not move forward with either bid, and that the market for installers would improve by issuing another RFP at a later time. We estimate that the cost associated with those efforts was approximately \$1500 and has been included in the capital costs for which we are seeking recovery.

d) P20 – Installation of Polyphase GS < 50 kW Meters

On Bluewater Power's behalf, Util-Assist issued RFP BBP-440-10 to cover the installation of all polyphase GS<50 kW Smart Meters in our territory (approximately 1,800 meters). Factors such as customer communication, safety, pricing and installation service offerings were taken into account during the RFP. Three submissions were received from all three vendors invited to bid. After a thorough review, a decision was made to reject all of the proposals submitted and to install the polyphase meters with internal resources. The narrow scope of this project made it possible to complete the work with internal resources and the savings associated with carrying out the project internally were significant.

4(d) Response

The RFP was prepared by Util-Assist at no incremental cost to Bluewater Power and an evaluation committee of five staff was assembled for the review. There were three submissions reviewed and scored separately by the team members. Ultimately, the prices proposed in the three submissions were significantly over the anticipated budget and, therefore, we could not proceed. The decision not to proceed required three meetings and the estimated cost of those efforts was approximately \$2500 and has been included in the capital costs for which we are seeking recovery.

e) P32 – Testing

In May of 2011, due to the required Measurement Canada solution changes that affected the Provincial MDM/R, Bluewater Power made the decision to halt our Unit Testing and discontinue redundant effort around testing issues that would be rectified after the anticipated new release from the IESO.

4(e) Response

Bluewater Power designed the interfaces with the MDM/R and the transaction of data exchange on the basis of the MDM/R R7.0 version. In the midst of that effort, the R7.2 version was announced with a timeframe that appeared compatible with our planned go-live date. During the testing, issues were revealed that we expected would be resolved as part of the normal process of developing a technology solution within the 'Prescribed Testing' required by the MDM/R. Testing was halted and our effort was focused on designing changes for the release of the R7.2 version.

Testing was halted at a point where issues began to surface. The issues that surfaced were likely to be resolved with the newer xml R7.2 version. The testing that had taken place to that point in time had value, and benefitted our efforts when we later tested in R7.2. To be specific, the initial testing lasted 4 weeks and, in that time, we were able to complete 14 out of the recommended 44 test scenarios. These efforts later benefited the testing and implementation of R7.2 as we were not required to repeat those first 14 test scenarios when testing resumed in 2012.

With that background, the estimated cost of four weeks of testing was approximately \$80,000. That would consist of capitalized labour from five staff members devoting most of their effort for four weeks, as well as third party consulting costs of approximately \$40,000. These costs have been included in the capital costs for which we are seeking recovery.

5. Ref: Application p23 – AMI Annual Security Audit

An RFP for an AMI Network Security Audit was developed and executed by Util-Assist for several LDCs, including Bluewater Power. Please confirm that Bluewater Power's share of the Util-Assist's costs for this RFP was \$13,750.

The Application states that there are no costs relating to the security measures recommended following the audit conducted at PowerStream. Does Bluewater Power expect to propose costs related to the security audit recommendations in its 2013 cost of service application?

5 Response

Bluewater Power confirms the amount actually charged to the Smart Meter Deferral Account in relation to the security audit was \$12,272. At the time of agreeing to participate in the process, Bluewater Power's share of the costs was estimated to be \$13,750; however, additional LDCs joined the effort prior to its completion and Bluewater Power's share was reduced accordingly. The amount included in the application for recovery is the actual cost of \$12,272.

Bluewater Power will accommodate required security changes as part of its regular Information Technology capital budgets on a go forward basis. As such, portions of the recommendations of the security audit will be included in the 2013 cost of service application through capital projects increasing the value of Fixed Assets.

6. Ref: Application p25 - Beyond Minimum Functionality

Table 6.1 summarizes capital expenditures beyond minimum functionality. The Application states, "The total amount claimed in this application for recovery as Beyond Minimum Functionality is \$2.53M or \$71.49 per customer."

Please confirm that Bluewater Power is also seeking \$21,120 of OM&A costs beyond minimum functionality. Further, please confirm that the \$71.49 per customer of beyond minimum functionality reflects only the capital costs.

6 Response

Confirmed. As indicated in Table 2.1 on page 4 of the pre-filed evidence, the Capital Costs beyond minimum functionality are \$2.53M or \$71.49 per customer, and the OM&A beyond minimum functionality total \$21,120 or \$0.60 per customer. The total claimed for Capital Cost and OM&A for Beyond Minimum Functionality is, therefore, \$72.09 per customer.

7. Application p10 and p26 – Beyond Minimum Functionality

At p26, it states that the majority of beyond minimum functionality capital costs "fall under the category of MDM/R integration and relate to the integration of the MDM/R with Bluewater Power's SAP-based CIS."

At p10, Bluewater Power elected to do a partial cutover to the R7.0 MDM/R environment and then full migration to R7.2. Bluewater Power was approached by the

IESO to complete testing of the R7.2 environment as it one of only a few LDCs ready to function in R7.2.

What is the estimated cost of this testing, and where is this cost represented in Sheet 2 of the Smart Meter Model?

7 Response

The estimated cost of the testing for the R7.2 environment was \$10,497 and these costs are included in category 1.6.3 in the smart meter model. This amount includes only capitalized labour associated with testing. Due to the short time frame associated with the effort, almost one-third of the labour devoted to the effort was overtime.

We note that, although we were leaders in the development and testing of R7.2, we did not encounter any so-called “bugs” that affected our system. While there were issues raised as a result of our testing that impacted the IESO, those issues did not contribute to extra hours or cost for Bluewater Power

In closing, we note that the estimated cost provided in answer to this question is for testing only. These costs do not include the cost associated with the partial cut-over to R7.0 as we were required to gather historical data regardless of our implementation path. In addition, we have not included the development or programming costs associated with developing the solution to be tested.

8. Ref: Application, pp 25-28 – Software Costs

In Table 6.1 on p25, Bluewater Power documents about \$2.5M in software costs for MDM/R integration, TOU billing, web presentment, etc. This corresponds with “1.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.” on row 105 of sheet 2 of the Smart Meter Model. Board staff observes that these costs of \$2.5M represent about 29% of total smart meter capital costs for which Bluewater Power is seeking recovery.

On pp 26-27, Bluewater Power states:

The majority of costs set out in Table 6.1 fall under the category of MDM/R Integration and relate to the integration of the MDM/R with Bluewater Power’s SAP-based CIS. Bluewater Power implemented SAP Industry Solution Utilities in the year 2002 as the industry prepared for the deregulated electricity market. The system represents a substantial investment in an Enterprise Resource Planning (“ERP”) solution. SAP serves to function as Bluewater Power’s primary business software. The solution includes Finance, Supply Chain, Plant

Maintenance, Engineering, Metering, Customer Information, Billing, web presentment, retail and wholesale settlement functions in a completely integrated solution.

In 2008, Bluewater Power engaged SJH consulting to perform an upgrade assessment. This assessment looked at the need to upgrade SAP in order to move to an updated software solution utilizing new functionality and having the ability to accommodate the pending Smart Meter Initiative. The facts considered at the time pointed to the need to upgrade from ERP Version 4.7 Enterprise to Version 6.0 EhP 4 of SAP. The version of SAP that Bluewater Power was operating on at the time was entering into a period of 'Extended Support Coverage' and was less than 2 years away from no longer being supported by SAP. In addition, the upgrade addressed a number of limitations in the existing system that improved functionality and, in some cases, better prepared the CIS for the introduction of smart meters. Finally, given the timeline in place to implement the smart metering initiative at Bluewater Power, it was necessary for the SAP upgrade to occur prior to that required effort.

The upgrade to ERP Version 6.0 EhP 4 is an example of the kind of "normal budget for maintenance" of Bluewater Power's CIS. The costs related to this upgrade are not included for recovery in this Smart Meter Final Disposition. Likewise, Bluewater Power engaged in an upgrade of SAP to accommodate the move to International Financial Reporting Standards (IFRS) in the year 2009. Those costs are also not included for recovery in this application, just like other routine upgrades and modifications to SAP continue to form part of Bluewater Power's normal maintenance of its CIS.

On p28, Bluewater continues:

These costs are considered "required" for Smart Meters because the SAP billing system that Bluewater Power operates was not inherently capable of billing TOU pricing. SAP's utility offering is an Enterprise Resource Planning solution. It is not an "off the shelf" product, but its design is end-user driven. Prior to the commencement of Phase 2 Smart Meter Project, the system was not configured for integration with the MDM/R or for producing a TOU bill. It is clear that "but for" the requirements of the Smart Metering Initiative, none of the costs for which we are seeking recovery in this application would have been incurred.

When Bluewater Power did its SAP upgrade in 2008-2009, the requirements for TOU billing were better defined.

- a) Please clarify the statements on p28 that the SAP ERP was not inherently capable of MDM/R integration and TOU billing with the statements on pp 26-27 that the earlier upgrade "improved functionality and, in some cases, better prepared the CIS for the introduction of smart meters."

8(a) Response

In order to understand that statement in our evidence, the Board must understand that SAP is a platform on which a billing system can be built. SAP provides the base upon which the end user (the utility) configures the system to match their business processes, their data configuration, desired flow of information and the bill format required. SAP is not like other "off the shelf" billing systems that are developed by a software company based on a particular business process and customized for the Ontario market. The SAP offering

provides a world-class system on which any type of billing system can be configured; the configuration itself is carried out by the end user, typically using SAP certified consultants that work independent of SAP (consultants work for companies like Deloitte Consulting or HCL Axon).

It is also important to remember that SAP is an Enterprise Resource Planning (“ERP”) tool that provides Bluewater Power with its billing, settlement, finance, work order management, inventory, etc. It is the billing portion of Bluewater Power’s system that requires re-configuration when changes to billing processes are introduced to our market, but when SAP upgrades its product that upgrade affects the entire ERP.

At the risk of trivializing the complexity and offerings of the billing portion of the SAP software, SAP can be likened to Microsoft Excel for illustrative purposes. The software on its own is capable of organizing data and carrying out transactions. However, just as the OEB had to build configuration within Excel to prepare the Smart Meter Model on which this application was filed, Bluewater Power must configure SAP to bill in a manner consistent with our business processes and the Ontario market. When an upgrade occurs in SAP (much like an upgrade in Excel) additional functionality is added to the software. That upgrade imbeds in the software functionality that would otherwise require custom configuration or the upgrade, at least, simplifies the process of carrying out the customization.

In the case of the upgrade of SAP that took place in 2010, the following functionality was introduced that better facilitated the integration of Smart Meters and the development of TOU pricing:

1. Complex billing was made easier in ERP 6.0 with changes to the SAP base code which enabled the more complex TOU billing buckets to be handled with less custom configuration. It is important to note that using custom developed code is costlier during an implementation and costlier to maintain going forward in regular maintenance and in future upgrades.
2. The requirement to integrate with the MDM/R was made easier because ERP 6.0 is capable of handling multiple unique identifiers associated with each customer. More specifically, it is better able to handle the USDPs, SDP, AMI numbers, and Meter numbers and their relationships such that proper synchronization can occur between the AMI system, the MDM/R, and SAP.
3. The upgrade included the implementation of SAP PI. This so-called “middleware” translates the data from SAP to data that is able to be read by the MDM/R and the AMI system (Sensus, Flexnet). Conversely, data that flows from these systems back into SAP is translated by SAP PI such that SAP is able to read or understand the data.

4. The upgrade to SAP ERP 6.0 included the Netweaver Stack that was not previously available. This was a critical component necessary in order for BWP to develop customer facing products such as web presentment.

- b) Why did Bluewater Power not upgrade its SAP system to be capable of smart meters and TOU billing when it did its upgrade in 2009?

8(b) Response

The answer provided above to IR# 8(a) provides the background to understand that there was no option to wait for a version of SAP that was capable of integrating with smart meters and carrying out TOU billing in Ontario.

The question that might then follow is “Should Bluewater Power have carried out the upgrade to SAP and the custom configuration required for the integration of Smart Meters at the same time?” The answer to that question is that both projects were of sufficient magnitude that a phased approach was necessary. For a utility the size of Bluewater Power, the same personnel would have been involved in each project making it impractical to carry out simultaneous projects. Moreover, it does not automatically follow that the cost of a simultaneous upgrade and Smart Meter implementation would be lower given the possibility of delays on one project impacting the cost of the other. As we saw with the IESO’s upgrade from R7.0 to R7.2 delays proved to be commonplace and significant.

- c) Are there any capabilities or functionality of the CIS/billing system upgrade which are used to service customers other than residential and GS < 50 kW customers? If so, please identify these and provide Bluewater Power’s rationale for the costs of the CIS/billing system upgrade to be borne solely by smart metered residential and GS < 50 kW customers.

8(c) Response

There were no changes included in the smart meter implementation that applied to customers other than residential and GS < 50 customers.

9. Ref: Application p37 – Smart Meter Costs

The Application seeks approval of recovery of all costs for the period 2006 to 2012, net of the funding adder, through an SMDR. Table 7.1 on p37 indicates that 89% of the costs requested for disposition have been audited, which is below the suggested 90% threshold.

- a) Please provide actual YTD capital costs to June 2012. If June 2012 costs are not available, please provide the most recent data available.

9(a) Response

The YTD June 2012 capital costs are \$700,664. With those costs, the entire project actual capital costs as of the end of June 2012 are \$8,459,665.

- b) Please provide actual YTD OM&A costs to June 2012. If June 2012 costs are not available, please provide the most recent data available.

9(b) Response

The YTD June 2012 OM&A costs are \$125,486. With those costs, the entire project actual OM&A as of the end of June 2012 are \$588,949.

10.Ref: Application p21 and p41 – 2012 IRM Rate Application

There is a variance of (\$1,304,597) in smart meter costs between the 2012 IRM rate application, filed on October 4, 2011 and this Application. Bluewater Power states that one of the contributing factors was cost containment related to installing GS < 50 kW meters with internal resources. At p21 of the Application, it indicates that this work was completed in November 2011.

Please explain why the 2012 IRM application overstated the expenses by \$230,000 for work which was nearing completion.

10 Response

The focus of our attention at the time of filing the updated budget for informational purposes within the 2012 IRM application was on the delays at the IESO and the extended timeline of our implementation. Subsequent to the 2012 IRM application Bluewater Power was able to document the savings it had captured through the decision to install certain meters with internal resources.

11.Ref: Application p5 and p44 – Cost Allocation and Class-specific SMDRs

At p5 of the application, Bluewater Power confirms that it has not deployed smart meters to classes other than residential and small commercial (i.e. GS < 50 kW). At

p44 of the application, it states that the SMFA was a uniform rate amongst all metered customers.

Allocating revenue and interest from other classes 50:50 to the residential and GS < 50 kW classes is an approach approved in recent smart meter decisions, and documented in section 3.5 of *Guideline G-2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition* (“Guideline G-2011-0001”), issued December 15, 2011.

- a) How has Bluewater Power allocated the SMFA revenues from the GS 50 kW to 999 kW, GS 1,000 kW to 4,999 kW, and large use customer classes for calculating the class-specific SMDRs for the residential and GS < 50 kW classes?

11(a) Response

Bluewater Power did not track the SMFA revenues by rate class when collected; in order to allocate the revenues received, we used the number of meters installed as a proxy. Therefore, we allocated 90.1% of the SMFA revenue to the residential rate class and 9.9% of the SMFA revenue to the GS<50 rate class.

We estimated that approximately \$20,000 of the approximately \$1.8M of SMFA revenue (including interest) was collected from the rate classes other than residential and GS<50. We note that in other interrogatory responses we were requested to allocate revenue 50/50 between the residential and GS<50 rate classes when determining the SMDR, but the original evidence was filed assuming the allocator based on the number of meters (90.1% to residential and 9.9% to GS<50).

- b) Using the attached spreadsheet taken from Guelph Hydro’s draft Rate Order filing, please provide calculations for class-specific SMDRs using a more direct allocation of SMFA revenues. This should also reflect any and all revisions to Smart Meter Model, Version 2.21 made as a result of Bluewater Power’s responses to interrogatories.

11(b) Response

The completed spreadsheet is attached as Appendix 1. There are three items incorporated into the attached spreadsheet that vary from the information contained in Bluewater Power’s original submission as follows:

1. We have updated the number of customers to reflect the 2103 forecast (per response to OEB #20(b)).
2. We have allocated the SMFA revenue collected from rate classes other than residential and GS<50, based on a 50/50 allocation.

3. As per Board Staff IR#19(a), Bluewater Power calculated the interest on the OM&A using a monthly methodology rather than an annual methodology

12.Ref: Application p4, Appendix 2 and Smart Meter Model, Sheet 2 – OM&A Expenses

Bluewater Power seeks approval of foregone revenue requirement related to smart meter deployment from 2006 to present. Appendix 2 of the application is a copy of a May 30, 2008 letter from the Fairness Commission, indicating compliance with the London Hydro RFP process.

- a) Bluewater Power lists capital (\$172 in 2006 and \$1,316 in 2007) and OM&A (\$13,439 in 2006 and \$25,755 in 2007) expenses prior to 2008 in Sheet 2 of the model.
 - i) Please explain the nature of the work done for these expensed costs incurred prior to Bluewater Power becoming authorized and commencing its smart meter deployment.

12(a)(i) Response

Capital costs in 2006 and 2007 were associated with labour for research and educational purposes.

OM&A costs in the years 2006 and 2007 were primarily associated with data collection fees paid to Olameter (\$7,214), membership fees to Util-Assist on account of the OUSM Working Group (\$11,321), and travel/labour included in OEB category 2.5.3 (\$14,796).

- ii) Please explain whether or not these costs were necessary for and integral to the implementation of Bluewater Power's smart meter program and do not replace operating expenses for legacy distribution operations whose costs are reflected in Bluewater Power's normal revenue requirement and recoverable through base distribution rates.

12(a)(ii) Response

Membership in the OUSM Working Group allowed Bluewater Power to gain benefit from the experience of Util-Assist and the other utilities with whom Util-Assist had worked. A utility the size of Bluewater Power is not able to have subject experts in all areas and we found it extremely valuable to gain that expertise through associations like OUSM.

The fees paid to Olameter for data reading allowed Bluewater Power access to real-life data to enhance our understanding of systems and to gain practical experience dealing with Smart Meter data. The dollars attributable to the Olameter costs are nominal and justified relative to the experience that was gained. These costs were classified internally as research costs, and when we were required to classify the costs within the OEB cost categories, they were placed in the AMCD category as they were research costs related to the AMCD.

- b) Under section 2.1.2, Other (row 116 of sheet 2), Bluewater Power lists OM&A expenses labelled as "ODS Fees" with \$1,935 for 2006, \$6,112 for 2007, \$4,497 for 2008 and \$4,727 for 2009. These expenses then increase to \$16,584 for 2010, \$40,456 for 2011 and decrease to \$22,067 for 2012.
 - i) What are the ODS Fees for during the period from 2006 to 2009?

12(b)(i) Response

ODS Fees for the period of 2006 through 2009 consist of meter data collection fees paid in respect of iTron and Elster meters installed originally as part of the Watford pilot. Although there are no costs included in this application for the original deployment of the Watford Smart Meter pilot study, the availability of data was determined to have value after the pilot ended and the costs were recorded to the smart meter deferral account as research.

- ii) What is the reason for the increased fees in 2010 and 2011?

12(b)(ii) Response

The increased OM&A in 2010 relates to broken meter encountered during the installation of smart meters; the OEB directed utilities to record costs associated with the material to replace broken meter bases as OM&A. The cost recorded to OM&A in respect of broken meter bases in 2010 was \$12,710.

The increase in 2011 was due to the completion of Bluewater Power's ODS, which necessitated ODS fees being paid as of February 2011. It is also worth noting that the year 2012 only consists of four months of ODS fees; after that date meter readers were removed

from the Distribution Company, and the ODS fees became the replacement cost for meter readers as those costs were determined to be baked into base rates. Accordingly, ODS fees became part of Bluewater Power's regular OM&A expenses as of May 2012.

- iii) Are these costs one-time or recurring? In particular, is the 2012 forecasted cost of \$22,087 a reasonable estimate of recurring ODS fees?

12(b)(iii) Response

ODS fees are recurring monthly per meter costs. The costs claimed in 2012 are for the first four months only as the costs were moved to regular OM&A expense accounts in May 2012 outside of the smart meter deferral account. The costs included in the model as-filed with the application are actual costs for January to March 2012, and a one month estimate for April 2012.

- c) Under section 2.5.3, Program Management (row 152 of sheet 2), Bluewater Power lists costs of \$2,151 for 2006, \$14,796 for 2007, \$16,322 for 2008, \$6,583 for 2009, (\$1,590) for 2010 and \$nil for 2011-2013.
- i) Given that Bluewater Power commenced smart meter deployment in 2010, please explain why the majority of the costs were incurred prior to then.

12(c)(i) Response

The years 2006 through 2008, prior to smart meter deployment, were spent educating ourselves through smart meter conferences, vendor exhibits, utility visits, as well as participation in the London Hydro RFQ for Smart Meters. In 2009, we developed a smart meter team representing personnel from all affected departments within our LDC.

These costs were incurred prior to deployment in 2010 because they were costs related to research to prepare for the launch on Smart Meters. We interpreted the Program Management bucket as the appropriate depository for costs related to research, so it follows that the research related costs would be complete by the time this utility began its deployment.

- ii) Please explain the negative cost entry of (\$1,590) for 2010.

12(c)(ii) Response

OM&A costs were re-allocated from category 2.5.3 to category 1.5.6 as they were determined, upon review in 2010, to be capital in nature. Given that reallocation was the only entry for that category for the year 2010, a negative balance of \$1,590 resulted.

13.Ref: Application p37 and Smart Meter Model, Sheet 2 – Capital Expenses

On row 107 of Sheet 2, Bluewater Power forecasts capital costs beyond minimum functionality of \$557,785 in 2012. The note indicates the asset type is computer software related to TOU implementation, CIS upgrades, web presentment, integration with the MDM/R, etc.

- a) Please provide further explanation of the \$557,785 of capitalized software costs forecast for 2012.

13(a) Response

For purposes of the smart meter model filed with this application, the column heading '2012 Forecast' represents a combination of actual costs until March 31, 2012, with the remainder of the year being forecast amounts.

Therefore, of the \$557,785 of capitalized software costs, \$422,010 was actual costs from January to March 2012 associated with integration and testing, web presentment and Time of Use preparation. These costs would be for consultants as well as the capitalization of internal labour.

The remaining amount of \$135,775 is the forecast cost covering the period from April 2012 until the end of year related to consultants as well as the capitalization of internal labour to complete web presentment and TOU implementation.

- b) Please also document what portion of these forecasted costs have been incurred to date.

13(b) Response

As detailed in response to 13(a), \$135,775 is the forecasted cost included for recovery. The amount spent in the three months ending June 2012 is \$12,590.

14.Ref: Application p39 and Smart Meter Model, Sheet 2 – OM&A Expenses

Please provide further description and justification by category of the OM&A expenses that Bluewater Power is seeking to recover. For each category please respond to the following questions.

- a) Are any of the expenses internal (i.e. done by Bluewater Power staff)?

14(a) Response

2.1.2: OM&A – AMCD

- No internal expenses

2.2.2: OM&A – AMRC

- No internal expenses

2.3.2: OM&A – Software Maintenance

- No internal expenses

2.5.1: OM&A – Business Process Redesign

- \$13,169 for internal labour

2.5.2: OM&A – Customer Communication

- \$4,180 for internal labour

2.5.3: OM&A – Program Management

- \$28,958 for internal labour

2.5.4: OM&A – Change Management

- \$41,038 for internal labour

2.5.5: OM&A – Administration Costs

- No internal expenses, but contract positions hired at a cost of \$156,409.

b) Please describe how Bluewater Power determined that each category of costs is fully incremental.

14(b) Response

There are internal labour costs included for recovery in categories 2.5.1, 2.5.2, 2.5.3 and 2.5.4 as OM&A, but those costs could have otherwise been recorded as capitalized labour. At the time that the costs were recorded to the OM&A accounts of the smart meter deferral, the costs were determined not to be tied directly to any one capital asset. The effort expended was more broadly intended for the development of the Smart Meter program and the costs were not recorded as capitalized labour. An argument could have been made for the recovery of these costs as capitalized labour, but instead the costs were recorded as OM&A to be recovered as part of the smart meter project.

The smart meter implementation was the most significant capital project that Bluewater Power has undertaken in its history. The time represented by these internal labour costs of

\$86,310 (not including the \$1035 and \$156,409 explained below) are included for recovery as OM&A to represent the incremental effort expended by staff that was not otherwise recorded as capitalized labour. The time expended by staff would have otherwise been spent on (i) normal utility operations or (ii) capitalized to other capital projects. The “normal” utility work cannot be delayed, so it is likely that the extra effort of \$86,310 would have otherwise been dedicated to other capital projects. Therefore, the costs are incremental to the extent they represent an opportunity cost because the labour would have, otherwise, been capitalized to a non-smart meter project.

There are two internal costs included for recovery that are clearly fully incremental:

- Approximately \$1035 of cost in category 2.5.2 related to employee costs allocated from affiliates to the distribution company in order for that employee to assist in the customer communication effort; these costs would not have otherwise been incurred but for the smart meter initiative and were therefore fully incremental in nature. .
- All of the internal costs of \$156,409 included in category 2.5.5 relate to the three temporary contract Customer Service Representatives hired as back-fill and to accommodate the increase in call volume during meter rollout and implementation of TOU pricing. These costs would not have otherwise been incurred but for the smart meter initiative and were therefore fully incremental in nature

- c) Are there costs that Bluewater Power no longer incurs as a result of now transmitting customer usage data from smart meters over communications lines?

14(c) Response

Bluewater Power no longer incurs the cost of manual meter reading, however Bluewater Power's meter reading costs have increased by approximately \$32,000 as a result of the switch from manual metering to transmitting customer usage data from smart meters over communications lines. While the annual cost of manual meter reading for residential and GS<50 was approximately \$110,000, the annual cost of, instead, transmitting that customer usage data from smart meters over communications lines is approximately \$142,647.

15.Ref: Application p39-40 and Smart Meter Model, Sheet 2 – OM&A Expenses

- a) Under section 2.2.2 of Sheet 2, Bluewater Power lists Network Fees of \$29,633 in 2010, \$49,134 in 2011 and \$21,563 in 2012. Please explain the nature of these fees. Please explain the higher fees in 2011.

15(a) Response

Network fees consist of monthly per meter data collection fees from our AMI vendor. These charges began to be incurred in June 2010; therefore, there are only 6 months accounted for in 2010. In the year 2011, there are twelve months accounted for. As of May 2012, the

fees were moved to the distribution company's regular OM&A expense accounts (i.e. not recorded to the smart meter deferral account) because they were determined to be replacement costs for manual meter reading costs already embedded in base rates; therefore, only four months of the expense were accounted for in the Smart Meter costs for 2012.

- b) Under section 2.5.5, Bluewater Power lists Administration Costs of \$104,826 in 2011 and \$107,072 in 2012. Please explain the nature of these administration costs. Are they forecast to continue?

15(b) Response

Administration Costs consists of the following items:

- Supplies (\$1762 in 2011 and \$7544 in 2012)
- Modular office space was required to accommodate staff and consultants for the project, and those rental costs are recorded to this account (\$41,431 in 2011 and \$13,267 in 2012)
- Additional customer service personnel were required as back-fill and to accommodate the increase in call volume during meter rollout and implementation of TOU pricing (\$64,438 in 2011 and \$91,971 in 2012).

None of these costs are forecast to continue beyond 2012.

- c) The bulleted list on p40 indicates \$72,000 of expenses related to membership fees, training, conferences and research. Please quantify the membership fees and explain the nature of the membership fees and how they are necessary and prudent with respect to Bluewater Power's smart meter program.

15(c) Response

Membership fees equate to just over \$11,000 for the years of 2006 and 2007. Membership fees were paid to Util-Assist for membership in the OUSM Working Group.

The Ontario Utilities Smart Meter (OUSM) working group, whose members had the common goal of developing an in-depth understanding of the Smart Metering Initiative provided resources such as access to information regarding strategic pilots, test protocols developed by other utilities already completed implementation, RFP document development, etc. Focus was placed on technology, back office integration, change management, and data presentment back to the consumer. The OUSM group facilitated the involvement of third party integration companies for meter installation, ongoing operation of smart meter networks, and meter asset ownership models.

To ensure value was realized, it was critical that the strategy followed was one that considered all operational aspects of the available AMI technologies. As a result of collaborating with Util-Assist and the other utilities that were members of the OUSM we were able to be better prepared to implement Smart Meters in a cost effective manner. In Bluewater Power's view the cost of membership was minimal relative to the value of the experience gained.

16.Ref: Smart Meter Model, Sheet 3 - Taxes/PILs Rates

Bluewater Power has used the maximum taxes/PILs rates input on sheet 3, row 40, for the years 2006, 2007, 2008, 2009, 2010, 2011, 2012 and 2013 and beyond. These are summarized in the following table:

Year	2006	2007	2008	2009	2010	2011	2012	2013
Aggregate Federal and provincial income tax rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%	25.50%

Please confirm that these are the tax rates corresponding to the taxes or PILs actually paid by Bluewater Power in each of the historical years, and that Bluewater Power forecasts it will pay for 2012 and 2013. In the alternative, please explain the tax rates shown and their derivation.

16 Response

Bluewater Power confirms that the tax rates set out above correspond to the rates used to determine the PILs paid in each of the historical years and the rates that are forecasted for 2012 and 2013.

17.Ref: Smart Meter Model, Sheet 3 – CCA Rates

- a) Please explain why Bluewater Power has applied CCA class 8 for smart meters instead of CCA class 47. What CCA class is used for legacy conventional meters?

17(a) Response

Bluewater Power used CCA class 8 in the Smart Meter Model because that is the same class used in Bluewater Power's tax return for smart meters. Bluewater Power felt that the resulting PILS embedded in rates paid by electricity ratepayers should correlate to the actual amount of PILS paid through its tax return. That classification was set in consultation with our external tax advisors and incorporated in previously filed tax returns.

We confirm that CCA class 47 was used for legacy conventional meters starting in 2005. Prior to this, CCA class 2 was used.

- b) Please explain why Bluewater Power has applied CCA class 46 for computer equipment instead of CCA class 45

17(b) Response

Bluewater Power used CCA class 46 in the Smart Meter Model because this is the same class used in Bluewater Power's tax return for computer equipment. Bluewater Power felt that the resulting PILS embedded in rates paid by electricity ratepayers should correlate to the actual amount of PILS paid through its tax return. That classification was set in consultation with our external tax advisors and incorporated in previously filed tax returns.

18.Ref: Smart Meter Model, Sheet 8 SMFA Revenues

On sheet 8 of the Smart Meter Model, Bluewater Power has input SMFA revenues for May and June 2012. Please explain these entries as the SMFA ceased on April 30, 2012 in accordance with the Board's decisions of its 2011 and 2012 IRM rates applications.

18 Response

Although the rate rider ceased on April 30, 2012, Bluewater Power continued to collect SMFA revenue amounts after May 1, 2012 for amounts related to billing periods prior to May 1, 2012.

19.Ref: Smart Meter Model – Interest on OM&A and Depreciation Expenses

In the Smart Meter Model Version 2.21 filed by Bluewater Power, the utility has relied upon sheet 8B to calculate the interest on OM&A and depreciation/amortization expenses. Sheet 8B calculates the interest based on the average annual balance of deferred OM&A and depreciation/amortization expenses based on the annual amounts input elsewhere in the model.

For LDCs that have the appropriate data, the more accurate and preferred method for calculating the interest on OM&A and depreciation/amortization expense is to input the monthly amounts from the sub-account details of Account 1556, using sheet 8A of the model. This approach is analogous to the calculation of interest on SMFA revenues on sheet 8 of the model.

- a) Please re-file the smart meter model using the monthly OM&A and depreciation/amortization expense data from Account 1556 records. Bluewater Power should also take into account any revisions necessary as a result of its responses to any preceding interrogatories.

19(a) Response

The updated model is attached as Appendix 2, which includes the requested changes. The model includes the following updates:

1. We have updated the number of customers to reflect the 2103 forecast (per response to OEB #20(b)).
2. We have allocated the SMFA revenue collected from rate classes other than residential and GS<50, based on a 50/50 allocation.
3. As per above Board Staff IR#19(a), Bluewater Power calculated the interest on the OM&A using a monthly methodology rather than annual.

- b) If this is not possible, please explain.

19(b) Response

Not applicable. See 19(a).

20.Ref: Smart Meter Model, Sheet 2 and Sheet 9

Bluewater Power notes that it has installed a total of 35,401 smart meters. Sheet 9 of the smart meter model calculates the SMDR for the number of metered customers – average for 2013 test year.

- a) Please confirm that the entry of 35,401 is Bluewater Power's current estimate of the average number of smart metered residential and GS < 50 kW customers for the year 2013.

20(a) Response

Not confirmed. The entry of 35,401 is the number of meters installed as of March 31, 2012, not the estimate of the average number of smart metered customers for the year 2013.

- b) In the alternative please provide Bluewater Power's estimate of the average number of residential and GS < 50 kW customers for the period from November 1, 2012 (i.e., the effective date of the SMDR) to December 31, 2013.

20(b) Response

The average customer count for the 2013 forecast number of residential and GS<50 customers is 35,666.

21.Ref: Board Guideline G-2011-0001, Application p29

P19 of the Guideline G-2011-0001, 2011 states that, "In considering the recovery of smart meter costs, the Board also expects that a distributor will provide evidence on any operational efficiencies and cost savings that result from smart meter implementation." Please provide a summary of any operational efficiencies and costs savings relating to the implementation of smart meters to date realized or expected by Bluewater Power.

21 Response

This question is answered, in part, through the answer to OEB Staff IR#14(c) above. There are no net savings in meter reading costs; there is a net increase in metering reading costs. The annual cost of automated reads is approximately \$30,000 more than the annual cost of foot reading meters for the residential and GS<50 customers.

We note, again, that we recorded AMI related OM&A up to the end of April 2012. After May 1, 2012 those costs were not recorded to the Smart Meter Deferral Accounts, but became normal operating costs of the utility as they replaced the costs saved with the elimination of

meter readers. Put another way, Bluewater Power is absorbing the increased meter reading costs associated with Smart Meters as of May 1, 2012, with the expectation that the increased costs of reading Smart Meters will be accounted for upon rebasing.

There are no other operational efficiencies or costs savings associated with the implementation for smart meters.

22.Ref: Application p2 - Stranded Meters

In the application, Bluewater Power proposes that stranded meters continue to be included in rate base. Bluewater Power will seek recovery of stranded meter costs in its 2013 cost of service application.

Please provide the estimated NBV of stranded conventional meters as of December 31, 2012, disaggregated by Residential and GS < 50 kW customer classes.

22 Response

The estimated NBV for the Residential customer class is \$1,735,945. The estimated NBV for the GS<50 kW customer class is \$161,118. Both amounts are stated as of December 31, 2012.

Responses to VECC Interrogatories

**Bluewater Power Distribution Corporation
2012 Smart Meter Cost Recovery
EB-2012-0263
Responses to VECC Interrogatories**

VECC Question # 1

Reference 1: Application, Page 5, Page 25

“The capital and OM&A costs included for recovery for Minimum Functionality are \$6.7M or \$188.92 per customer (see Section 5.0 of this Application). There is no published average for Minimum Functionality costs only, and there are only 14 applications¹ that have been filed for final disposition in the last six months for comparison purposes. Based on that relatively small sample, the average claim for Minimum Functionality is \$194.93 per customer.”

“The total capital and OM&A costs included for recovery for Beyond Minimum Functionality costs is \$2.55M or \$72.09 per customer (see Section 6.0 of this Application). There is no published average for Beyond Minimum Functionality costs only, and there are only 14 applications that have been filed for final disposition in the last six months. Based on that relatively small sample, the average claim is approximately \$11.84 per customer.”

Reference 2: Application, Page 25

The total amount claimed in this application for recovery as Beyond Minimum Functionality is \$2.53M or \$71.49 per customer. There is no published average for Beyond Minimum Functionality, and there are only 14² applications for Smart Meter cost recovery that have been filed to date in 2012. The footnotes list the applications.

a) Please provide the underlying data and analysis that was used to derive the above average costs calculated by Bluewater Power based on data from the 14 applications.

1(a) Response

The data for the analysis was sourced from the original Smart Meter Models filed by each of the listed LDCs as found on the OEB website. The cost per customer was determined for each application and the average for all applications was determined on a non-weighted basis. Table 1.1 details the costs defined as ‘Minimum Functionality’, and Table 1.2 details the costs defined as ‘Beyond Minimum Functionality’ within each LDC’s smart meter model.

Table 1.1 – Minimum Functionality Costs per Customer

	File Number	Number of Customers	Minimum Functionality			
			Capital Costs	OM&A	Total Minimum Functionality Costs	Cost per Customer
Collus	EB-2012-0017	16,000	\$2,574,422	\$350,000	\$2,924,422	\$182.78
Horizon	EB-2011-0417	230,713	\$25,859,794	\$5,736,698	\$31,596,492	\$136.95
Innisfil	EB-2011-0435	14,721	\$2,151,270	\$283,733	\$2,435,003	\$165.41
Lakeland	EB-2011-0413	9,620	\$2,170,637	\$213,779	\$2,384,416	\$247.86
Midland	EB-2011-0434	6,828	\$1,241,267	\$200,930	\$1,442,196	\$211.22
Niagara on the Lake	EB-2012-0036	8,050	\$1,619,172	\$119,558	\$1,738,729	\$215.99
Orangeville	EB-2012-0039	11,105	\$1,863,162	\$150,797	\$2,013,959	\$181.36
Peterborough	EB-2012-0008	34,967	\$5,535,936	\$172,347	\$5,708,283	\$163.25
Thunder Bay	EB 2012-0015	49,440	\$8,157,370	\$1,899,825	\$10,057,195	\$203.42
Welland	EB-2011-0415	21,520	\$3,037,636	\$520,817	\$3,558,453	\$165.36
London	EB-2012-0187	146,850	\$21,723,929	\$1,450,459	\$23,174,388	\$157.81
Cambridge	EB-2012-0086	50,709	\$8,177,996	\$1,283,726	\$9,461,722	\$186.59
Oakville	EB-2012-0193	63,734	\$10,103,247	\$1,327,688	\$11,430,935	\$179.35
Sioux Lookout	EB-2012-0245	2,675	\$715,162	\$172,135	\$887,297	\$331.70
AVERAGE						\$194.93
Bluewater Power	EB-2012-0263	35,401	\$6,053,314	\$634,751	\$6,688,064	\$188.92

Table 1.2 – Beyond Minimum Functionality Costs per Customer

	File Number	Number of Customers	Beyond Minimum Functionality			
			Capital	OM&A	Total Costs Beyond Minimum Functionality	Cost per Customer
Collus	EB-2012-0017	16,000	\$0	\$0	\$0	\$0.00
Horizon	EB-2011-0417	230,713	\$1,483,555	\$405,098	\$1,888,653	\$8.19
Innisfil	EB-2011-0435	14,721	\$43,544	\$179,992	\$223,536	\$15.18
Lakeland	EB-2011-0413	9,620	\$116,542	\$57,026	\$173,568	\$18.04
Midland	EB-2011-0434	6,828	\$62,139	\$9,704	\$71,843	\$10.52
Niagara on the Lake	EB-2012-0036	8,050	\$268,479	\$45,733	\$314,211	\$39.03
Orangeville	EB-2012-0039	11,105	\$100,629	\$122,775	\$223,404	\$20.12
Peterborough	EB-2012-0008	34,967	\$0	\$0	\$0	\$0.00
Thunder Bay	EB_2012-0015	49,440	\$0	\$0	\$0	\$0.00
Welland	EB-2011-0415	21,520	\$0	\$0	\$0	\$0.00
London	EB-2012-0187	146,850	\$3,190,874	\$102,252	\$3,293,126	\$22.43
Cambridge	EB-2012-0086	50,709	\$0	\$0	\$0	\$0.00
Oakville	EB-2012-0193	63,734	\$227,905	\$363,660	\$591,565	\$9.28
Sioux Lookout	EB-2012-0245	2,675	\$13,088	\$16,671	\$29,759	\$11.12
AVERAGE						\$11.84
Bluewater Power	EB-2012-0263	35,401	\$2,530,673	\$21,120	\$2,551,793	\$72.08

This data has been provided as requested. However, we would like to reassert the caveats contained in our application regarding the use of the data. The summary data was provided in the pre-filed evidence with two important cautions as follows:

- (1) The average represents a sample of only fourteen distributors. That is a relatively small sample and therefore easily skewed if the sample is not representative of all licensed distributors in Ontario.
- (2) Costs filed for recovery as “Beyond Minimum Functionality” must meet the test of being required for the smart meter program and incremental to normal spending on a utility’s CIS. In Bluewater Power’s respectful submission every LDC will have necessarily incurred costs that could have properly been characterized as “Beyond Minimum Functionality”; yet four of the LDCs in Table 1.2 have claimed \$0 in “Beyond Minimum Functionality” costs. It appears to Bluewater Power that LDCs to-date have disparate interpretations of the test required to seek recovery of costs through this

application. In addition, some LDCs with lesser costs may have chosen not to seek recovery of any “Beyond Minimum Functionality” costs in advance of rebasing.

Accordingly the data was provided for context but, in Bluewater Power’s submission, that context is most helpful if the Board and Intervenors are mindful of the limits of the data. The comparisons do not compare the amount actually spent by LDCs on “Beyond Minimum Functionality” but more accurately represents a comparison of the “Beyond Minimum Functionality” costs claimed for recovery through this particular process (ie. Smart Meter Final Disposition as opposed to a Rebasing Application).

VECC Question # 2

Reference: Application, Page 10, 3.0 Smart Meter Program Status

Preamble: In Table 3.1, Bluewater Power provides a summary of the smart meters installed by year.

a) Please summarize the types of meters installed for each rate class.

2(a) Response

Table 2.1 – Type of Meters by Rate Class

Meter Type	Description	Rate Category Applicable
Single phase - 2S	1 phase 3 wire 1.5 element self-contained meters	Residential, GS<50
Single phase - 3S	1 phase 2 wire 1 element transformer rated meters	Residential
Single phase - 1S	1 phase 2 wire 1 element self-contained meters	Residential
Remote disconnect	1 phase 3 wire 1.5 element self-contained meters with remote disconnect relay	Residential
Network	3 phase 3 wire 2 element self-contained meters	Residential
Polyphase	3 phase 3 and 4 wire 2,2.5 and 3 element transformer and self-contained meters	Residential, GS<50

b) Please complete the following table to show the calculation of average costs based on individual meter types.

Class	Type of Meter	Quantity	Meter Cost	Average Meter Cost	Installation Cost	Average Installation Cost	Other Costs	Total Average Cost
Residential								
GS<50 kW								

2(b) Response

Table 2.2 is provided below to detail the average costs based on meter type in the format requested by the interrogatory. We note that two issues require elaboration to explain the data provided.

First, the cost of installation for the GS<50 meters includes \$67,091 in costs under the heading of 'Other'. This represents the installed costs for conversion bases required for some of the installations encountered. Bluewater Power did not track the costs for conversion bases by the type of meter. Therefore, the costs are added to the total for the GS<50 category rather than arbitrarily dividing the costs amongst the three types of meters in the GS<50 category.

Second, Table 8.2 provided in our original application specified the average smart meter unit cost of \$94.66 for residential customers and \$394.34 for GS<50 customers. The totals in Table 2.2 are slightly different at \$91.15 for residential and \$374.66 for GS<50 customers. The variance is due to the fact that 1,412 extra meters were purchased but not yet installed; the cost of these meters is included in Table 2.2 but Table 8.2 of the pre-filed evidence only included costs associated with installed meters. The meters were purchased at the time of mass installation as a contingency to accommodate faulty meters, knowing the additional stock would be useful for customer growth.

Table 2.2 – Average Meter Cost per Rate Category

Class	Type of Meter	Quantity	Meter Cost	Average Meter Cost	Installation cost	Average Installation cost	Other costs	Total Cost	Total Average Cost
Residential	Single phase - 2S	27,941	\$1,959,227	\$70.12					
	Single phase - 3S	205	\$29,075	\$141.83					
	Single phase - 1S	26	\$3,494	\$134.38					
	Remote disconnect	3,518	\$246,085	\$69.95					
	Network	1,435	\$213,715	\$148.93					
Total Residential		33,125	\$2,451,596		\$567,846.15	\$17.14	\$0.00	\$3,019,441.90	\$91.15
GS<50	Single phase - 2S	1,700	\$118,875	\$69.93					
	Polyphase	1,878	\$884,569	\$471.02					
	Polyphase - 600 V	110	\$109,093	\$991.76					
Total GS<50		3,688	\$1,112,537		\$202,131.79	\$54.81	\$67,091.20	\$1,381,760.03	\$374.66

VECC Question # 3

Reference: Application, Page 17 Preamble: The evidence states “The end goal of the selection process was to find the best fit for our territory and to learn from the experience of others to better mitigate known project risks.”

a) Please summarize the known project risks.

3(a) Response

The deployment of Smart Meters represented the single biggest capital project undertaken by Bluewater Power (and most LDCs in Ontario). Electricity utilities in Ontario have become more collaborative in recent years, so risks were both known and rumored (and therefore required confirmation). Some highlights of the risks and solutions investigated during our research phase of the project included:

- Storage space was required to accommodate storage of ‘old’ meters in case of meter reading discrepancies between the old meters and the new smart meters.

- Customer communication issues were identified associated with both installation of meters and roll out of TOU pricing.
- Communication equipment issues were identified by some utilities as requiring particular attention (i.e. tower placement was critical; additional collectors may be required to accommodate growth; setting deadlines for requiring Smart Meters on new homes).
- Practical deployment issues were identified (i.e. non-flammable/dielectric hornet blaster was required for installers).
- Issues particular to certain meter vendors (i.e. some meters were identified as vulnerable to providing incorrect outage reports)
- WAN – cellular modem: The contract with cellular service providers was not applicable for 'data only' plans, so they required negotiation with cell phone vendors. It had taken some utilities 8-10 weeks to build the WANX (tunnel) partly attributable to these delays.

VECC Question # 4

Reference: Application, Page 19

Preamble: The evidence states “Due to a delay in the availability of meter stock from Sensus, the completion of the mass installation was delayed into 2011. This delay of approximately 6 months posed the potential to increase costs of the installation, which could have materially compromised the budget. However, successful negotiations with Honeywell resulted in the amount over budget being limited to approximately \$25,000.

a) Please provide a breakdown and description of the over budget costs.

4(a) Response

1.	Additional installation costs: because mass installation was complete, Honeywell had the right to charge 'semi-urban' per meter installation rates given the random location of meters remaining to be changed. We negotiated a compromise rate for the remaining installations with a lesser incremental cost of \$3,735.80.	\$ 3,735.80
2.	Warehouse and call centre fees for an additional 4 month period	\$ 12,720.00
3	Legal fees & expenses associated with the extension of contract with Honeywell and to enforce the delivery schedule with Sensus	\$ 5,000.00
4	Bluewater Power labour for meetings, internal costs to negotiate with meter installation service provider & to initiate dispute resolution with Sensus	\$ 4,000.00

It should be noted that while the incremental cost of \$25,455 discussed above has been included for recovery as part of the installation cost for meters, these costs are offset by a credit negotiated with Sensus. That credit is reflected in the meter costs claimed as part of this application for disposition, so there is no net impact on customers from the delay.

VECC Question # 5

Reference: Application, Page 40

Preamble: The application indicates “It is worth noting that those OM&A costs which relate primarily to meter reading are only included in this application up to April 30, 2012; from that point where the AMI replaces foot reading by meter readers, the costs form part of regular OM&A after May 1, 2012 as costs were already incorporated into rates relating to meter reading.”

- a) Please confirm the amount of meter reading savings and how these savings are accounted for in this application.

5(a) Response

Please see response to Board Staff #14(c).

VECC Question # 6

Reference: Application, Page 29

Preamble: The evidence indicates “Smart Meters created additional steps in the business process compared to prior work processes and, therefore, one of the goals during the review of processes was to increase productivity through automation where possible in order to balance the introduction of additional steps associated with Smart Meters. The end result was increased automation that has allowed Bluewater Power to accommodate Smart Meters with no incremental permanent staff.”

- a) Please provide a summary of incremental internal labour costs incurred by Bluewater Power to implement its smart meter program in terms of positions, contract type (permanent vs. temporary, parttime vs. fulltime), length of employment and work activities.

6(a) Response

It is worth clarifying that internal labour is included in this application for recovery through both capitalized labour and OM&A. The Board has accepted in previous Smart Meter Final Disposition applications that capitalized labour is not “double counted” and has been approved for recovery. The treatment of capitalized labour in those applications and this application is identical to the normal and accepted practice of capitalizing internal labour associated with capital projects.

The labour included in OM&A accounts for recovery through this application is further discussed in response to OEB Staff IR#14(b). The labour is made up of the following:

- a) Three temporary, full-time, contract Customer Service Representatives (CSRs) were hired as of May 2011 through to September 2012. These positions cover the 17 month period while smart meters were installed and TOU pricing was implemented. They were required to backfill CSR roles while those permanent CSRs backfilled other permanent roles (Billing and Collections) who were temporarily reassigned to the smart meter project. The total incremental cost of the CSRs included for recovery is \$156,409 and recorded to OEB category 2.5.5.
- b) One employee with relevant experience was shared from an affiliate to the distribution company to assist with customer education, with a total incremental cost of \$1035.
- c) An additional \$86,310 of Internal Labour was included for recovery as OM&A as it was akin to capitalized labour and justified on the basis of the incremental opportunity cost resulting from staff being tied-up with Smart Meters to the detriment of other capital projects (see discussion in response to OEB Staff IR#14(b))

VECC Question # 7

Reference 1: Smart Meter Model (V2_2.21)

Reference 2: Board Guideline G20110001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011, Page 19

Preamble: The Guideline states, “The Board views that, where practical and where data is available, class specific SMDRs should be calculated on full cost causality.”

- a) Please complete a separate smart meter revenue requirement model by rate class. (This should include any revisions to the model resulting from interrogatory responses)

7(a) Response

As discussed at page 43-44 of Bluewater Power’s pre-filed evidence, we submit that the application as filed has been completed in a manner consistent with the Board’s Guideline G-2011-0001, which states:

“In the Board’s decision with respect to PowerStream’s 2011 Smart Meter Disposition Application (EB-2011-0128), the Board approved an allocation methodology based on a class-specific revenue requirement, offset by class specific revenues. The Board noted that this approach may not be appropriate or feasible for all distributors as the necessary data may not be readily available¹¹. The Board views that, where practical

and where the data is available, class specific SMDRs should be calculated based on full cost causality. The methodology approved by the Board in EB-2011-0128 should serve as a suitable guide.”

The methodology deployed by Bluewater Power in the pre-filed evidence should be expected to produce similar results as if two separate models had been filed; both methodologies require certain assumptions be made regarding the allocation of costs (and SMFA revenue) amongst the two rate classes. If the same assumptions are made in both methodologies, then similar results should be produced.

Provided in Table 7.1 below, we have provided the results produced from completing two separate models (results shown under the heading ‘Per VECC 7’). For comparison purposes, the results from the original methodology deployed in the pre-filed evidence are also detailed (results shown under the heading ‘Per Table 8.3 of evidence’). We have also included an updated version of the original evidence (results shown under the heading ‘Updated Table 8.3’), which has been updated (similarly to ‘Per VECC 7’) for the 3 changes noted below in response to items identified through these Interrogatory responses:

1. Updated the number of customers to reflect the 2103 forecast (per response to OEB #20(b)).
2. Allocated the SMFA revenue collected from rate classes other than residential and GS<50, based on a 50/50 allocation.
3. As per Board Staff IR#19(a), Bluewater Power calculated the interest on the OM&A using a monthly methodology (Sheet 8A of the smart meter model) rather than an annual calculation.

As expected, the results are very similar. However, the change in assumptions noted above and variations resulting from the calculations embedded in the model lead to slight differences in the rate riders produced.

The rate rider for residential increased from the original filing of \$4.32 to \$4.45 (a 3.0% increase in the SMDR, which results in no change to the total bill impact of 3.7%) and the rate rider for GS<50 decreased from \$9.02 to \$8.52 (a 5.5% decrease in the SMDR, which results in a decrease in the total bill impact from 3.2% to 3.0%).

The results of the analysis requested by VECC are presented in the Table 7.1 below, and the full models are also included as Appendix 3 (Residential Model) and Appendix 4 (GS<50 Model) to the responses.

Table VECC 7.1 – SMDR Analysis

	Per VECC 7			Original Table 8.3 of Evidence			UPDATED Table 8.3		
	Residential Model	GS<50 Model	Total	Residential	GS<50	Total	Residential	GS<50	Total
Return	\$776,926	\$353,704	\$1,130,631	\$775,669	\$354,962	\$1,130,631	\$775,669	\$354,962	\$1,130,631
Amortization	\$1,340,757	\$613,699	\$1,954,457	\$1,340,854	\$613,603	\$1,954,457	\$1,340,854	\$613,603	\$1,954,457
OM&A	\$590,939	\$64,931	\$655,870	\$590,951	\$64,918	\$655,869	\$590,951	\$64,918	\$655,870
PILs	(\$270,073)	(\$123,974)	(\$394,047)	(\$285,187)	(\$108,860)	(\$394,047)	(\$285,187)	(\$108,860)	(\$394,047)
Interest on Deferred OM&A	\$38,068	\$4,183	\$42,251	\$32,582	\$12,437	\$45,019	\$30,578	\$11,672	\$42,250
Total Revenue Requirement	\$2,476,617	\$912,544	\$3,389,161	\$2,454,869	\$937,060	\$3,391,929	\$2,452,866	\$936,295	\$3,389,161
SMFA Allocation	-\$1,618,691	-\$187,527	-\$1,806,218	-\$1,627,343	-\$178,770	-\$1,806,113	-\$1,618,630	-\$187,482	-\$1,806,113
True-up balance	\$857,926	\$725,017	\$1,582,943	\$827,526	\$758,290	\$1,585,816	\$834,235	\$748,813	\$1,583,048
Rate Rider Calculation									
Number of customers	32,122	3,544		31,897	3,504		32,122	3,544	
Residential - 6 months	\$4.45			\$4.32			\$4.33		
GS<50 - 24 months		\$8.52			\$9.02			\$8.80	

b) Please recalculate the SMDR & SMIRR rate riders based on full cost causality by rate class.

7(b) Response

See Table VECC 7.1 above for the rate riders requested.

- c) Please provide a table that summarizes the total Smart Meter Rate Adder Revenue and associated interest collected by customer class.

7(c) Response

Provided in the first two columns of Table 7.2 below are the total of SMFA revenue and associated interest by rate class. The table also includes the reallocation of the SMFA revenue from 'other' rate classes to the residential and GS<50 rate class under the heading "Allocate SMFA revenue from Other Metered Customers" to produce a total shown under the heading "SMFA Revenue".

The revenue collected from each rate class was not tracked separately as it was collected. Rather, the dollar values shown in Table 7.2 were determined using the monthly customer numbers to estimate the amount of SMFA revenue that would have been expected to be received from each rate class. The percentages that resulted from that calculation were used to allocate the actual total amount of SMFA collected (with interest) which were recorded in the general ledger account (\$1,806,113).

Table 7.2 – SMFA Revenue and Interest by Rate Class

	SMFA Revenue Collected	Interest	Total	% allocation	Allocate SMFA revenue from Other Metered Customers	SMFA Revenue
Residential	\$1,556,926	\$51,176	\$1,608,102	89.0%	\$10,528	\$1,618,630
GS<50	\$171,323	\$5,631	\$176,954	9.8%	\$10,528	\$187,482
Other Metered Customers	\$20,386	\$670	\$21,056	1.2%		\$0
TOTAL	\$1,748,635	\$57,478	\$1,806,113	100.0%	\$21,056	\$1,806,113

VECC Question # 8

Reference: Application, Page 6

Preamble: With this application Bluewater Power has proposed a disposition date of November 1, 2012, suggesting the need for a SMDR for costs up to October 31, 2012 and a SMIRR for the months of November and December of 2012. Bluewater Power has proposed an alternative approach, including November and December costs in the SMDR application despite the proposed November 1, 2012 implementation date of the proposed SMDR.

- a) Please provide a breakdown of the forecasted November and December 2012 costs.

8(a) Response

There are no forecast OM&A or capital costs for the months of November and December of 2012. There is no spending forecast for inclusion in this recovery past September 2012. As discussed elsewhere in the pre-filed evidence and in response to Interrogatories, all ongoing costs for the AMI have been included in Bluewater Power's normal budget past April of 2012 when meter readers were moved out of the distribution company (past that date, the costs were considered replacement costs for former foot reading costs already built into base rates).

Appendix 1

	2006	2007	2008	2009	2010	2011	2012		Total 2006 to 2012	Explanation Allocator	ID and Factors	Total	Residential	GS<50
Revenue Requirement for the Historical Years	\$ 13,802	\$ 27,349	\$ 23,997	\$ 31,240	\$ 461,939	\$ 1,203,759	\$ 1,627,075		\$3,389,161.01					
Total Return on Capital	\$ 170	\$ 373	\$ 502	\$ 3,791	\$ 182,175	\$ 436,054	\$ 507,566		\$1,130,630.85 Allocated per Class	Allocation by Meter and Installation Cost	Table 8.2 of prefiled evidence	100.00% \$1,130,630.85	68.60% \$775,668.61	31.40% \$354,962.25
Amortization and interest Expense	\$ 144	\$ 1,143	\$ 2,660	\$ 11,707	\$ 240,241	\$ 706,561	\$ 1,034,251		\$1,996,707.31 Allocated per Class	Allocation by Meter and Installation Cost	Table 8.2 of prefiled evidence	100.00% \$1,996,707.31	68.60% \$1,369,839.84	31.40% \$626,867.48
Operating Expenses	\$ 13,439	\$ 25,755	\$ 20,836	\$ 17,177	\$ 142,644	\$ 243,611	\$ 192,407		\$655,869.59 Allocated per Class	Number of Smart Meters Installed for each Class	Table 8.2 of prefiled evidence	35,401 \$655,869.59	31,897 \$590,951.45	3,504 \$64,918.14
Grossed-up Taxes/PILs	\$ 49	\$ 77	\$ (1)	\$ (1,435)	\$ (103,120)	\$ (182,468)	\$ (107,149)		-\$394,046.75 Allocated per Class	Revenue Requirement allocated to each Class before PILs	Table 8.2 of prefiled evidence	\$3,740,957.00 -\$394,046.75	\$2,707,474.00 -\$285,186.74	\$1,033,483.00 -\$108,860.01
TOTAL REVENUE REQUIREMENT									\$3,389,161.01			\$3,389,161.01	\$2,451,273.15	\$937,887.85
Percentage of costs allocated to Residential and GS < 50 kW customer classes												100.00%	72.33%	27.67%
Revenue Generated from Smart Meter Funding Adder (includes interest)									\$1,806,112.79					
SMFA Revenues directly attributable to class													89.04%	9.80%
Residual SMFA revenues (from other metered classes) attributed evenly													0.58%	0.58%
Total													89.62%	10.38%
Revenues Generated from SMFA									\$1,806,112.79				\$ 1,618,630.38	\$187,482.41
Net Deferred Revenue Requirement									\$0.00					
Remainder to be Allocated per Class												\$1,583,048.22	\$832,642.77	\$750,405.45
Number of Metered Customers (2013 Forecast)													32,122	3,544
Smart Meter Disposition Rate Rider														
													\$4.32	
														\$8.82

Summary of SMFA Revenue Allocation

	SMFA Collected	Interest	Total	% allocation	Allocate Other Metered SMFA revenue	Total SMFA Revenue
Residential	\$1,556,926	\$51,176	\$1,608,102	89.0%	\$10,528	\$1,618,630
GS<50	\$171,323	\$5,631	\$176,954	9.8%	\$10,528	\$187,482
Other Metered Customers	\$20,386	\$670	\$21,056	1.2%		
TOTAL	\$1,748,635	\$57,478	\$1,806,113	100.0%	\$21,056	\$1,806,113

Appendix 2



Ontario Energy Board
Smart Meter Model
(for 2013 Rates Applications)

V 2.21

Choose Your Utility:

Bluewater Power Distribution Corporation

Brant County Power Inc.

Application Contact Information

Name:

Leslie Dugas

Title:

Manager of Regulatory Affairs

Phone Number:

519-337-8201 Ext 2255

Email Address:

ldugas@bluewaterpower.com

We are applying for rates effective:

November 1, 2012

Last COS Re-based Year

2009

Legend

DROP-DOWN MENU

INPUT FIELD

CALCULATION FIELD

Copyright

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

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



Ontario Energy Board

Smart Meter Model

Bluewater Power Distribution Corporation

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.

	2006	2007	2008	2009	2010	2011	2012	2013	Total
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
Smart Meter Capital Cost and Operational Expense Data									
Smart Meter Installation Plan									
Actual/Planned number of Smart Meters installed during the Calendar Year									
Residential					28,293	3,586	18		31897
General Service < 50 kW					1,488	2,012	4		3504
Actual/Planned number of Smart Meters installed (Residential and GS < 50 kW only)	0	0	0	0	29781	5598	22	0	35379
Percentage of Residential and GS < 50 kW Smart Meter Installations Completed	0.00%	0.00%	0.00%	0.00%	84.18%	100.00%	0.00%	100.06%	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	0	29781	5598	22	0	35401

1 Capital Costs

1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)

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

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

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

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

Total Advanced Metering Communications Devices (AMCD)

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

1.2.1 Collectors

1.2.2 Repeaters (may include radio licence, etc.)

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

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

Asset Type	2006	2007	2008	2009	2010	2011	2012	2013	
Asset type must be selected to enable calculations	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
Smart Meter					3,303,275	327,354	595		\$ 3,631,224
Smart Meter					436,359	279,482	54,136		\$ 769,977
Tools & Equipment					5,934				\$ 5,934
									\$ -
Total Advanced Metering Communications Devices (AMCD)	\$ -	\$ -	\$ -	\$ -	\$ 3,745,568	\$ 606,836	\$ 54,731	\$ -	\$ 4,407,135
Asset Type	2006	2007	2008	2009	2010	2011	2012	2013	
Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
Smart Meter					260,747				\$ 260,747
Computer Hardware					6,928				\$ 6,928
Computer Hardware			3,035	10,504	227,227	3,436			\$ 244,202
Total Advanced Metering Regional Collector (AMRC) (Includes LAN)	\$ -	\$ -	\$ 3,035	\$ 10,504	\$ 494,902	\$ 3,436	\$ -	\$ -	\$ 511,877

1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)									
Asset Type									
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
1.3.1 Computer Hardware	Computer Hardware					6,138			\$ 6,138
1.3.2 Computer Software	Computer Software				29,658	177,037			\$ 206,695
1.3.3 Computer Software Licences & Installation (includes hardware and software) <i>(may include AS/400 disk space, backup and recovery computer, UPS, etc.)</i>									\$ -
Total Advanced Metering Control Computer (AMCC)		\$ -	\$ -	\$ -	\$ 29,658	\$ 183,175	\$ -	\$ -	\$ 212,833
1.4 WIDE AREA NETWORK (WAN)									
Asset Type									
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
1.4.1 Activation 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	Forecast	
1.5.1 Customer Equipment <i>(including repair of damaged equipment)</i>	Other Equipment					39,853	8,300		\$ 48,153
1.5.2 AMI Interface to CIS	Computer Software								\$ -
1.5.3 Professional Fees	Computer Hardware			840	39,137	26,812	6,654		\$ 73,443
1.5.4 Integration	Computer Software								\$ -
1.5.5 Program Management	Computer Software	172	1,316	448	2,184	56,697	51,968	67,530	\$ 180,315
1.5.6 Other AMI Capital	Computer Software				16,106	286,111	172,401	144,940	\$ 619,557
Total Other AMI Capital Costs Related to Minimum Functionality		\$ 172	\$ 1,316	\$ 1,288	\$ 57,427	\$ 409,473	\$ 239,323	\$ 212,470	\$ 921,468
Total Capital Costs Related to Minimum Functionality		\$ 172	\$ 1,316	\$ 4,323	\$ 97,589	\$ 4,833,118	\$ 849,595	\$ 267,201	\$ 6,053,313
1.6 CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY									
Asset Type									
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	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					29,742	1,943,146	557,785	\$ 2,530,673
Total Capital Costs Beyond Minimum Functionality		\$ -	\$ -	\$ -	\$ -	\$ 29,742	\$ 1,943,146	\$ 557,785	\$ 2,530,673
Total Smart Meter Capital Costs		\$ 172	\$ 1,316	\$ 4,323	\$ 97,589	\$ 4,862,860	\$ 2,792,741	\$ 824,986	\$ 8,583,986

2 OM&A Expenses

2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)

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

2.1.2 Other *(please specify)* ODS Fees

Total Incremental AMCD OM&A Costs

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

2.2.1 Maintenance

2.2.2 Other *(please specify)* Network Fees

Total Incremental AMRC OM&A Costs

2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)

2.3.1 Hardware Maintenance *(may include server support, etc.)*

2.3.2 Software Maintenance *(may include maintenance support, etc.)*

2.3.2 Other *(please specify)*

Total Incremental AMCC OM&A Costs

2.4 WIDE AREA NETWORK (WAN)

2.4.1 WAN Maintenance

2.4.2 Other *(please specify)*

Total Incremental AMRC OM&A Costs

2.5 OTHER AMI OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY

2.5.1 Business Process Redesign

2.5.2 Customer Communication *(may include project communication, etc.)*

2.5.3 Program Management

2.5.4 Change Management *(may include training, etc.)*

2.5.5 Administration Costs

2.5.6 Other AMI Expenses
(please specify)

Total Other AMI OM&A Costs Related to Minimum Functionality

TOTAL OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY

2.6 OM&A COSTS RELATED TO BEYOND MINIMUM FUNCTIONALITY
(Please provide a descriptive title and identify nature of beyond minimum functionality costs)

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

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

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

Total OM&A Costs Beyond Minimum Functionality

Total Smart Meter OM&A Costs

	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
									\$ -
	1,935	6,112	4,497	4,727	16,584	40,456	22,087		\$ 96,399
	\$ 1,935	\$ 6,112	\$ 4,497	\$ 4,727	\$ 16,584	\$ 40,456	\$ 22,087	\$ -	\$ 96,399
									\$ -
					29,633	49,134	21,563		\$ 100,329
	\$ -	\$ -	\$ -	\$ -	\$ 29,633	\$ 49,134	\$ 21,563	\$ -	\$ 100,329
									\$ -
					26,157	9,026	1,359		\$ 36,542
									\$ -
	\$ -	\$ -	\$ -	\$ -	\$ 26,157	\$ 9,026	\$ 1,359	\$ -	\$ 36,542
									\$ -
									\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
					2,938	10,833			\$ 13,772
	27				55,819	14,749			\$ 70,596
	2,151	14,796	16,322	6,583	-1,590				\$ 38,263
				5,848	12,223	14,586	19,206		\$ 51,864
	9,326	4,847	16	19	880	104,826	107,072		\$ 226,985
									\$ -
	\$ 11,504	\$ 19,643	\$ 16,338	\$ 12,450	\$ 70,270	\$ 144,995	\$ 126,278	\$ -	\$ 401,479
	\$ 13,439	\$ 25,755	\$ 20,836	\$ 17,177	\$ 142,644	\$ 243,611	\$ 171,288	\$ -	\$ 634,750
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual			
									\$ -
									\$ -
							21,120		\$ 21,120
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,120	\$ -	\$ 21,120
	\$ 13,439	\$ 25,755	\$ 20,836	\$ 17,177	\$ 142,644	\$ 243,611	\$ 192,407	\$ -	\$ 655,870

3 Aggregate Smart Meter Costs by Category

3.1	Capital																			
3.1.1	Smart Meter	\$	-	\$	-	\$	-	\$	-	\$	4,000,381	\$	606,836	\$	54,731	\$	-	\$	4,661,948	
3.1.2	Computer Hardware	\$	-	\$	-	\$	3,875	\$	49,641	\$	267,105	\$	10,090	\$	-	\$	-	\$	330,711	
3.1.3	Computer Software	\$	172	\$	1,316	\$	448	\$	47,948	\$	549,587	\$	2,167,515	\$	770,255	\$	-	\$	3,537,240	
3.1.4	Tools & Equipment	\$	-	\$	-	\$	-	\$	-	\$	5,934	\$	-	\$	-	\$	-	\$	5,934	
3.1.5	Other Equipment	\$	-	\$	-	\$	-	\$	-	\$	39,853	\$	8,300	\$	-	\$	-	\$	48,153	
3.1.6	Applications Software	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
3.1.7	Total Capital Costs	\$	172	\$	1,316	\$	4,323	\$	97,589	\$	4,862,860	\$	2,792,741	\$	824,986	\$	-	\$	8,583,986	
3.2	OM&A Costs																			
3.2.1	Total OM&A Costs	\$	13,439	\$	25,755	\$	20,836	\$	17,177	\$	142,644	\$	243,611	\$	192,407	\$	-	\$	655,870	



	2006	2007	2008	2009	2010	2011	2012	2013
Cost of Capital								
Capital Structure¹								
Deemed Short-term Debt Capitalization				4.0%	4.0%	4.0%	4.0%	4.0%
Deemed Long-term Debt Capitalization	50.0%	50.0%	53.3%	52.7%	56.0%	56.0%	56.0%	56.0%
Deemed Equity Capitalization	50.0%	50.0%	46.7%	43.3%	40.0%	40.0%	40.0%	40.0%
Preferred Shares								
Total	100.0%	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%	1.33%	1.33%	1.33%	1.33%	1.33%
Long-term Debt Rate (actual/embedded/deemed) ²	7.25%	7.25%	7.25%	7.62%	7.62%	7.62%	7.62%	7.62%
Target Return on Equity (ROE)	9.0%	9.00%	9.00%	8.01%	8.01%	8.01%	8.01%	8.01%
Return on Preferred Shares								
WACC	8.13%	8.13%	8.07%	7.54%	7.52%	7.52%	7.52%	7.52%
Working Capital Allowance								
Working Capital Allowance Rate	15.0%	15.0%	15.0%	12.0%	12.0%	12.0%	12.0%	12.0%
(% 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%	25.50%
Capital Tax (until July 1st, 2010)	0.30%	0.225%	0.225%	0.225%	0.075%	0.00%	0.00%	0.00%

Depreciation Rates

(expressed as expected useful life in years)

Smart Meters - years	15	15	15	15	15	15	15	15
- rate (%)	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%
Computer Hardware - years	5	5	5	5	5	5	5	5
- rate (%)	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Computer Software - years	5	5	5	5	5	5	5	5
- rate (%)	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Tools & Equipment - years	10	10	10	10	10	10	10	10
- rate (%)	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Other Equipment - years	10	10	10	10	10	10	10	10
- rate (%)	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%

CCA Rates

Smart Meters - CCA Class	8	8	8	8	8	8	8	8
Smart Meters - CCA Rate	20%	20%	20%	20%	20%	20%	20%	20%
Computer Equipment - CCA Class	46	46	46	46	46	46	46	46
Computer Equipment - CCA Rate	30%	30%	30%	30%	30%	30%	30%	30%
General Equipment - CCA Class	8	8	8	8	8	8	8	8
General Equipment - CCA Rate	20%	20%	20%	20%	20%	20%	20%	20%
Applications Software - CCA Class								
Applications Software - CCA Rate								

Assumptions

- ¹ Planned smart meter installations occur evenly throughout the year.
- ² Fiscal calendar year (January 1 to December 31) used.
- ³ Amortization is done on a straight line basis and has the "half-year" rule applied.



	2006	2007	2008	2009	2010	2011	2012	2013
Net Fixed Assets - Smart Meters								
Gross Book Value								
Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ 4,000,381	\$ 4,607,217	\$ 4,661,948
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ 4,000,381	\$ 606,836	\$ 54,731	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 4,000,381	\$ 4,607,217	\$ 4,661,948	\$ 4,661,948
Accumulated Depreciation								
Opening Balance		\$ -	\$ -	\$ -	\$ -	-\$ 133,346	-\$ 420,266	-\$ 729,238
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	-\$ 133,346	-\$ 286,920	-\$ 308,972	-\$ 310,797
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	-\$ 133,346	-\$ 420,266	-\$ 729,238	-\$ 1,040,035
Net Book Value								
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,867,035	\$ 4,186,951	\$ 3,932,710
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 3,867,035	\$ 4,186,951	\$ 3,932,710	\$ 3,621,913
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ 1,933,517	\$ 4,026,993	\$ 4,059,830	\$ 3,777,312
Net Fixed Assets - Computer Hardware								
Gross Book Value								
Opening Balance		\$ -	\$ -	\$ 3,875	\$ 53,516	\$ 320,621	\$ 330,711	\$ 330,711
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ 3,875	\$ 49,641	\$ 267,105	\$ 10,090	\$ -	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ 3,875	\$ 53,516	\$ 320,621	\$ 330,711	\$ 330,711	\$ 330,711
Accumulated Depreciation								
Opening Balance	\$ -	\$ -	\$ -	-\$ 388	-\$ 6,127	-\$ 43,540	-\$ 108,674	-\$ 174,816
Amortization expense during year	\$ -	\$ -	-\$ 388	-\$ 5,739	-\$ 37,414	-\$ 65,133	-\$ 66,142	-\$ 66,142
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	-\$ 388	-\$ 6,127	-\$ 43,540	-\$ 108,674	-\$ 174,816	-\$ 240,958
Net Book Value								
Opening Balance	\$ -	\$ -	\$ -	\$ 3,488	\$ 47,389	\$ 277,081	\$ 222,038	\$ 155,895
Closing Balance	\$ -	\$ -	\$ 3,488	\$ 47,389	\$ 277,081	\$ 222,038	\$ 155,895	\$ 89,753
Average Net Book Value	\$ -	\$ -	\$ 1,744	\$ 25,438	\$ 162,235	\$ 249,559	\$ 188,966	\$ 122,824

Net Fixed Assets - Computer Software (including Applications Software)

Gross Book Value

Opening Balance		\$ 172	\$ 1,488	\$ 1,936	\$ 49,884	\$ 599,471	\$ 2,766,986	\$ 3,537,240
Capital Additions during year (from Smart Meter Costs)	\$ 172	\$ 1,316	\$ 448	\$ 47,948	\$ 549,587	\$ 2,167,515	\$ 770,255	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ 172	\$ 1,488	\$ 1,936	\$ 49,884	\$ 599,471	\$ 2,766,986	\$ 3,537,240	\$ 3,537,240

Accumulated Depreciation

Opening Balance	\$ -	-\$ 17	-\$ 183	-\$ 526	-\$ 5,708	-\$ 70,643	-\$ 407,289	-\$ 1,037,711
Amortization expense during year	-\$ 17	-\$ 166	-\$ 342	-\$ 5,182	-\$ 64,936	-\$ 336,646	-\$ 630,423	-\$ 707,448
Retirements/Removals (if applicable)								
Closing Balance	-\$ 17	-\$ 183	-\$ 526	-\$ 5,708	-\$ 70,643	-\$ 407,289	-\$ 1,037,711	-\$ 1,745,159

Net Book Value

Opening Balance	\$ -	\$ 155	\$ 1,305	\$ 1,410	\$ 44,176	\$ 528,828	\$ 2,359,697	\$ 2,499,529
Closing Balance	\$ 155	\$ 1,305	\$ 1,410	\$ 44,176	\$ 528,828	\$ 2,359,697	\$ 2,499,529	\$ 1,792,081
Average Net Book Value	\$ 77	\$ 730	\$ 1,358	\$ 22,793	\$ 286,502	\$ 1,444,262	\$ 2,429,613	\$ 2,145,805

Net Fixed Assets - Tools and Equipment

Gross Book Value

Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ 5,934	\$ 5,934	\$ 5,934
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ 5,934	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 5,934	\$ 5,934	\$ 5,934	\$ 5,934

Accumulated Depreciation

Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	-\$ 297	-\$ 890	-\$ 1,484
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	-\$ 297	-\$ 593	-\$ 593	-\$ 593
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	-\$ 297	-\$ 890	-\$ 1,484	-\$ 2,077

Net Book Value

Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,637	\$ 5,044	\$ 4,451
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 5,637	\$ 5,044	\$ 4,451	\$ 3,857
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ 2,819	\$ 5,341	\$ 4,747	\$ 4,154

Net Fixed Assets - Other Equipment

Gross Book Value

Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ 39,853	\$ 48,153	\$ 48,153
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ 39,853	\$ 8,300	\$ -	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 39,853	\$ 48,153	\$ 48,153	\$ 48,153

Accumulated Depreciation

Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	-\$ 1,993	-\$ 6,393	-\$ 11,208
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	-\$ 1,993	-\$ 4,400	-\$ 4,815	-\$ 4,815
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	-\$ 1,993	-\$ 6,393	-\$ 11,208	-\$ 16,024

Net Book Value

Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 37,860	\$ 41,760	\$ 36,945
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 37,860	\$ 41,760	\$ 36,945	\$ 32,129
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ 18,930	\$ 39,810	\$ 39,352	\$ 34,537



	2006	2007	2008	2009	2010	2011	2012	2013
Average Net Fixed Asset Values (from Sheet 4)								
Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 1,933,517	\$ 4,026,993	\$ 4,059,830	\$ 3,777,312
Computer Hardware	\$ -	\$ -	\$ 1,744	\$ 25,438	\$ 162,235	\$ 249,559	\$ 188,966	\$ 122,824
Computer Software	\$ 77	\$ 730	\$ 1,358	\$ 22,793	\$ 286,502	\$ 1,444,262	\$ 2,429,613	\$ 2,145,805
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ 2,819	\$ 5,341	\$ 4,747	\$ 4,154
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 18,930	\$ 39,810	\$ 39,352	\$ 34,537
Total Net Fixed Assets	\$ 77	\$ 730	\$ 3,101	\$ 48,232	\$ 2,404,004	\$ 5,765,965	\$ 6,722,509	\$ 6,084,632
Working Capital								
Operating Expenses (from Sheet 2)	\$ 13,439	\$ 25,755	\$ 20,836	\$ 17,177	\$ 142,644	\$ 243,611	\$ 192,407	\$ -
Working Capital Factor (from Sheet 3)	15%	15%	15%	12%	12%	12%	12%	12%
Working Capital Allowance	\$ 2,016	\$ 3,863	\$ 3,125	\$ 2,061	\$ 17,117	\$ 29,233	\$ 23,089	\$ -
Incremental Smart Meter Rate Base	\$ 2,093	\$ 4,593	\$ 6,227	\$ 50,293	\$ 2,421,121	\$ 5,795,199	\$ 6,745,598	\$ 6,084,632
Return on Rate Base								
Capital Structure								
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 2,012	\$ 96,845	\$ 231,808	\$ 269,824	\$ 243,385
Deemed Long Term Debt	\$ 1,047	\$ 2,297	\$ 3,319	\$ 26,504	\$ 1,355,828	\$ 3,245,311	\$ 3,777,535	\$ 3,407,394
Equity	\$ 1,047	\$ 2,297	\$ 2,908	\$ 21,777	\$ 968,448	\$ 2,318,079	\$ 2,698,239	\$ 2,433,853
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ 2,093	\$ 4,593	\$ 6,227	\$ 50,293	\$ 2,421,121	\$ 5,795,199	\$ 6,745,598	\$ 6,084,632
Return on								
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 27	\$ 1,288	\$ 3,083	\$ 3,589	\$ 3,237
Deemed Long Term Debt	\$ 76	\$ 166	\$ 241	\$ 2,020	\$ 103,314	\$ 247,293	\$ 287,848	\$ 259,643
Equity	\$ 94	\$ 207	\$ 262	\$ 1,744	\$ 77,573	\$ 185,678	\$ 216,129	\$ 194,952
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ 170	\$ 373	\$ 502	\$ 3,791	\$ 182,175	\$ 436,054	\$ 507,566	\$ 457,832
Operating Expenses	\$ 13,439	\$ 25,755	\$ 20,836	\$ 17,177	\$ 142,644	\$ 243,611	\$ 192,407	\$ -
Amortization Expenses (from Sheet 4)								
Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 133,346	\$ 286,920	\$ 308,972	\$ 310,797
Computer Hardware	\$ -	\$ -	\$ 388	\$ 5,739	\$ 37,414	\$ 65,133	\$ 66,142	\$ 66,142
Computer Software	\$ 17	\$ 166	\$ 342	\$ 5,182	\$ 64,936	\$ 336,646	\$ 630,423	\$ 707,448
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ 297	\$ 593	\$ 593	\$ 593
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 1,993	\$ 4,400	\$ 4,815	\$ 4,815
Total Amortization Expense in Year	\$ 17	\$ 166	\$ 730	\$ 10,921	\$ 237,985	\$ 693,693	\$ 1,010,946	\$ 1,089,795
Incremental Revenue Requirement before Taxes/PILs	\$ 13,627	\$ 26,294	\$ 22,068	\$ 31,889	\$ 562,803	\$ 1,373,357	\$ 1,710,919	\$ 1,547,627
Calculation of Taxable Income								
Incremental Operating Expenses	\$ 13,439	\$ 25,755	\$ 20,836	\$ 17,177	\$ 142,644	\$ 243,611	\$ 192,407	\$ -
Amortization Expense	\$ 17	\$ 166	\$ 730	\$ 10,921	\$ 237,985	\$ 693,693	\$ 1,010,946	\$ 1,089,795
Interest Expense	\$ 76	\$ 166	\$ 241	\$ 2,046	\$ 104,602	\$ 250,376	\$ 291,437	\$ 262,880
Net Income for Taxes/PILs	\$ 94	\$ 207	\$ 262	\$ 1,744	\$ 77,573	\$ 185,678	\$ 216,129	\$ 194,952
Grossed-up Taxes/PILs (from Sheet 7)	\$ 48.86	\$ 77.25	-\$ 0.63	-\$ 1,434.95	-\$ 103,120.48	-\$ 182,467.74	-\$ 107,149.06	\$ -
Revenue Requirement, including Grossed-up Taxes/PILs	\$ 13,675	\$ 26,372	\$ 22,067	\$ 30,454	\$ 459,683	\$ 1,190,890	\$ 1,603,770	\$ 1,547,627



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 Forecast	2013 Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,600,342.90	\$ 3,426,426.72	\$ 2,790,399.28
Capital Additions	\$ -	\$ -	\$ -	\$ -	\$ 4,000,381.00	\$ 606,836.00	\$ 54,731.00	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ -	\$ 4,000,381.00	\$ 4,207,178.90	\$ 3,481,157.72	\$ 2,790,399.28
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ 2,000,190.50	\$ 303,418.00	\$ 27,365.50	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ -	\$ 2,000,190.50	\$ 3,903,760.90	\$ 3,453,792.22	\$ 2,790,399.28
CCA Rate Class	8	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ -	\$ -	\$ -	\$ 400,038.10	\$ 780,752.18	\$ 690,758.44	\$ 558,079.86
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ 3,600,342.90	\$ 3,426,426.72	\$ 2,790,399.28	\$ 2,232,319.42

UCC - Computer Equipment

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 Forecast	2013 Forecast
Opening UCC	\$ -	\$ 146.20	\$ 1,220.94	\$ 4,529.21	\$ 86,121.10	\$ 754,473.06	\$ 2,379,095.02	\$ 2,320,082.86
Capital Additions Computer Hardware	\$ -	\$ -	\$ 3,875.00	\$ 49,641.00	\$ 267,105.00	\$ 10,090.00	\$ -	\$ -
Capital Additions Computer Software	\$ 172.00	\$ 1,316.00	\$ 448.00	\$ 47,948.00	\$ 549,587.11	\$ 2,167,514.56	\$ 770,254.53	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ 172.00	\$ 1,462.20	\$ 5,543.94	\$ 102,118.21	\$ 902,813.21	\$ 2,932,077.62	\$ 3,149,349.55	\$ 2,320,082.86
Half Year Rule (1/2 Additions - Disposals)	\$ 86.00	\$ 658.00	\$ 2,161.50	\$ 48,794.50	\$ 408,346.06	\$ 1,088,802.28	\$ 385,127.27	\$ -
Reduced UCC	\$ 86.00	\$ 804.20	\$ 3,382.44	\$ 53,323.71	\$ 494,467.15	\$ 1,843,275.34	\$ 2,764,222.28	\$ 2,320,082.86
CCA Rate Class	46	46	46	46	46	46	46	46
CCA Rate	30%	30%	30%	30%	30%	30%	30%	30%
CCA	\$ 25.80	\$ 241.26	\$ 1,014.73	\$ 15,997.11	\$ 148,340.15	\$ 552,982.60	\$ 829,266.68	\$ 696,024.86
Closing UCC	\$ 146.20	\$ 1,220.94	\$ 4,529.21	\$ 86,121.10	\$ 754,473.06	\$ 2,379,095.02	\$ 2,320,082.86	\$ 1,624,058.00

UCC - General Equipment

	2006	2007	2008	2009	2010	2011	2012	2013
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 41,208.30	\$ 40,436.64	\$ 32,349.31
Capital Additions Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ 5,934.00	\$ -	\$ -	\$ -
Capital Additions Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 39,853.00	\$ 8,300.00	\$ -	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ -	\$ 45,787.00	\$ 49,508.30	\$ 40,436.64	\$ 32,349.31
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ 22,893.50	\$ 4,150.00	\$ -	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ -	\$ 22,893.50	\$ 45,358.30	\$ 40,436.64	\$ 32,349.31
CCA Rate Class	8	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ -	\$ -	\$ -	\$ 4,578.70	\$ 9,071.66	\$ 8,087.33	\$ 6,469.86
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ 41,208.30	\$ 40,436.64	\$ 32,349.31	\$ 25,879.45

UCC - Applications Software

	2006	2007	2008	2009	2010	2011	2012	2013
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA Rate Class	0	0	0	0	0	0	0	0
CCA Rate	0%	0%	0%	0%	0%	0%	0%	0%
CCA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



PILs Calculation

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 Forecast	2013 Forecast
INCOME TAX								
Net Income	\$ 94.20	\$ 206.69	\$ 261.71	\$ 1,744.33	\$ 77,572.71	\$ 185,678.17	\$ 216,128.97	\$ 194,951.59
Amortization	\$ 17.20	\$ 166.00	\$ 729.90	\$ 10,921.10	\$ 237,984.59	\$ 693,692.51	\$ 1,010,945.65	\$ 1,089,795.47
CCA - Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 400,038.10	\$ 780,752.18	\$ 690,758.44	\$ 558,079.86
CCA - Computers	-\$ 25.80	-\$ 241.26	-\$ 1,014.73	-\$ 15,997.11	-\$ 148,340.15	-\$ 552,982.60	-\$ 829,266.68	-\$ 696,024.86
CCA - Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 4,578.70	\$ 9,071.66	\$ 8,087.33	\$ 6,469.86
Change in taxable income	\$ 85.60	\$ 131.43	-\$ 23.12	-\$ 3,331.68	-\$ 237,399.64	-\$ 463,435.77	-\$ 301,037.84	\$ 24,172.49
Tax Rate (from Sheet 3)	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%	25.50%
Income Taxes Payable	\$ 30.92	\$ 47.47	-\$ 7.75	-\$ 1,099.45	-\$ 73,593.89	-\$ 130,920.60	-\$ 79,022.43	\$ 6,163.98
ONTARIO CAPITAL TAX								
Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 3,867,034.97	\$ 4,186,951.03	\$ 3,932,709.87	\$ 3,621,913.33
Computer Hardware	\$ -	\$ -	\$ 3,487.50	\$ 47,389.40	\$ 277,080.70	\$ 222,037.50	\$ 155,895.30	\$ 89,753.10
Computer Software (Including Application Software)	\$ 154.80	\$ 1,304.80	\$ 1,410.40	\$ 44,176.40	\$ 528,828.00	\$ 2,359,696.88	\$ 2,499,528.82	\$ 1,792,080.78
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ 5,637.30	\$ 5,043.90	\$ 4,450.50	\$ 3,857.10
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 37,860.35	\$ 41,760.05	\$ 36,944.75	\$ 32,129.45
Rate Base	\$ 154.80	\$ 1,304.80	\$ 4,897.90	\$ 91,565.80	\$ 4,716,441.32	\$ 6,815,489.36	\$ 6,629,529.24	\$ 5,539,733.77
Less: Exemption								
Deemed Taxable Capital	\$ 154.80	\$ 1,304.80	\$ 4,897.90	\$ 91,565.80	\$ 4,716,441.32	\$ 6,815,489.36	\$ 6,629,529.24	\$ 5,539,733.77
Ontario Capital Tax Rate (from Sheet 3)	0.300%	0.225%	0.225%	0.225%	0.075%	0.000%	0.000%	0.000%
Net Amount (Taxable Capital x Rate)	\$ 0.46	\$ 2.94	\$ 11.02	\$ 206.02	\$ 3,537.33	\$ -	\$ -	\$ -
Change in Income Taxes Payable	\$ 30.92	\$ 47.47	-\$ 7.75	-\$ 1,099.45	-\$ 73,593.89	-\$ 130,920.60	-\$ 79,022.43	\$ 6,163.98
Change in OCT	\$ 0.46	\$ 2.94	\$ 11.02	\$ 206.02	\$ 3,537.33	\$ -	\$ -	\$ -
PILs	\$ 31.38	\$ 50.41	\$ 3.27	-\$ 893.43	-\$ 70,056.56	-\$ 130,920.60	-\$ 79,022.43	\$ 6,163.98
Gross Up PILs								
Tax Rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%	25.50%
Change in Income Taxes Payable	\$ 48.40	\$ 74.31	-\$ 11.65	-\$ 1,640.98	-\$ 106,657.81	-\$ 182,467.74	-\$ 107,149.06	\$ 8,273.81
Change in OCT	\$ 0.46	\$ 2.94	\$ 11.02	\$ 206.02	\$ 3,537.33	\$ -	\$ -	\$ -
PILs	\$ 48.86	\$ 77.25	-\$ 0.63	-\$ 1,434.95	-\$ 103,120.48	-\$ 182,467.74	-\$ 107,149.06	\$ 8,273.81



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	\$ -		4.59%	\$ -	\$ -		
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	\$ -		4.59%	\$ -	\$ -		
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	\$ -	\$ 51,594.92	4.59%	\$ -	\$ 51,594.92		\$ 0.26
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	\$ 51,594.92	\$ 8,681.92	4.59%	\$ 197.35	\$ 60,474.19	\$ 69,022.41	\$ 0.26
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	\$ 60,276.84	\$ 8,317.66	4.59%	\$ 230.56	\$ 68,825.06		\$ 0.26
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	\$ 68,594.50	\$ 12,914.46	4.59%	\$ 262.37	\$ 81,771.33		\$ 0.26
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	\$ 81,508.96	\$ 6,943.82	4.59%	\$ 311.77	\$ 88,764.55		\$ 0.26
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	\$ 88,452.78	\$ 12,169.04	4.59%	\$ 338.33	\$ 100,960.15		\$ 0.26
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	\$ 100,621.82	\$ 7,242.56	4.59%	\$ 384.88	\$ 108,249.26		\$ 0.26
2010 Q1	0.55%	4.34%	May-07	2007	Q2	\$ 107,864.38	\$ 7,242.56	4.59%	\$ 412.58	\$ 115,519.52		\$ 0.26
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	\$ 115,106.94	\$ 11,934.00	4.59%	\$ 440.28	\$ 127,481.22		\$ 0.26
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	\$ 127,040.94	\$ 11,431.16	4.59%	\$ 485.93	\$ 138,958.03		\$ 0.26
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	\$ 138,472.10	\$ 9,261.20	4.59%	\$ 529.66	\$ 148,262.96		\$ 0.26
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	\$ 147,733.30	\$ 9,257.30	4.59%	\$ 565.08	\$ 157,555.68		\$ 0.26
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	\$ 156,990.60	\$ 10,174.32	5.14%	\$ 672.44	\$ 167,837.36		\$ 0.26
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	\$ 167,164.92	\$ 10,116.60	5.14%	\$ 716.02	\$ 177,997.54		\$ 0.26
2011 Q4	1.47%	3.92%	Dec-07	2007	Q4	\$ 177,281.52	\$ 7,990.58	5.14%	\$ 759.36	\$ 186,031.46	\$ 122,556.30	\$ 0.26
2012 Q1	1.47%	3.92%	Jan-08	2008	Q1	\$ 185,272.10	\$ 12,540.06	5.14%	\$ 793.58	\$ 198,605.74		\$ 0.26
2012 Q2	1.47%	3.51%	Feb-08	2008	Q1	\$ 197,812.16	\$ 7,152.08	5.14%	\$ 847.30	\$ 205,811.54		\$ 0.26
2012 Q3	1.47%	3.51%	Mar-08	2008	Q1	\$ 204,964.24	\$ 10,315.50	5.14%	\$ 877.93	\$ 216,157.67		\$ 0.26
2012 Q4	1.47%	3.51%	Apr-08	2008	Q2	\$ 215,279.74	\$ 10,092.16	4.08%	\$ 731.95	\$ 226,103.85		\$ 0.26
2013 Q1			May-08	2008	Q2	\$ 225,371.90	\$ 10,260.12	4.08%	\$ 766.26	\$ 236,398.28		\$ 0.26
2013 Q2			Jun-08	2008	Q2	\$ 235,632.02	\$ 8,379.54	4.08%	\$ 801.15	\$ 244,812.71		\$ 0.26
2013 Q3			Jul-08	2008	Q3	\$ 244,011.56	\$ 12,026.30	3.35%	\$ 681.20	\$ 256,719.06		\$ 0.26



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)
2013 Q4			Aug-08	2008	Q3	\$ 256,037.86	\$ 7,346.04	3.35%	\$ 714.77	\$ 264,098.67		\$ 0.26
			Sep-08	2008	Q3	\$ 263,383.90	\$ 7,861.88	3.35%	\$ 735.28	\$ 271,981.06		\$ 0.26
			Oct-08	2008	Q4	\$ 271,245.78	\$ 10,001.68	3.35%	\$ 757.23	\$ 282,004.69		\$ 0.26
			Nov-08	2008	Q4	\$ 281,247.46	\$ 9,384.18	3.35%	\$ 785.15	\$ 291,416.79		\$ 0.26
			Dec-08	2008	Q4	\$ 290,631.64	\$ 11,311.56	3.35%	\$ 811.35	\$ 302,754.55	\$ 125,974.25	\$ 0.26
			Jan-09	2009	Q1	\$ 301,943.20	\$ 13,109.72	2.45%	\$ 616.47	\$ 315,669.39		\$ 0.26
			Feb-09	2009	Q1	\$ 315,052.92	\$ 6,988.80	2.45%	\$ 643.23	\$ 322,684.95		\$ 0.26
			Mar-09	2009	Q1	\$ 322,041.72	\$ 11,554.92	2.45%	\$ 657.50	\$ 334,254.14		\$ 0.26
			Apr-09	2009	Q2	\$ 333,596.64	\$ 9,229.22	1.00%	\$ 278.00	\$ 343,103.86		\$ 0.26
			May-09	2009	Q2	\$ 342,825.86	\$ 10,430.94	1.00%	\$ 285.69	\$ 353,542.49		\$ 0.26
			Jun-09	2009	Q2	\$ 353,256.80	\$ 8,395.40	1.00%	\$ 294.38	\$ 361,946.58		\$ 0.26
			Jul-09	2009	Q3	\$ 361,652.20	\$ 12,393.94	0.55%	\$ 165.76	\$ 374,211.90		\$ 0.26
			Aug-09	2009	Q3	\$ 374,046.14	\$ 6,910.89	0.55%	\$ 171.44	\$ 381,128.47		\$ 0.26
			Sep-09	2009	Q3	\$ 380,957.03	\$ 10,621.43	0.55%	\$ 174.61	\$ 391,753.07		\$ 0.26
			Oct-09	2009	Q4	\$ 391,578.46	\$ 7,778.65	0.55%	\$ 179.47	\$ 399,536.58		\$ 0.26
			Nov-09	2009	Q4	\$ 399,357.11	\$ 9,981.80	0.55%	\$ 183.04	\$ 409,521.95		\$ 0.26
			Dec-09	2009	Q4	\$ 409,338.91	\$ 7,982.22	0.55%	\$ 187.61	\$ 417,508.74	\$ 119,215.13	\$ 0.26
			Jan-10	2010	Q1	\$ 417,321.13	\$ 11,061.19	0.55%	\$ 191.27	\$ 428,573.59		\$ 0.26
			Feb-10	2010	Q1	\$ 428,382.32	\$ 7,140.27	0.55%	\$ 196.34	\$ 435,718.93		\$ 0.26
			Mar-10	2010	Q1	\$ 435,522.59	\$ 12,231.77	0.55%	\$ 199.61	\$ 447,953.97		\$ 0.26
			Apr-10	2010	Q2	\$ 447,754.36	\$ 6,669.89	0.55%	\$ 205.22	\$ 454,629.47		\$ 0.26
			May-10	2010	Q2	\$ 454,424.25	\$ 11,458.62	0.55%	\$ 208.28	\$ 466,091.15		\$ 1.00
			Jun-10	2010	Q2	\$ 465,882.87	\$ 18,076.28	0.55%	\$ 213.53	\$ 484,172.68		\$ 1.00
			Jul-10	2010	Q3	\$ 483,959.15	\$ 25,999.30	0.89%	\$ 358.94	\$ 510,317.39		\$ 1.00
			Aug-10	2010	Q3	\$ 509,958.45	\$ 44,100.24	0.89%	\$ 378.22	\$ 554,436.91		\$ 1.00
			Sep-10	2010	Q3	\$ 554,058.69	\$ 36,759.82	0.89%	\$ 410.93	\$ 591,229.44		\$ 1.00
			Oct-10	2010	Q4	\$ 590,818.51	\$ 33,008.31	1.20%	\$ 590.82	\$ 624,417.64		\$ 1.00
			Nov-10	2010	Q4	\$ 623,826.82	\$ 38,735.50	1.20%	\$ 623.83	\$ 663,186.15		\$ 1.00
			Dec-10	2010	Q4	\$ 662,562.32	\$ 30,685.47	1.20%	\$ 662.56	\$ 693,910.35	\$ 280,166.21	\$ 1.00
			Jan-11	2011	Q1	\$ 693,247.79	\$ 39,610.03	1.47%	\$ 849.23	\$ 733,707.05		\$ 1.00
			Feb-11	2011	Q1	\$ 732,857.82	\$ 32,834.14	1.47%	\$ 897.75	\$ 766,589.71		\$ 1.00
			Mar-11	2011	Q1	\$ 765,691.96	\$ 43,074.85	1.47%	\$ 937.97	\$ 809,704.78		\$ 1.00



This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

Interest Rates	Approved Deferral and Variance Accounts	CWIP				Opening Balance	Funding Adder	Interest				Annual amounts	Board Approved Smart Meter Funding Adder (from Tariff)
			Date	Year	Quarter	(Principal)	Revenues	Rate	Interest	Closing Balance			
			Apr-11	2011	Q2	\$ 808,766.81	\$ 28,584.13	1.47%	\$ 990.74	\$ 838,341.68			\$ 1.00
			May-11	2011	Q2	\$ 837,350.94	\$ 42,877.53	1.47%	\$ 1,025.75	\$ 881,254.22			\$ 2.00
			Jun-11	2011	Q2	\$ 880,228.47	\$ 44,908.03	1.47%	\$ 1,078.28	\$ 926,214.78			\$ 2.00
			Jul-11	2011	Q3	\$ 925,136.50	\$ 79,077.03	1.47%	\$ 1,133.29	\$ 1,005,346.82			\$ 2.00
			Aug-11	2011	Q3	\$ 1,004,213.53	\$ 66,740.57	1.47%	\$ 1,230.16	\$ 1,072,184.26			\$ 2.00
			Sep-11	2011	Q3	\$ 1,070,954.10	\$ 82,553.45	1.47%	\$ 1,311.92	\$ 1,154,819.47			\$ 2.00
			Oct-11	2011	Q4	\$ 1,153,507.55	\$ 55,003.17	1.47%	\$ 1,413.05	\$ 1,209,923.77			\$ 2.00
			Nov-11	2011	Q4	\$ 1,208,510.72	\$ 89,463.28	1.47%	\$ 1,480.43	\$ 1,299,454.43			\$ 2.00
			Dec-11	2011	Q4	\$ 1,297,974.00	\$ 49,472.42	1.47%	\$ 1,590.02	\$ 1,349,036.44	\$ 668,137.22		\$ 2.00
			Jan-12	2012	Q1	\$ 1,347,446.42	\$ 92,973.55	1.47%	\$ 1,650.62	\$ 1,442,070.59			\$ 2.00
			Feb-12	2012	Q1	\$ 1,440,419.97	\$ 54,224.39	1.47%	\$ 1,764.51	\$ 1,496,408.87			\$ 2.00
			Mar-12	2012	Q1	\$ 1,494,644.36	\$ 85,342.31	1.47%	\$ 1,830.94	\$ 1,581,817.61			\$ 2.00
			Apr-12	2012	Q2	\$ 1,579,986.67	\$ 57,676.00	1.47%	\$ 1,935.48	\$ 1,639,598.15			\$ 2.00
			May-12	2012	Q2	\$ 1,637,662.67	\$ 73,981.50	1.47%	\$ 2,006.14	\$ 1,713,650.31			
			Jun-12	2012	Q2	\$ 1,711,644.17	\$ 36,990.75	1.47%	\$ 2,096.76	\$ 1,750,731.68			
			Jul-12	2012	Q3	\$ 1,748,634.92		1.47%	\$ 2,142.08	\$ 1,750,777.00			
			Aug-12	2012	Q3	\$ 1,748,634.92		1.47%	\$ 2,142.08	\$ 1,750,777.00			
			Sep-12	2012	Q3	\$ 1,748,634.92		1.47%	\$ 2,142.08	\$ 1,750,777.00			
			Oct-12	2012	Q4	\$ 1,748,634.92		1.47%	\$ 2,142.08	\$ 1,750,777.00			
			Nov-12	2012	Q4	\$ 1,748,634.92		0.00%	\$ -	\$ 1,748,634.92			
			Dec-12	2012	Q4	\$ 1,748,634.92		0.00%	\$ -	\$ 1,748,634.92	\$ 421,041.27		
			Jan-13	2013	Q1	\$ 1,748,634.92		0.00%	\$ -	\$ 1,748,634.92			
			Feb-13	2013	Q1	\$ 1,748,634.92		0.00%	\$ -	\$ 1,748,634.92			
			Mar-13	2013	Q1	\$ 1,748,634.92		0.00%	\$ -	\$ 1,748,634.92			
			Apr-13	2013	Q2	\$ 1,748,634.92		0.00%	\$ -	\$ 1,748,634.92			
			May-13	2013	Q2	\$ 1,748,634.92		0.00%	\$ -	\$ 1,748,634.92			
			Jun-13	2013	Q2	\$ 1,748,634.92		0.00%	\$ -	\$ 1,748,634.92			
			Jul-13	2013	Q3	\$ 1,748,634.92		0.00%	\$ -	\$ 1,748,634.92			
			Aug-13	2013	Q3	\$ 1,748,634.92		0.00%	\$ -	\$ 1,748,634.92			
			Sep-13	2013	Q3	\$ 1,748,634.92		0.00%	\$ -	\$ 1,748,634.92			
			Oct-13	2013	Q4	\$ 1,748,634.92		0.00%	\$ -	\$ 1,748,634.92			
			Nov-13	2013	Q4	\$ 1,748,634.92		0.00%	\$ -	\$ 1,748,634.92			



Ontario Energy Board

Smart Meter Model



This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

Interest Rates	Approved Deferral and Variance Accounts	CWIP				Opening Balance	Funding Adder	Interest		Closing Balance	Annual amounts	Board Approved Smart Meter Funding Adder (from Tariff)
			Date	Year	Quarter	(Principal)	Revenues	Rate				
			Dec-13	2013	Q4	\$ 1,748,634.92		FALSE	\$ -	\$ 1,748,634.92	\$ -	
Total Funding Adder Revenues Collected							\$ 1,748,634.92		\$ 57,477.87	\$ 1,806,112.79	\$ 1,806,112.79	



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	-	\$ 1,590.19		1,590.19	4.14%	-	-
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	1,590.19	\$ -		1,590.19	4.14%	5.49	5.49
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	1,590.19	\$ -		1,590.19	4.59%	6.08	11.57
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	1,590.19	\$ -		1,590.19	4.59%	6.08	17.65
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	1,590.19	\$ -		1,590.19	4.59%	6.08	23.73
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	1,590.19	\$ 10,443.11		12,033.30	4.59%	6.08	29.82
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	12,033.30	\$ 1,285.51		13,318.81	4.59%	46.03	75.84
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	13,318.81	\$ 120.51	\$ 17.00	13,456.32	4.59%	50.94	126.79
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	13,456.32	\$ 241.02		13,697.34	4.59%	51.47	178.26
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	13,697.34	\$ 274.95		13,972.29	4.59%	52.39	230.65
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	13,972.29	\$ 274.95		14,247.24	4.59%	53.44	284.09
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	14,247.24	\$ 274.95		14,522.19	4.59%	54.50	338.59
2010 Q1	0.55%	4.34%	May-07	2007	Q2	14,522.19	\$ 1,619.97		16,142.16	4.59%	55.55	394.14
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	16,142.16	\$ 2,385.51		18,527.67	4.59%	61.74	455.88
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	18,527.67	\$ 3,946.02		22,473.69	4.59%	70.87	526.75
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	22,473.69	\$ 1,326.67		23,800.36	4.59%	85.96	612.71
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	23,800.36	\$ 6,530.35		30,330.71	4.59%	91.04	703.75
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	30,330.71	\$ 565.73		30,896.44	5.14%	129.92	833.66
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	30,896.44	\$ 1,321.83		32,218.27	5.14%	132.34	966.00
2011 Q4	1.47%	3.92%	Dec-07	2007	Q4	32,218.27	\$ 6,993.25	\$ 166.00	39,377.52	5.14%	138.00	1,104.01
2012 Q1	1.47%	3.92%	Jan-08	2008	Q1	39,377.52	\$ 1,001.85		40,379.37	5.14%	168.67	1,272.67
2012 Q2	1.47%	3.51%	Feb-08	2008	Q1	40,379.37	\$ 2,996.92		43,376.29	5.14%	172.96	1,445.63
2012 Q3	1.47%	3.51%	Mar-08	2008	Q1	43,376.29	\$ 2,340.57		45,716.86	5.14%	185.80	1,631.43
2012 Q4	1.47%	3.51%	Apr-08	2008	Q2	45,716.86	\$ 986.29		46,703.15	4.08%	155.44	1,786.86
2013 Q1	0.00%	0.00%	May-08	2008	Q2	46,703.15	\$ 2,881.14		49,584.29	4.08%	158.79	1,945.65
2013 Q2	0.00%	0.00%	Jun-08	2008	Q2	49,584.29	\$ 1,259.96		50,844.25	4.08%	168.59	2,114.24
2013 Q3	0.00%	0.00%	Jul-08	2008	Q3	50,844.25	\$ 1,720.23		52,564.48	3.35%	141.94	2,256.18
2013 Q4	0.00%	0.00%	Aug-08	2008	Q3	52,564.48	\$ 1,500.82		54,065.30	3.35%	146.74	2,402.92
			Sep-08	2008	Q3	54,065.30	\$ 756.74		54,822.04	3.35%	150.93	2,553.86
			Oct-08	2008	Q4	54,822.04	\$ 2,867.88		57,689.92	3.35%	153.04	2,706.90

Nov-08	2008	Q4	57,689.92	\$ 1,862.50		59,552.42	3.35%	161.05	2,867.95
Dec-08	2008	Q4	59,552.42	\$ 660.64	\$ 730.00	60,943.06	3.35%	166.25	3,034.20
Jan-09	2009	Q1	60,943.06	\$ 2,012.04	\$ 910.00	63,865.10	2.45%	124.43	3,158.63
Feb-09	2009	Q1	63,865.10	\$ 940.18	\$ 910.00	65,715.28	2.45%	130.39	3,289.02
Mar-09	2009	Q1	65,715.28	\$ 1,979.72	\$ 910.00	68,605.00	2.45%	134.17	3,423.19
Apr-09	2009	Q2	68,605.00	\$ 463.55	\$ 910.00	69,978.55	1.00%	57.17	3,480.36
May-09	2009	Q2	69,978.55	\$ 3,052.55	\$ 910.00	73,941.10	1.00%	58.32	3,538.67
Jun-09	2009	Q2	73,941.10	\$ 415.74	\$ 910.00	75,266.84	1.00%	61.62	3,600.29
Jul-09	2009	Q3	75,266.84	\$ 408.40	\$ 910.00	76,585.24	0.55%	34.50	3,634.79
Aug-09	2009	Q3	76,585.24	\$ 369.64	\$ 910.00	77,864.88	0.55%	35.10	3,669.89
Sep-09	2009	Q3	77,864.88	\$ 487.37	\$ 910.00	79,262.25	0.55%	35.69	3,705.58
Oct-09	2009	Q4	79,262.25	\$ 4,272.57	\$ 910.00	84,444.82	0.55%	36.33	3,741.91
Nov-09	2009	Q4	84,444.82	\$ 995.97	\$ 910.00	86,350.79	0.55%	38.70	3,780.61
Dec-09	2009	Q4	86,350.79	\$ 1,779.53	\$ 910.00	89,040.32	0.55%	39.58	3,820.19
Jan-10	2010	Q1	89,040.32	\$ 37.82	\$ 19,832.00	108,910.14	0.55%	40.81	3,861.00
Feb-10	2010	Q1	108,910.14	\$ 1,060.55	\$ 19,832.00	129,802.69	0.55%	49.92	3,910.92
Mar-10	2010	Q1	129,802.69	\$ 6,007.80	\$ 19,832.00	155,642.49	0.55%	59.49	3,970.41
Apr-10	2010	Q2	155,642.49	\$ 41,928.51	\$ 19,832.00	217,403.00	0.55%	71.34	4,041.74
May-10	2010	Q2	217,403.00	\$ 2,864.79	\$ 19,832.00	240,099.79	0.55%	99.64	4,141.39
Jun-10	2010	Q2	240,099.79	\$ 19,515.84	\$ 19,832.00	279,447.63	0.55%	110.05	4,251.43
Jul-10	2010	Q3	279,447.63	\$ 8,160.76	\$ 19,832.00	307,440.39	0.89%	207.26	4,458.69
Aug-10	2010	Q3	307,440.39	\$ 3,669.32	\$ 19,832.00	330,941.71	0.89%	228.02	4,686.71
Sep-10	2010	Q3	330,941.71	\$ 4,865.69	\$ 19,832.00	355,639.40	0.89%	245.45	4,932.16
Oct-10	2010	Q4	355,639.40	\$ 5,821.80	\$ 19,832.00	381,293.20	1.20%	355.64	5,287.80
Nov-10	2010	Q4	381,293.20	\$ 5,998.92	\$ 19,832.00	407,124.12	1.20%	381.29	5,669.09
Dec-10	2010	Q4	407,124.12	\$ 42,712.33	\$ 19,832.00	469,668.45	1.20%	407.12	6,076.21
Jan-11	2011	Q1	469,668.45	\$ 17,832.68	\$ 57,808.00	545,309.13	1.47%	575.34	6,651.56
Feb-11	2011	Q1	545,309.13	\$ 9,318.81	\$ 57,808.00	612,435.94	1.47%	668.00	7,319.56
Mar-11	2011	Q1	612,435.94	\$ 13,918.78	\$ 57,808.00	684,162.72	1.47%	750.23	8,069.80
Apr-11	2011	Q2	684,162.72	\$ 12,054.63	\$ 57,808.00	754,025.35	1.47%	838.10	8,907.89
May-11	2011	Q2	754,025.35	\$ 24,278.81	\$ 57,808.00	836,112.16	1.47%	923.68	9,831.58
Jun-11	2011	Q2	836,112.16	\$ 18,167.36	\$ 57,808.00	912,087.52	1.47%	1,024.24	10,855.81
Jul-11	2011	Q3	912,087.52	\$ 17,864.23	\$ 57,808.00	987,759.74	1.47%	1,117.31	11,973.12
Aug-11	2011	Q3	987,759.74	\$ 16,400.05	\$ 57,808.00	1,061,967.79	1.47%	1,210.01	13,183.13
Sep-11	2011	Q3	1,061,967.79	\$ 13,714.70	\$ 57,808.00	1,133,490.49	1.47%	1,300.91	14,484.04
Oct-11	2011	Q4	1,133,490.49	\$ 19,403.25	\$ 57,808.00	1,210,701.74	1.47%	1,388.53	15,872.56
Nov-11	2011	Q4	1,210,701.74	\$ 28,990.02	\$ 57,808.00	1,297,499.76	1.47%	1,483.11	17,355.67
Dec-11	2011	Q4	1,297,499.76	\$ 51,668.15	\$ 57,808.00	1,406,975.91	1.47%	1,589.44	18,945.11
Jan-12	2012	Q1	1,406,975.91	\$ 33,506.18	\$ 84,245.00	1,524,727.09	1.47%	1,723.55	20,668.65
Feb-12	2012	Q1	1,524,727.09	\$ 32,703.26	\$ 84,245.00	1,641,675.35	1.47%	1,867.79	22,536.45
Mar-12	2012	Q1	1,641,675.35	\$ 30,543.53	\$ 84,245.00	1,756,463.88	1.47%	2,011.05	24,547.50
Apr-12	2012	Q2	1,756,463.88	\$ 27,187.43	\$ 84,245.00	1,867,896.31	1.47%	2,151.67	26,699.17
May-12	2012	Q2	1,867,896.31	\$ 21,053.00	\$ 84,245.00	1,973,194.31	1.47%	2,288.17	28,987.34
Jun-12	2012	Q2	1,973,194.31	\$ 11,853.00	\$ 84,245.00	2,069,292.31	1.47%	2,417.16	31,404.50
Jul-12	2012	Q3	2,069,292.31	\$ 11,853.00	\$ 84,245.00	2,165,390.31	1.47%	2,534.88	33,939.39
Aug-12	2012	Q3	2,165,390.31	\$ 11,853.00	\$ 84,245.00	2,261,488.31	1.47%	2,652.60	36,591.99
Sep-12	2012	Q3	2,261,488.31	\$ 11,853.00	\$ 84,245.00	2,357,586.31	1.47%	2,770.32	39,362.31
Oct-12	2012	Q4	2,357,586.31	\$ -	\$ 84,245.00	2,441,831.31	1.47%	2,888.04	42,250.35
Nov-12	2012	Q4	2,441,831.31	\$ -	\$ 84,245.00	2,526,076.31	0.00%	-	42,250.35
Dec-12	2012	Q4	2,526,076.31	\$ -	\$ 84,245.00	2,610,321.31	0.00%	-	42,250.35
Jan-13	2013	Q1	2,610,321.31		\$ 90,816.00	2,701,137.31	0.00%	-	42,250.35
Feb-13	2013	Q1	2,701,137.31		\$ 90,816.00	2,791,953.31	0.00%	-	42,250.35
Mar-13	2013	Q1	2,791,953.31		\$ 90,816.00	2,882,769.31	0.00%	-	42,250.35
Apr-13	2013	Q2	2,882,769.31		\$ 90,816.00	2,973,585.31	0.00%	-	42,250.35
May-13	2013	Q2	2,973,585.31		\$ 90,816.00	3,064,401.31	0.00%	-	42,250.35
Jun-13	2013	Q2	3,064,401.31		\$ 90,816.00	3,155,217.31	0.00%	-	42,250.35
Jul-13	2013	Q3	3,155,217.31		\$ 90,816.00	3,246,033.31	0.00%	-	42,250.35
Aug-13	2013	Q3	3,246,033.31		\$ 90,816.00	3,336,849.31	0.00%	-	42,250.35
Sep-13	2013	Q3	3,336,849.31		\$ 90,816.00	3,427,665.31	0.00%	-	42,250.35
Oct-13	2013	Q4	3,427,665.31		\$ 90,816.00	3,518,481.31	0.00%	-	42,250.35

	Nov-13	2013	Q4	3,518,481.31		\$ 90,816.00	3,609,297.31	0.00%	-	42,250.35
	Dec-13	2013	Q4	3,609,297.31		\$ 90,816.00	3,700,113.31	FALSE	-	42,250.35
				\$ 655,868.31	\$ 1,954,453.00	\$ 2,610,321.31				



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	\$ 13,439.32	\$ 17.20	\$ 13,456.52	\$ 6,728.26	4.37%	\$ 293.69
2007	\$ 25,755.20	\$ 166.00	\$ 39,377.72	\$ 26,417.12	4.73%	\$ 1,248.87
2008	\$ 20,835.54	\$ 729.90	\$ 60,943.16	\$ 50,160.44	3.98%	\$ 1,996.39
2009	\$ 17,177.26	\$ 10,921.10	\$ 89,041.52	\$ 74,992.34	1.14%	\$ 853.04
2010	\$ 142,643.87	\$ 237,984.59	\$ 469,669.98	\$ 279,355.75	0.80%	\$ 2,227.86
2011	\$ 243,610.99	\$ 693,692.51	\$ 1,406,973.49	\$ 938,321.74	1.47%	\$ 13,793.33
2012	\$ 192,407.41	\$ 1,010,945.65	\$ 2,610,326.55	\$ 2,008,650.02	1.23%	\$ 24,605.96
2013	\$ -	\$ 1,089,795.47	\$ 3,700,122.02	\$ 3,155,224.29	0.00%	\$ -
Cumulative Interest to 2011						\$ 20,413.17
Cumulative Interest to 2012						\$ 45,019.14
Cumulative Interest to 2013						\$ 45,019.14



Bluewater Power Distribution Corporation

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

Check if applicable

- ☐ Smart Meter Funding Adder (SMFA)
- ☒ Smart Meter Disposition Rider (SMDR)
- ☒ Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)

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

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

	2006	2007	2008	2009	2010	2011	2012	2013	Total
Deferred and forecasted Smart Meter Incremental Revenue Requirement (from Sheet 5)	\$ 13,675.47	\$ 26,371.64	\$ 22,067.13	\$ 30,454.13	\$ 459,682.80	\$ 1,190,889.69	\$ 1,603,769.79	\$ 1,547,627.49	\$ 3,346,910.65
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B) (Check one of the boxes below)	\$ 126.79	\$ 977.22	\$ 1,930.20	\$ 785.99	\$ 2,256.03	\$ 12,868.90	\$ 23,305.25		\$ 42,250.35
<input checked="" type="checkbox"/> Sheet 8A (Interest calculated on monthly balances)	\$ 126.79	\$ 977.22	\$ 1,930.20	\$ 785.99	\$ 2,256.03	\$ 12,868.90	\$ 23,305.25	\$ -	\$ 42,250.35
<input type="checkbox"/> Sheet 8B (Interest calculated on average annual balances)									
SMFA Revenues (from Sheet 8)	\$ 68,594.50	\$ 116,677.60	\$ 116,671.10	\$ 115,377.93	\$ 275,926.66	\$ 654,198.63	\$ 401,188.50	\$ -	\$ 1,748,634.92
SMFA Interest (from Sheet 8)	\$ 427.91	\$ 5,878.70	\$ 9,303.15	\$ 3,837.20	\$ 4,239.55	\$ 13,938.59	\$ 19,852.77	\$ -	\$ 57,477.87
Net Deferred Revenue Requirement	-\$ 55,220.16	-\$ 95,207.44	-\$ 101,976.92	-\$ 87,975.01	\$ 181,772.62	\$ 535,621.36	\$ 1,206,033.77	\$ 1,547,627.49	\$ 1,583,048.22
Number of Metered Customers (average for 2013 test year) - Number of metered customers for which smart meter were deployed as part of program). Residential and GS < 50 kW customer classes and any other metered classes involved (e.g. GS 50 to 4999 kW for which interval meters were upgraded to utilize AMI and ODS assets)								35666	

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

Years for collection or refunding	1	
Deferred Incremental Revenue Requirement from 2006 to December 31, 2012 plus Interest on OM&A and Amortization	\$ 3,389,161.01	
SMFA Revenues collected from 2006 to 2013 test year (inclusive) Plus Simple Interest on SMFA Revenues	\$ 1,806,112.79	
Net Deferred Revenue Requirement	\$ 1,583,048.22	
SMDR	November 1, 2012 to	\$ 3.70
Check: Forecasted SMDR Revenues		\$ 1,583,570.40

Match

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

Incremental Revenue Requirement for 2013	\$ 1,547,627.49	
SMIRR	\$ 3.62	
Check: Forecasted SMIRR Revenues		\$ 1,549,331.04

Match

	2006	2007	2008	2009	2010	2011	2012	Total to 2011	Total to 2012
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 27	\$ 1,288	\$ 3,083	\$ 3,589	\$ 4,398	\$ 7,986
Deemed Long Term Debt	\$ 76	\$ 166	\$ 241	\$ 2,020	\$ 103,314	\$ 247,293	\$ 287,848	\$ 353,109	\$ 640,958
Equity	\$ 94	\$ 207	\$ 262	\$ 1,744	\$ 77,573	\$ 185,678	\$ 216,129	\$ 265,558	\$ 481,687
Return on Capital	\$ 170	\$ 373	\$ 502	\$ 3,791	\$ 182,175	\$ 436,054	\$ 507,566	\$ 623,065	\$ 1,130,631
Operating Expense	\$ 13,439	\$ 25,755	\$ 20,836	\$ 17,177	\$ 142,644	\$ 243,611	\$ 192,407	\$ 463,462	\$ 655,870
Amortization	\$ 17	\$ 166	\$ 730	\$ 10,921	\$ 237,985	\$ 693,693	\$ 1,010,946	\$ 943,511	\$ 1,954,457
Total Before PILs	\$ 13,627	\$ 26,294	\$ 22,068	\$ 31,889	\$ 562,803	\$ 1,373,357	\$ 1,710,919	\$ 2,030,039	\$ 3,740,957
PILS	\$ 49	\$ 77	-\$ 1	-\$ 1,435	-\$ 103,120	-\$ 182,468	-\$ 107,149	-\$ 286,898	-\$ 394,047
Revenue Requirement	\$ 13,675	\$ 26,372	\$ 22,067	\$ 30,454	\$ 459,683	\$ 1,190,890	\$ 1,603,770	\$ 1,743,141	\$ 3,346,911
Interest on Deferred OM&A and Amortization	\$ 127	\$ 977	\$ 1,930	\$ 786	\$ 2,256	\$ 12,869	\$ 23,305	\$ 18,945	\$ 42,250
Total Revenue Requirement	\$ 13,802	\$ 27,349	\$ 23,997	\$ 31,240	\$ 461,939	\$ 1,203,759	\$ 1,627,075	\$ 1,762,086	\$ 3,389,161

Appendix 3

V 2.21



Ontario Energy Board

**Smart Meter Model
(for 2013 Rates Applications)**

Choose Your Utility:

Bluewater Power Distribution Corporation
Brant County Power Inc.

Application Contact Information

Name:	Leslie Dugas
Title:	Manager of Regulatory Affairs
Phone Number:	519-337-8201 Ext 2255
Email Address:	ldugas@bluewaterpower.com
We are applying for rates effective:	November 1, 2012
Last COS Re-based Year	2009

Legend

DROP-DOWN MENU

INPUT FIELD

CALCULATION FIELD

Copyright

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





Ontario Energy Board

Smart Meter Model

Bluewater Power Distribution Corporation

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

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

Smart Meter Capital Cost and Operational Expense Data	2006	2007	2008	2009	2010	2011	2012	2013	Total
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
Smart Meter Installation Plan									
Actual/Planned number of Smart Meters installed during the Calendar Year									
Residential					28,293	3,586	18		31897
General Service < 50 kW									0
Actual/Planned number of Smart Meters installed (Residential and GS < 50 kW only)	0	0	0	0	28293	3586	18	0	31879
Percentage of Residential and GS < 50 kW Smart Meter Installations Completed	0.00%	0.00%	0.00%	0.00%	88.75%	100.00%	0.00%	100.06%	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	0	28293	3586	18	0	31897
1 Capital Costs									
1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)									
1.1.1 Smart Meters (may include new meters and modules, etc.)	Asset Type Asset type must be selected to enable calculations								
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
	Smart Meter				2,266,047	224,565	408		\$ 2,491,020
	Smart Meter				299,342	191,725	37,137		\$ 528,204
	Tools & Equipment				4,071				\$ 4,071
1.1.2 Installation Costs (may include socket kits, labour, vehicle, benefits, etc.)									\$ -
1.1.3a Workforce Automation Hardware (may include fieldwork handhelds, barcode hardware, etc.)									\$ -
1.1.3b Workforce Automation Software (may include fieldwork handhelds, barcode hardware, etc.)									\$ -
Total Advanced Metering Communications Devices (AMCD)	\$ -	\$ -	\$ -	\$ -	\$ 2,569,460	\$ 416,289	\$ 37,545	\$ -	\$ 3,023,295
1.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)									
1.2.1 Collectors	Asset Type								
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
	Smart Meter				178,872				\$ 178,872
	Computer Hardware				4,753				\$ 4,753
	Computer Hardware		2,082	7,206	155,878	2,357			\$ 167,523
1.2.2 Repeaters (may include radio licence, etc.)									\$ -
1.2.3 Installation (may include meter seals and rings, collector computer hardware, etc.)									\$ -
Total Advanced Metering Regional Collector (AMRC) (Includes LAN)	\$ -	\$ -	\$ 2,082	\$ 7,206	\$ 339,503	\$ 2,357	\$ -	\$ -	\$ 351,148

1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)										
	Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
1.3.1 Computer Hardware	Computer Hardware					4,211				\$ 4,211
1.3.2 Computer Software	Computer Software				20,345	121,447				\$ 141,793
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)		\$ -	\$ -	\$ -	\$ 20,345	\$ 125,658	\$ -	\$ -	\$ -	\$ 146,003
1.4 WIDE AREA NETWORK (WAN)										
	Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
1.4.1 Activation 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	Forecast	
1.5.1 Customer Equipment (including repair of damaged equipment)	Other Equipment					27,339	5,694			\$ 33,033
1.5.2 AMI Interface to CIS	Computer Software									\$ -
1.5.3 Professional Fees	Computer Hardware			576	26,848	18,393	4,565			\$ 50,382
1.5.4 Integration	Computer Software									\$ -
1.5.5 Program Management	Computer Software	118	903	307	1,498	38,894	35,650	46,326		\$ 123,696
1.5.6 Other AMI Capital	Computer Software				11,049	196,272	118,267	99,429		\$ 425,016
Total Other AMI Capital Costs Related to Minimum Functionality		\$ 118	\$ 903	\$ 884	\$ 39,395	\$ 280,898	\$ 164,175	\$ 145,754	\$ -	\$ 632,127
Total Capital Costs Related to Minimum Functionality		\$ 118	\$ 903	\$ 2,966	\$ 66,946	\$ 3,315,519	\$ 582,822	\$ 183,300	\$ -	\$ 4,152,573
1.6 CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY										
(Please provide a descriptive title and identify nature of beyond minimum functionality costs)										
1.6.1 Costs related to technical capabilities in the smart meters or related communications infrastructure that exceed those specified in O.Reg 425/06										\$ -
1.6.2 Costs for deployment of smart meters to customers other than residential and small general service										\$ -
1.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.	Computer Software					20,403	1,332,998	382,640		\$ 1,736,042
Total Capital Costs Beyond Minimum Functionality		\$ -	\$ -	\$ -	\$ -	\$ 20,403	\$ 1,332,998	\$ 382,640	\$ -	\$ 1,736,042
Total Smart Meter Capital Costs		\$ 118	\$ 903	\$ 2,966	\$ 66,946	\$ 3,335,922	\$ 1,915,820	\$ 565,940	\$ -	\$ 5,888,615

2 OM&A Expenses

2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)

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

2.1.2 Other *(please specify)* ODS Fees

Total Incremental AMCD OM&A Costs

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

2.2.1 Maintenance

2.2.2 Other *(please specify)* Network Fees

Total Incremental AMRC OM&A Costs

2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)

2.3.1 Hardware Maintenance *(may include server support, etc.)*

2.3.2 Software Maintenance *(may include maintenance support, etc.)*

2.3.2 Other *(please specify)*

Total Incremental AMCC OM&A Costs

2.4 WIDE AREA NETWORK (WAN)

2.4.1 WAN Maintenance

2.4.2 Other *(please specify)*

Total Incremental AMRC OM&A Costs

2.5 OTHER AMI OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY

2.5.1 Business Process Redesign

2.5.2 Customer Communication *(may include project communication, etc.)*

2.5.3 Program Management

2.5.4 Change Management *(may include training, etc.)*

2.5.5 Administration Costs

2.5.6 Other AMI Expenses
(please specify)

Total Other AMI OM&A Costs Related to Minimum Functionality

TOTAL OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY

2.6 OM&A COSTS RELATED TO BEYOND MINIMUM FUNCTIONALITY

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

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

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

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

Total OM&A Costs Beyond Minimum Functionality

Total Smart Meter OM&A Costs

Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
								\$ -
1,743	5,507	4,052	4,259	14,943	36,451	19,901		\$ 86,856
\$ 1,743	\$ 5,507	\$ 4,052	\$ 4,259	\$ 14,943	\$ 36,451	\$ 19,901	\$ -	\$ 86,856
								\$ -
				26,699	44,269	19,428		\$ 90,397
\$ -	\$ -	\$ -	\$ -	\$ 26,699	\$ 44,269	\$ 19,428	\$ -	\$ 90,397
								\$ -
				23,567	8,132	1,224		\$ 32,924
								\$ -
\$ -	\$ -	\$ -	\$ -	\$ 23,567	\$ 8,132	\$ 1,224	\$ -	\$ 32,924
								\$ -
								\$ -
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
				2,647	9,761			\$ 12,408
25				50,293	13,289			\$ 63,607
1,938	13,331	14,706	5,932	-1,433				\$ 34,475
			5,269	11,013	13,142	17,305		\$ 46,729
8,403	4,367	14	17	792	94,448	96,472		\$ 204,514
								\$ -
\$ 10,365	\$ 17,699	\$ 14,721	\$ 11,218	\$ 63,313	\$ 130,641	\$ 113,777	\$ -	\$ 361,733
\$ 12,109	\$ 23,205	\$ 18,773	\$ 15,477	\$ 128,522	\$ 219,494	\$ 154,330	\$ -	\$ 571,910
Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual			
								\$ -
								\$ -
						19,029		\$ 19,029
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,029	\$ -	\$ 19,029
\$ 12,109	\$ 23,205	\$ 18,773	\$ 15,477	\$ 128,522	\$ 219,494	\$ 173,359	\$ -	\$ 590,939

3 Aggregate Smart Meter Costs by Category

3.1	Capital																				
3.1.1	Smart Meter	\$	-	\$	-	\$	-	\$	-	\$	2,744,261	\$	416,289	\$	37,545	\$	-	\$	-	\$	3,198,096
3.1.2	Computer Hardware	\$	-	\$	-	\$	2,658	\$	34,054	\$	183,234	\$	6,922	\$	-	\$	-	\$	-	\$	226,868
3.1.3	Computer Software	\$	118	\$	903	\$	307	\$	32,892	\$	377,017	\$	1,486,915	\$	528,395	\$	-	\$	-	\$	2,426,547
3.1.4	Tools & Equipment	\$	-	\$	-	\$	-	\$	-	\$	4,071	\$	-	\$	-	\$	-	\$	-	\$	4,071
3.1.5	Other Equipment	\$	-	\$	-	\$	-	\$	-	\$	27,339	\$	5,694	\$	-	\$	-	\$	-	\$	33,033
3.1.6	Applications Software	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
3.1.7	Total Capital Costs	\$	118	\$	903	\$	2,966	\$	66,946	\$	3,335,922	\$	1,915,820	\$	565,940	\$	-	\$	-	\$	5,888,615
3.2	OM&A Costs																				
3.2.1	Total OM&A Costs	\$	12,109	\$	23,205	\$	18,773	\$	15,477	\$	128,522	\$	219,494	\$	173,359	\$	-	\$	-	\$	590,939



	2006	2007	2008	2009	2010	2011	2012	2013
Cost of Capital								
Capital Structure¹								
Deemed Short-term Debt Capitalization				4.0%	4.0%	4.0%	4.0%	4.0%
Deemed Long-term Debt Capitalization	50.0%	50.0%	53.3%	52.7%	56.0%	56.0%	56.0%	56.0%
Deemed Equity Capitalization	50.0%	50.0%	46.7%	43.3%	40.0%	40.0%	40.0%	40.0%
Preferred Shares								
Total	100.0%	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%	1.33%	1.33%	1.33%	1.33%	1.33%
Long-term Debt Rate (actual/embedded/deemed) ²	7.25%	7.25%	7.25%	7.62%	7.62%	7.62%	7.62%	7.62%
Target Return on Equity (ROE)	9.0%	9.00%	9.00%	8.01%	8.01%	8.01%	8.01%	8.01%
Return on Preferred Shares								
WACC	8.13%	8.13%	8.07%	7.54%	7.52%	7.52%	7.52%	7.52%
Working Capital Allowance								
Working Capital Allowance Rate	15.0%	15.0%	15.0%	12.0%	12.0%	12.0%	12.0%	12.0%
(% 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%	25.50%
Capital Tax (until July 1st, 2010)	0.30%	0.225%	0.225%	0.225%	0.075%	0.00%	0.00%	0.00%

Depreciation Rates

(expressed as expected useful life in years)

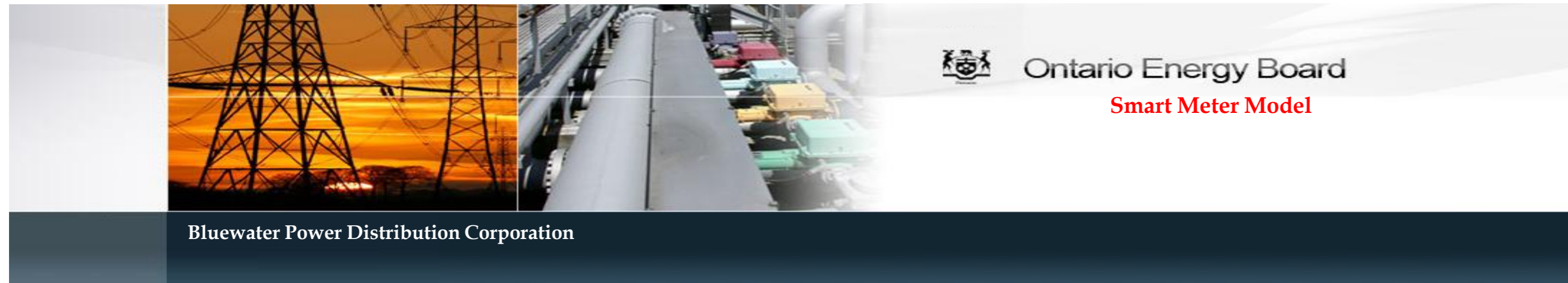
Smart Meters - years	15	15	15	15	15	15	15	15
- rate (%)	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%
Computer Hardware - years	5	5	5	5	5	5	5	5
- rate (%)	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Computer Software - years	5	5	5	5	5	5	5	5
- rate (%)	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Tools & Equipment - years	10	10	10	10	10	10	10	10
- rate (%)	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Other Equipment - years	10	10	10	10	10	10	10	10
- rate (%)	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%

CCA Rates

Smart Meters - CCA Class	8	8	8	8	8	8	8	8
Smart Meters - CCA Rate	20%	20%	20%	20%	20%	20%	20%	20%
Computer Equipment - CCA Class	46	46	46	46	46	46	46	46
Computer Equipment - CCA Rate	30%	30%	30%	30%	30%	30%	30%	30%
General Equipment - CCA Class	8	8	8	8	8	8	8	8
General Equipment - CCA Rate	20%	20%	20%	20%	20%	20%	20%	20%
Applications Software - CCA Class								
Applications Software - CCA Rate								

Assumptions

- ¹ Planned smart meter installations occur evenly throughout the year.
- ² Fiscal calendar year (January 1 to December 31) used.
- ³ Amortization is done on a straight line basis and has the "half-year" rule applied.



	2006	2007	2008	2009	2010	2011	2012	2013
Net Fixed Assets - Smart Meters								
Gross Book Value								
Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ 2,744,261	\$ 3,160,551	\$ 3,198,096
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ 2,744,261	\$ 416,289	\$ 37,545	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 2,744,261	\$ 3,160,551	\$ 3,198,096	\$ 3,198,096
Accumulated Depreciation								
Opening Balance		\$ -	\$ -	\$ -	\$ -	-\$ 91,475	-\$ 288,302	-\$ 500,257
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	-\$ 91,475	-\$ 196,827	-\$ 211,955	-\$ 213,206
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	-\$ 91,475	-\$ 288,302	-\$ 500,257	-\$ 713,464
Net Book Value								
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,652,786	\$ 2,872,248	\$ 2,697,839
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 2,652,786	\$ 2,872,248	\$ 2,697,839	\$ 2,484,633
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ 1,326,393	\$ 2,762,517	\$ 2,785,044	\$ 2,591,236
Net Fixed Assets - Computer Hardware								
Gross Book Value								
Opening Balance		\$ -	\$ -	\$ 2,658	\$ 36,712	\$ 219,946	\$ 226,868	\$ 226,868
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ 2,658	\$ 34,054	\$ 183,234	\$ 6,922	\$ -	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ 2,658	\$ 36,712	\$ 219,946	\$ 226,868	\$ 226,868	\$ 226,868
Accumulated Depreciation								
Opening Balance	\$ -	\$ -	\$ -	-\$ 266	-\$ 4,203	-\$ 29,869	-\$ 74,550	-\$ 119,924
Amortization expense during year	\$ -	\$ -	-\$ 266	-\$ 3,937	-\$ 25,666	-\$ 44,681	-\$ 45,374	-\$ 45,374
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	-\$ 266	-\$ 4,203	-\$ 29,869	-\$ 74,550	-\$ 119,924	-\$ 165,297
Net Book Value								
Opening Balance	\$ -	\$ -	\$ -	\$ 2,392	\$ 32,509	\$ 190,077	\$ 152,318	\$ 106,944
Closing Balance	\$ -	\$ -	\$ 2,392	\$ 32,509	\$ 190,077	\$ 152,318	\$ 106,944	\$ 61,571
Average Net Book Value	\$ -	\$ -	\$ 1,196	\$ 17,451	\$ 111,293	\$ 171,198	\$ 129,631	\$ 84,257

Net Fixed Assets - Computer Software (including Applications Software)

Gross Book Value

Opening Balance		\$ 118	\$ 1,021	\$ 1,328	\$ 34,220	\$ 411,237	\$ 1,898,152	\$ 2,426,547
Capital Additions during year (from Smart Meter Costs)	\$ 118	\$ 903	\$ 307	\$ 32,892	\$ 377,017	\$ 1,486,915	\$ 528,395	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ 118	\$ 1,021	\$ 1,328	\$ 34,220	\$ 411,237	\$ 1,898,152	\$ 2,426,547	\$ 2,426,547

Accumulated Depreciation

Opening Balance	\$ -	-\$ 12	-\$ 126	-\$ 361	-\$ 3,915	-\$ 48,461	-\$ 279,400	-\$ 711,870
Amortization expense during year	-\$ 12	-\$ 114	-\$ 235	-\$ 3,555	-\$ 44,546	-\$ 230,939	-\$ 432,470	-\$ 485,309
Retirements/Removals (if applicable)								
Closing Balance	-\$ 12	-\$ 126	-\$ 361	-\$ 3,915	-\$ 48,461	-\$ 279,400	-\$ 711,870	-\$ 1,197,179

Net Book Value

Opening Balance	\$ -	\$ 106	\$ 895	\$ 968	\$ 30,305	\$ 362,776	\$ 1,618,752	\$ 1,714,677
Closing Balance	\$ 106	\$ 895	\$ 968	\$ 30,305	\$ 362,776	\$ 1,618,752	\$ 1,714,677	\$ 1,229,367
Average Net Book Value	\$ 53	\$ 501	\$ 931	\$ 15,636	\$ 196,541	\$ 990,764	\$ 1,666,714	\$ 1,472,022

Net Fixed Assets - Tools and Equipment

Gross Book Value

Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ 4,071	\$ 4,071	\$ 4,071
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ 4,071	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 4,071	\$ 4,071	\$ 4,071	\$ 4,071

Accumulated Depreciation

Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	-\$ 204	-\$ 611	-\$ 1,018
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	-\$ 204	-\$ 407	-\$ 407	-\$ 407
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	-\$ 204	-\$ 611	-\$ 1,018	-\$ 1,425

Net Book Value

Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,867	\$ 3,460	\$ 3,053
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 3,867	\$ 3,460	\$ 3,053	\$ 2,646
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ 1,934	\$ 3,664	\$ 3,257	\$ 2,850

Net Fixed Assets - Other Equipment

Gross Book Value

Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ 27,339	\$ 33,033	\$ 33,033
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ 27,339	\$ 5,694	\$ -	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 27,339	\$ 33,033	\$ 33,033	\$ 33,033

Accumulated Depreciation

Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	-\$ 1,367	-\$ 4,386	-\$ 7,689
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	-\$ 1,367	-\$ 3,019	-\$ 3,303	-\$ 3,303
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	-\$ 1,367	-\$ 4,386	-\$ 7,689	-\$ 10,992

Net Book Value

Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,972	\$ 28,647	\$ 25,344
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 25,972	\$ 28,647	\$ 25,344	\$ 22,041
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ 12,986	\$ 27,310	\$ 26,996	\$ 23,692



	2006	2007	2008	2009	2010	2011	2012	2013
Average Net Fixed Asset Values (from Sheet 4)								
Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 1,326,393	\$ 2,762,517	\$ 2,785,044	\$ 2,591,236
Computer Hardware	\$ -	\$ -	\$ 1,196	\$ 17,451	\$ 111,293	\$ 171,198	\$ 129,631	\$ 84,257
Computer Software	\$ 53	\$ 501	\$ 931	\$ 15,636	\$ 196,541	\$ 990,764	\$ 1,666,714	\$ 1,472,022
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ 1,934	\$ 3,664	\$ 3,257	\$ 2,850
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 12,986	\$ 27,310	\$ 26,996	\$ 23,692
Total Net Fixed Assets	\$ 53	\$ 501	\$ 2,128	\$ 33,087	\$ 1,649,146	\$ 3,955,452	\$ 4,611,641	\$ 4,174,057
Working Capital								
Operating Expenses (from Sheet 2)	\$ 12,109	\$ 23,205	\$ 18,773	\$ 15,477	\$ 128,522	\$ 219,494	\$ 173,359	\$ -
Working Capital Factor (from Sheet 3)	15%	15%	15%	12%	12%	12%	12%	12%
Working Capital Allowance	\$ 1,816	\$ 3,481	\$ 2,816	\$ 1,857	\$ 15,423	\$ 26,339	\$ 20,803	\$ -
Incremental Smart Meter Rate Base	\$ 1,869	\$ 3,981	\$ 4,943	\$ 34,944	\$ 1,664,569	\$ 3,981,791	\$ 4,632,444	\$ 4,174,057
Return on Rate Base								
Capital Structure								
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 1,398	\$ 66,583	\$ 159,272	\$ 185,298	\$ 166,962
Deemed Long Term Debt	\$ 935	\$ 1,991	\$ 2,635	\$ 18,416	\$ 932,159	\$ 2,229,803	\$ 2,594,169	\$ 2,337,472
Equity	\$ 935	\$ 1,991	\$ 2,309	\$ 15,131	\$ 665,828	\$ 1,592,717	\$ 1,852,978	\$ 1,669,623
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ 1,869	\$ 3,981	\$ 4,943	\$ 34,944	\$ 1,664,569	\$ 3,981,791	\$ 4,632,444	\$ 4,174,057
Return on								
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 19	\$ 886	\$ 2,118	\$ 2,464	\$ 2,221
Deemed Long Term Debt	\$ 68	\$ 144	\$ 191	\$ 1,403	\$ 71,030	\$ 169,911	\$ 197,676	\$ 178,115
Equity	\$ 84	\$ 179	\$ 208	\$ 1,212	\$ 53,333	\$ 127,577	\$ 148,424	\$ 133,737
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ 152	\$ 323	\$ 399	\$ 2,634	\$ 125,249	\$ 299,606	\$ 348,564	\$ 314,073
Operating Expenses	\$ 12,109	\$ 23,205	\$ 18,773	\$ 15,477	\$ 128,522	\$ 219,494	\$ 173,359	\$ -
Amortization Expenses (from Sheet 4)								
Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 91,475	\$ 196,827	\$ 211,955	\$ 213,206
Computer Hardware	\$ -	\$ -	\$ 266	\$ 3,937	\$ 25,666	\$ 44,681	\$ 45,374	\$ 45,374
Computer Software	\$ 12	\$ 114	\$ 235	\$ 3,555	\$ 44,546	\$ 230,939	\$ 432,470	\$ 485,309
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ 204	\$ 407	\$ 407	\$ 407
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 1,367	\$ 3,019	\$ 3,303	\$ 3,303
Total Amortization Expense in Year	\$ 12	\$ 114	\$ 501	\$ 7,492	\$ 163,257	\$ 475,873	\$ 693,509	\$ 747,600
Incremental Revenue Requirement before Taxes/PILs	\$ 12,273	\$ 23,643	\$ 19,672	\$ 25,602	\$ 417,028	\$ 994,972	\$ 1,215,431	\$ 1,061,672
Calculation of Taxable Income								
Incremental Operating Expenses	\$ 12,109	\$ 23,205	\$ 18,773	\$ 15,477	\$ 128,522	\$ 219,494	\$ 173,359	\$ -
Amortization Expense	\$ 12	\$ 114	\$ 501	\$ 7,492	\$ 163,257	\$ 475,873	\$ 693,509	\$ 747,600
Interest Expense	\$ 68	\$ 144	\$ 191	\$ 1,422	\$ 71,916	\$ 172,029	\$ 200,140	\$ 180,336
Net Income for Taxes/PILs	\$ 84	\$ 179	\$ 208	\$ 1,212	\$ 53,333	\$ 127,577	\$ 148,424	\$ 133,737
Grossed-up Taxes/PILs (from Sheet 7)	\$ 44.55	\$ 74.13	\$ 13.80	-\$ 976.81	-\$ 70,687.67	-\$ 125,093.58	-\$ 73,447.64	\$ -
Revenue Requirement, including Grossed-up Taxes/PILs	\$ 12,317	\$ 23,717	\$ 19,686	\$ 24,626	\$ 346,341	\$ 869,879	\$ 1,141,984	\$ 1,061,672



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 Forecast	2013 Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,469,835.23	\$ 2,350,528.73	\$ 1,914,213.90
Capital Additions	\$ -	\$ -	\$ -	\$ -	\$ 2,744,261.37	\$ 416,289.50	\$ 37,545.47	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ -	\$ 2,744,261.37	\$ 2,886,124.73	\$ 2,388,074.20	\$ 1,914,213.90
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ 1,372,130.68	\$ 208,144.75	\$ 18,772.73	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ -	\$ 1,372,130.68	\$ 2,677,979.98	\$ 2,369,301.46	\$ 1,914,213.90
CCA Rate Class	8	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ -	\$ -	\$ -	\$ 274,426.14	\$ 535,596.00	\$ 473,860.29	\$ 382,842.78
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ 2,469,835.23	\$ 2,350,528.73	\$ 1,914,213.90	\$ 1,531,371.12

UCC - Computer Equipment

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 Forecast	2013 Forecast
Opening UCC	\$ -	\$ 100.29	\$ 837.56	\$ 3,107.04	\$ 59,079.07	\$ 517,568.52	\$ 1,632,059.18	\$ 1,591,576.84
Capital Additions Computer Hardware	\$ -	\$ -	\$ 2,658.25	\$ 34,053.73	\$ 183,234.03	\$ 6,921.74	\$ -	\$ -
Capital Additions Computer Software	\$ 117.99	\$ 902.78	\$ 307.33	\$ 32,892.33	\$ 377,016.76	\$ 1,486,914.99	\$ 528,394.61	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ 117.99	\$ 1,003.07	\$ 3,803.14	\$ 70,053.09	\$ 619,329.86	\$ 2,011,405.25	\$ 2,160,453.79	\$ 1,591,576.84
Half Year Rule (1/2 Additions - Disposals)	\$ 59.00	\$ 451.39	\$ 1,482.79	\$ 33,473.03	\$ 280,125.39	\$ 746,918.36	\$ 264,197.30	\$ -
Reduced UCC	\$ 59.00	\$ 551.68	\$ 2,320.35	\$ 36,580.06	\$ 339,204.47	\$ 1,264,486.88	\$ 1,896,256.49	\$ 1,591,576.84
CCA Rate Class	46	46	46	46	46	46	46	46
CCA Rate	30%	30%	30%	30%	30%	30%	30%	30%
CCA	\$ 17.70	\$ 165.50	\$ 696.11	\$ 10,974.02	\$ 101,761.34	\$ 379,346.07	\$ 568,876.95	\$ 477,473.05
Closing UCC	\$ 100.29	\$ 837.56	\$ 3,107.04	\$ 59,079.07	\$ 517,568.52	\$ 1,632,059.18	\$ 1,591,576.84	\$ 1,114,103.79

UCC - General Equipment

	2006	2007	2008	2009	2010	2011	2012	2013
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,268.89	\$ 27,739.54	\$ 22,191.63
Capital Additions Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ 4,070.72	\$ -	\$ -	\$ -
Capital Additions Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 27,339.16	\$ 5,693.80	\$ -	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ -	\$ 31,409.88	\$ 33,962.69	\$ 27,739.54	\$ 22,191.63
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ 15,704.94	\$ 2,846.90	\$ -	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ -	\$ 15,704.94	\$ 31,115.79	\$ 27,739.54	\$ 22,191.63
CCA Rate Class	8	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ -	\$ -	\$ -	\$ 3,140.99	\$ 6,223.16	\$ 5,547.91	\$ 4,438.33
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ 28,268.89	\$ 27,739.54	\$ 22,191.63	\$ 17,753.30

UCC - Applications Software

	2006	2007	2008	2009	2010	2011	2012	2013
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA Rate Class	0	0	0	0	0	0	0	0
CCA Rate	0%	0%	0%	0%	0%	0%	0%	0%
CCA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



PILs Calculation

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 Forecast	2013 Forecast
INCOME TAX								
Net Income	\$ 84.12	\$ 179.17	\$ 207.77	\$ 1,211.98	\$ 53,332.79	\$ 127,576.60	\$ 148,423.52	\$ 133,736.79
Amortization	\$ 11.80	\$ 113.88	\$ 500.71	\$ 7,491.87	\$ 163,257.43	\$ 475,873.06	\$ 693,508.72	\$ 747,599.69
CCA - Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 274,426.14	\$ 535,596.00	\$ 473,860.29	\$ 382,842.78
CCA - Computers	-\$ 17.70	-\$ 165.50	-\$ 696.11	-\$ 10,974.02	-\$ 101,761.34	-\$ 379,346.07	-\$ 568,876.95	-\$ 477,473.05
CCA - Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 3,140.99	\$ 6,223.16	\$ 5,547.91	\$ 4,438.33
Change in taxable income	\$ 78.22	\$ 127.54	\$ 12.38	-\$ 2,270.16	-\$ 162,738.24	-\$ 317,715.56	-\$ 206,352.91	\$ 16,582.33
Tax Rate (from Sheet 3)	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%	25.50%
Income Taxes Payable	\$ 28.25	\$ 46.07	\$ 4.15	-\$ 749.15	-\$ 50,448.85	-\$ 89,754.65	-\$ 54,167.64	\$ 4,228.49
ONTARIO CAPITAL TAX								
Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 2,652,785.99	\$ 2,872,248.41	\$ 2,697,838.97	\$ 2,484,632.55
Computer Hardware	\$ -	\$ -	\$ 2,392.43	\$ 32,509.13	\$ 190,077.36	\$ 152,317.73	\$ 106,944.18	\$ 61,570.63
Computer Software (Including Application Software)	\$ 106.19	\$ 895.09	\$ 967.53	\$ 30,305.01	\$ 362,776.01	\$ 1,618,752.06	\$ 1,714,676.77	\$ 1,229,367.42
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ 3,867.19	\$ 3,460.12	\$ 3,053.04	\$ 2,645.97
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 25,972.20	\$ 28,647.39	\$ 25,344.10	\$ 22,040.80
Rate Base	\$ 106.19	\$ 895.09	\$ 3,359.96	\$ 62,814.14	\$ 3,235,478.74	\$ 4,675,425.70	\$ 4,547,857.06	\$ 3,800,257.36
Less: Exemption								
Deemed Taxable Capital	\$ 106.19	\$ 895.09	\$ 3,359.96	\$ 62,814.14	\$ 3,235,478.74	\$ 4,675,425.70	\$ 4,547,857.06	\$ 3,800,257.36
Ontario Capital Tax Rate (from Sheet 3)	0.300%	0.225%	0.225%	0.225%	0.075%	0.000%	0.000%	0.000%
Net Amount (Taxable Capital x Rate)	\$ 0.32	\$ 2.01	\$ 7.56	\$ 141.33	\$ 2,426.61	\$ -	\$ -	\$ -
Change in Income Taxes Payable	\$ 28.25	\$ 46.07	\$ 4.15	-\$ 749.15	-\$ 50,448.85	-\$ 89,754.65	-\$ 54,167.64	\$ 4,228.49
Change in OCT	\$ 0.32	\$ 2.01	\$ 7.56	\$ 141.33	\$ 2,426.61	\$ -	\$ -	\$ -
PILs	\$ 28.57	\$ 48.08	\$ 11.71	-\$ 607.82	-\$ 48,022.24	-\$ 89,754.65	-\$ 54,167.64	\$ 4,228.49
Gross Up PILs								
Tax Rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%	25.50%
Change in Income Taxes Payable	\$ 44.23	\$ 72.11	\$ 6.24	-\$ 1,118.14	-\$ 73,114.28	-\$ 125,093.58	-\$ 73,447.64	\$ 5,675.83
Change in OCT	\$ 0.32	\$ 2.01	\$ 7.56	\$ 141.33	\$ 2,426.61	\$ -	\$ -	\$ -
PILs	\$ 44.55	\$ 74.13	\$ 13.80	-\$ 976.81	-\$ 70,687.67	-\$ 125,093.58	-\$ 73,447.64	\$ 5,675.83



Bluewater Power Distribution Corporation

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%	\$ -	\$ -		\$ 0.89
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	\$ -	\$ 45,940.12	4.59%	\$ -	\$ 45,940.12		\$ 0.26
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	\$ 45,940.12	\$ 7,730.38	4.59%	\$ 175.72	\$ 53,846.22		\$ 0.26
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	\$ 53,670.50	\$ 7,406.04	4.59%	\$ 205.29	\$ 61,281.83	\$ 61,457.55	\$ 0.26
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	\$ 61,076.54	\$ 11,499.04	4.59%	\$ 233.62	\$ 72,809.20		\$ 0.26
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	\$ 72,575.58	\$ 6,182.78	4.59%	\$ 277.60	\$ 79,035.96		\$ 0.26
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	\$ 78,758.36	\$ 10,835.31	4.59%	\$ 301.25	\$ 89,894.92		\$ 0.26
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	\$ 89,593.67	\$ 6,448.78	4.59%	\$ 342.70	\$ 96,385.14		\$ 0.26
2010 Q1	0.55%	4.34%	May-07	2007	Q2	\$ 96,042.44	\$ 6,448.78	4.59%	\$ 367.36	\$ 102,858.58		\$ 0.26
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	\$ 102,491.22	\$ 10,626.03	4.59%	\$ 392.03	\$ 113,509.28		\$ 0.26
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	\$ 113,117.25	\$ 10,178.30	4.59%	\$ 432.67	\$ 123,728.23		\$ 0.26
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	\$ 123,295.56	\$ 8,246.17	4.59%	\$ 471.61	\$ 132,013.34		\$ 0.26
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	\$ 131,541.73	\$ 8,242.70	4.59%	\$ 503.15	\$ 140,287.58		\$ 0.26
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	\$ 139,784.43	\$ 9,059.21	5.14%	\$ 598.74	\$ 149,442.38		\$ 0.26
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	\$ 148,843.64	\$ 9,007.82	5.14%	\$ 637.55	\$ 158,489.02		\$ 0.26
2011 Q4	1.47%	3.92%	Dec-07	2007	Q4	\$ 157,851.47	\$ 7,114.81	5.14%	\$ 676.13	\$ 165,642.41	\$ 109,124.15	\$ 0.26
2012 Q1	1.47%	3.92%	Jan-08	2008	Q1	\$ 164,966.28	\$ 11,165.67	5.14%	\$ 706.61	\$ 176,838.56		\$ 0.26
2012 Q2	1.47%	3.51%	Feb-08	2008	Q1	\$ 176,131.95	\$ 6,368.21	5.14%	\$ 754.43	\$ 183,254.59		\$ 0.26
2012 Q3	1.47%	3.51%	Mar-08	2008	Q1	\$ 182,500.16	\$ 9,184.92	5.14%	\$ 781.71	\$ 192,466.79		\$ 0.26
2012 Q4	1.47%	3.51%	Apr-08	2008	Q2	\$ 191,685.08	\$ 8,986.06	4.08%	\$ 651.73	\$ 201,322.87		\$ 0.26
2013 Q1			May-08	2008	Q2	\$ 200,671.14	\$ 9,135.61	4.08%	\$ 682.28	\$ 210,489.03		\$ 0.26
2013 Q2			Jun-08	2008	Q2	\$ 209,806.75	\$ 7,461.14	4.08%	\$ 713.34	\$ 217,981.23		\$ 0.26
2013 Q3			Jul-08	2008	Q3	\$ 217,267.89	\$ 10,708.22	3.35%	\$ 606.54	\$ 228,582.65		\$ 0.26



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)
2013 Q4				Aug-08	2008	Q3	\$ 227,976.11	\$ 6,540.91	3.35%	\$ 636.43	\$ 235,153.45		\$ 0.26
				Sep-08	2008	Q3	\$ 234,517.02	\$ 7,000.22	3.35%	\$ 654.69	\$ 242,171.93		\$ 0.26
				Oct-08	2008	Q4	\$ 241,517.24	\$ 8,905.50	3.35%	\$ 674.24	\$ 251,096.98		\$ 0.26
				Nov-08	2008	Q4	\$ 250,422.74	\$ 8,355.67	3.35%	\$ 699.10	\$ 259,477.51		\$ 0.26
				Dec-08	2008	Q4	\$ 258,778.41	\$ 10,071.81	3.35%	\$ 722.42	\$ 269,572.65	\$ 112,167.47	\$ 0.26
				Jan-09	2009	Q1	\$ 268,850.23	\$ 11,672.89	2.45%	\$ 548.90	\$ 281,072.02		\$ 0.26
				Feb-09	2009	Q1	\$ 280,523.12	\$ 6,222.83	2.45%	\$ 572.73	\$ 287,318.68		\$ 0.26
				Mar-09	2009	Q1	\$ 286,745.95	\$ 10,288.50	2.45%	\$ 585.44	\$ 297,619.89		\$ 0.26
				Apr-09	2009	Q2	\$ 297,034.45	\$ 8,217.70	1.00%	\$ 247.53	\$ 305,499.68		\$ 0.26
				May-09	2009	Q2	\$ 305,252.15	\$ 9,287.71	1.00%	\$ 254.38	\$ 314,794.23		\$ 0.26
				Jun-09	2009	Q2	\$ 314,539.85	\$ 7,475.26	1.00%	\$ 262.12	\$ 322,277.24		\$ 0.26
				Jul-09	2009	Q3	\$ 322,015.12	\$ 11,035.56	0.55%	\$ 147.59	\$ 333,198.27		\$ 0.26
				Aug-09	2009	Q3	\$ 333,050.68	\$ 6,153.46	0.55%	\$ 152.65	\$ 339,356.79		\$ 0.26
				Sep-09	2009	Q3	\$ 339,204.14	\$ 9,457.32	0.55%	\$ 155.47	\$ 348,816.93		\$ 0.26
				Oct-09	2009	Q4	\$ 348,661.46	\$ 6,926.11	0.55%	\$ 159.80	\$ 355,747.37		\$ 0.26
				Nov-09	2009	Q4	\$ 355,587.57	\$ 8,887.79	0.55%	\$ 162.98	\$ 364,638.35		\$ 0.26
				Dec-09	2009	Q4	\$ 364,475.37	\$ 7,107.37	0.55%	\$ 167.05	\$ 371,749.78	\$ 106,149.15	\$ 0.26
				Jan-10	2010	Q1	\$ 371,582.73	\$ 9,848.88	0.55%	\$ 170.31	\$ 381,601.93		\$ 0.26
				Feb-10	2010	Q1	\$ 381,431.62	\$ 6,357.70	0.55%	\$ 174.82	\$ 387,964.13		\$ 0.26
				Mar-10	2010	Q1	\$ 387,789.31	\$ 10,891.17	0.55%	\$ 177.74	\$ 398,858.22		\$ 0.26
				Apr-10	2010	Q2	\$ 398,680.48	\$ 5,938.87	0.55%	\$ 182.73	\$ 404,802.08		\$ 0.26
				May-10	2010	Q2	\$ 404,619.35	\$ 10,202.76	0.55%	\$ 185.45	\$ 415,007.56		\$ 1.00
				Jun-10	2010	Q2	\$ 414,822.11	\$ 16,095.12	0.55%	\$ 190.13	\$ 431,107.36		\$ 1.00
				Jul-10	2010	Q3	\$ 430,917.23	\$ 23,149.78	0.89%	\$ 319.60	\$ 454,386.60		\$ 1.00
				Aug-10	2010	Q3	\$ 454,067.00	\$ 39,266.85	0.89%	\$ 336.77	\$ 493,670.63		\$ 1.00
				Sep-10	2010	Q3	\$ 493,333.86	\$ 32,730.94	0.89%	\$ 365.89	\$ 526,430.69		\$ 1.00
				Oct-10	2010	Q4	\$ 526,064.80	\$ 29,390.60	1.20%	\$ 526.06	\$ 555,981.46		\$ 1.00
				Nov-10	2010	Q4	\$ 555,455.40	\$ 34,490.09	1.20%	\$ 555.46	\$ 590,500.95		\$ 1.00
				Dec-10	2010	Q4	\$ 589,945.49	\$ 27,322.34	1.20%	\$ 589.95	\$ 617,857.78	\$ 249,460.01	\$ 1.00
				Jan-11	2011	Q1	\$ 617,267.83	\$ 35,268.77	1.47%	\$ 756.15	\$ 653,292.75		\$ 1.00
				Feb-11	2011	Q1	\$ 652,536.60	\$ 29,235.52	1.47%	\$ 799.36	\$ 682,571.48		\$ 1.00
				Mar-11	2011	Q1	\$ 681,772.12	\$ 38,353.85	1.47%	\$ 835.17	\$ 720,961.14		\$ 1.00



This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

Interest Rates	Approved Deferral and Variance Accounts	CWIP				Opening Balance	Funding Adder	Interest				Annual amounts	Board Approved Smart
			Date	Year	Quarter	(Principal)	Revenues	Rate	Interest	Closing Balance	Meter Funding Adder (from Tariff)		
			Apr-11	2011	Q2	\$ 720,125.97	\$ 25,451.31	1.47%	\$ 882.15	\$ 746,459.43		\$ 1.00	
			May-11	2011	Q2	\$ 745,577.28	\$ 38,178.15	1.47%	\$ 913.33	\$ 784,668.76		\$ 2.00	
			Jun-11	2011	Q2	\$ 783,755.43	\$ 39,986.11	1.47%	\$ 960.10	\$ 824,701.64		\$ 2.00	
			Jul-11	2011	Q3	\$ 823,741.54	\$ 70,410.19	1.47%	\$ 1,009.08	\$ 895,160.81		\$ 2.00	
			Aug-11	2011	Q3	\$ 894,151.73	\$ 59,425.80	1.47%	\$ 1,095.34	\$ 954,672.87		\$ 2.00	
			Sep-11	2011	Q3	\$ 953,577.53	\$ 73,505.59	1.47%	\$ 1,168.13	\$ 1,028,251.25		\$ 2.00	
			Oct-11	2011	Q4	\$ 1,027,083.12	\$ 48,974.82	1.47%	\$ 1,258.18	\$ 1,077,316.13		\$ 2.00	
			Nov-11	2011	Q4	\$ 1,076,057.95	\$ 79,658.10	1.47%	\$ 1,318.17	\$ 1,157,034.22		\$ 2.00	
			Dec-11	2011	Q4	\$ 1,155,716.05	\$ 44,050.24	1.47%	\$ 1,415.75	\$ 1,201,182.04	\$ 594,909.37	\$ 2.00	
			Jan-12	2012	Q1	\$ 1,199,766.29	\$ 82,783.65	1.47%	\$ 1,469.71	\$ 1,284,019.65		\$ 2.00	
			Feb-12	2012	Q1	\$ 1,282,549.94	\$ 48,281.40	1.47%	\$ 1,571.12	\$ 1,332,402.46		\$ 2.00	
			Mar-12	2012	Q1	\$ 1,330,831.34	\$ 75,988.79	1.47%	\$ 1,630.27	\$ 1,408,450.40		\$ 2.00	
			Apr-12	2012	Q2	\$ 1,406,820.13	\$ 51,354.71	1.47%	\$ 1,723.35	\$ 1,459,898.19		\$ 2.00	
			May-12	2012	Q2	\$ 1,458,174.84	\$ 65,873.13	1.47%	\$ 1,786.26	\$ 1,525,834.23			
			Jun-12	2012	Q2	\$ 1,524,047.97	\$ 32,936.56	1.47%	\$ 1,866.96	\$ 1,558,851.49			
			Jul-12	2012	Q3	\$ 1,556,984.53		1.47%	\$ 1,907.31	\$ 1,558,891.84			
			Aug-12	2012	Q3	\$ 1,556,984.53		1.47%	\$ 1,907.31	\$ 1,558,891.84			
			Sep-12	2012	Q3	\$ 1,556,984.53		1.47%	\$ 1,907.31	\$ 1,558,891.84			
			Oct-12	2012	Q4	\$ 1,556,984.53		1.47%	\$ 1,907.31	\$ 1,558,891.84			
			Nov-12	2012	Q4	\$ 1,556,984.53		0.00%	\$ -	\$ 1,556,984.53			
			Dec-12	2012	Q4	\$ 1,556,984.53	\$ 10,528.00	0.00%	\$ -	\$ 1,567,512.53	\$ 385,423.15		
			Jan-13	2013	Q1	\$ 1,567,512.53		0.00%	\$ -	\$ 1,567,512.53			
			Feb-13	2013	Q1	\$ 1,567,512.53		0.00%	\$ -	\$ 1,567,512.53			
			Mar-13	2013	Q1	\$ 1,567,512.53		0.00%	\$ -	\$ 1,567,512.53			
			Apr-13	2013	Q2	\$ 1,567,512.53		0.00%	\$ -	\$ 1,567,512.53			
			May-13	2013	Q2	\$ 1,567,512.53		0.00%	\$ -	\$ 1,567,512.53			
			Jun-13	2013	Q2	\$ 1,567,512.53		0.00%	\$ -	\$ 1,567,512.53			
			Jul-13	2013	Q3	\$ 1,567,512.53		0.00%	\$ -	\$ 1,567,512.53			
			Aug-13	2013	Q3	\$ 1,567,512.53		0.00%	\$ -	\$ 1,567,512.53			
			Sep-13	2013	Q3	\$ 1,567,512.53		0.00%	\$ -	\$ 1,567,512.53			
			Oct-13	2013	Q4	\$ 1,567,512.53		0.00%	\$ -	\$ 1,567,512.53			
			Nov-13	2013	Q4	\$ 1,567,512.53		0.00%	\$ -	\$ 1,567,512.53			



Ontario Energy Board
Smart Meter Model



This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

Interest Rates	Approved Deferral and Variance Accounts	CWIP				Opening Balance	Funding Adder	Interest		Closing Balance	Annual amounts	Board Approved Smart Meter Funding Adder (from Tariff)
			Date	Year	Quarter	(Principal)	Revenues	Rate				
			Dec-13	2013	Q4	\$ 1,567,512.53		FALSE	\$ -	\$ 1,567,512.53	\$ -	
Total Funding Adder Revenues Collected							\$ 1,567,512.53		\$ 51,178.31	\$ 1,618,690.84	\$ 1,618,690.84	



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	\$ -		\$ 0.90	0.90	0.00%	-	-
2006 Q2	4.14%	4.68%	Feb-06	2006	Q1	0.90			0.90	0.00%	-	-
2006 Q3	4.59%	5.05%	Mar-06	2006	Q1	0.90			0.90	0.00%	-	-
2006 Q4	4.59%	4.72%	Apr-06	2006	Q2	0.90			0.90	4.14%	0.00	0.00
2007 Q1	4.59%	4.72%	May-06	2006	Q2	0.90	\$ 1,432.76	\$ -	1,433.66	4.14%	0.00	0.01
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	1,433.66	\$ -	\$ -	1,433.66	4.14%	4.95	4.95
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	1,433.66	\$ -	\$ -	1,433.66	4.59%	5.48	10.44
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	1,433.66	\$ -	\$ -	1,433.66	4.59%	5.48	15.92
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	1,433.66	\$ -	\$ -	1,433.66	4.59%	5.48	21.40
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	1,433.66	\$ 9,409.24	\$ -	10,842.90	4.59%	5.48	26.89
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	10,842.90	\$ 1,158.24	\$ -	12,001.15	4.59%	41.47	68.36
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	12,001.15	\$ 108.58	\$ 15.32	12,125.05	4.59%	45.90	114.27
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	12,125.05	\$ 217.16	\$ -	12,342.20	4.59%	46.38	160.64
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	12,342.20	\$ 247.73	\$ -	12,589.93	4.59%	47.21	207.85
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	12,589.93	\$ 247.73	\$ -	12,837.66	4.59%	48.16	256.01
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	12,837.66	\$ 247.73	\$ -	13,085.39	4.59%	49.10	305.11
2010 Q1	0.55%	4.34%	May-07	2007	Q2	13,085.39	\$ 1,459.59	\$ -	14,544.99	4.59%	50.05	355.17
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	14,544.99	\$ 2,149.34	\$ -	16,694.33	4.59%	55.63	410.80
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	16,694.33	\$ 3,555.36	\$ -	20,249.70	4.59%	63.86	474.66
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	20,249.70	\$ 1,195.33	\$ -	21,445.03	4.59%	77.46	552.11
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	21,445.03	\$ 5,883.85	\$ -	27,328.87	4.59%	82.03	634.14
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	27,328.87	\$ 509.72	\$ -	27,838.59	5.14%	117.06	751.20
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	27,838.59	\$ 1,190.97	\$ -	29,029.56	5.14%	119.24	870.44
2011 Q4	1.47%	3.92%	Dec-07	2007	Q4	29,029.56	\$ 6,300.92	\$ 149.57	35,480.05	5.14%	124.34	994.78
2012 Q1	1.47%	3.92%	Jan-08	2008	Q1	35,480.05	\$ 902.67	\$ -	36,382.71	5.14%	151.97	1,146.75
2012 Q2	1.47%	3.51%	Feb-08	2008	Q1	36,382.71	\$ 2,700.22	\$ -	39,082.94	5.14%	155.84	1,302.59
2012 Q3	1.47%	3.51%	Mar-08	2008	Q1	39,082.94	\$ 2,108.85	\$ -	41,191.79	5.14%	167.41	1,470.00
2012 Q4	1.47%	3.51%	Apr-08	2008	Q2	41,191.79	\$ 888.65	\$ -	42,080.44	4.08%	140.05	1,610.05
2013 Q1	0.00%	0.00%	May-08	2008	Q2	42,080.44	\$ 2,595.91	\$ -	44,676.35	4.08%	143.07	1,753.12
2013 Q2	0.00%	0.00%	Jun-08	2008	Q2	44,676.35	\$ 1,135.22	\$ -	45,811.57	4.08%	151.90	1,905.02
2013 Q3	0.00%	0.00%	Jul-08	2008	Q3	45,811.57	\$ 1,549.93	\$ -	47,361.50	3.35%	127.89	2,032.92
2013 Q4	0.00%	0.00%	Aug-08	2008	Q3	47,361.50	\$ 1,352.24	\$ -	48,713.74	3.35%	132.22	2,165.13
			Sep-08	2008	Q3	48,713.74	\$ 681.82	\$ -	49,395.56	3.35%	135.99	2,301.13
			Oct-08	2008	Q4	49,395.56	\$ 2,583.96	\$ -	51,979.52	3.35%	137.90	2,439.02

Nov-08	2008	Q4	51,979.52	\$ 1,678.11	\$ -	53,657.63	3.35%	145.11	2,584.13
Dec-08	2008	Q4	53,657.63	\$ 595.24	\$ 657.73	54,910.60	3.35%	149.79	2,733.92
Jan-09	2009	Q1	54,910.60	\$ 1,812.85	\$ 819.91	57,543.36	2.45%	112.11	2,846.03
Feb-09	2009	Q1	57,543.36	\$ 847.10	\$ 819.91	59,210.37	2.45%	117.48	2,963.52
Mar-09	2009	Q1	59,210.37	\$ 1,783.73	\$ 819.91	61,814.01	2.45%	120.89	3,084.41
Apr-09	2009	Q2	61,814.01	\$ 417.66	\$ 819.91	63,051.57	1.00%	51.51	3,135.92
May-09	2009	Q2	63,051.57	\$ 2,750.35	\$ 819.91	66,621.83	1.00%	52.54	3,188.46
Jun-09	2009	Q2	66,621.83	\$ 374.58	\$ 819.91	67,816.32	1.00%	55.52	3,243.98
Jul-09	2009	Q3	67,816.32	\$ 367.97	\$ 819.91	69,004.20	0.55%	31.08	3,275.06
Aug-09	2009	Q3	69,004.20	\$ 333.05	\$ 819.91	70,157.16	0.55%	31.63	3,306.69
Sep-09	2009	Q3	70,157.16	\$ 439.12	\$ 819.91	71,416.19	0.55%	32.16	3,338.84
Oct-09	2009	Q4	71,416.19	\$ 3,849.59	\$ 819.91	76,085.68	0.55%	32.73	3,371.58
Nov-09	2009	Q4	76,085.68	\$ 897.37	\$ 819.91	77,802.96	0.55%	34.87	3,406.45
Dec-09	2009	Q4	77,802.96	\$ 1,603.36	\$ 819.91	80,226.23	0.55%	35.66	3,442.11
Jan-10	2010	Q1	80,226.23	\$ 34.08	\$ 17,868.63	98,128.94	0.55%	36.77	3,478.88
Feb-10	2010	Q1	98,128.94	\$ 955.56	\$ 17,868.63	116,953.12	0.55%	44.98	3,523.85
Mar-10	2010	Q1	116,953.12	\$ 5,413.03	\$ 17,868.63	140,234.78	0.55%	53.60	3,577.46
Apr-10	2010	Q2	140,234.78	\$ 37,777.59	\$ 17,868.63	195,881.00	0.55%	64.27	3,641.73
May-10	2010	Q2	195,881.00	\$ 2,581.18	\$ 17,868.63	216,330.81	0.55%	89.78	3,731.51
Jun-10	2010	Q2	216,330.81	\$ 17,583.77	\$ 17,868.63	251,783.22	0.55%	99.15	3,830.66
Jul-10	2010	Q3	251,783.22	\$ 7,352.84	\$ 17,868.63	277,004.69	0.89%	186.74	4,017.40
Aug-10	2010	Q3	277,004.69	\$ 3,306.06	\$ 17,868.63	298,179.38	0.89%	205.45	4,222.85
Sep-10	2010	Q3	298,179.38	\$ 4,383.99	\$ 17,868.63	320,432.00	0.89%	221.15	4,444.00
Oct-10	2010	Q4	320,432.00	\$ 5,245.44	\$ 17,868.63	343,546.07	1.20%	320.43	4,764.43
Nov-10	2010	Q4	343,546.07	\$ 5,405.03	\$ 17,868.63	366,819.73	1.20%	343.55	5,107.97
Dec-10	2010	Q4	366,819.73	\$ 38,483.81	\$ 17,868.63	423,172.17	1.20%	366.82	5,474.79
Jan-11	2011	Q1	423,172.17	\$ 16,067.24	\$ 52,085.01	491,324.43	1.47%	518.39	5,993.18
Feb-11	2011	Q1	491,324.43	\$ 8,396.25	\$ 52,085.01	551,805.68	1.47%	601.87	6,595.05
Mar-11	2011	Q1	551,805.68	\$ 12,540.82	\$ 52,085.01	616,431.51	1.47%	675.96	7,271.01
Apr-11	2011	Q2	616,431.51	\$ 10,861.22	\$ 52,085.01	679,377.74	1.47%	755.13	8,026.14
May-11	2011	Q2	679,377.74	\$ 21,875.21	\$ 52,085.01	753,337.96	1.47%	832.24	8,858.38
Jun-11	2011	Q2	753,337.96	\$ 16,368.79	\$ 52,085.01	821,791.75	1.47%	922.84	9,781.22
Jul-11	2011	Q3	821,791.75	\$ 16,095.67	\$ 52,085.01	889,972.43	1.47%	1,006.69	10,787.92
Aug-11	2011	Q3	889,972.43	\$ 14,776.44	\$ 52,085.01	956,833.88	1.47%	1,090.22	11,878.13
Sep-11	2011	Q3	956,833.88	\$ 12,356.94	\$ 52,085.01	1,021,275.83	1.47%	1,172.12	13,050.25
Oct-11	2011	Q4	1,021,275.83	\$ 17,482.33	\$ 52,085.01	1,090,843.17	1.47%	1,251.06	14,301.32
Nov-11	2011	Q4	1,090,843.17	\$ 26,120.01	\$ 52,085.01	1,169,048.19	1.47%	1,336.28	15,637.60
Dec-11	2011	Q4	1,169,048.19	\$ 46,553.00	\$ 52,085.01	1,267,686.20	1.47%	1,432.08	17,069.68
Jan-12	2012	Q1	1,267,686.20	\$ 30,189.07	\$ 75,904.75	1,373,780.01	1.47%	1,552.92	18,622.60
Feb-12	2012	Q1	1,373,780.01	\$ 29,465.64	\$ 75,904.75	1,479,150.39	1.47%	1,682.88	20,305.48
Mar-12	2012	Q1	1,479,150.39	\$ 27,519.72	\$ 75,904.75	1,582,574.86	1.47%	1,811.96	22,117.44
Apr-12	2012	Q2	1,582,574.86	\$ 24,495.87	\$ 75,904.75	1,682,975.48	1.47%	1,938.65	24,056.09
May-12	2012	Q2	1,682,975.48	\$ 18,968.75	\$ 75,904.75	1,777,848.98	1.47%	2,061.64	26,117.74
Jun-12	2012	Q2	1,777,848.98	\$ 10,679.55	\$ 75,904.75	1,864,433.28	1.47%	2,177.86	28,295.60
Jul-12	2012	Q3	1,864,433.28	\$ 10,679.55	\$ 75,904.75	1,951,017.57	1.47%	2,283.93	30,579.53
Aug-12	2012	Q3	1,951,017.57	\$ 10,679.55	\$ 75,904.75	2,037,601.87	1.47%	2,390.00	32,969.53
Sep-12	2012	Q3	2,037,601.87	\$ 10,679.55	\$ 75,904.75	2,124,186.17	1.47%	2,496.06	35,465.59
Oct-12	2012	Q4	2,124,186.17	\$ -	\$ 75,904.75	2,200,090.91	1.47%	2,602.13	38,067.72
Nov-12	2012	Q4	2,200,090.91	\$ -	\$ 75,904.75	2,275,995.66	0.00%	-	38,067.72
Dec-12	2012	Q4	2,275,995.66	\$ -	\$ 75,904.75	2,351,900.40	0.00%	-	38,067.72
Jan-13	2013	Q1	2,351,900.40	\$ -	\$ 81,825.22	2,433,725.62	0.00%	-	38,067.72
Feb-13	2013	Q1	2,433,725.62	\$ -	\$ 81,825.22	2,515,550.84	0.00%	-	38,067.72
Mar-13	2013	Q1	2,515,550.84	\$ -	\$ 81,825.22	2,597,376.05	0.00%	-	38,067.72
Apr-13	2013	Q2	2,597,376.05	\$ -	\$ 81,825.22	2,679,201.27	0.00%	-	38,067.72
May-13	2013	Q2	2,679,201.27	\$ -	\$ 81,825.22	2,761,026.48	0.00%	-	38,067.72
Jun-13	2013	Q2	2,761,026.48	\$ -	\$ 81,825.22	2,842,851.70	0.00%	-	38,067.72
Jul-13	2013	Q3	2,842,851.70	\$ -	\$ 81,825.22	2,924,676.92	0.00%	-	38,067.72
Aug-13	2013	Q3	2,924,676.92	\$ -	\$ 81,825.22	3,006,502.13	0.00%	-	38,067.72
Sep-13	2013	Q3	3,006,502.13	\$ -	\$ 81,825.22	3,088,327.35	0.00%	-	38,067.72
Oct-13	2013	Q4	3,088,327.35	\$ -	\$ 81,825.22	3,170,152.56	0.00%	-	38,067.72

	Nov-13	2013	Q4	3,170,152.56	\$ -	\$ 81,825.22	3,251,977.78	0.00%	-	38,067.72
	Dec-13	2013	Q4	3,251,977.78	\$ -	\$ 81,825.22	3,333,803.00	FALSE	-	38,067.72
				\$ 590,937.35	\$ 1,760,963.05	\$ 2,351,900.40				



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	\$ 12,108.83	\$ 11.80	\$ 12,120.63	\$ 6,060.31	4.37%	\$ 264.53
2007	\$ 23,205.44	\$ 113.88	\$ 35,439.94	\$ 23,780.28	4.73%	\$ 1,124.21
2008	\$ 18,772.82	\$ 500.71	\$ 54,713.47	\$ 45,076.70	3.98%	\$ 1,794.05
2009	\$ 15,476.71	\$ 7,491.87	\$ 77,682.06	\$ 66,197.76	1.14%	\$ 753.00
2010	\$ 128,522.13	\$ 163,257.43	\$ 369,461.62	\$ 223,571.84	0.80%	\$ 1,782.99
2011	\$ 219,493.50	\$ 475,873.06	\$ 1,064,828.18	\$ 717,144.90	1.47%	\$ 10,542.03
2012	\$ 173,359.08	\$ 693,508.72	\$ 1,931,695.97	\$ 1,498,262.08	1.23%	\$ 18,353.71
2013	\$ -	\$ 747,599.69	\$ 2,679,295.67	\$ 2,305,495.82	0.00%	\$ -
Cumulative Interest to 2011						\$ 16,260.81
Cumulative Interest to 2012						\$ 34,614.52
Cumulative Interest to 2013						\$ 34,614.52



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

Check if
applicable

- ☐
- Smart Meter Funding Adder (SMFA)
-
- ☒
- Smart Meter Disposition Rider (SMDR)
-
- ☒
- Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)

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

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

	2006	2007	2008	2009	2010	2011	2012	2013	Total
Deferred and forecasted Smart Meter Incremental Revenue Requirement (from Sheet 5)	\$ 12,317.07	\$ 23,716.93	\$ 19,686.13	\$ 24,625.62	\$ 346,340.72	\$ 869,878.90	\$ 1,141,983.80	\$ 1,061,672.46	\$ 2,438,549.17
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B) (Check one of the boxes below)	\$ 114.27	\$ 880.52	\$ 1,739.14	\$ 708.18	\$ 2,032.69	\$ 11,594.89	\$ 20,998.04		\$ 38,067.72
<div><input checked="" type="checkbox"/> Sheet 8A (Interest calculated on monthly balances)</div>	\$ 114.27	\$ 880.52	\$ 1,739.14	\$ 708.18	\$ 2,032.69	\$ 11,594.89	\$ 20,998.04	\$ -	\$ 38,067.72
<div><input type="checkbox"/> Sheet 8B (Interest calculated on average annual balances)</div>									
SMFA Revenues (from Sheet 8)	\$ 61,076.54	\$ 103,889.74	\$ 103,883.95	\$ 102,732.51	\$ 245,685.10	\$ 582,498.46	\$ 367,746.24	\$ -	\$ 1,567,512.53
SMFA Interest (from Sheet 8)	\$ 381.01	\$ 5,234.41	\$ 8,283.52	\$ 3,416.64	\$ 3,774.91	\$ 12,410.91	\$ 17,676.91	\$ -	\$ 51,178.31
Net Deferred Revenue Requirement	-\$ 49,026.22	-\$ 84,526.70	-\$ 90,742.20	-\$ 80,815.34	\$ 98,913.40	\$ 286,564.42	\$ 777,558.69	\$ 1,061,672.46	\$ 857,926.05
Number of Metered Customers (average for 2013 test year) - Number of metered customers for which smart meter were deployed as part of program). Residential and GS < 50 kW customer classes and any other metered classes involved (e.g. GS 50 to 4999 kW for which interval meters were upgraded to utilize AMI and ODS assets)								32122	

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

Years for collection or refunding	0.5	
Deferred Incremental Revenue Requirement from 2006 to December 31, 2012 plus Interest on OM&A and Amortization	\$ 2,476,616.89	
SMFA Revenues collected from 2006 to 2013 test year (inclusive) Plus Simple Interest on SMFA Revenues	\$ 1,618,690.84	
Net Deferred Revenue Requirement	\$ 857,926.05	
SMDR	November 1, 2012 to	\$ 4.45
Check: Forecasted SMDR Revenues		\$ 857,657.40

Match

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

Incremental Revenue Requirement for 2013	\$ 1,061,672.46	
SMIRR	\$ 2.75	
Check: Forecasted SMIRR Revenues		\$ 1,060,026.00

Match

	2006	2007	2008	2009	2010	2011	2012	Total to 2011	Total to 2012
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 19	\$ 886	\$ 2,118	\$ 2,464	\$ 3,022	\$ 5,487
Deemed Long Term Debt	\$ 68	\$ 144	\$ 191	\$ 1,403	\$ 71,030	\$ 169,911	\$ 197,676	\$ 242,748	\$ 440,424
Equity	\$ 84	\$ 179	\$ 208	\$ 1,212	\$ 53,333	\$ 127,577	\$ 148,424	\$ 182,592	\$ 331,016
Return on Capital	\$ 152	\$ 323	\$ 399	\$ 2,634	\$ 125,249	\$ 299,606	\$ 348,564	\$ 428,363	\$ 776,926
Operating Expense	\$ 12,109	\$ 23,205	\$ 18,773	\$ 15,477	\$ 128,522	\$ 219,494	\$ 173,359	\$ 417,579	\$ 590,939
Amortization	\$ 12	\$ 114	\$ 501	\$ 7,492	\$ 163,257	\$ 475,873	\$ 693,509	\$ 647,249	\$ 1,340,757
Total Before PILs	\$ 12,273	\$ 23,643	\$ 19,672	\$ 25,602	\$ 417,028	\$ 994,972	\$ 1,215,431	\$ 1,493,191	\$ 2,708,622
PILS	\$ 45	\$ 74	\$ 14	-\$ 977	-\$ 70,688	-\$ 125,094	-\$ 73,448	-\$ 196,626	-\$ 270,073
Revenue Requirement	\$ 12,317	\$ 23,717	\$ 19,686	\$ 24,626	\$ 346,341	\$ 869,879	\$ 1,141,984	\$ 1,296,565	\$ 2,438,549
Interest on Deferred OM&A and Amortization	\$ 114	\$ 881	\$ 1,739	\$ 708	\$ 2,033	\$ 11,595	\$ 20,998	\$ 17,070	\$ 38,068
Total Revenue Requirement	\$ 12,431	\$ 24,597	\$ 21,425	\$ 25,334	\$ 348,373	\$ 881,474	\$ 1,162,982	\$ 1,313,635	\$ 2,476,617

Appendix 4

V 2.21



Ontario Energy Board

**Smart Meter Model
(for 2013 Rates Applications)**

Choose Your Utility:

Bluewater Power Distribution Corporation
Brant County Power Inc.

Application Contact Information

Name: Leslie Dugas

Title: Manager of Regulatory Affairs

Phone Number: 519-337-8201 Ext 2255

Email Address: ldugas@bluewaterpower.com

We are applying for rates effective: November 1, 2012

Last COS Re-based Year 2009

Legend

DROP-DOWN MENU

INPUT FIELD

CALCULATION FIELD

Copyright

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

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

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.

2. Smart_Meter_Costs

1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)		Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
1.3.1	Computer Hardware	Computer Hardware					1,927				\$ 1,927
1.3.2	Computer Software	Computer Software				9,313	55,590				\$ 64,902
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)			\$ -	\$ -	\$ -	\$ 9,313	\$ 57,517	\$ -	\$ -	\$ -	\$ 66,830
1.4 WIDE AREA NETWORK (WAN)		Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
1.4.1	Activation 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	Forecast	
1.5.1	Customer Equipment (including repair of damaged equipment)	Other Equipment					12,514	2,606			\$ 15,120
1.5.2	AMI Interface to CIS	Computer Software									\$ -
1.5.3	Professional Fees	Computer Hardware			264	12,289	8,419	2,089			\$ 23,061
1.5.4	Integration	Computer Software									\$ -
1.5.5	Program Management	Computer Software	54	413	141	686	17,803	16,318	21,204		\$ 56,619
1.5.6	Other AMI Capital	Computer Software				5,057	89,839	54,134	45,511		\$ 194,541
Total Other AMI Capital Costs Related to Minimum Functionality			\$ 54	\$ 413	\$ 404	\$ 18,032	\$ 128,575	\$ 75,147	\$ 66,715	\$ -	\$ 289,341
Total Capital Costs Related to Minimum Functionality			\$ 54	\$ 413	\$ 1,357	\$ 30,643	\$ 1,517,599	\$ 266,773	\$ 83,901	\$ -	\$ 1,900,740
1.6 CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY		Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
(Please provide a descriptive title and identify nature of beyond minimum functionality costs)											
1.6.1	Costs related to technical capabilities in the smart meters or related communications infrastructure that exceed those specified in O.Reg 425/06										\$ -
1.6.2	Costs for deployment of smart meters to customers other than residential and small general service										\$ -
1.6.3	Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.	Computer Software					9,339	610,148	175,144		\$ 794,631
Total Capital Costs Beyond Minimum Functionality			\$ -	\$ -	\$ -	\$ -	\$ 9,339	\$ 610,148	\$ 175,144	\$ -	\$ 794,631
Total Smart Meter Capital Costs			\$ 54	\$ 413	\$ 1,357	\$ 30,643	\$ 1,526,938	\$ 876,921	\$ 259,045	\$ -	\$ 2,695,372

2 OM&A Expenses

2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
2.1.1 Maintenance <i>(may include meter reverification costs, etc.)</i>									\$ -
2.1.2 Other <i>(please specify)</i> ODS Fees	192	605	445	468	1,642	4,005	2,187		\$ 9,544
Total Incremental AMCD OM&A Costs	\$ 192	\$ 605	\$ 445	\$ 468	\$ 1,642	\$ 4,005	\$ 2,187	\$ -	\$ 9,544
2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)									
2.2.1 Maintenance									\$ -
2.2.2 Other <i>(please specify)</i> Network Fees					2,934	4,864	2,135		\$ 9,933
Total Incremental AMRC OM&A Costs	\$ -	\$ -	\$ -	\$ -	\$ 2,934	\$ 4,864	\$ 2,135	\$ -	\$ 9,933
2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)									
2.3.1 Hardware Maintenance <i>(may include server support, etc.)</i>									\$ -
2.3.2 Software Maintenance <i>(may include maintenance support, etc.)</i>					2,590	894	135		\$ 3,618
2.3.2 Other <i>(please specify)</i>									\$ -
Total Incremental AMCC OM&A Costs	\$ -	\$ -	\$ -	\$ -	\$ 2,590	\$ 894	\$ 135	\$ -	\$ 3,618
2.4 WIDE AREA NETWORK (WAN)									
2.4.1 WAN Maintenance									\$ -
2.4.2 Other <i>(please specify)</i>									\$ -
Total Incremental AMRC OM&A Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2.5 OTHER AMI OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY									
2.5.1 Business Process Redesign					291	1,072			\$ 1,363
2.5.2 Customer Communication <i>(may include project communication, etc.)</i>	3				5,526	1,460			\$ 6,989
2.5.3 Program Management	213	1,465	1,616	652	-157				\$ 3,788
2.5.4 Change Management <i>(may include training, etc.)</i>				579	1,210	1,444	1,901		\$ 5,135
2.5.5 Administration Costs	923	480	2	2	87	10,378	10,600		\$ 22,472
2.5.6 Other AMI Expenses <i>(please specify)</i>									\$ -
Total Other AMI OM&A Costs Related to Minimum Functionality	\$ 1,139	\$ 1,945	\$ 1,617	\$ 1,233	\$ 6,957	\$ 14,355	\$ 12,502	\$ -	\$ 39,746
TOTAL OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY	\$ 1,330	\$ 2,550	\$ 2,063	\$ 1,701	\$ 14,122	\$ 24,117	\$ 16,957	\$ -	\$ 62,840
2.6 OM&A COSTS RELATED TO BEYOND MINIMUM FUNCTIONALITY <i>(Please provide a descriptive title and identify nature of beyond minimum functionality costs)</i>	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual			
2.6.1 Costs related to technical capabilities in the smart meters or related communications infrastructure that exceed those specified in O.Reg 425/06									\$ -
2.6.2 Costs for deployment of smart meters to customers other than residential and small general service									\$ -
2.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.							2,091		\$ 2,091
Total OM&A Costs Beyond Minimum Functionality	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,091	\$ -	\$ 2,091
Total Smart Meter OM&A Costs	\$ 1,330	\$ 2,550	\$ 2,063	\$ 1,701	\$ 14,122	\$ 24,117	\$ 19,048	\$ -	\$ 64,931

3 Aggregate Smart Meter Costs by Category

3.1	Capital																			
3.1.1	Smart Meter	\$	-	\$	-	\$	-	\$	-	\$	1,256,120	\$	190,547	\$	17,186	\$	-	\$	1,463,852	
3.1.2	Computer Hardware	\$	-	\$	-	\$	1,217	\$	15,587	\$	83,871	\$	3,168	\$	-	\$	-	\$	103,843	
3.1.3	Computer Software	\$	54	\$	413	\$	141	\$	15,056	\$	172,570	\$	680,600	\$	241,860	\$	-	\$	1,110,693	
3.1.4	Tools & Equipment	\$	-	\$	-	\$	-	\$	-	\$	1,863	\$	-	\$	-	\$	-	\$	1,863	
3.1.5	Other Equipment	\$	-	\$	-	\$	-	\$	-	\$	12,514	\$	2,606	\$	-	\$	-	\$	15,120	
3.1.6	Applications Software	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
3.1.7	Total Capital Costs	\$	54	\$	413	\$	1,357	\$	30,643	\$	1,526,938	\$	876,921	\$	259,045	\$	-	\$	2,695,372	
3.2	OM&A Costs																			
3.2.1	Total OM&A Costs	\$	1,330	\$	2,550	\$	2,063	\$	1,701	\$	14,122	\$	24,117	\$	19,048	\$	-	\$	64,931	



	2006	2007	2008	2009	2010	2011	2012	2013
Cost of Capital								
Capital Structure¹								
Deemed Short-term Debt Capitalization				4.0%	4.0%	4.0%	4.0%	4.0%
Deemed Long-term Debt Capitalization	50.0%	50.0%	53.3%	52.7%	56.0%	56.0%	56.0%	56.0%
Deemed Equity Capitalization	50.0%	50.0%	46.7%	43.3%	40.0%	40.0%	40.0%	40.0%
Preferred Shares								
Total	100.0%	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%	1.33%	1.33%	1.33%	1.33%	1.33%
Long-term Debt Rate (actual/embedded/deemed) ²	7.25%	7.25%	7.25%	7.62%	7.62%	7.62%	7.62%	7.62%
Target Return on Equity (ROE)	9.0%	9.00%	9.00%	8.01%	8.01%	8.01%	8.01%	8.01%
Return on Preferred Shares								
WACC	8.13%	8.13%	8.07%	7.54%	7.52%	7.52%	7.52%	7.52%
Working Capital Allowance								
Working Capital Allowance Rate	15.0%	15.0%	15.0%	12.0%	12.0%	12.0%	12.0%	12.0%
(% 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%	25.50%
Capital Tax (until July 1st, 2010)	0.30%	0.225%	0.225%	0.225%	0.075%	0.00%	0.00%	0.00%

Depreciation Rates

(expressed as expected useful life in years)

Smart Meters - years	15	15	15	15	15	15	15	15
- rate (%)	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%
Computer Hardware - years	5	5	5	5	5	5	5	5
- rate (%)	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Computer Software - years	5	5	5	5	5	5	5	5
- rate (%)	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Tools & Equipment - years	10	10	10	10	10	10	10	10
- rate (%)	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Other Equipment - years	10	10	10	10	10	10	10	10
- rate (%)	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%

CCA Rates

Smart Meters - CCA Class	8	8	8	8	8	8	8	8
Smart Meters - CCA Rate	20%	20%	20%	20%	20%	20%	20%	20%
Computer Equipment - CCA Class	46	46	46	46	46	46	46	46
Computer Equipment - CCA Rate	30%	30%	30%	30%	30%	30%	30%	30%
General Equipment - CCA Class	8	8	8	8	8	8	8	8
General Equipment - CCA Rate	20%	20%	20%	20%	20%	20%	20%	20%
Applications Software - CCA Class								
Applications Software - CCA Rate								

Assumptions

- ¹ Planned smart meter installations occur evenly throughout the year.
- ² Fiscal calendar year (January 1 to December 31) used.
- ³ Amortization is done on a straight line basis and has the "half-year" rule applied.



	2006	2007	2008	2009	2010	2011	2012	2013
Net Fixed Assets - Smart Meters								
Gross Book Value								
Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ 1,256,120	\$ 1,446,666	\$ 1,463,852
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ 1,256,120	\$ 190,547	\$ 17,186	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 1,256,120	\$ 1,446,666	\$ 1,463,852	\$ 1,463,852
Accumulated Depreciation								
Opening Balance		\$ -	\$ -	\$ -	\$ -	-\$ 41,871	-\$ 131,964	-\$ 228,981
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	-\$ 41,871	-\$ 90,093	-\$ 97,017	-\$ 97,590
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	-\$ 41,871	-\$ 131,964	-\$ 228,981	-\$ 326,571
Net Book Value								
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,214,249	\$ 1,314,703	\$ 1,234,871
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 1,214,249	\$ 1,314,703	\$ 1,234,871	\$ 1,137,281
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ 607,124	\$ 1,264,476	\$ 1,274,787	\$ 1,186,076
Net Fixed Assets - Computer Hardware								
Gross Book Value								
Opening Balance		\$ -	\$ -	\$ 1,217	\$ 16,804	\$ 100,675	\$ 103,843	\$ 103,843
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ 1,217	\$ 15,587	\$ 83,871	\$ 3,168	\$ -	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ 1,217	\$ 16,804	\$ 100,675	\$ 103,843	\$ 103,843	\$ 103,843
Accumulated Depreciation								
Opening Balance	\$ -	\$ -	\$ -	-\$ 122	-\$ 1,924	-\$ 13,672	-\$ 34,123	-\$ 54,892
Amortization expense during year	\$ -	\$ -	-\$ 122	-\$ 1,802	-\$ 11,748	-\$ 20,452	-\$ 20,769	-\$ 20,769
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	-\$ 122	-\$ 1,924	-\$ 13,672	-\$ 34,123	-\$ 54,892	-\$ 75,661
Net Book Value								
Opening Balance	\$ -	\$ -	\$ -	\$ 1,095	\$ 14,880	\$ 87,003	\$ 69,720	\$ 48,951
Closing Balance	\$ -	\$ -	\$ 1,095	\$ 14,880	\$ 87,003	\$ 69,720	\$ 48,951	\$ 28,182
Average Net Book Value	\$ -	\$ -	\$ 548	\$ 7,988	\$ 50,942	\$ 78,362	\$ 59,335	\$ 38,567

Net Fixed Assets - Computer Software (including Applications Software)

Gross Book Value

Opening Balance		\$ 54	\$ 467	\$ 608	\$ 15,664	\$ 188,234	\$ 868,834	\$ 1,110,693
Capital Additions during year (from Smart Meter Costs)	\$ 54	\$ 413	\$ 141	\$ 15,056	\$ 172,570	\$ 680,600	\$ 241,860	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ 54	\$ 467	\$ 608	\$ 15,664	\$ 188,234	\$ 868,834	\$ 1,110,693	\$ 1,110,693

Accumulated Depreciation

Opening Balance	\$ -	-\$ 5	-\$ 58	-\$ 165	-\$ 1,792	-\$ 22,182	-\$ 127,889	-\$ 325,841
Amortization expense during year	-\$ 5	-\$ 52	-\$ 108	-\$ 1,627	-\$ 20,390	-\$ 105,707	-\$ 197,953	-\$ 222,139
Retirements/Removals (if applicable)								
Closing Balance	-\$ 5	-\$ 58	-\$ 165	-\$ 1,792	-\$ 22,182	-\$ 127,889	-\$ 325,841	-\$ 547,980

Net Book Value

Opening Balance	\$ -	\$ 49	\$ 410	\$ 443	\$ 13,871	\$ 166,052	\$ 740,945	\$ 784,852
Closing Balance	\$ 49	\$ 410	\$ 443	\$ 13,871	\$ 166,052	\$ 740,945	\$ 784,852	\$ 562,713
Average Net Book Value	\$ 24	\$ 229	\$ 426	\$ 7,157	\$ 89,962	\$ 453,498	\$ 762,898	\$ 673,783

Net Fixed Assets - Tools and Equipment

Gross Book Value

Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ 1,863	\$ 1,863	\$ 1,863
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ 1,863	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 1,863	\$ 1,863	\$ 1,863	\$ 1,863

Accumulated Depreciation

Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	-\$ 93	-\$ 279	-\$ 466
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	-\$ 93	-\$ 186	-\$ 186	-\$ 186
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	-\$ 93	-\$ 279	-\$ 466	-\$ 652

Net Book Value

Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,770	\$ 1,584	\$ 1,397
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 1,770	\$ 1,584	\$ 1,397	\$ 1,211
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ 885	\$ 1,677	\$ 1,491	\$ 1,304

Net Fixed Assets - Other Equipment

Gross Book Value

Opening Balance		\$ -	\$ -	\$ -	\$ -	\$ 12,514	\$ 15,120	\$ 15,120
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ -	\$ 12,514	\$ 2,606	\$ -	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 12,514	\$ 15,120	\$ 15,120	\$ 15,120

Accumulated Depreciation

Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	-\$ 626	-\$ 2,007	-\$ 3,519
Amortization expense during year	\$ -	\$ -	\$ -	\$ -	-\$ 626	-\$ 1,382	-\$ 1,512	-\$ 1,512
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ -	-\$ 626	-\$ 2,007	-\$ 3,519	-\$ 5,031

Net Book Value

Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,888	\$ 13,113	\$ 11,601
Closing Balance	\$ -	\$ -	\$ -	\$ -	\$ 11,888	\$ 13,113	\$ 11,601	\$ 10,089
Average Net Book Value	\$ -	\$ -	\$ -	\$ -	\$ 5,944	\$ 12,500	\$ 12,357	\$ 10,845



Bluewater Power Distribution Corporation

	2006	2007	2008	2009	2010	2011	2012	2013
Average Net Fixed Asset Values (from Sheet 4)								
Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 607,124	\$ 1,264,476	\$ 1,274,787	\$ 1,186,076
Computer Hardware	\$ -	\$ -	\$ 548	\$ 7,988	\$ 50,942	\$ 78,362	\$ 59,335	\$ 38,567
Computer Software	\$ 24	\$ 229	\$ 426	\$ 7,157	\$ 89,962	\$ 453,498	\$ 762,898	\$ 673,783
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ 885	\$ 1,677	\$ 1,491	\$ 1,304
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 5,944	\$ 12,500	\$ 12,357	\$ 10,845
Total Net Fixed Assets	\$ 24	\$ 229	\$ 974	\$ 15,145	\$ 754,857	\$ 1,810,513	\$ 2,110,868	\$ 1,910,574
Working Capital								
Operating Expenses (from Sheet 2)	\$ 1,330	\$ 2,550	\$ 2,063	\$ 1,701	\$ 14,122	\$ 24,117	\$ 19,048	\$ -
Working Capital Factor (from Sheet 3)	15%	15%	15%	12%	12%	12%	12%	12%
Working Capital Allowance	\$ 200	\$ 382	\$ 309	\$ 204	\$ 1,695	\$ 2,894	\$ 2,286	\$ -
Incremental Smart Meter Rate Base	\$ 224	\$ 612	\$ 1,283	\$ 15,349	\$ 756,552	\$ 1,813,407	\$ 2,113,154	\$ 1,910,574
Return on Rate Base								
Capital Structure								
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 614	\$ 30,262	\$ 72,536	\$ 84,526	\$ 76,423
Deemed Long Term Debt	\$ 112	\$ 306	\$ 684	\$ 8,089	\$ 423,669	\$ 1,015,508	\$ 1,183,366	\$ 1,069,922
Equity	\$ 112	\$ 306	\$ 599	\$ 6,646	\$ 302,621	\$ 725,363	\$ 845,261	\$ 764,230
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ 224	\$ 612	\$ 1,283	\$ 15,349	\$ 756,552	\$ 1,813,407	\$ 2,113,154	\$ 1,910,574
Return on								
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 8	\$ 402	\$ 965	\$ 1,124	\$ 1,016
Deemed Long Term Debt	\$ 8	\$ 22	\$ 50	\$ 616	\$ 32,284	\$ 77,382	\$ 90,172	\$ 81,528
Equity	\$ 10	\$ 28	\$ 54	\$ 532	\$ 24,240	\$ 58,102	\$ 67,705	\$ 61,215
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ 18	\$ 50	\$ 104	\$ 1,157	\$ 56,926	\$ 136,448	\$ 159,002	\$ 143,759
Operating Expenses	\$ 1,330	\$ 2,550	\$ 2,063	\$ 1,701	\$ 14,122	\$ 24,117	\$ 19,048	\$ -
Amortization Expenses (from Sheet 4)								
Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 41,871	\$ 90,093	\$ 97,017	\$ 97,590
Computer Hardware	\$ -	\$ -	\$ 122	\$ 1,802	\$ 11,748	\$ 20,452	\$ 20,769	\$ 20,769
Computer Software	\$ 5	\$ 52	\$ 108	\$ 1,627	\$ 20,390	\$ 105,707	\$ 197,953	\$ 222,139
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ 93	\$ 186	\$ 186	\$ 186
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 626	\$ 1,382	\$ 1,512	\$ 1,512
Total Amortization Expense in Year	\$ 5	\$ 52	\$ 229	\$ 3,429	\$ 74,727	\$ 217,819	\$ 317,437	\$ 342,196
Incremental Revenue Requirement before Taxes/PILs	\$ 1,354	\$ 2,652	\$ 2,395	\$ 6,287	\$ 145,775	\$ 378,385	\$ 495,487	\$ 485,955
Calculation of Taxable Income								
Incremental Operating Expenses	\$ 1,330	\$ 2,550	\$ 2,063	\$ 1,701	\$ 14,122	\$ 24,117	\$ 19,048	\$ -
Amortization Expense	\$ 5	\$ 52	\$ 229	\$ 3,429	\$ 74,727	\$ 217,819	\$ 317,437	\$ 342,196
Interest Expense	\$ 8	\$ 22	\$ 50	\$ 625	\$ 32,686	\$ 78,346	\$ 91,297	\$ 82,544
Net Income for Taxes/PILs	\$ 10	\$ 28	\$ 54	\$ 532	\$ 24,240	\$ 58,102	\$ 67,705	\$ 61,215
Grossed-up Taxes/PILs (from Sheet 7)	\$ 4.32	\$ 3.12	-\$ 14.42	-\$ 458.15	-\$ 32,432.81	-\$ 57,374.16	-\$ 33,701.42	\$ -
Revenue Requirement, including Grossed-up Taxes/PILs	\$ 1,358	\$ 2,655	\$ 2,381	\$ 5,829	\$ 113,342	\$ 321,011	\$ 461,786	\$ 485,955



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 Forecast	2013 Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,130,507.67	\$ 1,075,897.99	\$ 876,185.37
Capital Additions	\$ -	\$ -	\$ -	\$ -	\$ 1,256,119.63	\$ 190,546.50	\$ 17,185.53	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ -	\$ 1,256,119.63	\$ 1,321,054.17	\$ 1,093,083.52	\$ 876,185.37
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ 628,059.82	\$ 95,273.25	\$ 8,592.77	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ -	\$ 628,059.82	\$ 1,225,780.92	\$ 1,084,490.76	\$ 876,185.37
CCA Rate Class	8	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ -	\$ -	\$ -	\$ 125,611.96	\$ 245,156.18	\$ 216,898.15	\$ 175,237.07
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ 1,130,507.67	\$ 1,075,897.99	\$ 876,185.37	\$ 700,948.30

UCC - Computer Equipment

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 Forecast	2013 Forecast
Opening UCC	\$ -	\$ 45.91	\$ 383.38	\$ 1,422.17	\$ 27,042.02	\$ 236,904.54	\$ 747,035.84	\$ 728,506.02
Capital Additions Computer Hardware	\$ -	\$ -	\$ 1,216.75	\$ 15,587.27	\$ 83,870.97	\$ 3,168.26	\$ -	\$ -
Capital Additions Computer Software	\$ 54.01	\$ 413.22	\$ 140.67	\$ 15,055.67	\$ 172,570.35	\$ 680,599.57	\$ 241,859.92	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ 54.01	\$ 459.13	\$ 1,740.80	\$ 32,065.12	\$ 283,483.35	\$ 920,672.37	\$ 988,895.76	\$ 728,506.02
Half Year Rule (1/2 Additions - Disposals)	\$ 27.00	\$ 206.61	\$ 678.71	\$ 15,321.47	\$ 128,220.66	\$ 341,883.92	\$ 120,929.96	\$ -
Reduced UCC	\$ 27.00	\$ 252.52	\$ 1,062.09	\$ 16,743.64	\$ 155,262.69	\$ 578,788.46	\$ 867,965.80	\$ 728,506.02
CCA Rate Class	46	46	46	46	46	46	46	46
CCA Rate	30%	30%	30%	30%	30%	30%	30%	30%
CCA	\$ 8.10	\$ 75.76	\$ 318.63	\$ 5,023.09	\$ 46,578.81	\$ 173,636.54	\$ 260,389.74	\$ 218,551.81
Closing UCC	\$ 45.91	\$ 383.38	\$ 1,422.17	\$ 27,042.02	\$ 236,904.54	\$ 747,035.84	\$ 728,506.02	\$ 509,954.21

UCC - General Equipment

	2006	2007	2008	2009	2010	2011	2012	2013
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,939.41	\$ 12,697.10	\$ 10,157.68
Capital Additions Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ 1,863.28	\$ -	\$ -	\$ -
Capital Additions Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 12,513.84	\$ 2,606.20	\$ -	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ -	\$ 14,377.12	\$ 15,545.61	\$ 12,697.10	\$ 10,157.68
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ 7,188.56	\$ 1,303.10	\$ -	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ -	\$ 7,188.56	\$ 14,242.51	\$ 12,697.10	\$ 10,157.68
CCA Rate Class	8	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ -	\$ -	\$ -	\$ 1,437.71	\$ 2,848.50	\$ 2,539.42	\$ 2,031.54
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ 12,939.41	\$ 12,697.10	\$ 10,157.68	\$ 8,126.15

UCC - Applications Software

	2006	2007	2008	2009	2010	2011	2012	2013
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA Rate Class	0	0	0	0	0	0	0	0
CCA Rate	0%	0%	0%	0%	0%	0%	0%	0%
CCA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



PILs Calculation

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 Forecast	2013 Forecast
INCOME TAX								
Net Income	\$ 10.07	\$ 27.52	\$ 53.93	\$ 532.35	\$ 24,239.92	\$ 58,101.57	\$ 67,705.45	\$ 61,214.80
Amortization	\$ 5.40	\$ 52.12	\$ 229.19	\$ 3,429.23	\$ 74,727.16	\$ 217,819.45	\$ 317,436.94	\$ 342,195.78
CCA - Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 125,611.96	\$ 245,156.18	\$ 216,898.15	\$ 175,237.07
CCA - Computers	-\$ 8.10	-\$ 75.76	-\$ 318.63	-\$ 5,023.09	-\$ 46,578.81	-\$ 173,636.54	-\$ 260,389.74	-\$ 218,551.81
CCA - Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Other Equipment	\$ -	\$ -	\$ -	\$ -	-\$ 1,437.71	-\$ 2,848.50	-\$ 2,539.42	-\$ 2,031.54
Change in taxable income	\$ 7.37	\$ 3.89	-\$ 35.50	-\$ 1,061.52	-\$ 74,661.40	-\$ 145,720.21	-\$ 94,684.93	\$ 7,590.16
Tax Rate (from Sheet 3)	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%	25.50%
Income Taxes Payable	\$ 2.66	\$ 1.41	-\$ 11.89	-\$ 350.30	-\$ 23,145.03	-\$ 41,165.96	-\$ 24,854.79	\$ 1,935.49
ONTARIO CAPITAL TAX								
Smart Meters	\$ -	\$ -	\$ -	\$ -	\$ 1,214,248.98	\$ 1,314,702.62	\$ 1,234,870.90	\$ 1,137,280.79
Computer Hardware	\$ -	\$ -	\$ 1,095.08	\$ 14,880.27	\$ 87,003.34	\$ 69,719.78	\$ 48,951.12	\$ 28,182.47
Computer Software (Including Application Software)	\$ 48.61	\$ 409.71	\$ 442.87	\$ 13,871.39	\$ 166,051.99	\$ 740,944.82	\$ 784,852.05	\$ 562,713.37
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ 1,770.11	\$ 1,583.78	\$ 1,397.46	\$ 1,211.13
Other Equipment	\$ -	\$ -	\$ -	\$ -	\$ 11,888.15	\$ 13,112.66	\$ 11,600.65	\$ 10,088.65
Rate Base	\$ 48.61	\$ 409.71	\$ 1,537.94	\$ 28,751.66	\$ 1,480,962.57	\$ 2,140,063.66	\$ 2,081,672.18	\$ 1,739,476.40
Less: Exemption								
Deemed Taxable Capital	\$ 48.61	\$ 409.71	\$ 1,537.94	\$ 28,751.66	\$ 1,480,962.57	\$ 2,140,063.66	\$ 2,081,672.18	\$ 1,739,476.40
Ontario Capital Tax Rate (from Sheet 3)	0.300%	0.225%	0.225%	0.225%	0.075%	0.000%	0.000%	0.000%
Net Amount (Taxable Capital x Rate)	\$ 0.15	\$ 0.92	\$ 3.46	\$ 64.69	\$ 1,110.72	\$ -	\$ -	\$ -
Change in Income Taxes Payable	\$ 2.66	\$ 1.41	-\$ 11.89	-\$ 350.30	-\$ 23,145.03	-\$ 41,165.96	-\$ 24,854.79	\$ 1,935.49
Change in OCT	\$ 0.15	\$ 0.92	\$ 3.46	\$ 64.69	\$ 1,110.72	\$ -	\$ -	\$ -
PILs	\$ 2.81	\$ 2.33	-\$ 8.43	-\$ 285.61	-\$ 22,034.31	-\$ 41,165.96	-\$ 24,854.79	\$ 1,935.49
Gross Up PILs								
Tax Rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%	25.50%
Change in Income Taxes Payable	\$ 4.17	\$ 2.20	-\$ 17.88	-\$ 522.84	-\$ 33,543.53	-\$ 57,374.16	-\$ 33,701.42	\$ 2,597.97
Change in OCT	\$ 0.15	\$ 0.92	\$ 3.46	\$ 64.69	\$ 1,110.72	\$ -	\$ -	\$ -
PILs	\$ 4.32	\$ 3.12	-\$ 14.42	-\$ 458.15	-\$ 32,432.81	-\$ 57,374.16	-\$ 33,701.42	\$ 2,597.97



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%	\$ -	\$ -		\$ 0.10
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	\$ -	\$ 5,056.30	4.59%	\$ -	\$ 5,056.30		\$ 0.26
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	\$ 5,056.30	\$ 850.83	4.59%	\$ 19.34	\$ 5,926.47		\$ 0.26
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	\$ 5,907.13	\$ 815.13	4.59%	\$ 22.59	\$ 6,744.85	\$ 6,764.19	\$ 0.26
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	\$ 6,722.26	\$ 1,265.62	4.59%	\$ 25.71	\$ 8,013.59		\$ 0.26
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	\$ 7,987.88	\$ 680.49	4.59%	\$ 30.55	\$ 8,698.92		\$ 0.26
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	\$ 8,668.37	\$ 1,192.57	4.59%	\$ 33.16	\$ 9,894.10		\$ 0.26
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	\$ 9,860.94	\$ 709.77	4.59%	\$ 37.72	\$ 10,608.43		\$ 0.26
2010 Q1	0.55%	4.34%	May-07	2007	Q2	\$ 10,570.71	\$ 709.77	4.59%	\$ 40.43	\$ 11,320.91		\$ 0.26
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	\$ 11,280.48	\$ 1,169.53	4.59%	\$ 43.15	\$ 12,493.16		\$ 0.26
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	\$ 12,450.01	\$ 1,120.25	4.59%	\$ 47.62	\$ 13,617.89		\$ 0.26
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	\$ 13,570.27	\$ 907.60	4.59%	\$ 51.91	\$ 14,529.77		\$ 0.26
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	\$ 14,477.86	\$ 907.22	4.59%	\$ 55.38	\$ 15,440.46		\$ 0.26
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	\$ 15,385.08	\$ 997.08	5.14%	\$ 65.90	\$ 16,448.06		\$ 0.26
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	\$ 16,382.16	\$ 991.43	5.14%	\$ 70.17	\$ 17,443.76		\$ 0.26
2011 Q4	1.47%	3.92%	Dec-07	2007	Q4	\$ 17,373.59	\$ 783.08	5.14%	\$ 74.42	\$ 18,231.09	\$ 12,010.52	\$ 0.26
2012 Q1	1.47%	3.92%	Jan-08	2008	Q1	\$ 18,156.67	\$ 1,228.93	5.14%	\$ 77.77	\$ 19,463.36		\$ 0.26
2012 Q2	1.47%	3.51%	Feb-08	2008	Q1	\$ 19,385.59	\$ 700.90	5.14%	\$ 83.03	\$ 20,169.53		\$ 0.26
2012 Q3	1.47%	3.51%	Mar-08	2008	Q1	\$ 20,086.50	\$ 1,010.92	5.14%	\$ 86.04	\$ 21,183.45		\$ 0.26
2012 Q4	1.47%	3.51%	Apr-08	2008	Q2	\$ 21,097.41	\$ 989.03	4.08%	\$ 71.73	\$ 22,158.18		\$ 0.26
2013 Q1			May-08	2008	Q2	\$ 22,086.45	\$ 1,005.49	4.08%	\$ 75.09	\$ 23,167.03		\$ 0.26
2013 Q2			Jun-08	2008	Q2	\$ 23,091.94	\$ 821.19	4.08%	\$ 78.51	\$ 23,991.64		\$ 0.26
2013 Q3			Jul-08	2008	Q3	\$ 23,913.13	\$ 1,178.58	3.35%	\$ 66.76	\$ 25,158.47		\$ 0.26



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)
2013 Q4				Aug-08	2008	Q3	\$ 25,091.71	\$ 719.91	3.35%	\$ 70.05	\$ 25,881.67	\$ 12,345.47	\$ 0.26
				Sep-08	2008	Q3	\$ 25,811.62	\$ 770.46	3.35%	\$ 72.06	\$ 26,654.15		\$ 0.26
				Oct-08	2008	Q4	\$ 26,582.09	\$ 980.16	3.35%	\$ 74.21	\$ 27,636.46		\$ 0.26
				Nov-08	2008	Q4	\$ 27,562.25	\$ 919.65	3.35%	\$ 76.94	\$ 28,558.84		\$ 0.26
				Dec-08	2008	Q4	\$ 28,481.90	\$ 1,108.53	3.35%	\$ 79.51	\$ 29,669.94		\$ 0.26
				Jan-09	2009	Q1	\$ 29,590.43	\$ 1,284.75	2.45%	\$ 60.41	\$ 30,935.60		\$ 0.26
				Feb-09	2009	Q1	\$ 30,875.19	\$ 684.90	2.45%	\$ 63.04	\$ 31,623.13		\$ 0.26
				Mar-09	2009	Q1	\$ 31,560.09	\$ 1,132.38	2.45%	\$ 64.44	\$ 32,756.91		\$ 0.26
				Apr-09	2009	Q2	\$ 32,692.47	\$ 904.46	1.00%	\$ 27.24	\$ 33,624.17		\$ 0.26
				May-09	2009	Q2	\$ 33,596.93	\$ 1,022.23	1.00%	\$ 28.00	\$ 34,647.17		\$ 0.26
				Jun-09	2009	Q2	\$ 34,619.17	\$ 822.75	1.00%	\$ 28.85	\$ 35,470.77		\$ 0.26
				Jul-09	2009	Q3	\$ 35,441.92	\$ 1,214.61	0.55%	\$ 16.24	\$ 36,672.76		\$ 0.26
				Aug-09	2009	Q3	\$ 36,656.52	\$ 677.27	0.55%	\$ 16.80	\$ 37,350.59	\$ 0.26	
				Sep-09	2009	Q3	\$ 37,333.79	\$ 1,040.90	0.55%	\$ 17.11	\$ 38,391.80	\$ 0.26	
				Oct-09	2009	Q4	\$ 38,374.69	\$ 762.31	0.55%	\$ 17.59	\$ 39,154.59	\$ 0.26	
				Nov-09	2009	Q4	\$ 39,137.00	\$ 978.22	0.55%	\$ 17.94	\$ 40,133.15	\$ 0.26	
				Dec-09	2009	Q4	\$ 40,115.21	\$ 782.26	0.55%	\$ 18.39	\$ 40,915.86	\$ 11,683.09	\$ 0.26
				Jan-10	2010	Q1	\$ 40,897.47	\$ 1,084.00	0.55%	\$ 18.74	\$ 42,000.21		\$ 0.26
				Feb-10	2010	Q1	\$ 41,981.47	\$ 699.75	0.55%	\$ 19.24	\$ 42,700.45		\$ 0.26
				Mar-10	2010	Q1	\$ 42,681.21	\$ 1,198.71	0.55%	\$ 19.56	\$ 43,899.49		\$ 0.26
				Apr-10	2010	Q2	\$ 43,879.93	\$ 653.65	0.55%	\$ 20.11	\$ 44,553.69		\$ 0.26
				May-10	2010	Q2	\$ 44,533.58	\$ 1,122.94	0.55%	\$ 20.41	\$ 45,676.93		\$ 1.00
				Jun-10	2010	Q2	\$ 45,656.52	\$ 1,771.48	0.55%	\$ 20.93	\$ 47,448.93		\$ 1.00
				Jul-10	2010	Q3	\$ 47,428.00	\$ 2,547.93	0.89%	\$ 35.18	\$ 50,011.11		\$ 1.00
				Aug-10	2010	Q3	\$ 49,975.93	\$ 4,321.82	0.89%	\$ 37.07	\$ 54,334.82		\$ 1.00
				Sep-10	2010	Q3	\$ 54,297.75	\$ 3,602.46	0.89%	\$ 40.27	\$ 57,940.48		\$ 1.00
				Oct-10	2010	Q4	\$ 57,900.21	\$ 3,234.81	1.20%	\$ 57.90	\$ 61,192.93		\$ 1.00
				Nov-10	2010	Q4	\$ 61,135.03	\$ 3,796.08	1.20%	\$ 61.14	\$ 64,992.25		\$ 1.00
				Dec-10	2010	Q4	\$ 64,931.11	\$ 3,007.18	1.20%	\$ 64.93	\$ 68,003.21	\$ 27,456.29	\$ 1.00
				Jan-11	2011	Q1	\$ 67,938.28	\$ 3,881.78	1.47%	\$ 83.22	\$ 71,903.29		\$ 1.00
				Feb-11	2011	Q1	\$ 71,820.07	\$ 3,217.75	1.47%	\$ 87.98	\$ 75,125.79		\$ 1.00
				Mar-11	2011	Q1	\$ 75,037.81	\$ 4,221.34	1.47%	\$ 91.92	\$ 79,351.07		\$ 1.00



This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

Interest Rates	Approved Deferral and Variance Accounts	CWIP				Opening Balance	Funding Adder	Interest				Annual amounts	Board Approved Smart Meter Funding Adder
	Date		Year	Quarter	(Principal)	Revenues	Rate	Interest	Closing Balance	(from Tariff)			
			Apr-11	2011	Q2	\$ 79,259.15	\$ 2,801.24	1.47%	\$ 97.09	\$ 82,157.48		\$ 1.00	
			May-11	2011	Q2	\$ 82,060.39	\$ 4,202.00	1.47%	\$ 100.52	\$ 86,362.91		\$ 2.00	
			Jun-11	2011	Q2	\$ 86,262.39	\$ 4,400.99	1.47%	\$ 105.67	\$ 90,769.05		\$ 2.00	
			Jul-11	2011	Q3	\$ 90,663.38	\$ 7,749.55	1.47%	\$ 111.06	\$ 98,523.99		\$ 2.00	
			Aug-11	2011	Q3	\$ 98,412.93	\$ 6,540.58	1.47%	\$ 120.56	\$ 105,074.06		\$ 2.00	
			Sep-11	2011	Q3	\$ 104,953.50	\$ 8,090.24	1.47%	\$ 128.57	\$ 113,172.31		\$ 2.00	
			Oct-11	2011	Q4	\$ 113,043.74	\$ 5,390.31	1.47%	\$ 138.48	\$ 118,572.53		\$ 2.00	
			Nov-11	2011	Q4	\$ 118,434.05	\$ 8,767.40	1.47%	\$ 145.08	\$ 127,346.53		\$ 2.00	
			Dec-11	2011	Q4	\$ 127,201.45	\$ 4,848.30	1.47%	\$ 155.82	\$ 132,205.57	\$ 65,477.44	\$ 2.00	
			Jan-12	2012	Q1	\$ 132,049.75	\$ 9,111.41	1.47%	\$ 161.76	\$ 141,322.92		\$ 2.00	
			Feb-12	2012	Q1	\$ 141,161.16	\$ 5,313.99	1.47%	\$ 172.92	\$ 146,648.07		\$ 2.00	
			Mar-12	2012	Q1	\$ 146,475.15	\$ 8,363.55	1.47%	\$ 179.43	\$ 155,018.12		\$ 2.00	
			Apr-12	2012	Q2	\$ 154,838.69	\$ 5,652.25	1.47%	\$ 189.68	\$ 160,680.62		\$ 2.00	
			May-12	2012	Q2	\$ 160,490.94	\$ 7,250.19	1.47%	\$ 196.60	\$ 167,937.73			
			Jun-12	2012	Q2	\$ 167,741.13	\$ 3,625.09	1.47%	\$ 205.48	\$ 171,571.70			
			Jul-12	2012	Q3	\$ 171,366.22		1.47%	\$ 209.92	\$ 171,576.14			
			Aug-12	2012	Q3	\$ 171,366.22		1.47%	\$ 209.92	\$ 171,576.14			
			Sep-12	2012	Q3	\$ 171,366.22		1.47%	\$ 209.92	\$ 171,576.14			
			Oct-12	2012	Q4	\$ 171,366.22		1.47%	\$ 209.92	\$ 171,576.14			
			Nov-12	2012	Q4	\$ 171,366.22		0.00%	\$ -	\$ 171,366.22			
			Dec-12	2012	Q4	\$ 171,366.22	\$ 10,528.00	0.00%	\$ -	\$ 181,894.22	\$ 51,790.02		
			Jan-13	2013	Q1	\$ 181,894.22		0.00%	\$ -	\$ 181,894.22			
			Feb-13	2013	Q1	\$ 181,894.22		0.00%	\$ -	\$ 181,894.22			
			Mar-13	2013	Q1	\$ 181,894.22		0.00%	\$ -	\$ 181,894.22			
			Apr-13	2013	Q2	\$ 181,894.22		0.00%	\$ -	\$ 181,894.22			
			May-13	2013	Q2	\$ 181,894.22		0.00%	\$ -	\$ 181,894.22			
			Jun-13	2013	Q2	\$ 181,894.22		0.00%	\$ -	\$ 181,894.22			
			Jul-13	2013	Q3	\$ 181,894.22		0.00%	\$ -	\$ 181,894.22			
			Aug-13	2013	Q3	\$ 181,894.22		0.00%	\$ -	\$ 181,894.22			
			Sep-13	2013	Q3	\$ 181,894.22		0.00%	\$ -	\$ 181,894.22			
			Oct-13	2013	Q4	\$ 181,894.22		0.00%	\$ -	\$ 181,894.22			
			Nov-13	2013	Q4	\$ 181,894.22		0.00%	\$ -	\$ 181,894.22			



Ontario Energy Board
Smart Meter Model



Bluewater Power Distribution Corporation

This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

Interest Rates	Approved Deferral and Variance Accounts	CWIP				Opening Balance	Funding Adder	Interest					Board Approved Smart
			Date	Year	Quarter	(Principal)	Revenues	Rate	Interest	Closing Balance	Annual amounts		Meter Funding Adder (from Tariff)
			Dec-13	2013	Q4	\$ 181,894.22		FALSE	\$ -	\$ 181,894.22	\$ -		
Total Funding Adder Revenues Collected							\$ 181,894.22		\$ 5,632.80	\$ 187,527.02	\$ 187,527.02		



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	\$ -	\$ -	\$ 0.10	0.10	0.00%	-	-
2006 Q2	4.14%	4.68%	Feb-06	2006	Q1	0.10	\$ -		0.10	0.00%	-	-
2006 Q3	4.59%	5.05%	Mar-06	2006	Q1	0.10	\$ -		0.10	0.00%	-	-
2006 Q4	4.59%	4.72%	Apr-06	2006	Q2	0.10	\$ -		0.10	4.14%	0.00	0.00
2007 Q1	4.59%	4.72%	May-06	2006	Q2	0.10	\$ 157.43	\$ -	157.53	4.14%	0.00	0.00
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	157.53	\$ -	\$ -	157.53	4.14%	0.54	0.54
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	157.53	\$ -	\$ -	157.53	4.59%	0.60	1.15
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	157.53	\$ -	\$ -	157.53	4.59%	0.60	1.75
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	157.53	\$ -	\$ -	157.53	4.59%	0.60	2.35
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	157.53	\$ 1,033.87	\$ -	1,191.40	4.59%	0.60	2.95
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	1,191.40	\$ 127.27	\$ -	1,318.66	4.59%	4.56	7.51
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	1,318.66	\$ 11.93	\$ 1.68	1,332.27	4.59%	5.04	12.56
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	1,332.27	\$ 23.86	\$ -	1,356.14	4.59%	5.10	17.65
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	1,356.14	\$ 27.22	\$ -	1,383.36	4.59%	5.19	22.84
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	1,383.36	\$ 27.22	\$ -	1,410.58	4.59%	5.29	28.13
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	1,410.58	\$ 27.22	\$ -	1,437.80	4.59%	5.40	33.53
2010 Q1	0.55%	4.34%	May-07	2007	Q2	1,437.80	\$ 160.38	\$ -	1,598.17	4.59%	5.50	39.02
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	1,598.17	\$ 236.17	\$ -	1,834.34	4.59%	6.11	45.14
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	1,834.34	\$ 390.66	\$ -	2,224.99	4.59%	7.02	52.15
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	2,224.99	\$ 131.34	\$ -	2,356.33	4.59%	8.51	60.66
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	2,356.33	\$ 646.50	\$ -	3,002.84	4.59%	9.01	69.68
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	3,002.84	\$ 56.01	\$ -	3,058.85	5.14%	12.86	82.54
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	3,058.85	\$ 130.86	\$ -	3,189.71	5.14%	13.10	95.64
2011 Q4	1.47%	3.92%	Dec-07	2007	Q4	3,189.71	\$ 692.33	\$ 16.43	3,898.47	5.14%	13.66	109.30
2012 Q1	1.47%	3.92%	Jan-08	2008	Q1	3,898.47	\$ 99.18	\$ -	3,997.66	5.14%	16.70	126.00
2012 Q2	1.47%	3.51%	Feb-08	2008	Q1	3,997.66	\$ 296.70	\$ -	4,294.35	5.14%	17.12	143.13
2012 Q3	1.47%	3.51%	Mar-08	2008	Q1	4,294.35	\$ 231.72	\$ -	4,526.07	5.14%	18.39	161.52
2012 Q4	1.47%	3.51%	Apr-08	2008	Q2	4,526.07	\$ 97.64	\$ -	4,623.71	4.08%	15.39	176.91
2013 Q1	0.00%	0.00%	May-08	2008	Q2	4,623.71	\$ 285.23	\$ -	4,908.94	4.08%	15.72	192.63
2013 Q2	0.00%	0.00%	Jun-08	2008	Q2	4,908.94	\$ 124.74	\$ -	5,033.68	4.08%	16.69	209.32
2013 Q3	0.00%	0.00%	Jul-08	2008	Q3	5,033.68	\$ 170.30	\$ -	5,203.98	3.35%	14.05	223.37
2013 Q4	0.00%	0.00%	Aug-08	2008	Q3	5,203.98	\$ 148.58	\$ -	5,352.56	3.35%	14.53	237.90
			Sep-08	2008	Q3	5,352.56	\$ 74.92	\$ -	5,427.48	3.35%	14.94	252.84
			Oct-08	2008	Q4	5,427.48	\$ 283.92	\$ -	5,711.40	3.35%	15.15	267.99

Nov-08	2008	Q4	5,711.40	\$ 184.39	\$ -	5,895.79	3.35%	15.94	283.94
Dec-08	2008	Q4	5,895.79	\$ 65.40	\$ 72.27	6,033.46	3.35%	16.46	300.40
Jan-09	2009	Q1	6,033.46	\$ 199.19	\$ 90.09	6,322.74	2.45%	12.32	312.72
Feb-09	2009	Q1	6,322.74	\$ 93.08	\$ 90.09	6,505.91	2.45%	12.91	325.63
Mar-09	2009	Q1	6,505.91	\$ 195.99	\$ 90.09	6,791.99	2.45%	13.28	338.91
Apr-09	2009	Q2	6,791.99	\$ 45.89	\$ 90.09	6,927.98	1.00%	5.66	344.57
May-09	2009	Q2	6,927.98	\$ 302.20	\$ 90.09	7,320.27	1.00%	5.77	350.34
Jun-09	2009	Q2	7,320.27	\$ 41.16	\$ 90.09	7,451.52	1.00%	6.10	356.44
Jul-09	2009	Q3	7,451.52	\$ 40.43	\$ 90.09	7,582.04	0.55%	3.42	359.86
Aug-09	2009	Q3	7,582.04	\$ 36.59	\$ 90.09	7,708.72	0.55%	3.48	363.33
Sep-09	2009	Q3	7,708.72	\$ 48.25	\$ 90.09	7,847.06	0.55%	3.53	366.87
Oct-09	2009	Q4	7,847.06	\$ 422.98	\$ 90.09	8,360.14	0.55%	3.60	370.46
Nov-09	2009	Q4	8,360.14	\$ 98.60	\$ 90.09	8,548.83	0.55%	3.83	374.29
Dec-09	2009	Q4	8,548.83	\$ 176.17	\$ 90.09	8,815.09	0.55%	3.92	378.21
Jan-10	2010	Q1	8,815.09	\$ 3.74	\$ 1,963.37	10,782.20	0.55%	4.04	382.25
Feb-10	2010	Q1	10,782.20	\$ 104.99	\$ 1,963.37	12,850.57	0.55%	4.94	387.19
Mar-10	2010	Q1	12,850.57	\$ 594.77	\$ 1,963.37	15,408.71	0.55%	5.89	393.08
Apr-10	2010	Q2	15,408.71	\$ 4,150.92	\$ 1,963.37	21,523.00	0.55%	7.06	400.15
May-10	2010	Q2	21,523.00	\$ 283.61	\$ 1,963.37	23,769.98	0.55%	9.86	410.01
Jun-10	2010	Q2	23,769.98	\$ 1,932.07	\$ 1,963.37	27,665.41	0.55%	10.89	420.91
Jul-10	2010	Q3	27,665.41	\$ 807.92	\$ 1,963.37	30,436.70	0.89%	20.52	441.42
Aug-10	2010	Q3	30,436.70	\$ 363.26	\$ 1,963.37	32,763.33	0.89%	22.57	464.00
Sep-10	2010	Q3	32,763.33	\$ 481.70	\$ 1,963.37	35,208.40	0.89%	24.30	488.30
Oct-10	2010	Q4	35,208.40	\$ 576.36	\$ 1,963.37	37,748.13	1.20%	35.21	523.51
Nov-10	2010	Q4	37,748.13	\$ 593.89	\$ 1,963.37	40,305.39	1.20%	37.75	561.25
Dec-10	2010	Q4	40,305.39	\$ 4,228.52	\$ 1,963.37	46,497.28	1.20%	40.31	601.56
Jan-11	2011	Q1	46,497.28	\$ 1,765.44	\$ 5,722.99	53,985.70	1.47%	56.96	658.52
Feb-11	2011	Q1	53,985.70	\$ 922.56	\$ 5,722.99	60,631.26	1.47%	66.13	724.65
Mar-11	2011	Q1	60,631.26	\$ 1,377.96	\$ 5,722.99	67,732.21	1.47%	74.27	798.92
Apr-11	2011	Q2	67,732.21	\$ 1,193.41	\$ 5,722.99	74,648.61	1.47%	82.97	881.90
May-11	2011	Q2	74,648.61	\$ 2,403.60	\$ 5,722.99	82,775.20	1.47%	91.44	973.34
Jun-11	2011	Q2	82,775.20	\$ 1,798.57	\$ 5,722.99	90,296.76	1.47%	101.40	1,074.74
Jul-11	2011	Q3	90,296.76	\$ 1,768.56	\$ 5,722.99	97,788.31	1.47%	110.61	1,185.35
Aug-11	2011	Q3	97,788.31	\$ 1,623.60	\$ 5,722.99	105,134.91	1.47%	119.79	1,305.14
Sep-11	2011	Q3	105,134.91	\$ 1,357.76	\$ 5,722.99	112,215.66	1.47%	128.79	1,433.93
Oct-11	2011	Q4	112,215.66	\$ 1,920.92	\$ 5,722.99	119,859.57	1.47%	137.46	1,571.40
Nov-11	2011	Q4	119,859.57	\$ 2,870.01	\$ 5,722.99	128,452.58	1.47%	146.83	1,718.23
Dec-11	2011	Q4	128,452.58	\$ 5,115.15	\$ 5,722.99	139,290.71	1.47%	157.35	1,875.58
Jan-12	2012	Q1	139,290.71	\$ 3,317.11	\$ 8,340.26	150,948.08	1.47%	170.63	2,046.21
Feb-12	2012	Q1	150,948.08	\$ 3,237.62	\$ 8,340.26	162,525.96	1.47%	184.91	2,231.12
Mar-12	2012	Q1	162,525.96	\$ 3,023.81	\$ 8,340.26	173,890.02	1.47%	199.09	2,430.22
Apr-12	2012	Q2	173,890.02	\$ 2,691.56	\$ 8,340.26	184,921.83	1.47%	213.02	2,643.23
May-12	2012	Q2	184,921.83	\$ 2,084.25	\$ 8,340.26	195,346.34	1.47%	226.53	2,869.76
Jun-12	2012	Q2	195,346.34	\$ 1,173.45	\$ 8,340.26	204,860.04	1.47%	239.30	3,109.06
Jul-12	2012	Q3	204,860.04	\$ 1,173.45	\$ 8,340.26	214,373.74	1.47%	250.95	3,360.02
Aug-12	2012	Q3	214,373.74	\$ 1,173.45	\$ 8,340.26	223,887.44	1.47%	262.61	3,622.62
Sep-12	2012	Q3	223,887.44	\$ 1,173.45	\$ 8,340.26	233,401.14	1.47%	274.26	3,896.89
Oct-12	2012	Q4	233,401.14	\$ -	\$ 8,340.26	241,741.40	1.47%	285.92	4,182.80
Nov-12	2012	Q4	241,741.40	\$ -	\$ 8,340.26	250,081.65	0.00%	-	4,182.80
Dec-12	2012	Q4	250,081.65	\$ -	\$ 8,340.26	258,421.91	0.00%	-	4,182.80
Jan-13	2013	Q1	258,421.91		\$ 8,990.78	267,412.69	0.00%	-	4,182.80
Feb-13	2013	Q1	267,412.69		\$ 8,990.78	276,403.48	0.00%	-	4,182.80
Mar-13	2013	Q1	276,403.48		\$ 8,990.78	285,394.26	0.00%	-	4,182.80
Apr-13	2013	Q2	285,394.26		\$ 8,990.78	294,385.05	0.00%	-	4,182.80
May-13	2013	Q2	294,385.05		\$ 8,990.78	303,375.83	0.00%	-	4,182.80
Jun-13	2013	Q2	303,375.83		\$ 8,990.78	312,366.61	0.00%	-	4,182.80
Jul-13	2013	Q3	312,366.61		\$ 8,990.78	321,357.40	0.00%	-	4,182.80
Aug-13	2013	Q3	321,357.40		\$ 8,990.78	330,348.18	0.00%	-	4,182.80
Sep-13	2013	Q3	330,348.18		\$ 8,990.78	339,338.97	0.00%	-	4,182.80
Oct-13	2013	Q4	339,338.97		\$ 8,990.78	348,329.75	0.00%	-	4,182.80

	Nov-13	2013	Q4	348,329.75		\$ 8,990.78	357,320.53	0.00%	-	4,182.80
	Dec-13	2013	Q4	357,320.53		\$ 8,990.78	366,311.32	FALSE	-	4,182.80
				\$ 64,930.96	\$ 193,490.95	\$ 258,421.91				



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	\$ 1,330.49	\$ 5.40	\$ 1,335.89	\$ 667.95	4.37%	\$ 29.16
2007	\$ 2,549.76	\$ 52.12	\$ 3,937.78	\$ 2,636.84	4.73%	\$ 124.66
2008	\$ 2,062.72	\$ 229.19	\$ 6,229.69	\$ 5,083.74	3.98%	\$ 202.33
2009	\$ 1,700.55	\$ 3,429.23	\$ 11,359.46	\$ 8,794.58	1.14%	\$ 100.04
2010	\$ 14,121.74	\$ 74,727.16	\$ 100,208.37	\$ 55,783.92	0.80%	\$ 444.88
2011	\$ 24,117.49	\$ 217,819.45	\$ 342,145.31	\$ 221,176.84	1.47%	\$ 3,251.30
2012	\$ 19,048.33	\$ 317,436.94	\$ 678,630.57	\$ 510,387.94	1.23%	\$ 6,252.25
2013	\$ -	\$ 342,195.78	\$ 1,020,826.35	\$ 849,728.46	0.00%	\$ -
Cumulative Interest to 2011						\$ 4,152.36
Cumulative Interest to 2012						\$ 10,404.61
Cumulative Interest to 2013						\$ 10,404.61



Ontario Energy Board

Smart Meter Model

Bluewater Power Distribution Corporation

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

Check if applicable

- ☐ Smart Meter Funding Adder (SMFA)
- ☒ Smart Meter Disposition Rider (SMDR)

The SMDR is calculated based on costs to December 31, 2011
- ☒ Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)

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

	2006	2007	2008	2009	2010	2011	2012	2013	Total
Deferred and forecasted Smart Meter Incremental Revenue Requirement (from Sheet 5)	\$ 1,358.40	\$ 2,654.71	\$ 2,381.00	\$ 5,828.51	\$ 113,342.08	\$ 321,010.79	\$ 461,785.99	\$ 485,955.03	\$ 908,361.48
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B) (Check one of the boxes below)	\$ 12.56	\$ 96.75	\$ 191.09	\$ 77.81	\$ 223.35	\$ 1,274.02	\$ 2,307.22		\$ 4,182.80
<input checked="" type="checkbox"/> Sheet 8A (Interest calculated on monthly balances)	\$ 12.56	\$ 96.75	\$ 191.09	\$ 77.81	\$ 223.35	\$ 1,274.02	\$ 2,307.22	\$ -	\$ 4,182.80
<input type="checkbox"/> Sheet 8B (Interest calculated on average annual balances)									
SMFA Revenues (from Sheet 8)	\$ 6,722.26	\$ 11,434.40	\$ 11,433.77	\$ 11,307.04	\$ 27,040.81	\$ 64,111.47	\$ 49,844.47	\$ -	\$ 181,894.22
SMFA Interest (from Sheet 8)	\$ 41.93	\$ 576.12	\$ 911.70	\$ 376.05	\$ 415.48	\$ 1,365.97	\$ 1,945.55	\$ -	\$ 5,632.80
Net Deferred Revenue Requirement	-\$ 5,393.24	-\$ 9,259.07	-\$ 9,773.37	-\$ 5,776.76	\$ 86,109.13	\$ 256,807.38	\$ 412,303.19	\$ 485,955.03	\$ 725,017.26
Number of Metered Customers (average for 2013 test year) - Number of metered customers for which smart meter were deployed as part of program). Residential and GS < 50 kW customer classes and any other metered classes involved (e.g. GS 50 to 4999 kW for which interval meters were upgraded to utilize AMI and ODS assets)								3544	

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, 2012 plus Interest on OM&A and Amortization	\$ 912,544.28	
SMFA Revenues collected from 2006 to 2013 test year (inclusive) Plus Simple Interest on SMFA Revenues	\$ 187,527.02	
Net Deferred Revenue Requirement	\$ 725,017.26	
SMDR November 1, 2012 to	\$ 8.52	Match
Check: Forecasted SMDR Revenues	\$ 724,677.12	

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

Incremental Revenue Requirement for 2013	\$ 485,955.03	
SMIRR	\$ 11.43	Match
Check: Forecasted SMIRR Revenues	\$ 486,095.04	

	2006	2007	2008	2009	2010	2011	2012	Total to 2011	Total to 2012
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 8	\$ 402	\$ 965	\$ 1,124	\$ 1,375	\$ 2,500
Deemed Long Term Debt	\$ 8	\$ 22	\$ 50	\$ 616	\$ 32,284	\$ 77,382	\$ 90,172	\$ 110,362	\$ 200,534
Equity	\$ 10	\$ 28	\$ 54	\$ 532	\$ 24,240	\$ 58,102	\$ 67,705	\$ 82,965	\$ 150,671
Return on Capital	\$ 18	\$ 50	\$ 104	\$ 1,157	\$ 56,926	\$ 136,448	\$ 159,002	\$ 194,702	\$ 353,704
Operating Expense	\$ 1,330	\$ 2,550	\$ 2,063	\$ 1,701	\$ 14,122	\$ 24,117	\$ 19,048	\$ 45,883	\$ 64,931
Amortization	\$ 5	\$ 52	\$ 229	\$ 3,429	\$ 74,727	\$ 217,819	\$ 317,437	\$ 296,263	\$ 613,699
Total Before PILs	\$ 1,354	\$ 2,652	\$ 2,395	\$ 6,287	\$ 145,775	\$ 378,385	\$ 495,487	\$ 536,848	\$ 1,032,335
PILS	\$ 4	\$ 3	-\$ 14	-\$ 458	-\$ 32,433	-\$ 57,374	-\$ 33,701	-\$ 90,272	-\$ 123,974
Revenue Requirement	\$ 1,358	\$ 2,655	\$ 2,381	\$ 5,829	\$ 113,342	\$ 321,011	\$ 461,786	\$ 446,575	\$ 908,361
Interest on Deferred OM&A and Amortization	\$ 13	\$ 97	\$ 191	\$ 78	\$ 223	\$ 1,274	\$ 2,307	\$ 1,876	\$ 4,183
Total Revenue Requirement	\$ 1,371	\$ 2,751	\$ 2,572	\$ 5,906	\$ 113,565	\$ 322,285	\$ 464,093	\$ 448,451	\$ 912,544