## Hydro One Brampton Networks Inc.

175 Sandalwood Pkwy West
Brampton, Ontario L7A 1E8

December 14, 2012

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
PO Box 2319
2300 Yonge Street, 27th Floor
Toronto ON M4P 1E4

Dear Ms. Walli,

## Re: Hydro One Brampton Networks Inc. 2013 Smart Meter Cost Recovery Application Board File No. EB-2012-0440

Enclosed is Hydro One Brampton Networks Inc.'s ("HOBNI") 2013 stand-alone Rate Application for disposition of the balances of Smart Meter Cost Variance Accounts 1555 and 1556; as well as the recovery of associated revenue requirement through Smart Meter Disposition Riders and Smart Meter Incremental Revenue Requirement Riders with an effective date of May 1, 2013.

HOBNI has submitted two hard copies of this application and a CD containing the above captioned Application in PDF format, together with electronic copies (in Excel format) of the completed Board models. The electronic copies of the document and spreadsheet files have also been filed electronically through the Board's web portal.

Please contact myself should anything further be required.

Sincerely,


[^0]cc: Remy Fernandes, President \& CEO, Hydro One Brampton Networks Inc. Aldo Mastrofrancesco, Vice President of Engineering \& Operations, Hydro One Brampton Networks Inc.
Marc Villett, Vice-President Finance, Hydro One Brampton Networks Inc.
Encl.

## APPLICANT COUNSEL

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## HYDRO ONE BRAMPTON NETWORKS INC.

## 2013 SMART METER COST RECOVERY APPLICATION FOR

## APPROVAL OF RATE RIDERS EFFECTIVE MAY 1, 2013

## Table of Contents

1. APPLICATION .....  5
2. Managers Summary. ..... 8
2.1 Approvals Requested ..... 10
2.2 Introduction ..... 11
2.3 Smart Meter Program Status ..... 17
2.4 Procurement of Smart Meters and Installation Services ..... 19
2.5 Smart Meter Costs ..... 21
2.5.1 Costs Beyond Minimum Functionality ..... 22
2.5.2 Summary of Cost Prudency Requested for Approval ..... 25
2.5.3 Smart Meter Capital Expenditures Requested for Approval ..... 26
2.5.4 Smart Meter Depreciation Requested for Approval ..... 29
2.5.5 Smart Meter OM\&A Requested for Approval ..... 31
2.5.6 Annual Expenditure Analysis ..... 34
2.5.7 Smart Meter Capital \& OM\&A Life to Date Expenditures per Meter Installed ..... 36
2.5.8 Reconciliation of Smart Meter Amounts Requested vs. Reported in 2011 Regulatory Trial Balance ..... 38
2.5.9 Reconciliation of Smart Meter Variance Accounts 1555 \& 1556 ..... 45
2.6 Stranded Meters ..... 47
2.7 Smart Meter Disposition Riders ..... 48
2.8 Smart Meter Incremental Revenue Requirement Riders ..... 52
2.9 Rate Change Summary and Bill Impacts ..... 53
2.10 Conclusion ..... 55
APPENDIX A - OEB SMART METER MODEL - RESIDENTIAL AND GENERAL SERVICE <KW CLASSES
APPENDIX B - OEB SMART METER MODEL - GENERAL SERVICE 50 to 699 kW
APPENDIX C - HOBNI SMART METER 2010 STUB YEAR MODELAPPENDIX D - CARRYING CHARGES FOR JANUARY 1, 2013 TO APRIL 30, 2013 FORDEPRECIATION AND OM\&A EXPENSES RELATED TO SMART METER ADDITIONS FROM2010 TO 2012
APPENDIX E - BILL IMPACT TABLES

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

AND IN THE MATTER OF an Application by Hydro One Brampton Networks Inc. (HOBNI) for an Order or Orders approving or fixing just and reasonable rates with respect to Smart Meters, effective May 1, 2013

## 1. APPLICATION

The Applicant is Hydro One Brampton Networks Inc. (referred to in this Application as the "Applicant" or "HOBNI") a subsidiary of Hydro One Inc. The Applicant is a corporation incorporated pursuant to the Ontario Business Corporations Act with its head office in the City of Brampton. The Applicant carries on the business of distributing electricity within the City of Brampton as a licensed distributor operating pursuant to license ED-2003-0038.

The Applicant hereby applies to the Ontario Energy Board (referred to in this Application as the "Board" or "OEB") pursuant to Section 78 of the Ontario Energy Board Act, 1998 (the "OEB Act") for approval of its proposed Smart Meter Rate Riders, for this Smart Meter Cost Recovery application effective May 1, 2013.

The OEB guideline G-2011-0001 "Smart Meter Funding and Cost Recovery - Final Disposition Guideline" ("Guideline") issued on December 15, 2011 sets out the Board's filing instructions in
relation to the funding of and the recovery of costs associated with Smart Meter activities conducted by Ontario electricity distributors. It reflects amendments to a number of smart metering regulations that were enacted on June 25, 2008 as well as the direction provided by the Board in its combined proceeding on Smart Meter costs (proceeding EB-2007-0063)and in the previous Guideline G-2008-0002: Smart Meter Funding and Cost Recovery. The Guideline also provides guidance to distributors on how to apply for Smart Meter cost recovery beginning with the 2012 rate year. The evidence submitted in support of HOBNI's Smart Meter application complies with the filing requirements detailed in the Guideline.

The scope of this Application includes the prudency review and approval of the following:

- Incremental Capital Expenditures incurred for the Smart Meter program since the previous disposition,
- Incremental Operating, Maintenance and Administration Expenditures ("OM\&A Expenditures") and Depreciation Expenses incurred for the Smart Meter program since the previous disposition,
- Smart Meter Disposition Rate Riders, including the Smart Meter revenue requirement from the previous disposition up to the end of April 30, 2013, and
- Smart Meter Incremental Revenue Requirement Rate Riders, including the Smart Meter revenue requirement going forward from May 1, 2013 until HOBNI's next cost of service rebasing

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

The Applicant requests that, pursuant to Section 34.01 of the Board's Rules of Practice and Procedure, this proceeding be conducted by way of written hearing. In the event that the Board determines that it is necessary to convene an oral hearing in respect of this Application, HOBNI will then advise the Board as to the members of the witness panel(s). It is anticipated that any witness panel(s) will be composed of HOBNI personnel. HOBNI requests that the Board provide reasons in writing for its final decision and $\operatorname{order}(\mathrm{s})$ in this proceeding. This request is made pursuant to subsection 17(1) of the Statutory Powers Procedure Act.

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

Hydro One Brampton Networks Inc.
175 Sandalwood Parkway West
Brampton, Ontario
L7A 1E8
Attention:
Mr. Scott Miller, Director of Regulatory Affairs and Communications
Telephone: (905) 452-5504
Fax: (905) 840-0967
E-mail:smiller@hydroonebrampton.com

## All of which is respectfully submitted,

 Hydro One Brampton Networks Inc.Original signed by
Mr. Scott Miller,
Director of Regulatory Affairs and Communications

## 2. Managers Summary

HOBNI is a licensed electricity distributor that owns and operates an electricity distribution system that provides service to the businesses and residents of the City of Brampton by distributing electricity to over 140,000 customers in the City of Brampton. HOBNI is authorized by the OEB to charge its customers' distribution rates and other charges. In this application HOBNI is applying for Smart Meter rate riders pursuant to the Smart Meter Funding and Cost Recovery - Final Disposition Guideline G-2011-0001 issued by the Board on December 15, 2011, under assigned case number EB-2012-0440. HOBNI had previously completed a full cost of service rebasing application for rates effective January 1, 2011 as per the Board's decision in (EB-2010-0132). In that cost of service application HOBNI received Board approval for an interim Smart Meter Cost disposition as well. This Manager's Summary includes the following items:

- Approvals Requested
- Introduction
- Smart Meter Program Status
- Procurement of Smart Meters and Installation Services
- Smart Meter Costs
- Stranded Meters
- Smart Meter Disposition Riders
- Smart Meter Incremental Revenue Requirement Riders
- Rate Change Summary and Bill Impacts

The customer bill impacts are presented in Appendix $B$. The rate updates due to the proposed rate riders have been taken into consideration and included in the customer bill impacts. In summary, the total bill impact for a Residential customer in Brampton, with monthly electricity consumption of 800 kWh , will be an increase of $\$ 2.14$ or 1.93 \% per month after HST. The bill impact for a General Service Less than 50 kW customer with monthly consumption of 2,000 kWh, will be an increase of $\$ 2.14$ or $0.79 \%$ per month after HST. The bill impact for a General Service 50 to 699 kW customer with monthly consumption of 36,500 kWh and 100 kW demand, will be an increase of $\$ 32.96$ or $0.79 \%$ per month after HST. Also, a summary of bill impacts by class is provided in Section 2.9 Table 23, and the detail bill impacts schedules are provided in Appendix E.

This application is consistent with all the relevant Board guidelines and requirements. The Board has provided direction to Ontario electricity distributors with respect to disposition of Smart Meter costs and variance account applications in the following:

- Guideline G-2011-0001: Smart Meter Funding and Cost Recovery - Final Disposition Guideline, December 15, 2011,
- Guideline G-2008-0002: Smart Meter Funding and Cost Recovery Guideline, October 22, 2008,
- Filing Requirements for Electricity Transmission and Distribution Applications issued on November 14, 2006 and updated on June 28, 2012, and
- The Board approved Smart Meter Model - version 3.0, June 28, 2012.


### 2.1 Approvals Requested

HOBNI has now completed its Smart Meter program and is filing its final disposition application to seek approvals for Rate Riders, Smart Meter costs, and revenue requirements. Specifically, HOBNI requests the approval of the following:

1. Smart Meter Disposition Rider - A monthly fixed rate rider of $\$ 1.39$ per customer for the Residential and General Service < 50 kW Classes, and a monthly fixed rate rider of $\$ 22.87$ per customer for the General Service 50 to 699 kW Class, effective from May 1, 2013 to December 31, 2013,
2. Smart Meter Incremental Revenue Rider - A monthly fixed rate rider of $\$ 0.71$ per customer for the Residential and General Service < 50 kW Classes, and a monthly fixed rate rider of $\$ 9.55$ per customer for the General Service 50 to 699 kW Class, effective from May 1, 2013 until the effective date of HOBNI's next cost of service rate application,
3. Smart Meter Capital Expenditures - Capital Expenditures from 2010 to 2012 of \$7,288,183.71,
4. Smart Meter Depreciation Expenses - Depreciation Expenses from 2010 to 2012 of $\$ 2,478,909$, including $\$ 1,258,223$ for the 2010 Stub Year. Also, $\$ 644,804$ forecast for the full year, 2013,
5. Smart Meter OM\&A Expenditures - OM\&A Expenditures from 2010 to 2012 of $\$ 413,682$, including $\$ 325,914$ for the 2010 Stub Year. Also, $\$ 72,065$ forecast for the full year,2013,
6. Smart Meter Revenue Requirement - Revenue Requirement from 2010 to 2012 of $\$ 5,207,700$ including $\$ 3,098,675$ for the 2010 Stub Year. Also, $\$ 1,375,684^{1}$ forecast for the full year, 2013.
[^1]
### 2.2 Introduction

In January of 2007, HOBNI was a participant of the combined proceeding to conduct discretionary metering applications, case number (EB-2007-0063). The combined proceeding was initiated to determine prudence and recovery of costs associated with smart metering activities for thirteen ${ }^{2}$ licensed distributors. The proceeding served not only to determine cost recovery, but also to provide guidance to other Ontario utilities that would be installing smart meters in the near future. In this combined proceeding, the Board found that the purchasing decisions by HOBNI were implemented with the necessary due diligence and the terms of contracts, including the pricing, were prudent.

HOBNI has been actively installing Smart Meters in the City of Brampton since 2007. HOBNI had previously filed for disposition and recovery of Smart Meter costs on two separate occasions, the first as part of its 2008 IRM rate application (EB-2007-0882), and the latter as part of its 2011 Cost of Service rate application (EB-2010-0132). This is HOBNI's third and final filing for the disposition and recovery of costs related to Smart Meter installations.

The largest Smart Meter disposition to date was approved as part of HOBNI's 2011 Cost of Service Rate Application (EB-2010-0132) where HOBNI requested that the Board approve further dispositions of its Smart Meter investments. In its 2011 rate application the Board approved the disposition of the December 31, 2009 balances of the Smart Meter Variance Accounts and a corresponding Smart Meter Disposition Rider ("SMDR") of \$0.79 per month for all metered customer classes. The rate rider, "Rate Rider for Smart Meter Variance Account Disposition - effective until December 31, 2011", was recovered over an 8 month period.

The 2011 SMDR approved by the OEB was for the recovery of the difference between:

1. The revenue requirement entitlement for the period since the first disposition, (i.e. May 1, 2007) until December 31, 2009, based on capital and OM\&A expenditures, depreciation expense, Payment in Lieu of Taxes ("PILs"), and return on rate base for the same period, and

[^2]2. The amounts collected from all metered classes of customers through rate funding adders for the same time period.

In addition, the Board approved HOBNI's final Smart Meter Funding Adder ("SMFA") of \$1.52 per month for all metered customer classes in its 2011 cost of service rate application. The rate adder, "Smart Meter Funding Adder - effective until December 31, 2011", was used as an interim funding measure by the Board who stated that it expected HOBNI to file an application with the Board seeking final approval for the remaining Smart Meter related costs at the earliest possible opportunity following the availability of audited costs.

In addition, the Board also directed HOBNI to establish a separate rate rider, for each class including Residential, General Service < 50 kW and the General Service 50 to 699 kW, to recover stranded meter costs over a 20 month period ending December 31, 2012.

This application is consistent with the Smart Meter Guidelines, where in section 3.5 the Board requires that the majority of costs, (i.e. $90 \%$ or more) of the total project costs for which the distributor is seeking recovery will be audited. In HOBNI's case, Table 1 below shows that to date $99.90 \%$ of the total Smart Meter program costs up to December 31, 2012 have been audited. This application also contains forecast costs for 2012 and 2013 which have not been audited prior to filing this application based on actual Smart Meter Capital and OM\&A costs to September 30, 2012 and forecasted OM\&A costs for the balance of 2012 and all of 2013.

Table 1 Summary of Audited vs. Unaudited Smart Meter Programs Costs

| Year |  |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| OM\&A of <br> Cumulative |  |  |  |  |  |  |  |  |
| 2006 | $\$$ | - |  |  |  |  |  |  |
| Capital |  |  |  |  |  |  |  |  |

During the course of 2012, HOBNI has completed the installing of the more complex and costly meters associated with the polyphase customers in the General Service 50 to 699 service classification with demands of less than 200 kW. HOBNI has now completed $100 \%$ of the installations of Smart Meters in its Residential, General Service Less than 50 kW , and the General Service 50 to 699 kW Service Classifications. HOBNI has fulfilled its mandate to install Smart Meters in its service territory. Although all communications associated with the Residential and General Service Less than 50 kW classes are working satisfactorily, HOBNI still has some work required associated firmware and hardware related communications issues pertaining to our polyphase Smart Meters to make them fully functional with the Automated Metering Infrastructure ("AMI"). HOBNI expects to have these Smart Meter installations configured and expects to achieve connectivity and communications for these installations in 2013.

Now that it has virtually completed all work associated with its Smart Meter program, HOBNI submits its final application to the Board for approval. Pursuant to the Board order, in HOBNI's 2011 Cost of Service rate application, HOBNI submits its final disposition filing for recovery of Smart Meter costs and incremental revenue requirement up to its next rebasing application.

## The 2010 Stub Year:

In this application HOBNI will refer to the portion of the Smart Meter Capital \& OM\&A Expenditures, Depreciation Expenses and revenue requirements for 2010 that relates to Smart Meters installed from May 1, 2007 to December 31, 2009, as the 2010 Stub Year costs. The reason that 2010 is a Stub Year is because it is the year between HOBNI's last Smart Meter disposition year, (i.e. 2009), and its last rebasing year, (i.e. 2011). To date, for the 2010 Stub Year, HOBNI has not recovered any costs or revenues in any previous application as HOBNI did not have audited Financial Statements beyond 2009 when it filed its 2011 rate application ${ }^{3}$.

[^3]
## Recoveries in Previous Application:

In its last Smart Meter disposition application, (i.e. in 2011), HOBNI requested and received approval for recovery of Smart Meter Capital and OM\&A Expenditures, Depreciation Expenses and Revenue Requirement for the period from May 1, 2007 to December 31, 2009.

In addition, for its 2011 rebasing year HOBNI filed for and received approval for the following:

- The inclusion of the 2009 life to date net book value of Smart Meter Capital in its 2011 Test Year Rate Base,
- The inclusion of the portion of the 2011 Smart Meter OM\&A Expenditures related to the Smart Meters installed up to December 31, 2009, in its 2011 Test Year OM\&A Expenses.
- The inclusion of Smart Meter Depreciation Expenses pertaining to the 2009 life to date Smart Meter Capital Expenditures in its 2011 Test Year Depreciation Expenses.


## Determination of Rate Riders Requested in this Application:

In this rate filing, the Applicant has calculated the rate riders it is seeking Board approval for as following:
A. SMDR's that will be in effect for 8 months for the customer usage period from May 1 , 2013 until December 31, 2013, determined as the difference between, 1) the deferred incremental Smart Meter revenue requirement from January 1, 2010 to April 30, 2013, and 2) the SMFA's collected from customers for their usage from January 1, 2010 to December 31, 2011. This approval would extend to the Smart Meter costs and deferred revenue requirement dollar amounts determined as follows:
i. Smart Meter revenue requirement for the 2010 Stub Year, as calculated in the 2010 Stub Year Model, based on Smart Meter Capital and OM\&A Expenditures, and Depreciation Expense for the 2010 Stub Year, and
ii. Smart Meter revenue requirement, using the Board's Smart Meter Model, for the period from January 1, 2010 to April 30, 2013, based on Smart Meter Capital Expenditures for the period January 1, 2010 to December 31, 2012,
and Smart Meter OM\&A and Depreciation Expense for the period January 1, 2010 to December 31, 2012, and
iii. 1/3 of the 2013 revenue requirement (i.e. for January 1, 2013 to April 30, 2013), as determined in the Board's Smart Meter Model for the Smart Meter Incremental Revenue Rider for 2013.
B. Smart Meter Incremental Revenue Riders ("SMIRR") to recover the Smart Meter revenue requirement that will be in effect for customer usage from May 1, 2013 until the implementation date of HOBNI's next cost of service rate application. This approval would extend to the Smart Meter costs and revenue requirement dollar amounts determined as follows:
i. Smart Meter incremental revenue requirement, using the Board's Smart Meter Model pertaining to HOBNI's Smart Meter capital investments made during the period from January 1, 2010 to December 31, 2012 and HOBNIs Smart Meter forecasted OM\&A Expenditures and Depreciation Expense going forward from May 1, 2013 until HOBNI's next cost of service rebasing rate application.

All rate riders are to be fixed monthly charges per metered customer for the Residential, General Service < 50 kW , and General Service 50 to 699 kW service classifications. HOBNI proposes that the Residential and General Service < 50 kW service classifications would share the same SMDR and SMIRR riders as HOBNI was unable to reliably disaggregate Smart Meter costs associated with these two classes of customers. Whereas, class specific SMDR and SMIRR riders are being proposed for the General Service 50 to 699 kW service classification as HOBNI was able to reliably segregate costs pertaining to Smart Meters associated with this customer class.

In addition, with respect to stranded meters, HOBNI is not making any submissions for the disposition of Stranded Meters at this time. HOBNI was ordered by the Board to file for final disposition and true up of the Stranded Meter costs at its next cost of service rate application.

Furthermore, no amounts have been included in the actual or projected costs for charges for use of the Provincial Meter Data Management and Repository ("MDM/R") as the Board has
undertaken, pursuant to section 19 of the of the Ontario Energy Board Act, 1998, a proceeding on its own motion to review the options for and ultimately determine the appropriate allocation and recovery of the Smart Metering Charge ("SMC.") The Board has given this proceeding File No. EB-2012-0211.

The MDM/R costs have not been included in determining revenue requirement and rates. Moreover, the Board has undertaken to determine how the SMC would be recovered from customers on a generic basis as all licensed and rate-regulated distributors involved in smart metering will be affected by MDM/R costs. HOBNI understands that these costs could be deferred for future recovery. If this is the case, HOBNI submits that Account 1556 would then be used to track costs related to the Provincial MDM/R for future disposition. Therefore, HOBNI does not propose to close account 1556 at this time.

### 2.3 Smart Meter Program Status

## Residential and General Service < 50 kW Service Classification:

HOBNI installed 7,538 smart meters in 2010 and 3,426 smart meters in 2011 for the Residential and General Service $<50 \mathrm{~kW}$ customer classes, thus completing all smart meter installations for low volume metered customers by December 31, 2011. See Table 2 below for a complete yearly breakdown of meters installed by year and by class. Effective December 31, 2011, HOBNI ceased adding any new Smart Meter capital expenditures to account 1555 for the Residential and GS < 50 kW classes of customers.

Between 2007 and 2011 HOBNI installed 127,950 Smart Meters for the Residential class and 8,206 Smart Meters for the General Service < 50 kW class. As of December 31, 2011 HOBNI had 127,956 active Residential class customers and 8,259 General Service < 50 kW class customers, see Table 2 below. The differences between the Smart Meters installed and the number of active customers in these classes was due to a small number of Smart Meter installations being in process at the end of 2011 and not being counted as part of the Smart Meter program nor having their costs included in account 1555 as they were treated as normal metering capital with costs included in account 1860. In addition HOBNI also has 26 customer accounts in the General Service < 50 kW class who do not have Smart Meters, they have interval meters. Interval meters are outside of the scope of the Smart Meter program cost recovery, and are shown only to reconcile the number of meters to the number of customers.

## General Service 50 to 699 kW Service Classification

As part of its Smart Meter initiative, HOBNI also installed Smart Meters for its General Service 50 to 699 kW Service Classification on customers with demands up to 200kW. HOBNI included these customers in its Smart Meter program for similar reasons that the Smart Meter program was justifiable for Residential and General Service < 50 kW customer classes. The smart meters for these customers in this class, and their associated costs, are part of the costs exceeding minimum functionality. These costs are part of the Smart Meter Program and they have been included in this Smart Meter Cost Recovery Application. By the end of September 30, 2012, HOBNI completed its Smart Meter program associated with this class of customers.

| Year | Residential | GS< 50 kW | Sub-Total | Annual \% Completed | GS 50-699 kW | Annual \% Completed | Total | Annual \% Completed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2007 | 37,179 |  | 37,179 | 27.31\% |  | 0.00\% | 37,179 | 27.11\% |
| 2008 | 40,154 |  | 40,154 | 29.49\% |  | 0.00\% | 40,154 | 29.28\% |
| 2009 | 44,289 | 3,570 | 47,859 | 35.15\% |  | 0.00\% | 47,859 | 34.90\% |
| 2010 | 3,221 | 4,317 | 7,538 | 5.54\% | 16 | 1.64\% | 7,554 | 5.51\% |
| 2011 | 3,107 | 319 | 3,426 | 2.52\% | 904 | 92.53\% | 4,330 | 3.16\% |
| 2012 | - | - | - | - | 57 | 5.83\% | 57 | 0.04\% |
| Total Installed | 127,950 | 8,206 | 136,156 | 100.00\% | 977 | 100.00\% | 137,133 | 100.00\% |
| Customer Counts * | 127,956 | 8,259 | 136,215 |  | 1,537 |  | 137,752 |  |
| Interval Meters | - | 26 | 26 |  | 560 |  | 586 |  |
| Targeted Connections | 127,956 | 8,233 | 136,189 |  | 977 |  | 137,166 |  |
| \% of Target Completed | 100.00\% | 99.67\% | 99.98\% |  | 100.00\% |  | 99.98\% |  |

*     - Customer counts for the Residential and GS < 50 kW classes are as of December 31, 2011 and customer counts for the GS 50-699 kW are as of October 31, 2012.
** - HOBNI ceased to use Smart Meter Variance accounts 1555 and 1556 for the Residential and GS < 50 kW classes as of December 31, 2011 as the installations for these classes were basically complete. HOBNI commenced charging the capital cost of Smart Meters to account 1860 on January 1, 2012. Note, a small number of Smart Meters were in process and not shown as installed to the end of 2011, but recorded as installed in 2012.
HOBNI installed a total of 977 Smart Meters for this class; installations by year were as follows, 16 in 2010, 904 in 2011, and 57 in 2012, see Table 2, below. At the end of October 31, 2012 HOBNI had 1,537 customers in this class. In addition HOBNI also has 560 customer accounts in the General Service 50 to 699 kW class who do not have Smart Meters, they have interval meters. Interval meters are outside of the scope of the Smart Meter program cost recovery and are shown only to reconcile the number of meters to the number of customers.

Table 2: Smart Meter Program Status

### 2.4 Procurement of Smart Meters and Installation Services

In January of 2007, twelve licensed distributors authorized by Ontario Regulation 427/06 to conduct discretionary metering activities filed applications pursuant to section 78 of the Ontario Energy Board Act, 1998 for the approval of distribution rates, case number (EB-2007-0063). In addition a thirteenth licensed distributor, Newmarket Hydro Limited, was also authorized by regulation to conduct discretionary metering activities.

HOBNI was one of the thirteen licensed distributors authorized to conduct smart metering activities who filed an application as part of this combined proceeding. The other eleven distributors are Chatham-Kent Hydro Inc., Enersource Hydro Mississauga Inc., Horizon Utilities Corporation, Hydro One Networks Inc., Hydro Ottawa Limited, Middlesex Power Distribution Corporation, Milton Hydro Distribution Inc., PowerStream Inc., Tay Hydro Electric Distribution Co. Inc., Toronto Hydro-Electric System Limited, and Veridian Connections Inc.

The Board performed a prudence analysis regarding the expenditures incurred. The prudence analysis related not only to the price paid for goods and services purchased, but also to the procurement process itself. The Board conducted a combined hearing in part to allow it to examine the different technologies deployed by different utilities, as well as the different cost implications.

Hydro One Networks Inc. ("HONI") procurement process began with a request for proposal ("RFP") issued in March 2005. HONI's RFP requested proposals for the provision of Smart Meters for all or a part or HONI's Smart Meter deployment. HONI evaluated the responses to the RFP based on the following criteria: quality of the solution, capability of the proponent, qualification of the vendor personnel and pricing. HONI indicated that Ozz/Trilliant achieved the highest overall evaluation score of all suppliers.

HONI and HOBNI were authorized by Ontario Regulation 427/06 to conduct their smart meter programs as long as the Smart Meter program was conducted in accordance with the March 2005 RFP, and both HONI and HOBNI followed the March 2005 RFP process as required.

The Board found that the evidence provided by Hydro One Networks Inc. ("HONI") and HOBNI demonstrated professionalism and that due diligence was exercised in the Smart Meter purchasing decisions. Also, buying economies were maximized and HONI and HOBNI received the same prices.

HOBNI's Smart Meter procurement activities for the period from 2010 to 2012 were a continuation of the same procurement processes accepted by the Board in the 2007 combined proceeding. HOBNI continued to work jointly with HONI following the March 2005 RFP process as specified in Ontario Regulation 427/06 for its procurement activities. HONI and HOBNI continued to procure all Smart Meters from Trilliant.

### 2.5 Smart Meter Costs

In this application, HOBNI submits evidence in support of the approval of incremental costs associated with its Smart Meter Program. The Smart Meter costs encompass the Capital and OM\&A Expenditures and Depreciation Expenses for the periods as specified. The costs incurred relate to the Smart Meters installed from January 1, 2010 to December 31, 2012. HOBNI installed 10,964 Smart Meters for the Residential and General Service < 50 kW classes of customers from January 1, 2010 to December 31, 2011. For the General Service 50 to 699 kW Service Classification, HOBNI installed 977 Smart Meters on customers in this class with demands less than 200kW from January 1, 2010 to December 31, 2012. HOBNI concludes its Smart Meter Program effective December 31, 2012. HOBNI did not include any forecast for Smart Meter Capital Expenditures for 2013 as HOBNI will fund those costs as part of its normal operations. The Smart Meter OM\&A costs however, were included in the 2013 forecast costs to determine the Rate Riders for Residential, General Service < 50 kW and the General Service 50 to 699 kW customer classes. The costs approved by the Board are used in the determination of revenue requirement which is the basis for the two Smart Meter Rate Riders requested by HOBNI, i.e. SMDR and SMIRR. The evidence supporting the Smart Meter costs requested for approval includes:

- Costs Beyond Minimum Functionality
- Summary of Cost Prudency Requested for Approval
- Smart Meter Capital Expenditures Requested for Approval
- Smart Meter Depreciation Requested for Approval
- Smart Meter OM\&A Requested for Approval
- Annual Expenditure Analysis
- Smart Meter Capital \& OM\&A Expenditures per Meter Installed
- Reconciliation of Smart Meter Amounts Requested vs. Reported in 2011 Regulatory Trial Balance
- Reconciliation of Smart Meter Variance Accounts 1555 \& 1556


### 2.5.1 Costs Beyond Minimum Functionality

## Outage Management Notification Capabilities

The Smart Meter system architecture that HOBNI purchased provides for not only AMI capabilities, but also facilitates an outage management notification system. The Smart Meters installed for the Residential and General Service < 50 kW customer classes during 2010 and 2011 have outage management notification capabilities built in, which is beyond the minimum functionality required. The outage management response system will allow Hydro One Brampton Operators to identify customer outages in real time to facilitate faster response and restoration times. The incremental capital cost incurred for Smart Meters with capabilities beyond the minimum functionality requirement outlined by the Board was $\$ 18.95$ per meter or approximately $\$ 207,768$ for 10,964 Smart Meters installed in 2010 and 2011, see Table 3, below. These capital costs have been included in the determination of the SMDR and SMIRR.

## Smart Meter Installations for General Service 50 to 699 kW Class

HOBNI included non-interval metered General Service 50 to 699 kW class customers with demands less than 200kW within the scope of its Smart Meter program and installed Smart Meters for these customers. HOBNI saw the replacement of legacy Conventional Meters with Smart Meters for these General Service customers as being more cost effective than using Interval Meters which require much more costly metering equipment and data lines, (which customers are responsible for). HOBNI decided to proceed with this project as it will allow for all customers to be metered via a smart meter or an interval meter thus eliminating the need for monthly manual meter reads.

HOBNI has used Interval Meters for General Service customers with demands exceeding 200 kW for some time and HOBNI determined that it would not be cost effective to replace those existing Interval Meters with Smart Meters. Since the investments in Interval Meters had been made previously for those accounts and, that the cost of replacing those meters and stranding them would be considerably more significant than the cost of stranding conventional meters, HOBNI decided only to replace non-interval, Conventional Meters.

HOBNI included this class of customers, for customers less than 200 kW, in its Smart Meter program for similar reasons that the Smart Meter program was justifiable for Residential and General Service < 50 kW customer classes as follows:

1. By replacing the conventional meters on for customers with demands $>50 \mathrm{~kW}$ and $<$ 200 kW, all HOBNI customers will be metered via a smart meter or an interval meter, thus eliminating the need for monthly manual meter reads.
2. Energy Management - Now that Smart Meters have been installed for General Service 50 to 699 kW customers, hourly electricity consumption data is available to these customers and this data will enable customers to use additional tools to assist in managing their electricity bills.
3. Meter Reading Access - This class of customers would be more likely to have estimated bills due to meter reading access issues whereas Smart Meters will enable billing on actual consumption every bill. Elimination of consumption estimates will mean billing true-ups will not be required, unlike for those customers that have conventional meters. This will provide better matching of energy usage and energy dollars billed, providing a better price signal to customers for managing their electricity bills.
4. Lower Cost Meter Reading - Smart Meters for this class of customers can also eliminate more costly and time consuming manual regular and special meter readings that are required for Conventional Meters.
5. Billing Accuracy - An additional benefit of smart meters is a higher degree of accuracy, as billing errors caused by incorrect manual meter reading data are eliminated.
6. Completion of Smart Grid - A component of HOBNI's Smart Grid is the use of Smart Meters including Interval Meters, where hourly data exists for all retail customer meters, within a Distributors service territory an LDC is better equipped to identify and eliminate power diversion and other usage anomalies such as meter multiplier errors.
7. Customer Class Load Profiling Data - Additional data will assist Distributors in accurately determining load profile data by customer class which will enable accurate cost allocation studies to reduce cross subsidization and provide better rate design. The use of this data enables more options to distributors for rate design beyond what is currently being used.

Due to the substantial benefits of Smart Meters, HOBNI has included this class of customers with demands < 200 kW in its Smart Meter Program with the program costs being included as part of its application for recovery and final cost disposition. The incremental Smart Meter Capital and OM\&A Expenditures sought for approval for the General Service 50 - 699 kW customer class is $\$ 1,169,811.62$ and $\$ 5,122.30$, respectively, see Table 3, below. HOBNI tracked the Capital and OM\&A Expenditures, and Depreciation Expenses separately for this class to calculate the revenue requirement for determination of the SMDR and SMIRR using the OEB Smart Meter Model. HOBNI submits this Smart Meter Model in Appendix B

Table 3: Expenditures beyond Minimum Functionality

|  | 2010 | 2011 | 2012 | Total |
| :--- | :--- | :--- | :--- | :---: |
| Capital Expenditures: |  |  |  |  |
| Outage Management Response <br> Functionality | $\$ 142,845.10$ | $\$ 64,922.70$ | $\$$ | - |
| General Service 50 to 699 kW <br> Smart Meter Program | $\$ 20,190.65$ | $\$ 1,102,543.94$ | $\$ 47,077.03$ | $\$ 1,169,811.62$ |
| Total Capital | $\$ 163,035.75$ | $\$ 1,167,466.64$ | $\$ 47,077.03$ | $\$ 1,377,579.42$ |
|  |  |  |  |  |
| Operating Expenditures: |  |  |  |  |
| General Service 50 to 699 kW <br> Smart Meter Program | $\$$ | 51.15 | $\$ 2,359.97$ | $\$ 2,711.19$ |

### 2.5.2 Summary of Cost Prudency Requested for Approval

In this Application, HOBNI is seeking the approval of Capital and OM\&A Expenditures, and Depreciation Expenses for Smart Meters per Table 4 below, as follows:
i. Smart Meter Capital Expenditures of \$7,288,184 for the period January 1, 2010 to December 31, 2012.
ii. Smart Meter OM\&A Expenditures of $\$ 413,682$ for the period January 1, 2010 to December 31, 2012 composed of:
a. $\$ 325,914$ of OM\&A Expenditures related to Smart Meters installed from May 1, 2007 to December 31, 2009 pertaining to the 2010 Stub Year,
b. $\$ 87,768$ of OM\&A Expenditures related to Smart Meters installed from January 1, 2010 to December 31, 2012.
iii. Forecasted Smart Meter OM\&A Expenditures of $\$ 72,065$ for the period January 1, 2013 to December 31, 2013 pertaining to Smart Meters installed from January 1, 2010 to December 31, 2012.
iv. Smart Meter Depreciation Expenses of \$2,478,909 for the period January 1, 2010 to December 31, 2012 composed of:
a. Smart Meter Depreciation Expenses of $\$ 1,258,223$ pertaining to the total Smart Meter Capital installed of \$18,873,338 for the period from May 1, 2007 to December 31, 2009, pertaining to the 2010 Stub Year,
b. Smart Meter Depreciation Expenses of $\$ 1,220,686$ pertaining to Smart Meter Capital installed for the period from January 1, 2010 to December 31, 2012 totaling \$7,288,184
v. Forecasted Smart Meter Depreciation Expenses of $\$ 644,804$ for the period January 1, 2013 to December 31, 2013 pertaining to the Smart Meter Capital installed for the period from January 1, 2010 to December 31, 2012 totaling \$7,288,184.

Table 4: Expenditure and Depreciation Expenses Sought for Approval

| Year | Total Capital Expenditures |  | OM\&A <br> Expenditures - <br> Stub Year |  | OM\&A <br> Expenditures - <br> Non-Stub |  | Total OM\&A Expenditures |  | Depreciation <br> Expenses - Stub <br> Year |  | Depreciation <br> Expenses - Non- <br> Stub |  | Total <br> Depreciation Expenses |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 | \$ | 3,500,850 | \$ | 325,914 | \$ | 24,147 | \$ | 350,061 | \$ | 1,258,223 | \$ | 116,695 | \$ | 1,374,918 |
| 2011 | \$ | 3,793,357 | \$ | - | \$ | 30,485 | \$ | 30,485 | \$ | - | \$ | 449,142 | \$ | 449,142 |
| 2012 | \$ | $(6,023)$ | \$ | - | \$ | 33,136 | \$ | 33,136 | \$ | - | \$ | 654,849 | \$ | 654,849 |
| Subtotal | \$ | 7,288,184 | \$ | 325,914 | \$ | 87,768 | \$ | 413,682 | \$ | 1,258,223 | \$ | 1,220,686 | \$ | 2,478,909 |
| 2013 | \$ | - | \$ | - | \$ | 72,065 | \$ | 72,065 | \$ | - | \$ | 644,804 | \$ | 644,804 |
| Total | \$ | 7,288,184 | \$ | 325,914 | \$ | 159,833 | \$ | 485,747 | \$ | 1,258,223 | \$ | 1,865,490 | \$ | 3,123,713 |

### 2.5.3 Smart Meter Capital Expenditures Requested for Approval

The incremental minimum functionality costs from 2010 to 2012 were $\$ 5,910,604$ for the Residential and General Service $<50 \mathrm{~kW}$ classes and the costs beyond minimum functionality were $\$ 1,377,579$, see Table 5 , below. The costs beyond minimum functionality were for:

- Outage notification capabilities of Smart Meters for the Residential and General Service $<50 \mathrm{~kW}$ class customers, and
- Smart Meters for the General Service 50 to 699 kW customer class.

Table 5: Capital Expenditures by OEB Category

|  |  |  | 2010 |  | 2011 |  | 2012 | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Actual |  | Actual |  | Projection |  |  |  |
| Minimum Functionality Costs |  |  |  |  |  |  |  |  |  |
| Smart Meters |  | \$ | 2,328,072 |  | 377,950 |  | $(239,602)$ | \$ | 2,466,419 |
| Installation Costs |  | \$ | 950,849 |  | 868,552 | \$ | 305,750 | \$ | 2,125,152 |
| Subtotal |  | \$ | 3,278,921 | \$ | 1,246,502 | \$ | 66,147 | \$ | 4,591,571 |
| Collectors |  | \$ | 49,018 | \$ | 31,780 | \$ | 8,708 | \$ | 89,506 |
| Repeators |  | \$ | - | \$ | 4,881 | \$ | 19,710 | \$ | 24,590 |
| Computer Software |  | \$ | - | \$ | 1,339,603 |  | $(147,666)$ | \$ | 1,191,937 |
| AMI Capital |  | \$ | 9,875 | \$ | 3,125 | \$ | - | \$ | 13,000 |
| Total Minimum Functionality Costs | A | \$ | 3,337,814 | \$ | 2,625,891 | \$ | $(53,100)$ | \$ | 5,910,604 |
|  |  |  |  |  |  |  |  |  |  |
| Cost Beyond Minimum Functionality |  |  |  |  |  |  |  |  |  |
| Costs related to technical capabilities or related communications infrastructure |  | \$ | 142,845 | \$ | 64,923 | \$ | - | \$ | 207,768 |
| General Service 50 to 699 kW |  | \$ | 20,191 | \$ | 1,102,544 | \$ | 47,077 | \$ | 1,169,812 |
| Total Cost Beyond Minimum Functionality | B | \$ | 163,036 | \$ | 1,167,467 | \$ | 47,077 | \$ | 1,377,579 |
|  |  |  |  |  |  |  |  |  |  |
| Total Smart Meter Costs | C= A+B | \$ | 3,500,850 | \$ | 3,793,357 | \$ | $(6,023)$ | \$ | 7,288,184 |

The Capital Expenditures for the Residential and General Service < 50 kW classes totaled $\$ 6,118,372$ comprised of the minimum functionality costs of $\$ 5,910,604$ plus $\$ 207,768$ for costs related to additional Smart Meter technical capabilities pertaining to outage notification. In addition, the Capital Expenditures pertaining to the General Service 50 to 699 kW customer class were $\$ 1,169,812$. See Table 5 above, and Tables 7 and 8 below.

## Capital Expenditure Variance Analysis Actual vs. Forecast

In HOBNI's 2011 cost of service rate application HOBNI provided a forecast of the remaining Capital Expenditures to complete its Smart Meter program. Table 6, below, summarizes the total actual costs vs. the forecast costs ${ }^{4}$.

Table 6: Actual vs. Forecast Capital Costs - 2010 to 2012


The Smart Meter Capital Expenditures forecast for the period from January 1, 2010 to December 31, 2011 were $\$ 5,679,675$, per Table 6, above. HOBNI planned to complete its Smart Meter Program for the Residential and General Service < 50 kW customer classes by the end of 2010; however due to some communication, and connectivity issues, the program was not completely finalized for these two customers classes until December 31, 2011. HOBNI commenced billing Time of Use Rates using Smart Meter Data for these two classes of customers based on June 2011 consumption. The forecasted number of Smart Meter

[^4]installations for the Residential and General Service < 50 kW classes to the end of 2010 was expected to be 7,405 and the actual number of Smart Meter installations to December 31, 2010 were 7,538 . In addition, a further 3,426 Smart Meters were installed in 2011 which were not forecasted. The total actual Smart Meters installed in 2010 and 2011 for these classes was 10,964 . The variance of 3,559 is attributable to an additional year of Smart Meter installations required to service new customers during this time period associated with the extension of HOBNI's Smart Meter program to the end of 2011.

HOBNI also planned to install 985 Smart Meters in the General Service > 50 to 699 kW customer class in 2011. HOBNI actually installed a total of 977 Smart Meters for this class, 16 in 2010, 904 in 2011 and 57 in 2012. HOBNI expects to resolve the communication issues in 2013. Further AMI software and firmware upgrades are still required.

HOBNI forecasted an average capital cost of $\$ 676.96$ per meter for 2010 and 2011, whereas the actual capital cost per meter was $\$ 610.35$. Actual capital costs were $\$ 7,288,184$ and forecast capital costs were $\$ 5,679,675$ with a resulting unfavourable capital cost variance of $\$ 1,608,508$. This variance is composed of a favourable unit cost variance of $\$ 795,369$ [ $(\sim$ \$610.35 - $\sim \$ 676.96) \times 11,941]$ and an unfavorable volume variance of $\$ 2,403,877$ [(11,941 $8,390) X \sim \$ 676.96]$. The higher level of spending during the period is attributable to the higher than forecasted number of Smart Meters installed in 2011 due to new customer connections.

In addition, the 2010 and 2011 forecast average unit capital cost per smart meter of \$676.96 was expected to be significantly higher than the average unit cost previously approved of $\$ 186.56^{5}$ for meters installed up to the end of 2009. As part of HOBNIs Smart Meter roll out the lower cost single phase meters were installed first from 2006 to 2009 for the Residential and General Service < 50 kW customer classes; then from 2010 to 2012 the balance of the lower cost Smart Meters were installed with a larger proportion of the more expensive poly phase meters installed for both the General Service < 50 kW and General Service 50 to 699 kW customer classes. As expected, the actual average unit cost of $\$ 610.35$ per meter installed from 2010 to 2012 was higher than the average actual unit cost for Smart Meters installed to the end of 2009 due to installation of the more expensive poly phase meters for the period. However, the actual unit cost per Smart Meter was a little lower than forecasted.

[^5]
### 2.5.4 Smart Meter Depreciation Requested for Approval

The Smart Meter Depreciation Expenses requested for approval for the period from January 1, 2010 to December 31, 2013 is $\$ 3,123,713$. See Tables 7 and 8 Below. This depreciation expense is composed of the following:

1. 2010 Stub Year Depreciation Expenses for 2010 of $\$ 1,258,223$ related to Smart Meter Capital Expenditures for the Residential and General Service < 50 kW Classes for the period May 1, 2007 to December 31, 2009.

In its 2011 cost of service rate application HOBNI requested and received approval for recovery of Smart Meter Capital up to 2009, Smart Meter OM\&A Expenditures and revenue requirement for years up to 2009. In addition, the following Smart Meter costs were approved to be included in HOBNI's 2011 rebasing year:

- Smart Meter Capital balances at December 31, 2009,
- Smart Meter Depreciation Expenses pertaining to the smart meters installed to the end of 2009, and
- Smart Meter OM\&A Expenditures pertaining to the Smart Meters installed to the end of 2009.

HOBNI did not request nor receive approval to recover Smart Meter OM\&A Expenditures, Depreciation Expenses, and revenue requirement for 2010 for Smart Meter investments to December 31, 2009 as HOBNI did not have audited Financial Statements for 2010 when it filed its rate application. ${ }^{6}$
2. Depreciation Expenses for 2010 to 2012 of $\$ 1,220,686$ for Smart Meter Capital Expenditures incurred in the same time period, including:

[^6]a) Depreciation Expense for the Residential and General Service < 50 kW classes totalling \$1,105,497
b) Depreciation Expense for the General Service 50 to 699 kW class totaling \$115,189
3. Depreciation Expenses for 2013 of $\$ 644,804$ related to Smart Meter Capital Expenditures for 2010 to 2012, including:
a) Depreciation Expense for the Residential and General Service < 50 kW classes totalling \$566,816
b) Depreciation Expense for the General Service 50 to 699 kW class totaling \$77,987.

Table 7: Residential and General Service < 50 kW Class Costs

| Year | Total Capital Expenditures |  | OM\&A <br> Expenditures - <br> Stub Year |  | OM\&A <br> Expenditures - <br> Non-Stub |  | Total OM\&A Expenditures |  | Depreciation Expenses Stub Year |  | Depreciation Expenses - Non Stub |  | Total <br> Depreciation <br> Expenses |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 | \$ | 3,480,659 | \$ | 325,914 | \$ | 24,096 | \$ | 350,010 | \$ | 1,258,223 | \$ | 116,022 | \$ | 1,374,244 |
| 2011 | \$ | 2,690,813 | \$ | - | \$ | 28,125 | \$ | 28,125 | \$ | - | \$ | 411,045 | \$ | 411,045 |
| 2012 | \$ | $(53,100)$ | \$ | - | \$ | 30,425 | \$ | 30,425 | \$ | - | \$ | 578,431 | \$ | 578,431 |
| Subtotal | \$ | 6,118,372 | \$ | 325,914 | \$ | 82,646 | \$ | 408,560 | \$ | 1,258,223 | \$ | 1,105,497 | \$ | 2,363,720 |
| 2013 | \$ | - | \$ | - | \$ | 66,169 | \$ | 66,169 | \$ | - | \$ | 566,816 | \$ | 566,816 |
| Total | \$ | 6,118,372 | \$ | 325,914 | \$ | 148,815 | \$ | 474,729 | \$ | 1,258,223 | \$ | 1,672,314 | \$ | 2,930,536 |

Table 8: General Service 50 to 699 kW Class Costs

| Year | Total Capital Expenditures |  | OM\&A <br> Expenditures - <br> Stub Year |  | OM\&A <br> Expenditures - <br> Non-Stub |  | Total OM\&A Expenditures |  | Depreciation Expenses Stub Year |  | Depreciation <br> Expenses - Non <br> Stub |  | Total Depreciation Expenses |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 | \$ | 20,191 | \$ | - | \$ | 51 | \$ | 51 | \$ | - | \$ | 673 | \$ | 673 |
| 2011 | \$ | 1,102,544 | \$ | - | \$ | 2,360 | \$ | 2,360 | \$ | - | \$ | 38,098 | \$ | 38,098 |
| 2012 | \$ | 47,077 | \$ | - | \$ | 2,711 | \$ | 2,711 | \$ | - | \$ | 76,418 | \$ | 76,418 |
| Subtotal | \$ | 1,169,812 | \$ | - | \$ | 5,122 | \$ | 5,122 | \$ | - | \$ | 115,189 | \$ | 115,189 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2013 | \$ | - | \$ | - | \$ | 5,896 | \$ | 5,896 | \$ | - | \$ | 77,987 | \$ | 77,987 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | \$ | 1,169,812 | \$ | - | \$ | 11,019 | \$ | 11,019 | \$ | - | \$ | 193,176 | \$ | 193,176 |

### 2.5.5 Smart Meter OM\&A Requested for Approval

Table 9, below, shows the OM\&A Expenditures for 2010 of $\$ 350,061$; these costs are made up of $\$ 325,914$ for the Residential and General Service < 50 kW classes, pertaining to the 2010 Stub Year, (see Table 4 above) and 2010 OM\&A Expenditures of $\$ 24,147$ related to Smart Meters Installed in 2010.

Starting 2011 HOBNI included only a portion of the Smart Meter OM\&A costs incurred in Account 1555, (the Smart Meter Capital Variance Account). Since HOBNI included Smart Meter capital expenditures to the end of 2009 in its 2011 rate base, it also included the portion of OM\&A Expenditures that related to the number of Smart Meters installed to the end of 2009 in its rebasing year OM\&A as well.

The Smart Meter OM\&A costs that HOBNI included for recovery for 2011 and 2012 only included the incremental portion of OM\&A relating to the meters installed since the beginning of 2010. The OM\&A Expenditures were $\$ 30,485$ and $\$ 33,136$ for 2011 and 2012, respectively. The total Smart Meter OM\&A Expenditures for 2011 and 2012 were prorated between OM\&A charged to account 5065 (Meter Maintenance) and Smart Meter OM\&A charged to account 1556 based on the number of meters expected to be installed during the respective years as a function of the total Smart Meters expected to be installed life to date to the end of the respective periods. The proration factors used for 2011 and 2012 were $6.9 \%$ and $8.1 \%$ respectively.

Table 9: OM\&A Expenditures - 2010 to 2012

| Expenditure Description | 2010 |  | 2011 |  | 2012 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Actual |  | Actual |  | Projection |  |  |  |
| SM Operating Expenses | \$ | 305,727 | \$ | 21,886 | \$ | - | \$ | 327,613 |
| SM Maintenance Expenses | \$ | 23,944 | \$ | 914 | \$ | - | \$ | 24,858 |
| SM Administration Expenses | \$ | 3,470 | \$ | 92 | \$ | - | \$ | 3,561 |
| SM Other Expenses | \$ | 210 | \$ | 14 | \$ | - | \$ | 224 |
| SM Maintenance Labour Expenses (Contract) | \$ | 126 | \$ | - | \$ | - | \$ | 126 |
| Meter Base Repairs (In-house) | \$ | - | \$ | - | \$ | - | \$ | - |
| Meter Base Repairs (Contract) | \$ | - | \$ | - | \$ | - | \$ | - |
| Meter Base Repairs Material | \$ | 16,375 | \$ | 216 | \$ | - | \$ | 16,591 |
| SM Disposal Expenses | \$ | 210 | \$ | (14) | \$ | - | \$ | 196 |
| Communication Costs Meter Reading | \$ | - | \$ | 1,205 | \$ | 3,988 | \$ | 5,193 |
| Trilliant Software Update Meter Reading | \$ | - | \$ | 4,604 | \$ | 3,071 | \$ | 7,675 |
| Trilliant Helpdesk Meter Reading | \$ | - | \$ | 1,567 | \$ | 1,046 | \$ | 2,613 |
| HONI OPERATIONS COSTS METER RE | \$ | - | \$ | - | \$ | 10,469 | \$ | 10,469 |
| COMMUNICATION COSTS METER READ | \$ | - | \$ | - | \$ | 14,563 | \$ | 14,563 |
| Total | \$ | 350,061 | \$ | 30,485 | \$ | 33,136 | \$ | 413,682 |

The Smart Meter OM\&A Expenditures requested for approval for the period from January 1, 2010 to December 31, 2013 is $\$ 485,747$. See Tables 7 and 8 Above. These OM\&A Expenditures are composed of the following:

1. 2010 Stub Year OM\&A Expenditures for 2010 of $\$ 325,914$ for the Residential and General Service < 50 kW Classes related to Smart Meters installed during the period May 1, 2007 to December 31, 2009.
2. OM\&A Expenditures for 2010 to 2012 of $\$ 87,768$ for Smart Meters installed for the same time period, including:
c) OM\&A Expenditures for the Residential and General Service < 50 kW classes totalling \$82,646, and
d) OM\&A Expenditures for the General Service 50 to 699 kW class totaling \$5,122
3. OM\&A Expenditures for 2013 of $\$ 72,065$ related to Smart Meters installed from 2010 to 2012, including:
c) OM\&A Expenditures for the Residential and General Service < 50 kW classes totalling \$66,169
d) OM\&A Expenditures for the General Service 50 to 699 kW class totaling \$5,896.

## OM\&A Expenditure Variance Analysis Actual vs. Forecast

In HOBNI's 2011 cost of service rate application HOBNI provided a forecast of the remaining OM\&A Expenditures to complete its Smart Meter program. Table 10, below, summarizes the total actual costs vs. the forecast costs ${ }^{7}$.

The Smart Meter OM\&A Expenditures forecast for the period from January 1, 2010 to December 31, 2011 were $\$ 979,869$, per Table 10, below. HOBNI expected to spend $\$ 116.79$ per meter during the period, but spent considerably less at $\$ 34.64$ per meter. OM\&A Expenditures are lower mainly due to maintenance, administration and meter base repairs costs being lower than expected.

Table 10: Actual vs. Estimated OM\&A Cost for 2010 to 2012

| Expenditure Description | Actual |  | Forecast |  | Over (under) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SM Operating Expenses | \$ | 327,613 | \$ | 236,669 | \$ | 90,944 |
| SM Maintenance Expenses | \$ | 24,858 | \$ | 333,904 | \$ | $(309,046)$ |
| SM Administration Expenses | \$ | 3,561 | \$ | 190,634 | \$ | $(187,073)$ |
| SM Other Expenses | \$ | 224 |  |  | \$ | 224 |
| SM Maintenance Labour Expenses (Contract) | \$ | 126 |  |  | \$ | 126 |
| Meter Base Repairs (In-house) | \$ | - | \$ | 136,000 | \$ | $(136,000)$ |
| Meter Base Repairs (Contract) | \$ | - |  |  | \$ | - |
| Meter Base Repairs Material | \$ | 16,591 | \$ | 35,000 | \$ | $(18,409)$ |
| SM Disposal Expenses | \$ | 196 |  |  | \$ | 196 |
| Communication Costs Meter Reading | \$ | 5,193 |  |  | \$ | 5,193 |
| Trilliant Software Update Meter Reading | \$ | 7,675 |  |  | \$ | 7,675 |
| Trilliant Helpdesk Meter Reading | \$ | 2,613 |  |  | \$ | 2,613 |
| HONI OPERATIONS COSTS METER RE | \$ | 10,469 |  |  | \$ | 10,469 |
| COMMUNICATION COSTS METER READ | \$ | 14,563 |  |  | \$ | 14,563 |
| Smart Metering Entity |  |  | \$ | 47,662 | \$ | $(47,662)$ |
| Total | \$ | 413,682 | \$ | 979,869 | \$ | $(566,187)$ |
|  |  |  |  |  |  |  |
| Number of Smart Meters Installed |  | 11,941 |  | 8,390 |  | 3,551 |
| OM\&A Cost per Meter Installed | \$ | 34.64 | \$ | 116.79 | \$ | (82.15) |
|  |  |  |  |  |  |  |

[^7]
### 2.5.6 Annual Expenditure Analysis

## 2010 Expenditures

## Total Capital Expenditures - \$3,500,849.61 Reference Table 4

OM\&A Expenditures - \$350,061.36 Reference Table 4

In 2010 HOBNI installed 7,554 Smart Meters, 3,221 for the Residential Class, 4,317 for the General Service < 50 kW Class, and 16 for the General Service 50 to 699 kW Class. Also, in 2010 HOBNI commenced installing the more complex higher cost poly-phase meters for the two general service classes of customers.

HOBNI continued ongoing configuration work to deal with Smart Meter connectivity and communications issues within the AMI system. Trees and buildings caused signal obstructions for all classes of customers. HOBNI was dealing with these obstructions by rerouting communications by installing more collectors and repeaters so data would flow from source to destination. In addition HOBNI changed out defective meters, performed system upgrades and meter firmware upgrades to rectify matters; however, the system still was not stable by the end of the year and further work was needed to resolve.

HOBNI continued its work with the MDM/R so it would be ready to implement Time of Use rates according to schedule in 2011. Also, the MDM/R underwent upgrades which required changes to HOBNI's systems.

## 2011 Expenditures

Total Capital Expenditures - $\$ 3,793,357.39$ Reference Table 4
Total OM\&A Expenditures - \$30,484.61 Reference Table 4

In 2011 HOBNI installed 4,330 Smart Meters, 3,107 for the Residential Class, 319 for the General Service < 50 kW Class, and 904 for the General Service 50 to 699 kW Class. So pertaining to the Residential and General Service < 50 kW classes of customers, in 2011, HOBNI had completed its Smart Meter program. In addition, HOBNI installed further higher cost
polyphase meters for the two general service classes of customers, and installed the majority of these higher cost polyphase meters on the General Service 50 to 699 kW class for customers less than 200kW in 2011

HOBNI continued ongoing firmware and hardware work to help resolve various Smart Meter connectivity and communications issues within the AMI system. Most Smart Meter communications issues for the Residential and General Service < 50 kW class customers were resolved. However, some persisting problems still existed at the end of 2011 with system stability issues for some small pockets of Smart Meters. In addition, there were ongoing data retrieval issues associated with the General Service 50 to 699 kW polyphase Smart Meters. HOBNI continues to work with its vendor Trilliant to help resolve these issues. In addition, HOBNI continued working on signal obstructions issues by installing more collectors and repeaters. HOBNI also performed additional software upgrades and meter firmware upgrades to rectify these issues.

In July HOBNI commenced billing customers on Time of Use rates for June usage for the majority of low volume Smart Metered customers with the exceptions of a few small pockets of Smart Metered customers.

## 2012 Expenditures

Total Capital Expenditures - $(\$ 6,023.29)$ Reference Table 4
Total OM\&A Expenditures - \$33,136.47 Reference Table 4

In 2012 HOBNI completed the balance of its Smart Meter program and installed the remaining 57 Smart Meters for the General Service 50 to 699 kW Class for customers with demands less than 200 kW . The Capital expenditures of $(\$ 6,023.47)$ is composed of a credit of $(\$ 53,100.32)$ for the Residential and General Service < 50 kW classes and a debit of $\$ 47,077$ for the General Service 50 to 699 kW class. The credit of ( $\$ 53,100.32$ ) is attributable to closing accrual adjustments to finalize program expenditures for the respective customer classes.

By October 31, 2012 HOBNI had ongoing Smart Meter communications issues associated with many of the General Service 50 to 699 kW class customers with customers with demands less
than 200 kW . HOBNI continues to work with its vendor Trilliant to resolve these issues. Trilliant plans to address these issues with its next software version release HOBNI plans to resolve the balance of communications issues in early 2013.

### 2.5.7 Smart Meter Capital \& OM\&A Life to Date Expenditures per Meter Installed

## Residential and General Service < 50 kW Classes

HOBNI's cumulative unit cost per Smart Meter to the end of 2009 was $\$ 169.86$, after reallocating computer software capital to all periods the smart meters were installed, see Table 11. In addition, the adjusted unit cost per Smart Meter in the current disposition period is $\$ 494.26$. The higher unit cost per Smart Meter in the current disposition period was attributable to the high cost of installation of polyphase meters in the General Service < 50 Class. In 2010 and 2011, of the 10,964 Smart Meters installed, 4,636 of the meters installed were for the General Service < 50 kW Class and many of the meters installed (i.e. for the General Service < 50 kW class) were high cost polyphase Smart Meters. The high cost polyphase meters caused a higher overall average.

Table 11: Comparative Unit Cost of Smart Meters - Residential and General Service < 50 kW

|  | Adjusted 2007 \& 2011 Dispositions |  | 2013 Disposition |  | LTD Disposition |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Capital Expenditure | \$ | 19,813,338 | \$ | 6,118,372 | \$ | 25,931,710 |
| Computer Software Capital * | \$ | 1,107,909 | \$ | $(1,107,909)$ | \$ | - |
| OM\&A Expenditure | \$ | 343,345 | \$ | 408,560 | \$ | 751,905 |
| Subtotal | \$ | 21,264,592 | \$ | 5,419,023 | \$ | 26,683,615 |
|  |  |  |  |  |  |  |
| Smart Meters Installed |  | 125,192 |  | 10,964 |  | 136,156 |
|  |  |  |  |  |  |  |
| Capital Expenditures Per Smart Meter | \$ | 167.11 | \$ | 456.99 | \$ | 190.46 |
| OM\&A Expenditures Per Smart Meter | \$ | 2.74 | \$ | 37.26 | \$ | 5.52 |
| Total Expenditures per Smart Meter | \$ | 169.86 | \$ | 494.26 | \$ | 195.98 |

[^8]Table 12 below provides a comparison of the LTD actual unit cost of Smart Meters for the Residential and General Service < 50 kW classes vs. the forecasted unit cost. The variance of $\$ 1,070,909.75$ is composed of an unfavourable unit cost variance of \$383,446 [( $\sim 195.98$ ~\$193.16) X 136,156] and an unfavorable volume variance of \$687,463.67 [(136,156-132,597) X ~\$193.16]. The actual cost of $\$ 195.98$ per Smart Meter was $\$ 2.82$ or $1.5 \%$ higher than the forecast cost of $\$ 193.16$ mainly due to Computer Software Capital costs as impacted by the implementation matters described in the Actual Expenditure analysis for 2010 to 2012.

Table 12: Life to Date Cost per Smart Meter - Residential \& General Service < 50 Classes

| Description |  | Actual |  | Forecast | Over/(Under) |  | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Capital Expenditures | \$ | 25,931,710 | \$ | 24,393,013 | \$ | 1,538,697 | 6.3\% |
| Total OM\&A Expenditures | \$ | 751,905 | \$ | 1,219,692 | \$ | $(467,787)$ | -38.4\% |
| Total Expenditures | \$ | 26,683,616 | \$ | 25,612,706 | \$ | 1,070,910 | 4.2\% |
| Number of Smart Meters Installed |  | 136,156 |  | 132,597 |  | 3,559 | 2.7\% |
| Capital Expenditures per Smart Meter | \$ | 190.46 | \$ | 183.96 | \$ | 6.49 | 3.5\% |
| OM\&A Expenditures per Smart Meter | \$ | 5.52 | \$ | 9.20 | \$ | (3.68) | -40.0\% |
| Total Expenditures per Smart Meter | \$ | 195.98 | \$ | 193.16 | \$ | 2.82 | 1.5\% |

HOBNI's average installed capital and OM\&A investment per meter is slightly less than the industry sector average capital and OM\&A investment as derived from the "Sector Market Meter Audit Review Report" issued by the Regulatory Audit and Accounting group of the Board on March 31, 2010. Table 13 below compares HOBNI's average cost per meter with the sector.

Table 13: Comparison of average cost per Smart Meter with Industry Sector

| Description |  | OEB Report - <br> March 31, 2010 |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Capital Expenditures | $\$$ | $25,931,710$ | $\$$ | $567,409,211$ |
| OM\&A Expenditures | $\$$ | 751,905 | $\$$ | $44,963,335$ |
| Total Investment | $\$$ | $26,683,616$ | $\$$ | $612,372,546$ |
| Total Smart Meters Installed |  | 136,156 | $3,053,931$ |  |
| Average Cost per Meter | $\$$ | 195.98 | $\$$ | 200.52 |

Note: Data and average cost information for Residential and General Service < 50 kW classes

## General Service 50 to 699 kW

This class of customers required the costly polyphase Smart Meter installations. The unit cost per Smart Meter is \$1,202.59, see Table 14. In HOBNI's 2011 Smart Meter disposition application with its cost of service rate application, HOBNI forecast a cost per meter of $\$ 1,221.85^{8}$. The cost per meter was $\$ 19.26$ or $1.6 \%$ lower than forecasted.

Table 14: Unit Price of Smart Meters for General Service 50 to 699 kW class

|  | Actual |  | Forecast |  | Over (under) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Capital Expenditure | \$ | 1,169,812 | \$ | 1,100,000 | \$ | 69,812 |
| OM\&A Expenditure | \$ | 5,122 | \$ | 103,522 | \$ | $(98,400)$ |
| Subtotal | \$ | 1,174,934 | \$ | 1,203,522 | \$ | $(28,588)$ |
|  |  |  |  |  |  |  |
| Smart Meters Installed |  | 977 |  | 985 |  | (8) |
|  |  |  |  |  |  |  |
| Capital Expenditures Per Smart Meter | \$ | 1,197.35 | \$ | 1,116.75 | \$ | 80.60 |
| OM\&A Expenditures Per Smart Meter | \$ | 5.24 | \$ | 105.10 | \$ | (99.86) |
| Total Expenditures per Smart Meter | \$ | 1,202.59 | \$ | 1,221.85 | \$ | (19.26) |
|  |  |  |  |  |  |  |

### 2.5.8 Reconciliation of Smart Meter Amounts Requested vs. Reported in 2011 Regulatory Trial Balance

HOBNI provides the following reconciliation of the amounts submitted in this application as at December 31, 2011 as compared to the amounts submitted in its last annual RRR filing to the Board. In HOBNI's April 2012 RRR filing of its 2011 Regulatory Trial Balance HOBNI submitted the balances of accounts 1555 and 1556 to be $\$ 4,506,972.13$ and $\$ 631,845.84$, respectively. In this application, the balances of accounts 1555 and 1556 at December 31, 2011 are presented as $\$ 3,551,819.70$ and $\$ 2,239,101.07$, respectively, see Table 15 below:

[^9]Table 15: Reconciliations of 2011 Submission vs. 2011 Trial Balance RRR Reported
Smart Meter Capital and Recovery Variance Account 1555

| Description | 2011 Balance Per Regulatory Trial Balance | 2011 Balance As <br> Filed with 2013 <br> Disposition | Adjustment | Table |
| :---: | :---: | :---: | :---: | :---: |
| Smart Meter Funding Adders | \$ (3,903,574.90) | \$ (3,681,949.29) | \$ 221,625.61 | A |
| Capital Additions | \$ 7,224,635.45 | \$ 7,294,207.00 | \$ 69,571.55 | B |
| Accumulated Depreciation | \$ $(563,518.03)$ | \$ (1,824,059.62) | \$ (1,260,541.59) | B |
| Carrying Charges | \$ 58,915.79 | \$ 40,774.78 | \$ $(18,141.01)$ |  |
| Stranded Meter Costs | \$ 2,527,580.22 | \$ 2,527,580.22 | \$ |  |
| Recovery of Stranded Meters | \$ $(837,066.40)$ | \$ $(837,066.40)$ | \$ |  |
| Carrying Charges | \$ | \$ 32,333.01 | \$ 32,333.01 |  |
| Total | \$ 4,506,972.13 | \$ 3,551,819.70 | \$ $(955,152.43)$ |  |

Smart Meter OM\&A Variance Account 1556

| Description | 2011 Balance Per <br> Regulatory Trial <br> Balance | 2011 Balance As <br> Filed with 2013 <br> Disposition | Adjustment | Table |  |  |
| :--- | :--- | ---: | :--- | :--- | :---: | :---: |
| OM\&A Expenses | $\$$ | $54,631.93$ | $\$$ | $380,545.96$ | $\$$ | $325,914.03$ |
| Cepreciation Expense | $\$$ | $563,518.03$ | $\$$ | $1,824,059.62$ | $\$$ | $1,260,541.59$ |
| Carrying Charges | $\$$ | $13,695.88$ | $\$$ | $34,495.49$ | $\$$ | $20,799.61$ |
| Total | $\$$ | $631,845.84$ | $\$$ | $2,239,101.07$ | $\$$ | $1,607,255.23$ |

As part of HOBNI's work preparing this rate application HOBNI conducted a review of the Smart Meter Variance Accounts being requested for disposition and determined that amendments were required. The amendments affect the current fiscal period and previously reported periods as well. The amendments however, do not relate to RRR data that was accepted and relied upon by the Board in a previous Board proceeding.

HOBNI has adjusted the balances of its Smart Meter Variance accounts retroactively from January 1, 2010 to September 30, 2012 with respect to the following:

1) SMFA Adjustment,
2) Smart Meter Capital Adjustment,
3) Depreciation of Smart Meter Capital Adjustment,
4) 2010 Stub Year Adjustments, and
5) Carrying Charges

## 1) SMFA Adjustment:

Table 15A below shows the original SMFA collections by month and the revised amounts. The adjustments were made to reflect the amounts and timing of the billings to customers. The cumulative SMFA collected from January 1, 2010 to date has been restated. The original SMFA recorded of $\$ 3,771,965.06$ has been amended to $\$ 3,790,255.29$, for a total adjustment of $\$ 18,290.23$, see Table 15A below. The original Smart Meter Funding adder amount included in account 1555 at the end of 2011 was $\$ 3,903,574.90$ and the adjusted amount is $\$ 3,681,949.29$ for a reduction of $\$ 221,625.61$. The timing and amounts reflect the amounts collected from customers in the months collected. Also, the SMFA adjustments allow carrying charges to be calculated based on more representative cash flow timing.

| Month | Original Smart Meter Rider Collected 1555 |  | Revised Smart Meter Rider Collected 1555 |  | Difference |  | Cumulative Adjustment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan-10 | \$ | $(65,102.81)$ | \$ | $(67,693.29)$ | \$ | $(2,590.48)$ | \$ | $(2,590.48)$ |
| Feb-10 | \$ | $(124,500.47)$ | \$ | $(130,964.00)$ | \$ | $(6,463.53)$ | \$ | (9,054.01) |
| Mar-10 | \$ | $(158,063.19)$ | \$ | $(131,268.00)$ | \$ | 26,795.19 | \$ | 17,741.18 |
| Apr-10 | \$ | (104,602.31) | \$ | $(131,843.00)$ | \$ | $(27,240.69)$ | \$ | (9,499.51) |
| May-10 | \$ | $(131,559.79)$ | \$ | $(131,504.00)$ | \$ | 55.79 | \$ | (9,443.72) |
| Jun-10 | \$ | $(147,374.07)$ | \$ | $(132,034.00)$ | \$ | 15,340.07 | \$ | 5,896.35 |
| Jul-10 | \$ | $(131,762.10)$ | \$ | $(131,845.00)$ | \$ | (82.90) | \$ | 5,813.45 |
| Aug-10 | \$ | $(132,029.61)$ | \$ | $(132,232.00)$ | \$ | (202.39) | \$ | 5,611.06 |
| Sep-10 | \$ | $(132,599.37)$ | \$ | $(132,660.00)$ | \$ | (60.63) | \$ | 5,550.43 |
| Oct-10 | \$ | $(123,441.61)$ | \$ | $(133,096.00)$ | \$ | $(9,654.39)$ | \$ | $(4,103.96)$ |
| Nov-10 | \$ | $(142,651.70)$ | \$ | $(133,405.00)$ | \$ | 9,246.70 | \$ | 5,142.74 |
| Dec-10 | \$ | $(183,079.26)$ | \$ | $(133,698.00)$ | \$ | 49,381.26 | \$ | 54,524.00 |
| Jan-11 | \$ | $(124,528.44)$ | \$ | $(134,246.00)$ | \$ | $(9,717.56)$ | \$ | 44,806.44 |
| Feb-11 | \$ | $(134,734.07)$ | \$ | $(134,336.00)$ | \$ | 398.07 | \$ | 45,204.51 |
| Mar-11 | \$ | $(141,328.74)$ | \$ | $(134,620.00)$ | \$ | 6,708.74 | \$ | 51,913.25 |
| Apr-11 | \$ | $(131,450.92)$ | \$ | $(134,815.00)$ | \$ | $(3,364.08)$ | \$ | 48,549.17 |
| May-11 | \$ | (240,071.69) | \$ | $(169,657.00)$ | \$ | 70,414.69 | \$ | 118,963.86 |
| Jun-11 | \$ | $(388,866.60)$ | \$ | $(206,294.00)$ | \$ | 182,572.60 | \$ | 301,536.46 |
| Jul-11 | \$ | $(330,915.65)$ | \$ | $(206,234.00)$ | \$ | 124,681.65 | \$ | 426,218.11 |
| Aug-11 | \$ | (340,351.77) | \$ | $(206,709.00)$ | \$ | 133,642.77 | \$ | 559,860.88 |
| Sep-11 | \$ | $(276,559.67)$ | \$ | $(207,421.00)$ | \$ | 69,138.67 | \$ | 628,999.55 |
| Oct-11 | \$ | $(353,719.71)$ | \$ | $(207,863.00)$ | \$ | 145,856.71 | \$ | 774,856.26 |
| Nov-11 | \$ | $(314,176.54)$ | \$ | $(208,546.00)$ | \$ | 105,630.54 | \$ | 880,486.80 |
| Dec-11 | \$ | 449,895.19 | \$ | $(208,966.00)$ | \$ | $(658,861.19)$ | \$ | 221,625.61 |
| Jan-12 | \$ | $(26,961.41)$ | \$ | $(108,231.00)$ | \$ | (81,269.59) | \$ | 140,356.02 |
| Feb-12 | \$ | $(47,613.43)$ | \$ | (66.00) | \$ | 47,547.43 | \$ | 187,903.45 |
| Mar-12 | \$ | 206,022.03 | \$ | 12.00 | \$ | $(206,010.03)$ | \$ | $(18,106.58)$ |
| Apr-12 | \$ | 10.15 | \$ | (19.00) | \$ | (29.15) | \$ | $(18,135.73)$ |
| May-12 | \$ | (28.00) | \$ | (2.00) | \$ | 26.00 | \$ | $(18,109.73)$ |
| Jun-12 | \$ | 180.50 | \$ | 10.00 | \$ | (170.50) | \$ | $(18,280.23)$ |
| Jul-12 | \$ | - | \$ | (10.00) | \$ | (10.00) | \$ | $(18,290.23)$ |
| Aug-12 | \$ | - | \$ | - | \$ | - | \$ | $(18,290.23)$ |
| Sep-12 | \$ | - | \$ | - | \$ | - | \$ | $(18,290.23)$ |
| Oct-12 | \$ | - | \$ | - | \$ | - | \$ | $(18,290.23)$ |
| Nov-12 | \$ | - | \$ | - | \$ | - | \$ | $(18,290.23)$ |
| Dec-12 | \$ | - | \$ | - | \$ | - | \$ | (18,290.23) |
| Total | \$ | (3,771,965.06) | \$ | (3,790,255.29) | \$ | $(18,290.23)$ |  |  |

## 2) Smart Meter Capital Adjustment:

The August 2011 Smart Meter Capital Expenditures were increased by \$69,571.55 adjusting for a duplicate entry made pertaining to the Board's decision on HOBNI's interim 2011 Smart Meter disposition. This adjustment impacts Depreciation for 2011 and 2012 as well, see Table 15B and 3) below for this adjustment.

## 3) Depreciation of Smart Meter Capital Adjustment:

The Depreciation Expense Adjustment relating to the Capital Expenditure adjustment in 2) above affects accounts 1555 and 1556, per Table 15B below, as follows:
a. Account 1556 was adjusted for $\$ 2,319.05$ pertaining to the Depreciation on the Smart Meter Capital adjustment in 2), above, and
b. Account 1555 was adjusted for ( $\$ 2,319.05$ ), for the corresponding amount of Accumulated Depreciation.

## 4) $\mathbf{2 0 1 0}$ Stub Year Adjustments:

2010 Stub Year adjustments were made to accounts 1555 and 1556 for Depreciation Expenses and OM\&A Expenditures, per Tables 15B \& 15C below, as follows:
a. Account 1556 was adjusted for $\$ 1,258,222.53$ pertaining to the 2010 Stub Year Depreciation,
b. Account 1555 was adjusted for ( $\$ 1,258,222.53$ ), for the corresponding amount of Accumulated Depreciation, for the 2010 Stub Year, and
c. Account 1556 was adjusted for $\$ 325,914.03$ for 2010 Stub Year OM\&A Expenditures.

## 5) Carrying Charges:

Carrying charges for account 1555 (for components other than stranded meters) were updated to the end of 2011 by ( $\$ 18,141.01$ ) (see Table 15 above) and the carrying charges pertaining to stranded meters were also adjusted by $\$ 32,333.01$. Originally HOBNI was not applying carrying charges to the stranded meter sub account at all. In addition, the carrying charges for account 1556 were adjusted by $\$ 20,799.61$, due to the amendments to the principal components of the account (see Table 15 above).

| Date |  | apital <br> stment * | Accumulated Capital ** |  | Monthly Depreciation |  | Totals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Asset Life |  |  |  |  |  | 15 |  |
| Dec-09 |  |  | \$ | 18,873,337.99 | \$ | - |  |
| Jan-10 | \$ | - | \$ | 18,873,337.99 | \$ | $(104,851.88)$ |  |
| Feb-10 | \$ | - | \$ | 18,873,337.99 | \$ | $(104,851.88)$ |  |
| Mar-10 | \$ | - | \$ | 18,873,337.99 | \$ | $(104,851.88)$ |  |
| Apr-10 | \$ | - | \$ | 18,873,337.99 | \$ | $(104,851.88)$ |  |
| May-10 | \$ | - | \$ | 18,873,337.99 | \$ | $(104,851.88)$ |  |
| Jun-10 | \$ | - | \$ | 18,873,337.99 | \$ | $(104,851.88)$ |  |
| Jul-10 | \$ | - | \$ | 18,873,337.99 | \$ | $(104,851.88)$ |  |
| Aug-10 | \$ | - | \$ | 18,873,337.99 | \$ | $(104,851.88)$ |  |
| Sep-10 | \$ | - | \$ | 18,873,337.99 | \$ | $(104,851.88)$ |  |
| Oct-10 | \$ | - | \$ | 18,873,337.99 | \$ | $(104,851.88)$ |  |
| Nov-10 | \$ | - | \$ | 18,873,337.99 | \$ | $(104,851.88)$ |  |
| Dec-10 | \$ | - | \$ | 18,873,337.99 | \$ | $(104,851.88)$ | \$ (1,258,222.53) |
| Jan-11 |  | 873,337.99) | \$ | - | \$ | - |  |
| Feb-11 | \$ | - | \$ | - | \$ | - |  |
| Mar-11 | \$ | - | \$ | - | \$ | - |  |
| Apr-11 | \$ | - | \$ | - | \$ | - |  |
| May-11 | \$ | - | \$ | - | \$ | - |  |
| Jun-11 | \$ | - | \$ | - | \$ | - |  |
| Jul-11 | \$ | - | \$ | - | \$ | - |  |
| Aug-11 | \$ | 69,571.55 | \$ | 69,571.55 | \$ | $(2,319.05)$ |  |
| Sep-11 | \$ | - | \$ | 69,571.55 | \$ | - |  |
| Oct-11 | \$ | - | \$ | 69,571.55 | \$ | - |  |
| Nov-11 | \$ | - | \$ | 69,571.55 | \$ | - |  |
| Dec-11 | \$ | - | \$ | 69,571.55 | \$ | - | \$ (2,319.05) |
| Total | \$ | - | \$ | 69,571.55 | \$ | (1,260,541.58) | \$ (1,260,541.58) |

*     - Amendment to August 2011 Capital Additions which were understated
** - Stub Year Depreciation Expense on Smart Meter Additions (from May 2007 to December 31, 2009) for 2010 only. In 2011 Smart Metering capital was transferred to rate base.

Table 15C: Smart Meter OM\&A Adjustment - Account 1556

| Month | Original Smart Meter OM\&A Expenses |  | Adjusted Smart Meter OM\&A Expenses |  | Difference |  | Cumulative Adjustment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan-10 | \$ | 19,458.15 | \$ | 19,458.15 | \$ | - | \$ | - |
| Feb-10 | \$ | 21,315.32 | \$ | 21,315.32 | \$ | - | \$ | - |
| Mar-10 | \$ | 23,875.03 | \$ | 23,875.03 | \$ | - | \$ | - |
| Apr-10 | \$ | 52,904.61 | \$ | 52,904.61 | \$ | - | \$ | - |
| May-10 | \$ | 22,666.10 | \$ | 22,666.10 | \$ | - | \$ | - |
| Jun-10 | \$ | 45,396.59 | \$ | 45,396.59 | \$ | - | \$ | - |
| Jul-10 | \$ | 36,431.17 | \$ | 36,431.17 | \$ | - | \$ | - |
| Aug-10 | \$ | 13,001.68 | \$ | 13,001.68 | \$ | - | \$ | - |
| Sep-10 | \$ | 22,011.74 | \$ | 22,011.74 | \$ | - | \$ | - |
| Oct-10 | \$ | 23,962.05 | \$ | 23,962.05 | \$ | - | \$ | - |
| Nov-10 | \$ | 22,728.93 | \$ | 22,728.93 | \$ | - | \$ | - |
| Dec-10 | \$ | 46,309.99 | \$ | 46,309.99 | \$ | - | \$ | - |
| Jan-11 | \$ | 46,223.09 | \$ | 3,188.48 | \$ | $(43,034.61)$ | \$ | $(43,034.61)$ |
| Feb-11 | \$ | 29,382.72 | \$ | 2,026.83 | \$ | $(27,355.89)$ | \$ | (70,390.50) |
| Mar-11 | \$ | 29,290.06 | \$ | 2,020.44 | \$ | $(27,269.62)$ | \$ | (97,660.12) |
| Apr-11 | \$ | 25,606.55 | \$ | 1,766.35 | \$ | (23,840.20) | \$ | $(121,500.33)$ |
| May-11 | \$ | 23,737.84 | \$ | 1,637.44 | \$ | $(22,100.40)$ | \$ | $(143,600.73)$ |
| Jun-11 | \$ | 26,125.44 | \$ | 1,802.14 | \$ | $(24,323.30)$ | \$ | $(167,924.03)$ |
| Jul-11 | \$ | 29,160.60 | \$ | 2,011.51 | \$ | $(27,149.09)$ | \$ | $(195,073.12)$ |
| Aug-11 | \$ | 27,504.29 | \$ | 1,897.25 | \$ | $(25,607.04)$ | \$ | $(220,680.16)$ |
| Sep-11 | \$ | 27,699.09 | \$ | 1,910.69 | \$ | $(25,788.40)$ | \$ | $(246,468.56)$ |
| Oct-11 | \$ | 116,491.96 | \$ | 8,035.65 | \$ | $(108,456.31)$ | \$ | $(354,924.87)$ |
| Nov-11 | \$ | 28,187.69 | \$ | 1,944.39 | \$ | $(26,243.30)$ | \$ | $(381,168.16)$ |
| Dec-11 | \$ | (704,838.76) | \$ | 2,243.44 | \$ | 707,082.20 | \$ | 325,914.03 |
| Jan-12 |  | 3,368.42 |  | 3,368.42 | \$ | - | \$ | 325,914.03 |
| Feb-12 |  | 3,293.68 |  | 3,293.68 | \$ | - | \$ | 325,914.03 |
| Mar-12 |  | 1,921.53 |  | 1,921.53 | \$ | - | \$ | 325,914.03 |
| Apr-12 |  | 2,833.56 |  | 2,833.56 | \$ | - | \$ | 325,914.03 |
| May-12 |  | 2,833.56 |  | 2,833.56 | \$ | - | \$ | 325,914.03 |
| Jun-12 |  | 2,593.59 |  | 2,593.59 | \$ | - | \$ | 325,914.03 |
| Jul-12 |  | 3,418.45 |  | 3,418.45 | \$ | - | \$ | 325,914.03 |
| Aug-12 |  | 1,914.62 |  | 1,914.62 | \$ | - | \$ | 325,914.03 |
| Sep-12 |  | 2,674.94 |  | 2,674.94 | \$ | - | \$ | 325,914.03 |
| Oct-12 |  | 2,761.37 |  | 2,761.37 | \$ | - | \$ | 325,914.03 |
| Nov-12 |  | 2,761.37 |  | 2,761.37 | \$ | - | \$ | 325,914.03 |
| Dec-12 |  | 2,761.37 |  | 2,761.37 | \$ | - | \$ | 325,914.03 |
| Total | \$ | 87,768.40 | \$ | 413,682.43 | \$ | 325,914.03 |  |  |


| Description |  | LTD 2009 |  | 2010 |  | 2011 |  | 2012 | Total Balance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Smart Meters: |  |  |  |  |  |  |  |  |  |
| Smart Meter Rate Adders Collected |  |  | \$ (1,522,242.29) |  | \$ (2,159,707.00) |  | \$ | (108,306.00) | \$ (3,790,255.29) |
| Capital Expenditures In Service |  |  | \$ 3 | ,500,849.61 |  | 3,793,357.39 | \$ | (6,023.29) | \$ 7,288,183.71 |
| Capital Expenditures - <br> Work in Process | \$ | 808,925.46 |  | 80,527.95 | \$ | (889,453.41) | \$ | - | \$ (0.00) |
| Accumulated Depreciation |  |  | \$ (1,374,917.52) |  | \$ | $(449,142.10)$ | \$ | (654,849.06) | \$ (2,478,908.68) |
| Carrying Charges | \$ | 7,217.73 | \$ | 7,917.11 | \$ | 25,639.95 | \$ | 21,804.90 | \$ 62,579.68 |
| Sub-Total | \$ | 816,143.19 |  | 692,134.86 | \$ | 320,694.83 | \$ | (747,373.45) | \$ 1,081,599.42 |
| Stranded Meters: |  |  |  |  |  |  |  |  |  |
| Stranded Meter Costs | \$ 2,340,640.97 |  | \$ 86,052.91 |  | \$ 100,886.34 |  | 41,485.90 |  | \$ 2,569,066.12 |
| Stranded Meter Rate Adder Recoveries | \$ | - | \$ - | - | \$ | $(837,066.40)$ |  | 1,355,193.06) | \$ (2,192,259.46) |
| Carrying Charges | \$ | - | \$ | - | \$ | 32,333.01 | \$ | 16,037.45 | \$ 48,370.46 |
| Sub-Total | \$ | 2,340,640.97 | \$ | 86,052.91 | \$ | $(703,847.05)$ |  | 1,297,669.71) | \$ 425,177.12 |
| Total | \$ | 3,156,784.16 | \$ | 778,187.77 | \$ | $(383,152.22)$ |  | 2,045,043.17) | \$ 1,506,776.54 |

### 2.5.9 Reconciliation of Smart Meter Variance Accounts 1555 \& 1556

The balance of account 1555 is expected to be $\$ 1,506,776.54$ by the end of December 31, 2012, per Table 16 below. HOBNI requests that the Board approve \$1,081,599.42 for disposition. HOBNI does not request the approval and disposition of the Stranded Meter related costs and recoveries of $\$ 425,177.12$ at this time as it will file for final disposition of Stranded Meters in its next cost of service rate application.

Table 16: Account 1555 - Smart Meter Capital Variance Account
$\qquad$

| Description | 2010 |  | 2011 |  | 2012 | Total Balance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Smart Meters: |  |  |  |  |  |  |
| Smart Meter OM\&A Expenses | \$ 350,061.36 | \$ | 30,484.60 | \$ | 33,136.47 | \$ 413,682.43 |
| Depreciation Expense | \$ 1,374,917.52 | \$ | 449,142.10 | \$ | 654,849.06 | \$ 2,478,908.68 |
| Carrying Charges | \$ 6,884.93 | \$ | 27,610.57 | \$ | 37,216.28 | \$ 71,711.77 |
| Total | \$ 1,731,863.81 | \$ | 507,237.27 | \$ | 725,201.81 | \$ 2,964,302.88 |

The balance of account 1556 is expected to be $\$ 2,964,302.88$ by the end of December 31, 2012, per Table 17 below.

Table 17: Account 1556 - Smart Meter Capital Variance Account

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### 2.6 Stranded Meters

HOBNI is not seeking disposition of Stranded Meter costs in this rate application. In HOBNI's 2011 Cost of Service application the Board ordered that HOBNI estimate the cost of stranded meters to December 31, 2011, track the Stranded Meter costs in "Sub-account Stranded Meter Costs" of Account 1555, and remove the stranded meter costs from rate base. Also, the Board approved Stranded Meter Rate Riders in the 2011 Cost of Service rate application for the recovery of Stranded Meters and the associated recoveries from these rate riders were recorded in this sub-account to reduce the balance in the sub-account. Given the fact that HOBNI had not completed 100\% of its Smart Meter deployment at the time of the 2011 application, the Board required that the approved 2011 estimate for the stranded meter costs be trued-up to actual stranded meter costs after the installation of all Smart Meters is completed. The true-up would be made through an adjusting entry based on the final balance of stranded meters (net of recoveries) to be submitted for review in HOBNI's next cost of service application. Therefore no submissions pertaining to stranded meters are being made at this time.

### 2.7 Smart Meter Disposition Riders

HOBNI is seeking approval for two SMDRs effective May 1, 2013 and revenue requirements, (see Table 18 below), for the period January 1, 2010 to April 30, 2013, based on the approved Smart Meter Capital and OM\&A Expenditures, and Depreciation Expenses.

Table 18: SMDR \& Revenue Requirement Requests for Approval


HOBNI requests that two SMDRs be established for recovery over eight months commencing May 1, 2013 until December 31, 2013, as follows:

1) $\$ 1.39$ Monthly Fixed Service Charge for the Residential and General Service < 50 kW Classes, and
2) $\$ 22.87$ Monthly Fixed Service Charge for the General Service 50 to 699 kW class.

HOBNI requests the approval of revenue requirements totaling $\$ 5,666,262$ associated with its Smart Meter Program for the period from January 1, 2010 to April 30, 2013. Table 19 summarizes the Revenue Requirement for each of the three revenue requirement groupings for the customer classes, i.e. 1) The 2010 Stub year, 2) 2010 to 2012 excluding Stub Year, and 3) the first 4 months of 2013.

Table 19: Revenue Requirement by Class Summary

| Customer Class | $\begin{aligned} & \text { Jan } 1 / 10 \text { to } \\ & \text { Dec } 31 / 10 \\ & \text { Stub Year * } \end{aligned}$ | $\begin{aligned} & \operatorname{Jan} 1 / 10 \text { to } \\ & \operatorname{Dec} 31 / 12 \end{aligned}$ | $\begin{aligned} & \text { Jan } 1 / 13 \text { to } \\ & \text { Apr 30/13 } \end{aligned}$ | Total |
| :---: | :---: | :---: | :---: | :---: |
| Residential \& General Service < 50 kW | \$ 3,098,675 | \$ 1,847,320 | \$ 400,478 | \$ 5,346,474 |
| General Service 50 to 699 kW |  | \$ 261,705 | \$ 58,083 | \$ 319,788 |
| Total | \$ 3,098,675 | \$ 2,109,025 | \$ 458,561 | \$ 5,666,262 |

*     - The revenue requirement for the 2010 Stub Year pertains to the Smart Meter Capital Expenditures from May 1, 2007 to December 31, 2009, the 2010 Depreciation Expense on those Capital Expenditures, and the OM\&A Expenditures in 2010 pertaining to the Smart Meters installed from May 1, 2007 to December 31, 2009

HOBNI has used three Smart Meter Models to determine the revenue requirement, funding adders and associated carrying charges to determine the SMDRs presented in Table 19, above. The three models HOBNI submits in this rate application are as follows:

1) OEB Smart Meter Model - Residential \& General Service < 50 kW (Appendix A) HOBNI completed this model such that a common rate rider could be established for these two classes of customers. HOBNI was unable to break out cost data between the Residential and General Service < 50 kW class customers reliably enough to be able to allocate reasonably between classes. However, HOBNI was able to run this combined class model separately from the General Service 50 to 699 class model since HOBNI was able to break out cost data in sufficient enough detail to do so,
2) OEB Smart Meter Model - General Service 50 - 699 kW (Appendix B)

HOBNI completed this model for this class of General Service customers as HOBNI had the cost data in sufficient enough detail needed to complete this model to determine the revenue requirement specific to this customer class. HOBNI chose to run a model for this class separately from the low volume customer classes model as this approach provides more reliable rate riders than using the allocation methodology in the OEB Smart Meter Model, and
3) HOBNI Stub Year Model (Appendix C)- Given the nature of data required for the 2010 Stub Year, the OEB Smart Meter Model was unable to accommodate the calculations for
the Stub Year so HOBNI used its own Smart Meter Model to calculate the revenue requirement needed so that the 2010 Stub Year could be included in the SMDR calculations.

HOBNI provides Table 20 below which provides the calculation of the True-up for the SMDR for the Residential and General Service < 50 kW classes and for the General Service 50 to 699 kW class. Table 20 also provides model mappings of revenue requirements, funding adders, and carrying charges amounts used in the SMDR calculations.

Table 20: Smart Meter Model Mapping

|  | HOBNI Model | OEB Model | HOBNI Model | Total Residential \& GS<50 | OEB Model | HOBNI Model | Total GS>50 | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stub Year | Incremental | Incremental |  | Incremental | Incremental |  |  |
|  | $\begin{gathered} \text { Residential \& } \\ G S<50 \end{gathered}$ | $\begin{gathered} \text { Residential \& } \\ \mathrm{GS}<50 \end{gathered}$ | $\begin{gathered} \text { Residential \& } \\ G S<50 \end{gathered}$ |  | GS>50 | GS>50 |  |  |
| Revenue Requirement: |  |  |  |  |  |  |  |  |
| 2010 Rate Year Entitlement (2009 Capital) | 3,098,675 |  |  | 3,098,675 |  |  | - | 3,098,675 |
| 2010 Rate Year Entitlement |  | 290,482 |  | 290,482 | 1,595 |  | 1,595 | 292,077 |
| 2011 Rate Year Entitlement |  | 625,102 |  | 625,102 | 88,219 |  | 88,219 | 713,321 |
| 2012 Rate Year Entitlement |  | 931,737 |  | 931,737 | 171,890 |  | 171,890 | 1,103,627 |
| 2013 Rate Year Entitlement (January to April) * |  | 400,478 |  | 400,478 | 58,083 |  | 58,083 | 458,561 |
| Total Revenue Entitlement | 3,098,675 | 2,247,799 | - | 5,346,474 | 319,788 | - | 319,788 | 5,666,262 |
|  |  |  |  |  |  |  |  |  |
| Smart Rate Rider Billed: |  |  |  |  |  |  |  |  |
| Amount collected in 2010 |  | $(1,504,402)$ |  | $(1,504,402)$ | $(17,840)$ |  | $(17,840)$ | $(1,522,242)$ |
| Amount collected in 2011 |  | $(2,135,546)$ |  | $(2,135,546)$ | $(24,161)$ |  | $(24,161)$ | $(2,159,707)$ |
| Amount collected in 2012 |  | $(108,010)$ |  | $(108,010)$ | (296) |  | (296) | $(108,306)$ |
| Total Collected | - | $(3,747,958)$ | - | $(3,747,958)$ | $(42,297)$ | - | $(42,297)$ | $(3,790,255)$ |
|  |  |  |  |  |  |  |  |  |
| Carrying Charges From January 2010 to December 2010 | 6,890 | $(5,785)$ |  | 1,105 | (74) |  | (74) | 1,031 |
| Carrying Charges From January 2011 to December 2011 | 23,287 | $(30,571)$ |  | $(7,284)$ | (129) |  | (129) | $(7,412)$ |
| Carrying Charges From January 2012 to December 2012 | 23,287 | $(42,172)$ |  | $(18,885)$ | 518 |  | 518 | $(18,368)$ |
| Carrying Charges From January 2013 to April 2013 | 7,762 |  | $(12,155)$ | $(4,393)$ |  | 434 | 434 | $(3,959)$ |
| Total Carrying Charges | 61,226 | $(78,528)$ | $(12,155)$ | $(29,457)$ | 315 | 434 | 749 | $(28,708)$ |
|  |  |  |  |  |  |  |  |  |
| Smart Meter Costs for Recovery | 3,159,901 | $(1,578,687)$ | $(12,155)$ | 1,569,059 | 277,806 | 434 | 278,239 | 1,847,298 |
|  |  |  |  |  |  |  |  |  |
| Forecasted Number of Customers |  |  |  | 141,107 |  |  | 1,521 |  |
| Number of Months |  |  |  | 8 |  |  | 8 |  |
| Rate Rider |  |  |  | 1.39 |  |  | 22.87 |  |
|  |  |  |  |  |  |  |  |  |

### 2.8 Smart Meter Incremental Revenue Requirement Riders

Hydro One Brampton is also seeking Smart Meter Incremental Revenue Requirement rate riders to recover the prospective annualized incremental revenue requirement. The proposed SMIRR rate riders would be in place from May 1, 2013 until HOBNI's next cost of service rebasing rate application when the Smart Meter Capital is added to rate base, and Smart Meter OM\&A Expenditures and Depreciation Expense are added to the test year costs for revenue requirement determination. Consistent with previous Smart Meter riders of the past, HOBNI is proposing to recover the SMIRR based on a monthly service charge from each customer in the class.

The calculations for the revenue requirement used to determine the SMIRR rate riders are derived from the OEB Smart Meter Models:

1) OEB Smart Meter Model Res \& GS < 50-\$1,201,435
2) OEB Smart Meter Model GS 50 to $699 \mathrm{~kW}-\$ 174,250$

HOBNI submits for approval, Table 21 below as the calculation to determine the SMIRR rate rider.

Table 21: Calculation of Smart Meter Incremental Rate Rider

| Customer Class | Forecasted Customers | True-up Amount |  | Monthly Charge |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Residential \& GS<50kW | 141,107 | $\$$ | $1,201,435$ | $\$$ | 0.71 |
| GS>50kW | 1,521 | $\$$ | 174,250 | $\$$ | 9.55 |
| Total | $\mathbf{1 4 2 , 6 2 8}$ | $\$$ | $\mathbf{1 , 3 7 5 , 6 8 4}$ |  |  |

### 2.9 Rate Change Summary and Bill Impacts

Currently HOBNI has no Smart Meter rate adders or rate riders being charged to customers. HOBNI is proposing the following rate riders in this Application in Table 22. All charges shown are monthly fixed charges.

Table 22: Summary of Smart Meter Rate Riders Requested

| Customer Class | SMDR Rate <br> Rider | SMIRR Rate <br> Rider | Total Rate <br> Riders |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Residential \& General Service <50 kW | $\$$ | 1.39 | $\$$ | 0.71 | $\$$ |
| General Service 50 to 699 kW | $\$$ | 22.87 | $\$$ | 9.55 | $\$$ |
|  |  |  |  |  |  |

HOBNI provides the following summary Bill Impacts in Table 23 and the supporting detailed bill impact analysis calculations in Appendix D of this Application. The following bill impacts would commence upon implementation of Rate Riders proposed to be implemented on May 1, 2013. HOBNI has used its existing approved Tariff of Rates and Charges for impact analysis purposes and the current Time of Use and Two Tier Rates effective on November 1, 2012.

The affect on the customers' bills caused by the SMDR and SMIRR Rate Riders are as follows:

- The Typical Residential Class customer with an average monthly consumption of 800 kWh per month would experience an increase of $\$ 2.10$ per month on the Distribution and Delivery Charges, or an increase of $9.86 \%$ for Distribution and $6.55 \%$ on Delivery. The total bill impact is \$2.14or 1.93\%
- The Typical General Service $<50 \mathrm{~kW}$ Class customer with an average monthly consumption of 2000 kWh per month would experience an increase of $\$ 2.10$ per month on the Distribution and Delivery Charges, or an increase of $4.29 \%$ for Distribution and $2.89 \%$ on Delivery. The total bill impact is $\$ 2.14$ or $0.79 \%$
- The Typical General Service 50 to 699 kW Class customer with an average monthly consumption of $36,500 \mathrm{kWh}$ and 100 kW peak monthly demand would experience an increase of $\$ 32.41$ per month on the Distribution and Delivery Charges, or an increase of $9.2 \%$ for Distribution and $4.07 \%$ on Delivery. The total bill impact is $\$ 32.96$ or $0.79 \%$.


## Table 23: Summary of Bill Impacts

| Rate Class | Variable <br> Metric | $\begin{array}{\|c\|} \hline \text { kWh } \\ \text { Quantity } \end{array}$ | kW <br> Quantity | $\begin{gathered} \text { Distribution \$ } \\ \text { Change } \\ \hline \end{gathered}$ |  | Distribution \% Change | Delivery \$ Change |  | Delivery \% Change | Total Bill \$ Change |  | Total Bill \% Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Residential | kWh | 250 |  | \$ | 2.10 | 15.64\% | \$ | 2.10 | 12.51\% | \$ | 2.14 | 5.13\% |
| Residential | kWh | 800 |  | \$ | 2.10 | 9.86\% | \$ | 2.10 | 6.55\% | \$ | 2.14 | 1.93\% |
| Residential | kWh | 1,500 |  | \$ | 2.10 | 6.71\% | \$ | 2.10 | 4.08\% | \$ | 2.14 | 1.08\% |
| General Service Less Than 50 kW | kWh | 2,000 |  | \$ | 2.10 | 4.29\% | \$ | 2.10 | 2.89\% | \$ | 2.14 | 0.79\% |
| General Service Less Than 50 kW | kWh | 5,000 |  | \$ | 2.10 | 2.19\% | \$ | 2.10 | 1.36\% | \$ | 2.14 | 0.33\% |
| General Service Less Than 50 kW | kWh | 10,000 |  | \$ | 2.10 | 1.21\% | \$ | 2.10 | 0.72\% | \$ | 2.14 | 0.17\% |
| General Service 50 to 699 kW | kW | 36,500 | 100 | \$ | 32.41 | 9.20\% | \$ | 32.41 | 4.07\% | \$ | 32.96 | 0.79\% |
| General Service 50 to 699 kW | kW | 91,250 | 250 | \$ | 32.41 | 4.52\% | \$ | 32.41 | 1.77\% | \$ | 32.96 | 0.32\% |
| General Service 50 to 699 kW | kW | 182,500 | 500 | \$ | 32.41 | 2.44\% | \$ | 32.41 | 0.91\% | \$ | 32.96 | 0.16\% |

### 2.10 Conclusion

HOBNI respectfully submits that it has prudently incurred the costs necessary to fulfill its obligations under the provincially mandated Smart Meter initiative in accordance with Board guidelines and otherwise subject to evidence provided with respect to expenditures exceeding minimum functionality. HOBNI submits that the proposed riders are just and reasonable and the associated customer bill impacts are not significant; and it is appropriate that the Board approve these proposed riders at this time, for implementation effective May 1, 2013.

## APPENDIX A - OEB SMART METER MODEL - RESIDENTIAL AND GENERAL SERVICE <50 KW CLASSES




Note: Drop-down lists are shaded blue; Input cells are shaded green.

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.

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. . .apital costs have been included in rate base and OM\&A costs in revenue equirement.
For 2012, distributors that have completed their deployments by the end of 2011 are not expected to enter any capital costs.
distributor has deployments in 2012 , istributors should enter the forecasted OM\&A for 2012 for all smart meters in service.

Smart Meter Capital Cost and Operational Expense Data

## Smart Meter Installation Plan

ActuallPlanned number of Smart Meters installed during the Calendar Year Residential
General Service < 50 kW
ActualPlanned number of Smart Meters installed (Residential and $G S<50 \mathrm{~kW}$ only)
Percentage of Residential and $\mathrm{GS}<50 \mathrm{~kW}$ Smart Meter Installations Completed
ActualPlanned number of $\mathrm{GS}>50 \mathrm{~kW}$ meters installed
Other (please identify)
installed or planned to be installed

## Capital costs

1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)
1.1.1 Smart Meters (may inculud enew meeers and modules, etc.)
1.1.2 Installation Costs (may include socketekis, alabur, venicle, benefitis, etc.)
1.1.3a Workforce Automation Hardware (may incolue fielectwork handheless, barcode hardwave, etc.)
1.1.3b Workforce Automation Software (may include feielwoork handheleds, barcode hardware, elc.)

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 icencese, etc.)
1.2.3 Installation (mayy include meter seals and rings, collector computer harctware, etc,

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



## OM\&A Expenses

2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)
2.1.1 Maintenance (mayy include meter reverification costs, etc.)
2.1.2 Other (pleases specifiy) $\square$ Total Incremental AMCD OMEA Costs
2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)
2.2.1 Maintenance
2.2.2 Other (please specifiy)

Total Incremental AMRC OM\&A Costs
2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)
2.3.1 Hardware Maintenance (may include severe support, etc;)
2.3.2 Software Maintenance (may include maintenance support, etc)
2.3.2 Other (please specifiy)

Total Incremental AMCC OM\&A Costs
2.4 WIDE AREA NETWORK (WAN)
2.4.1 WAN Maintenance
2.4.2 Other (pleases specifiy) $\square \square$

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

Total Other AM OM\&A Costs Related to Minimum Functionality
TOTAL OM\&A COSTS RELATED TO MIIMMUM FUNCTIONALITY
2.6 OMとA COSTS RELATED TO BEYOND MINIIUM FUNCTIONALTTY
(Please provide a descripive itite and dientity nature of beyond m minimum Anctionalit costs)
2.61 Costs related to to technical capapabilitese in the the smart meters or related communications infrastructure解
2.6. Costs for deploymen
and smal general sevice
2.6.3 Costs for ToU rate implementation, CIS system upgrades, web presentation,
integration with the MDMR, etc.

Total Om\&A Costs Beyond Minimum Functionality
Total Smart Meter Ом\&A Costs


## 3 Aggregate Smart Meter Costs by Category

| 3.1.1. | Smart Meter |
| :--- | :--- |
| 3.1.2 | Computer Hardware |
| 3.1.3 | Computer Software |
| 3.1.4 | Tools \& Equipment |
| 3.1.5 | Other Equipment |
| 3.1.6 | Applications Sotware |
| 3.1.7 | Total Capital Costs |
| 3.2 | om\&A Costs |
| 3.2.1 | Total OM\& Costs |




## Smart Meter Model for Electricity Distributors (2013 Filers)

Deemed Short-term Debt Capitalization Deemed Long-term Debt Capitalization Deemed Equity Capitalization
Preferred Shares
Total
Cost of Capital Parameters
Deemed Short-term Debt Rate
Long-term Debt Rate (actual/embedded/deemed) ${ }^{2}$ Target Return on Equity (ROE)
Return on Preferred Shares

## WACC

Working Capital Allowance Rate
(\% of the sum of Cost of Power + controllable expenses)

## Taxes/PILs

Aggregate Corporate Income Tax Rate
Capital Tax (until July 1st, 2010)
2006
2007

$\square \square$ $\square$ $\qquad$ $15.0 \%$15.0\%
$15.0 \%$ 15.0\%

## Depreciation Rates

## Smart Meters - years - rate (\%)

Computer Hardware - years - rate (\%)

Computer Software - years - rate (\%)

Tools \& Equipment - years - rate (\%)

Other Equipment - years - rate (\%)

## CCA Rates

Smart Meters - CCA Class
Smart Meters - CCA Rate

Computer Equipment - CCA Class
Computer Equipment - CCA Rate
General Equipment - CCA Class General Equipment - CCA Rate

Applications Software - CCA Class Applications Software - CCA Rate



$\square$
12



12
100\% $\qquad$ 2 12 $\qquad$

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


## Smart Meter Model for Electricity Distributors (2013 Filers)

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

2006


| $\$$ |
| :--- |
| $\$$ |

## $4,208,052$ $3,879,623$ 3,879,623 $4,043,837$




| $\$$ | - |
| :--- | :--- |
| $\$$ | - |
| $\$$ | - |



| $\$$ | - |
| :--- | :--- |
| $\$$ | - |
| $\$$ | - | | $\$$ | - |
| :--- | :--- |
| $\$$ | - |
| $\$$ | - |



| $\$$ |
| :--- |
| $\$$ |
| $\$$ |


$\$$
$\$$
$\$$

Net Fixed Assets - Computer Software (including Applications Software)



## Smart Meter Model for Electricity Distributors (2013 Filers)

Average Net Fixed Asset Values (from Sheet 4)
Smart Meters
Computer Har
Computer Hardware
Computer Software
Tools \& Equipment
Other Equipment
Total Net Fixed Assets
Working Capital
Operating Expenses (from Sheet 2)
Working Capital Factor (from Sheet 3)
Working Capital Allowance
Incremental Smart Meter Rate Base
Return on Rate Base
Capital Structure
Deemed Short Term Debt
Deemed Long Term Debt
Equity
Preferred Shares
Total Capitalization
Return on
Deemed Short Term Debt
Deemed Long Term Debt
Equity
Total Return on Capita

Operating Expenses
Amortization Expenses (from Sheet 4)
Smart Meters
Computer Hardware
Computer Software
Tools \& Equipmen
Other Equipment
Total Amortization Expense in Year
Incremental Revenue Requirement before Taxes/PILs
Calculation of Taxable Income
Incremental Operating Expenses
Amortization Expense
Interest Expense
Net Income for Taxes/PILs
Grossed-up Taxes/PILs (from Sheet 7)
Revenue Requirement, including Grossed-up Taxes/PILs



## Smart Meter Model for Electricity Distributors (2013 Filers)

## For PILs Calculation




## N N <br> Smart Meter Model for Electricity Distributors (2013 Filers)

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 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 60,693.59 | \$ | 174,217.72 | \$ | 206,075.00 | \$ | 183,130.10 |
| Amortization | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 116,021.97 | \$ | 411,044.59 | \$ | 578,430.85 | \$ | 566,816.46 |
| CCA - Smart Meters | \$ | - | \$ | - | \$ | - | \$ | - | -\$ | 139,226.36 | -\$ | 321,363.02 | -\$ | 353,485.01 | -\$ | 328,988.82 |
| CCA - Computers | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | -\$ | 669,801.58 | -\$ | 669,801.58 | \$ | 147,665.74 |
| CCA - Applications Software | \$ | - | \$ | - | + | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| CCA - Other Equipment | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Change in taxable income | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 37,489.19 | - | 405,902.29 | -\$ | 238,780.72 | \$ | 568,623.47 |
| Tax Rate (from Sheet 3) |  | 36.12\% |  | 36.12\% |  | 33.50\% |  | 33.00\% |  | 31.00\% |  | 28.25\% |  | 26.50\% |  | 26.50\% |
| Income Taxes Payable | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 11,621.65 | -\$ | 114,667.40 | -\$ | 63,276.89 | \$ | 150,685.22 |
| ONTARIO CAPITAL TAX |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Smart Meters | \$ | - | \$ | - | \$ | - | \$ |  | \$ | 3,364,636.99 | \$ | 4,438,763.02 | \$ | 4,208,051.64 | \$ | 3,879,622.66 |
| Computer Hardware | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Computer Software (Including Application Software) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 1,205,642.84 | \$ | 804,823.04 | \$ | 566,435.56 |
| Tools \& Equipment | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |  | - | \$ | - | \$ | - |
| Other Equipment | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Rate Base | \$ | - | \$ | - | + | - | \$ | - | \$ | 3,364,636.99 | \$ | 5,644,405.85 | \$ | 5,012,874.68 | \$ | 4,446,058.22 |
| Less: Exemption |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Deemed Taxable Capital | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 3,364,636.99 | \$ | 5,644,405.85 | \$ | 5,012,874.68 | \$ | 4,446,058.22 |
| 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 $\times$ Rate) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 2,523.48 | \$ |  | \$ |  | \$ |  |
| Change in Income Taxes Payable | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 11,621.65 | -\$ | 114,667.40 | -\$ | 63,276.89 | \$ | 150,685.22 |
| Change in OCT | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 2,523.48 | \$ | - | \$ | - | \$ | - |
| PILs | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 14,145.13 | -\$ | 114,667.40 | -\$ | 63,276.89 | \$ | 150,685.22 |
| Gross Up PILs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tax Rate |  | 36.12\% |  | 36.12\% |  | 33.50\% |  | 33.00\% |  | 31.00\% |  | 28.25\% |  | 26.50\% |  | 26.50\% |
| Change in Income Taxes Payable | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 16,842.97 | -\$ | 159,815.19 | -\$ | 86,091.01 | \$ | 205,013.91 |
| Change in OCT | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 2,523.48 | \$ | - | \$ | - | \$ | - |
| PILs | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 19,366.45 | -\$ | 159,815.19 | -\$ | 86,091.01 | \$ | 205,013.91 |

Smart Meter Model for
Electricity Distributors
(2013 Filers)

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 <br> Rate |  | Interest | Closing Balance | Annual amounts | Board Approved Smart Meter Funding Adder |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2008 Q3 | 3.35\% | 5.43\% | Nov-06 | 2006 | Q4 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2008 Q4 | 3.35\% | 5.43\% | Dec-06 | 2006 | Q4 | \$ | - |  | 4.59\% | \$ | - | \$ | \$ |  |
| 2009 Q1 | 2.45\% | 6.61\% | Jan-07 | 2007 | Q1 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2009 Q2 | 1.00\% | 6.61\% | Feb-07 | 2007 | Q1 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2009 Q3 | 0.55\% | 5.67\% | Mar-07 | 2007 | Q1 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2009 Q4 | 0.55\% | 4.66\% | Apr-07 | 2007 | Q2 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2010 Q1 | 0.55\% | 4.34\% | May-07 | 2007 | Q2 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2010 Q2 | 0.55\% | 4.34\% | Jun-07 | 2007 | Q2 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2010 Q3 | 0.89\% | 4.66\% | Jul-07 | 2007 | Q3 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2010 Q4 | 1.20\% | 4.01\% | Aug-07 | 2007 | Q3 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2011 Q1 | 1.47\% | 4.29\% | Sep-07 | 2007 | Q3 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2011 Q2 | 1.47\% | 4.29\% | Oct-07 | 2007 | Q4 | \$ | - |  | 5.14\% | \$ | - | \$ |  |  |
| 2011 Q3 | 1.47\% | 4.29\% | Nov-07 | 2007 | Q4 | \$ | - |  | 5.14\% | \$ | - | \$ |  |  |
| 2011 Q4 | 1.47\% | 3.92\% | Dec-07 | 2007 | Q4 | \$ | - |  | 5.14\% | \$ | - | \$ | \$ |  |
| 2012 Q1 | 1.47\% | 3.92\% | Jan-08 | 2008 | Q1 | \$ | - |  | 5.14\% | \$ | - | \$ |  |  |
| 2012 Q2 | 1.47\% | 3.51\% | Feb-08 | 2008 | Q1 | \$ | - |  | 5.14\% | \$ | - | \$ |  |  |
| 2012 Q3 | 1.47\% | 3.51\% | Mar-08 | 2008 | Q1 | \$ | - |  | 5.14\% | \$ | - | \$ |  |  |
| 2012 Q4 | 1.47\% | 3.51\% | Apr-08 | 2008 | Q2 | \$ | - |  | 4.08\% | \$ | - | \$ |  |  |
| 2013 Q1 |  |  | May-08 | 2008 | Q2 | \$ | - |  | 4.08\% | \$ | - | \$ |  |  |
| 2013 Q2 |  |  | Jun-08 | 2008 | Q2 | \$ | - |  | 4.08\% | \$ | - | \$ - |  |  |



This worksheet calculates the funding adder revenues.

| Interest Rates | Approved Deferral and Variance Accounts | CWIP | Date | Year | Quarter |  | Opening Balance (Principal) |  | Funding Adder Revenues | Interest Rate |  | Interest |  | osing Balance | Annual amounts | Board Approved Smart Meter Funding Adder |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2013 Q3 |  |  | Jul-08 | 2008 | Q3 | \$ | - |  |  | 3.35\% | \$ | - | \$ | - |  |  |
| 2013 Q4 |  |  | Aug-08 | 2008 | Q3 | \$ | - |  |  | 3.35\% | \$ | - | \$ | - |  |  |
|  |  |  | Sep-08 | 2008 | Q3 | \$ | - |  |  | 3.35\% | \$ | - | \$ | - |  |  |
|  |  |  | Oct-08 | 2008 | Q4 | \$ | - |  |  | 3.35\% | \$ | - | \$ | - |  |  |
|  |  |  | Nov-08 | 2008 | Q4 | \$ | - |  |  | 3.35\% | \$ | - | \$ | - |  |  |
|  |  |  | Dec-08 | 2008 | Q4 | \$ | - |  |  | 3.35\% | \$ | - | \$ | - | \$ |  |
|  |  |  | Jan-09 | 2009 | Q1 | \$ | - |  |  | 2.45\% | \$ | - | \$ | - |  |  |
|  |  |  | Feb-09 | 2009 | Q1 | \$ | - |  |  | 2.45\% | \$ | - | \$ | - |  |  |
|  |  |  | Mar-09 | 2009 | Q1 | \$ | - |  |  | 2.45\% | \$ | - | \$ | - |  |  |
|  |  |  | Apr-09 | 2009 | Q2 | \$ | - |  |  | 1.00\% | \$ | - | \$ | - |  |  |
|  |  |  | May-09 | 2009 | Q2 | \$ | - |  |  | 1.00\% | \$ | - | \$ | - |  |  |
|  |  |  | Jun-09 | 2009 | Q2 | \$ | - |  |  | 1.00\% | \$ | - | \$ | - |  |  |
|  |  |  | Jul-09 | 2009 | Q3 | \$ | - |  |  | 0.55\% | \$ | - | \$ | - |  |  |
|  |  |  | Aug-09 | 2009 | Q3 | \$ | - |  |  | 0.55\% | \$ | - | \$ | - |  |  |
|  |  |  | Sep-09 | 2009 | Q3 | \$ | - |  |  | 0.55\% | \$ | - | \$ | - |  |  |
|  |  |  | Oct-09 | 2009 | Q4 | \$ | - |  |  | 0.55\% | \$ | - | \$ | - |  |  |
|  |  |  | Nov-09 | 2009 | Q4 | \$ | - |  |  | 0.55\% | \$ | - | \$ | - |  |  |
|  |  |  | Dec-09 | 2009 | Q4 | \$ | - |  |  | 0.55\% | \$ | - | \$ | - | \$ |  |
|  |  |  | Jan-10 | 2010 | Q1 | \$ | - | \$ | 66,404.04 | 0.55\% | \$ | - | \$ | 66,404.04 |  |  |
|  |  |  | Feb-10 | 2010 | Q1 | \$ | 66,404.04 | \$ | 129,468.00 | 0.55\% | \$ | 30.44 | \$ | 195,902.48 |  |  |
|  |  |  | Mar-10 | 2010 | Q1 | \$ | 195,872.04 | \$ | 129,758.00 | 0.55\% | \$ | 89.77 | \$ | 325,719.81 |  |  |
|  |  |  | Apr-10 | 2010 | Q2 | \$ | 325,630.04 | \$ | 130,339.00 | 0.55\% | \$ | 149.25 | \$ | 456,118.29 |  |  |
|  |  |  | May-10 | 2010 | Q2 | \$ | 455,969.04 | \$ | 130,003.00 | 0.55\% | \$ | 208.99 | \$ | 586,181.03 |  |  |
|  |  |  | Jun-10 | 2010 | Q2 | \$ | 585,972.04 | \$ | 130,534.00 | 0.55\% | \$ | 268.57 | \$ | 716,774.61 |  |  |
|  |  |  | Jul-10 | 2010 | Q3 | \$ | 716,506.04 | \$ | 130,345.00 | 0.89\% | \$ | 531.41 | \$ | 847,382.45 |  |  |
|  |  |  | Aug-10 | 2010 | Q3 | \$ | 846,851.04 | \$ | 130,728.00 | 0.89\% | \$ | 628.08 | \$ | 978,207.12 |  |  |
|  |  |  | Sep-10 | 2010 | Q3 | \$ | 977,579.04 | \$ | 131,152.00 | 0.89\% | \$ | 725.04 | \$ | 1,109,456.08 |  |  |
|  |  |  | Oct-10 | 2010 | Q4 | \$ | 1,108,731.04 | \$ | 131,585.00 | 1.20\% | \$ | 1,108.73 | \$ | 1,241,424.77 |  |  |
|  |  |  | Nov-10 | 2010 | Q4 | \$ | 1,240,316.04 | \$ | 131,895.00 | 1.20\% | \$ | 1,240.32 | \$ | 1,373,451.36 |  |  |
|  |  |  | Dec-10 | 2010 | Q4 | \$ | 1,372,211.04 | \$ | 132,191.00 | 1.20\% | \$ | 1,372.21 | \$ | 1,505,774.25 | \$ 1,510,754.85 |  |
|  |  |  | Jan-11 | 2011 | Q1 | \$ | 1,504,402.04 | \$ | 132,738.00 | 1.47\% | \$ | 1,842.89 | \$ | 1,638,982.93 |  |  |



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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Feb-11 | 2011 | Q1 | \$ | 1,637,140.04 | \$ | 132,818.00 | 1.47\% | \$ | 2,005.50 | \$ | 1,771,963.54 |  |  |  |
|  |  |  | Mar-11 | 2011 | Q1 | \$ | 1,769,958.04 | \$ | 133,113.00 | 1.47\% | \$ | 2,168.20 | \$ | 1,905,239.24 |  |  |  |
|  |  |  | Apr-11 | 2011 | Q2 | \$ | 1,903,071.04 | \$ | 133,304.00 | 1.47\% | \$ | 2,331.26 | \$ | 2,038,706.30 |  |  |  |
|  |  |  | May-11 | 2011 | Q2 | \$ | 2,036,375.04 | \$ | 167,462.00 | 1.47\% | \$ | 2,494.56 | \$ | 2,206,331.60 |  |  |  |
|  |  |  | Jun-11 | 2011 | Q2 | \$ | 2,203,837.04 | \$ | 203,986.00 | 1.47\% | \$ | 2,699.70 | \$ | 2,410,522.74 |  |  |  |
|  |  |  | Jul-11 | 2011 | Q3 | \$ | 2,407,823.04 | \$ | 203,950.00 | 1.47\% | \$ | 2,949.58 | \$ | 2,614,722.62 |  |  |  |
|  |  |  | Aug-11 | 2011 | Q3 | \$ | 2,611,773.04 | \$ | 204,421.00 | 1.47\% | \$ | 3,199.42 | \$ | 2,819,393.46 |  |  |  |
|  |  |  | Sep-11 | 2011 | Q3 | \$ | 2,816,194.04 | \$ | 205,162.00 | 1.47\% | \$ | 3,449.84 | \$ | 3,024,805.88 |  |  |  |
|  |  |  | Oct-11 | 2011 | Q4 | \$ | 3,021,356.04 | \$ | 205,599.00 | 1.47\% | \$ | 3,701.16 | \$ | 3,230,656.20 |  |  |  |
|  |  |  | Nov-11 | 2011 | Q4 | \$ | 3,226,955.04 | \$ | 206,291.00 | 1.47\% | \$ | 3,953.02 | \$ | 3,437,199.06 |  |  |  |
|  |  |  | Dec-11 | 2011 | Q4 | \$ | 3,433,246.04 | \$ | 206,702.00 | 1.47\% | \$ | 4,205.73 | \$ | 3,644,153.77 | \$ | 2,170,546.86 |  |
|  |  |  | Jan-12 | 2012 | Q1 | \$ | 3,639,948.04 | \$ | 107,938.00 | 1.47\% | \$ | 4,458.94 | \$ | 3,752,344.98 |  |  |  |
|  |  |  | Feb-12 | 2012 | Q1 | \$ | 3,747,886.04 | \$ | 66.00 | 1.47\% | \$ | 4,591.16 | \$ | 3,752,543.20 |  |  |  |
|  |  |  | Mar-12 | 2012 | Q1 | \$ | 3,747,952.04 | -\$ | 15.00 | 1.47\% | \$ | 4,591.24 | \$ | 3,752,528.28 |  |  |  |
|  |  |  | Apr-12 | 2012 | Q2 | \$ | 3,747,937.04 | \$ | 19.00 | 1.47\% | \$ | 4,591.22 | \$ | 3,752,547.26 |  |  |  |
|  |  |  | May-12 | 2012 | Q2 | \$ | 3,747,956.04 | \$ | 2.00 | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 |  |  |  |
|  |  |  | Jun-12 | 2012 | Q2 | \$ | 3,747,958.04 | -\$ | 10.00 | 1.47\% | \$ | 4,591.25 | \$ | 3,752,539.29 |  |  |  |
|  |  |  | Jul-12 | 2012 | Q3 | \$ | 3,747,948.04 | \$ | 10.00 | 1.47\% | \$ | 4,591.24 | \$ | 3,752,549.28 |  |  |  |
|  |  |  | Aug-12 | 2012 | Q3 | \$ | 3,747,958.04 | \$ | - | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 |  |  |  |
|  |  |  | Sep-12 | 2012 | Q3 | \$ | 3,747,958.04 | \$ | - | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 |  |  |  |
|  |  |  | Oct-12 | 2012 | Q4 | \$ | 3,747,958.04 |  |  | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 |  |  |  |
|  |  |  | Nov-12 | 2012 | Q4 | \$ | 3,747,958.04 |  |  | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 |  |  |  |
|  |  |  | Dec-12 | 2012 | Q4 | \$ | 3,747,958.04 |  |  | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 | \$ | 162,972.55 |  |
|  |  |  | Jan-13 | 2013 | Q1 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - | \$ | 3,747,958.04 |  |  |  |
|  |  |  | Feb-13 | 2013 | Q1 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - | \$ | 3,747,958.04 |  |  |  |
|  |  |  | Mar-13 | 2013 | Q1 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - | \$ | 3,747,958.04 |  |  |  |
|  |  |  | Apr-13 | 2013 | Q2 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - | \$ | 3,747,958.04 |  |  |  |
|  |  |  | May-13 | 2013 | Q2 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - | \$ | 3,747,958.04 |  |  |  |
|  |  |  | Jun-13 | 2013 | Q2 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - |  | 3,747,958.04 |  |  |  |
|  |  |  | Jul-13 | 2013 | Q3 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - | \$ | 3,747,958.04 |  |  |  |
|  |  |  | Aug-13 | 2013 | Q3 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - | \$ | 3,747,958.04 |  |  |  |

## (2) <br>  <br> Smart Meter Model for <br> Electricity Distributors (2013 Filers)

This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues



## Smart Meter Model for <br> Electricity Distributors (2013 Filers)

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

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

| Prescribed Interest Rates | Approved Deferral and Variance Accounts | CWIP | Date | Year | Quarter | Opening Balance (Principal) | OM\&A Expenses | Amortization / Depreciation Expense | Closing Balance (Principal) | (Annual) Interest Rate | Interest (on opening balance) | Cumulative Interest |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2006 Q1 | 0.00\% | 0.00\% | Jan-06 | 2006 | Q1 | \$ |  |  | - | 0.00\% | - |  |
| 2006 Q2 | 4.14\% | 4.68\% | Feb-06 | 2006 | Q1 | - |  |  | - | 0.00\% | - |  |
| 2006 Q3 | 4.59\% | 5.05\% | Mar-06 | 2006 | Q1 | - |  |  | - | 0.00\% | - |  |
| 2006 Q4 | 4.59\% | 4.72\% | Apr-06 | 2006 | Q2 | - |  |  | - | 4.14\% | - |  |
| 2007 Q1 | 4.59\% | 4.72\% | May-06 | 2006 | Q2 | - |  |  | - | 4.14\% | - |  |
| 2007 Q2 | 4.59\% | 4.72\% | Jun-06 | 2006 | Q2 | - |  |  | - | 4.14\% | - |  |
| 2007 Q3 | 4.59\% | 5.18\% | Jul-06 | 2006 | Q3 | - |  |  | - | 4.59\% | - |  |
| 2007 Q4 | 5.14\% | 5.18\% | Aug-06 | 2006 | Q3 | - |  |  | - | 4.59\% | - |  |
| 2008 Q1 | 5.14\% | 5.18\% | Sep-06 | 2006 | Q3 | - |  |  | - | 4.59\% | - |  |
| 2008 Q2 | 4.08\% | 5.18\% | Oct-06 | 2006 | Q4 | - |  |  | - | 4.59\% | - |  |
| 2008 Q3 | 3.35\% | 5.43\% | Nov-06 | 2006 | Q4 | - |  |  | - | 4.59\% | - |  |
| 2008 Q4 | 3.35\% | 5.43\% | Dec-06 | 2006 | Q4 | - |  |  | - | 4.59\% | - |  |
| 2009 Q1 | 2.45\% | 6.61\% | Jan-07 | 2007 | Q1 | - |  |  | - | 4.59\% | - |  |
| 2009 Q2 | 1.00\% | 6.61\% | Feb-07 | 2007 | Q1 | - |  |  | - | 4.59\% | - |  |
| 2009 Q3 | 0.55\% | 5.67\% | Mar-07 | 2007 | Q1 | - |  |  | - | 4.59\% | - |  |
| 2009 Q4 | 0.55\% | 4.66\% | Apr-07 | 2007 | Q2 | - |  |  | - | 4.59\% | - |  |
| 2010 Q1 | 0.55\% | 4.34\% | May-07 | 2007 | Q2 | - |  |  | - | 4.59\% | - |  |
| 2010 Q2 | 0.55\% | 4.34\% | Jun-07 | 2007 | Q2 | - |  |  | - | 4.59\% | - |  |
| 2010 Q3 | 0.89\% | 4.66\% | Jul-07 | 2007 | Q3 | - |  |  | - | 4.59\% | - |  |
| 2010 Q4 | 1.20\% | 4.01\% | Aug-07 | 2007 | Q3 | - |  |  | - | 4.59\% | - |  |
| 2011 Q1 | 1.47\% | 4.29\% | Sep-07 | 2007 | Q3 | - |  |  | - | 4.59\% | - |  |
| 2011 Q2 | 1.47\% | 4.29\% | Oct-07 | 2007 | Q4 | - |  |  | - | 5.14\% | - |  |
| 2011 Q3 | 1.47\% | 4.29\% | Nov-07 | 2007 | Q4 | - |  |  | - | 5.14\% | - |  |
| 2011 Q4 | 1.47\% | 3.92\% | Dec-07 | 2007 | Q4 | - |  |  | - | 5.14\% | - |  |
| 2012 Q1 | 1.47\% | 3.92\% | Jan-08 | 2008 | Q1 | - |  |  | - | 5.14\% | - |  |
| 2012 Q2 | 1.47\% | 3.51\% | Feb-08 | 2008 | Q1 | - |  |  | - | 5.14\% | - |  |
| 2012 Q3 | 1.47\% | 3.51\% | Mar-08 | 2008 | Q1 | - |  |  | - | 5.14\% | - |  |
| 2012 Q4 | 1.47\% | 3.51\% | Apr-08 | 2008 | Q2 | - |  |  | - | 4.08\% | - |  |
| 2013 Q1 | 0.00\% | 0.00\% | May-08 | 2008 | Q2 | - |  |  | - | 4.08\% | - |  |
| 2013 Q2 | 0.00\% | 0.00\% | Jun-08 | 2008 | Q2 | - |  |  | - | 4.08\% | - |  |
| 2013 Q3 | 0.00\% | 0.00\% | Jul-08 | 2008 | Q3 | - |  |  | - | 3.35\% | - |  |
| 2013 Q4 | 0.00\% | 0.00\% | Aug-08 | 2008 | Q3 | - |  |  | - | 3.35\% | - |  |
|  |  |  | Sep-08 | 2008 | Q3 | - |  |  | - | 3.35\% | - |  |


| Oct-08 | 2008 | Q4 | - |  |  |  |  | - | 3.35\% | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov-08 | 2003 | Q4 | - |  |  |  |  | - | 3.35\% | - | - |
| Dec-08 | 2008 | Q4 | - |  |  |  |  | - | 3.35\% | - | - |
| Jan-09 | 2009 | Q1 | - |  |  |  |  | - | 2.45\% | - | - |
| Feb-09 | 2009 | Q1 | - |  |  |  |  | - | 2.45\% | - | - |
| Mar-09 | 2009 | Q1 | - |  |  |  |  | - | 2.45\% | - | - |
| Apr-09 | 2009 | Q2 | - |  |  |  |  | - | 1.00\% | - | - |
| May-09 | 2009 | Q2 | - |  |  |  |  | - | 1.00\% | - | - |
| Jun-09 | 2009 | Q2 | - |  |  |  |  | - | 1.00\% | - |  |
| Jul-09 | 2009 | Q3 | - |  |  |  |  | - | 0.55\% | - |  |
| Aug-09 | 2009 | Q3 | - |  |  |  |  | - | 0.55\% | - |  |
| Sep-09 | 2009 | Q3 | - |  |  |  |  | - | 0.55\% | - |  |
| Oct-09 | 2009 | Q4 | - |  |  |  |  | - | 0.55\% | - |  |
| Nov-09 | 2009 | Q4 | - |  |  |  |  | - | 0.55\% | - |  |
| Dec-09 | 2009 | Q4 | - |  |  |  |  | - | 0.55\% | - |  |
| Jan-10 | 2010 | Q1 | - | \$ | 1,339.39 | \$ | 10,876.24 | 12,215.63 | 0.55\% | - |  |
| Feb-10 | 2010 | Q1 | 12,215.63 | \$ | 1,467.22 | \$ | 12,505.96 | 26,188.80 | 0.55\% | 5.60 | 5.60 |
| Mar-10 | 2010 | Q1 | 26,188.80 | \$ | 1,643.42 | \$ | 5,391.96 | 33,224.19 | 0.55\% | 12.00 | 17.60 |
| Apr-10 | 2010 | Q2 | 33,224.19 | \$ | 3,641.65 | \$ | 9,466.60 | 46,332.43 | 0.55\% | 15.23 | 32.83 |
| May-10 | 2010 | Q2 | 46,332.43 | \$ | 1,560.20 | \$ | 5,836.20 | 53,728.83 | 0.55\% | 21.24 | 54.07 |
| Jun-10 | 2010 | Q2 | 53,728.83 | \$ | 3,124.84 | \$ | 10,876.80 | 67,730.47 | 0.55\% | 24.63 | 78.69 |
| Jul-10 | 2010 | Q3 | 67,730.47 | \$ | 2,507.71 | \$ | 5,142.65 | 75,380.83 | 0.89\% | 50.23 | 128.92 |
| Aug-10 | 2010 | Q3 | 75,380.83 | \$ | 894.96 | \$ | 7,652.38 | 83,928.18 | 0.89\% | 55.91 | 184.83 |
| Sep-10 | 2010 | Q3 | 83,928.18 | \$ | 1,515.16 | \$ | 7,303.24 | 92,746.58 | 0.89\% | 62.25 | 247.08 |
| Oct-10 | 2010 | Q4 | 92,746.58 | \$ | 1,649.41 | \$ | 8,917.88 | 103,313.87 | 1.20\% | 92.75 | 339.83 |
| Nov-10 | 2010 | Q4 | 103,313.87 | \$ | 1,564.53 | \$ | 19,633.60 | 124,512.00 | 1.20\% | 103.31 | 443.14 |
| Dec-10 | 2010 | Q4 | 124,512.00 | \$ | 3,187.71 | \$ | 12,418.44 | 140,118.15 | 1.20\% | 124.51 | 567.65 |
| Jan-11 | 2011 | Q1 | 140,118.15 | \$ | 2,941.64 | \$ | 24,563.79 | 167,623.58 | 1.47\% | 171.64 | 739.30 |
| Feb-11 | 2011 | Q1 | 167,623.58 | \$ | 1,869.92 | \$ | 22,936.44 | 192,429.94 | 1.47\% | 205.34 | 944.63 |
| Mar-11 | 2011 | Q1 | 192,429.94 | \$ | 1,864.02 | \$ | 27,922.49 | 222,216.46 | 1.47\% | 235.73 | 1,180.36 |
| Apr-11 | 2011 | Q2 | 222,216.46 | \$ | 1,629.60 | \$ | 21,394.85 | 245,240.91 | 1.47\% | 272.22 | 1,452.58 |
| May-11 | 2011 | Q2 | 245,240.91 | \$ | 1,510.68 | \$ | 23,805.83 | 270,557.42 | 1.47\% | 300.42 | 1,753.00 |
| Jun-11 | 2011 | Q2 | 270,557.42 | \$ | 1,662.63 | \$ | 21,694.59 | 293,914.63 | 1.47\% | 331.43 | 2,084.43 |
| Jul-11 | 2011 | Q3 | 293,914.63 | \$ | 1,855.79 | \$ | 22,193.09 | 317,963.51 | 1.47\% | 360.05 | 2,444.48 |
| Aug-11 | 2011 | Q3 | 317,963.51 | \$ | 1,750.38 | \$ | 21,352.70 | 341,066.58 | 1.47\% | 389.51 | 2,833.98 |
| Sep-11 | 2011 | Q3 | 341,066.58 | \$ | 1,762.77 | \$ | 20,726.55 | 363,555.90 | 1.47\% | 417.81 | 3,251.79 |
| Oct-11 | 2011 | Q4 | 363,555.90 | \$ | 7,413.57 | \$ | 150,424.36 | 521,393.83 | 1.47\% | 445.36 | 3,697.14 |
| Nov-11 | 2011 | Q4 | 521,393.83 | \$ | 1,793.87 | \$ | 17,221.66 | 540,409.36 | 1.47\% | 638.71 | 4,335.85 |
| Dec-11 | 2011 | Q4 | 540,409.36 | \$ | 2,069.76 | \$ | 36,808.25 | 579,287.37 | 1.47\% | 662.00 | 4,997.85 |
| Jan-12 | 2012 | Q1 | 579,287.37 |  | 3,092.82 | \$ | 54,486.82 | 636,867.02 | 1.47\% | 709.63 | 5,707.48 |
| Feb-12 | 2012 | Q1 | 636,867.02 | \$ | 3,024.19 | \$ | 55,080.67 | 694,971.88 | 1.47\% | 780.16 | 6,487.64 |
| Mar-12 | 2012 | Q1 | 694,971.88 | \$ | 1,764.31 | \$ | 48,283.26 | 745,019.45 | 1.47\% | 851.34 | 7,338.98 |
| Apr-12 | 2012 | Q2 | 745,019.45 | \$ | 2,601.72 | \$ | 46,011.85 | 793,633.03 | 1.47\% | 912.65 | 8,251.63 |
| May-12 | 2012 | Q2 | 793,633.03 | \$ | 2,601.72 | \$ | 47,708.01 | 843,942.76 | 1.47\% | 972.20 | 9,223.83 |
| Jun-12 | 2012 | Q2 | 843,942.76 | \$ | 2,381.39 | \$ | 42,896.66 | 889,220.80 | 1.47\% | 1,033.83 | 10,257.66 |
| Jul-12 | 2012 | Q3 | 889,220.80 | \$ | 3,138.76 | \$ | 58,311.88 | 950,671.43 | 1.47\% | 1,089.30 | 11,346.96 |
| Aug-12 | 2012 | Q3 | 950,671.43 | \$ | 1,757.97 | \$ | 51,099.48 | 1,003,528.88 | 1.47\% | 1,164.57 | 12,511.53 |
| Sep-12 | 2012 | Q3 | 1,003,528.88 | \$ | 2,456.08 | \$ | 52,006.13 | 1,057,991.09 | 1.47\% | 1,229.32 | 13,740.85 |
| Oct-12 | 2012 | Q4 | 1,057,991.09 | \$ | 2,535.44 | \$ | 51,309.30 | 1,111,835.83 | 1.47\% | 1,296.04 | 15,036.89 |
| Nov-12 | 2012 | Q4 | 1,111,835.83 | \$ | 2,535.44 | \$ | 19,927.50 | 1,134,298.77 | 1.47\% | 1,362.00 | 16,398.89 |
| Dec-12 | 2012 | Q4 | 1,134,298.77 | \$ | 2,535.44 | \$ | 51,309.30 | 1,188,143.50 | 1.47\% | 1,389.52 | 17,788.41 |
| Jan-13 | 2013 | Q1 | 1,188,143.50 | \$ | 5,514.06 | \$ | 47,234.71 | 1,240,892.27 | 0.00\% | - | 17,788.41 |
| Feb-13 | 2013 | Q1 | 1,240,892.27 | \$ | 5,514.06 | \$ | 47,234.71 | 1,293,641.03 | 0.00\% | - | 17,788.41 |
| Mar-13 | 2013 | Q1 | 1,293,641.03 | \$ | 5,514.06 | \$ | 47,234.71 | 1,346,389.80 | 0.00\% | - | 17,788.41 |
| Apr-13 | 2013 | Q2 | 1,346,389.80 | \$ | 5,514.06 | \$ | 47,234.71 | 1,399,138.56 | 0.00\% | - | 17,788.41 |
| May-13 | 2013 | Q2 | 1,399,138.56 | \$ | 5,514.06 | \$ | 47,234.71 | 1,451,887.32 | 0.00\% | - | 17,788.41 |
| Jun-13 | 2013 | Q2 | 1,451,887.32 | \$ | 5,514.06 | \$ | 47,234.71 | 1,504,636.09 | 0.00\% | - | 17,788.41 |
| Jul-13 | 2013 | Q3 | 1,504,636.09 | \$ | 5,514.06 | \$ | 47,234.71 | 1,557,384.85 | 0.00\% | - | 17,788.41 |
| Aug-13 | 2013 | Q3 | 1,557,384.85 | \$ | 5,514.06 | \$ | 47,234.71 | 1,610,133.62 | 0.00\% | - | 17,788.41 |
| Sep-13 | 2013 | Q3 | 1,610,133.62 | + | 5,514.06 | \$ | 47,234.71 | 1,662,882.38 | 0.00\% | - | 17,788.41 |


| Oct-13 | 2013 | Q4 | 1,662,882.38 | \$ | 5,514.06 | \$ | 47,234.71 | 1,715,631.15 | 0.00\% | - | 17,788.41 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov-13 | 2013 | Q4 | 1,715,631.15 | \$ | 5,514.06 | \$ | 47,234.71 | 1,768,379.91 | 0.00\% | - | 17,788.41 |
| Dec-13 | 2013 | Q4 | 1,768,379.91 | \$ | 5,514.06 | \$ | 47,234.71 | 1,821,128.67 | 0.00\% | - | 17,788.41 |



This worksheet calculates the interest on OM\&A and amortization/depreciation expense, in the absence of monthly data.



## Smart Meter Model for <br> Electricity Distributors <br> (2013 Filers)

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 is atool designed to and that the Board's expection is that distributors 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 Boar
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 woul
 continuation of the SMFA is warranted. Press the "UPDATE WORKSHEET" button after choosing the applicable adders/riders.


| Calculation of Smart Meter Disposition Rider (per metered customer per month) |  |  |  |
| :---: | :---: | :---: | :---: |
| Years for collection or refunding | 0.666666667 |  |  |
| Deferred Incremental Revenue Requirement from 2006 to December 31, 2012 plus Interest on OM\&A and Amortization | \$ | 1,865,108.80 |  |
| SMFA Revenues collected from 2006 to 2013 test year (inclusive) | \$ | 3,844,274.26 |  |
| Plus Simple Interest on SMFA Revenues Net Deferred Revenue Requirement |  |  |  |
| Net Deferred Revenue Requirement | -s | 1,979,165.46 |  |
| SMDR May 1, 2013 to December 31, 2013 | -\$ | 1.75 | Match |
| Check: Forecasted SMDR Revenues | -\$ | 1,975,498.00 |  |
| Calculation of Smart Meter Incremental Revenue Requirement Rate Rider (per metered customer per month) |  |  |  |
| Incremental Revenue Requirement for 2013 ( \$ 1,201,434.5 |  |  |  |
| SMIRR | \$ | 0.71 | Match |
| Check: Forecasted SMIRR Revenues |  | 1,202,231.64 |  |



## Smart Meter Model for Electricity Distributors (2013 Filers)

This worksheet calculates the class-specific SMDRs according to accepted practice. A distributor may choose to use its own methodology, but should provide analogous
support for its allocation and derivation of class-specific SMDRs and SMIRRs.

## Class-speciific SMDRs





This worksheet calculates the class-specific SMIRRs according to accepted practice. A distributor may choose to use its own methodology, but should provide analogous support for its allocation and derivation of class-specific SMDRs and SMIRRs.

Class-specific SMDRs

## Revenue Requirement for 2013

Return on Capital
$\begin{array}{ccc}\$ & 363,435.52 & \begin{array}{c}\text { Weighted Meter Cost - Capital } \\ \text { Allocated per class }\end{array} \\ \$ & 566,816.46 & \begin{array}{c}\text { Weighted Meter Cost - Capital } \\ \text { Allocated per class }\end{array}\end{array}$


Number of Smart Meters installed by Class

# APPENDIX B - OEB SMART METER MODEL - GENERAL SERVICE 50 to 699 kW 




Note: Drop-down lists are shaded blue; Input cells are shaded green.

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.

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 fina basis. . i. capital costs have been included in rate base and OM\& costs in revenue requirement.
Distributors must enter an incremental costs related to their smart meter program and all revenues recovered to date in the applicable tabs except for thoses 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.
distributor has deployments in 2012, istributors should enter the forecasted OM\&A for 2012 for all smart meters in service.

## Smart Meter Capital Cost and Operational Expense Data

## Smart Meter Installation Plan

ActuallPlanned number of Smart Meters installed during the Calendar Year Residential
General Service < 50 kW
Actualplanned number of Smart Meters installed (Residential and GS < 50 kW only)
Percentage of Residential and $G S<50 \mathrm{~kW}$ Smart Meter installations Completed
ActualPlanned number of $\mathrm{GS}>50 \mathrm{~kW}$ meters installed
Other (please idenitity)
installed or planned to be installed

## Capital Costs

1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)
1.1.1 Smart Meters (may inculud enew meeers and modules, etc.)
1.1.2 Instalation Costs (may include socketkits, abour, venicle, benefits, etc.)
1.1.3a Workforce Automation Hardware (may incolue fielectwork handheless, barcode hardwave, etc.)
1.1.3b Workforce Automation Software (may include feielwoork handheleds, barcode hardware, elc.)

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 icencese, etc.)
1.2.3 Installation (mayy include meter seals and rings, collector computer harctware, etc,

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



## OM\&A Expenses

2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)
2.1.1 Maintenance (mayy include meter reverification costs, etc.)
2.1.2 Other (pleases specifiy) $\square$ Total Incremental AMCD OM\&A Costs
2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)
2.2.1 Maintenance
2.2.2 Other (please specifiy)

Total Incremental AMRC OM\&A Costs
2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)
2.3.1 Hardware Maintenance (may include severe support, etc.)
2.3.2 Software Maintenance (may include maintenance support, etc)
2.3.2 Other (please specifiy)

Total Incremental AMCC OM\&A Costs
2.4 WIDE AREA NETWORK (WAN)
2.4.1 WAN Maintenance
2.4.2 Other (please specifiy) $\square \square$

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

Total Other AM OM\&A Costs Related to Minimum Functionality
TOTAL OM\&A COSTS RELATED TO MIIMMUM FUNCTIONALITY
2.6 OM̌A COSTS RELATED TO BEYOND MINIIUM FUNCTIONALITY
(Please provide a descripive itite and dientity nature of beyond m minimum Anctionalit costs)
2.61 Costs related to to technical capapabilitese in the the smart meters or related communications infrastructure hat exceed those specified in 0. Reg 425106
2.6. Costs for deployment
and smal general sevice
2.6.3 Costs for Tou rate implementation, CIS system upgrades, web presentation,
integration with the MDMR, etc.

Total Om\&A Costs Beyond Minimum Functionality
Total Smart Meter OM\&A Costs




## Smart Meter Model for Electricity Distributors (2013 Filers)

Deemed Short-term Debt Capitalization Deemed Long-term Debt Capitalization Deemed Equity Capitalization
Preferred Shares
Total
Cost of Capital Parameters
Deemed Short-term Debt Rate
Long-term Debt Rate (actual/embedded/deemed) ${ }^{2}$ Target Return on Equity (ROE)
Return on Preferred Shares
WACC

Working Capital Allowance Rate
(\% of the sum of Cost of Power + controllable expenses)

## Taxes/PILs

Aggregate Corporate Income Tax Rate
Capital Tax (until July 1st, 2010)
2006
2007

$\square \square$ $\square$ $\qquad$ $15.0 \%$15.0\%
$15.0 \%$ 15.0\%

## Depreciation Rates

## Smart Meters - years - rate (\%)

Computer Hardware - years - rate (\%)

Computer Software - years - rate (\%)

Tools \& Equipment - years - rate (\%)

Other Equipment - years - rate (\%)

## CCA Rates

Smart Meters - CCA Class
Smart Meters - CCA Rate

Computer Equipment - CCA Class
Computer Equipment - CCA Rate
General Equipment - CCA Class General Equipment - CCA Rate

Applications Software - CCA Class Applications Software - CCA Rate



$\square$
12



12
100\% $\qquad$ 2 12 $\qquad$

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


## Smart Meter Model for Electricity Distributors (2013 Filers)

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

2006

$\$$
$\$$
$\$$




| $\$$ | - |
| :--- | :--- |
| $\$$ | - |
| $\$$ | - |



| $\$$ | - |
| :--- | :--- |
| $\$$ | - |
| $\$$ | - |



| $\$$ |
| :--- |
| $\$$ |
| $\$$ |


$\$$
$\$$
$\$$

2013 1,169,812 \begin{tabular}{llr|rr}
- <br>
20,191

 $\begin{array}{ll}20,191\end{array}$

$\begin{array}{l}\$ \\
\$\end{array}$ <br>
\hline
\end{tabular}





## Net Fixed Assets - Computer Software (including Applications Software)




## Smart Meter Model for Electricity Distributors (2013 Filers)

Average Net Fixed Asset Values (from Sheet 4)
Smart Meters
Computer Har
Computer Hardware
Computer Software
Tools \& Equipment
Other Equipment
Total Net Fixed Assets
Working Capital
Operating Expenses (from Sheet 2)
Working Capital Factor (from Sheet 3)
Working Capital Allowance
Incremental Smart Meter Rate Base
Return on Rate Base
Capital Structure
Deemed Short Term Debt
Deemed Long Term Debt
Equity
Preferred Shares
Total Capitalization
Return on
Deemed Short Term Debt
Deemed Long Term Debt
Equity
Total Return on Capita

Operating Expenses
Amortization Expenses (from Sheet 4)
Smart Meters
Computer Hardware
Computer Software
Tools \& Equipment
Tools \& Equipment
Other Equipment
Total Amortization Expense in Year
Incremental Revenue Requirement before Taxes/PILs
Calculation of Taxable Income
Incremental Operating Expenses
Incremental Operating Ex
Amortization Expense
Amortization Expe
Interest Expense
Net Income for Taxes/PILs
Grossed-up Taxes/PILs (from Sheet 7)
Revenue Requirement, including Grossed-up Taxes/PILs



## Smart Meter Model for Electricity Distributors (2013 Filers)

## For PILs Calculation




## N N <br> Smart Meter Model for Electricity Distributors (2013 Filers)

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 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 351.59 | \$ | 21,332.94 | \$ | 41,333.21 | \$ | 39,278.09 |
| Amortization | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 673.02 | \$ | 38,097.51 | \$ | 76,418.21 | \$ | 77,987.44 |
| CCA - Smart Meters | \$ | - | \$ | - | \$ | - | \$ | - | -\$ | 807.63 | -\$ | 45,652.40 | -\$ | 87,985.05 | -\$ | 82,829.32 |
| CCA - Computers | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| CCA - Applications Software | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| CCA - Other Equipment | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Change in taxable income | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 216.99 | \$ | 13,778.05 | \$ | 29,766.37 | \$ | 34,436.20 |
| Tax Rate (from Sheet 3) |  | 36.12\% |  | 36.12\% |  | 33.50\% |  | 33.00\% |  | 31.00\% |  | 28.25\% |  | 26.50\% |  | 26.50\% |
| Income Taxes Payable | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 67.27 | \$ | 3,892.30 | \$ | 7,888.09 | \$ | 9,125.59 |
| ONTARIO CAPITAL TAX |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Smart Meters | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 19,517.63 | \$ | 1,083,964.06 | \$ | 1,054,622.89 | \$ | 976,635.45 |
| Computer Hardware | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Computer Software (Including Application Software) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Tools \& Equipment | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Other Equipment | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | $-$ | \$ | - |
| Rate Base | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 19,517.63 | \$ | 1,083,964.06 | \$ | 1,054,622.89 | \$ | 976,635.45 |
| Less: Exemption |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Deemed Taxable Capital | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 19,517.63 | \$ | 1,083,964.06 | \$ | 1,054,622.89 | \$ | 976,635.45 |
| 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 $\times$ Rate) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 14.64 | \$ |  | \$ |  | \$ |  |
| Change in Income Taxes Payable | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 67.27 | \$ | 3,892.30 | \$ | 7,888.09 | \$ | 9,125.59 |
| Change in OCT | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 14.64 | \$ | - | \$ | - | \$ | - |
| PILs | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 81.90 | \$ | 3,892.30 | \$ | 7,888.09 | \$ | 9,125.59 |
| Gross Up PILs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tax Rate |  | 36.12\% |  | 36.12\% |  | 33.50\% |  | 33.00\% |  | 31.00\% |  | 28.25\% |  | 26.50\% |  | 26.50\% |
| Change in Income Taxes Payable | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 97.49 | \$ | 5,424.81 | \$ | 10,732.09 | \$ | 12,415.77 |
| Change in OCT | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 14.64 | \$ | - | \$ | - | \$ | - |
| PILs | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 112.13 | \$ | 5,424.81 | \$ | 10,732.09 | \$ | 12,415.77 |

Smart Meter Model for
Electricity Distributors
(2013 Filers)

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 <br> Rate |  | Interest | Closing Balance | Annual amounts | Board Approved Smart Meter Funding Adder |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2008 Q3 | 3.35\% | 5.43\% | Nov-06 | 2006 | Q4 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2008 Q4 | 3.35\% | 5.43\% | Dec-06 | 2006 | Q4 | \$ | - |  | 4.59\% | \$ | - | \$ | \$ |  |
| 2009 Q1 | 2.45\% | 6.61\% | Jan-07 | 2007 | Q1 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2009 Q2 | 1.00\% | 6.61\% | Feb-07 | 2007 | Q1 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2009 Q3 | 0.55\% | 5.67\% | Mar-07 | 2007 | Q1 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2009 Q4 | 0.55\% | 4.66\% | Apr-07 | 2007 | Q2 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2010 Q1 | 0.55\% | 4.34\% | May-07 | 2007 | Q2 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2010 Q2 | 0.55\% | 4.34\% | Jun-07 | 2007 | Q2 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2010 Q3 | 0.89\% | 4.66\% | Jul-07 | 2007 | Q3 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2010 Q4 | 1.20\% | 4.01\% | Aug-07 | 2007 | Q3 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2011 Q1 | 1.47\% | 4.29\% | Sep-07 | 2007 | Q3 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2011 Q2 | 1.47\% | 4.29\% | Oct-07 | 2007 | Q4 | \$ | - |  | 5.14\% | \$ | - | \$ |  |  |
| 2011 Q3 | 1.47\% | 4.29\% | Nov-07 | 2007 | Q4 | \$ | - |  | 5.14\% | \$ | - | \$ |  |  |
| 2011 Q4 | 1.47\% | 3.92\% | Dec-07 | 2007 | Q4 | \$ | - |  | 5.14\% | \$ | - | \$ | \$ |  |
| 2012 Q1 | 1.47\% | 3.92\% | Jan-08 | 2008 | Q1 | \$ | - |  | 5.14\% | \$ | - | \$ |  |  |
| 2012 Q2 | 1.47\% | 3.51\% | Feb-08 | 2008 | Q1 | \$ | - |  | 5.14\% | \$ | - | \$ |  |  |
| 2012 Q3 | 1.47\% | 3.51\% | Mar-08 | 2008 | Q1 | \$ | - |  | 5.14\% | \$ | - | \$ |  |  |
| 2012 Q4 | 1.47\% | 3.51\% | Apr-08 | 2008 | Q2 | \$ | - |  | 4.08\% | \$ | - | \$ |  |  |
| 2013 Q1 |  |  | May-08 | 2008 | Q2 | \$ | - |  | 4.08\% | \$ | - | \$ |  |  |
| 2013 Q2 |  |  | Jun-08 | 2008 | Q2 | \$ | - |  | 4.08\% | \$ | - | \$ - |  |  |

## N N <br> 20 $=1$ $=1$ <br> Smart Meter Model for <br> Electricity Distributors (2013 Filers)

This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

| $\begin{aligned} & \text { Interest Rates } \\ & 2013 \text { Q3 } \\ & 2013 \text { Q4 } \end{aligned}$ | Approved Deferral and Variance Accounts | CWIP | Date | Year | Quarter | Opening Balance (Principal) |  |  | Adder nues | Interest <br> Rate | Interest |  | Closing Balance \$ |  | Annual amounts |  | Board Approved Smart Meter Funding Adder |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Jul-08 | 2008 | Q3 | \$ | - |  |  | 3.35\% | \$ | - |  |  |  |
|  |  |  | Aug-08 | 2008 | Q3 | \$ | - |  |  | 3.35\% | \$ | - | \$ | + |  |  |  |  |  |
|  |  |  | Sep-08 | 2008 | Q3 | \$ | - |  |  | 3.35\% | \$ | - | \$ | \$ - |  |  |  |
|  |  |  | Oct-08 | 2008 | Q4 | \$ | - |  |  | 3.35\% | \$ | - | \$ | \$ - |  |  |  |
|  |  |  | Nov-08 | 2008 | Q4 | \$ | - |  |  | 3.35\% | \$ | - | \$ | \$ - |  |  |  |
|  |  |  | Dec-08 | 2008 | Q4 | \$ | - |  |  | 3.35\% | \$ | - | \$ | \$ - | \$ | - |  |
|  |  |  | Jan-09 | 2009 | Q1 | \$ | - |  |  | 2.45\% | \$ | - | \$ | \$ - |  |  |  |
|  |  |  | Feb-09 | 2009 | Q1 | \$ | - |  |  | 2.45\% | \$ | - | \$ | \$ - |  |  |  |
|  |  |  | Mar-09 | 2009 | Q1 | \$ | - |  |  | 2.45\% | \$ | - | \$ | \$ - |  |  |  |
|  |  |  | Apr-09 | 2009 | Q2 | \$ | - |  |  | 1.00\% | \$ | - | \$ | \$ |  |  |  |
|  |  |  | May-09 | 2009 | Q2 | \$ | - |  |  | 1.00\% | \$ | - | \$ | \$ - |  |  |  |
|  |  |  | Jun-09 | 2009 | Q2 | \$ | - |  |  | 1.00\% | \$ | - | \$ | \$ - |  |  |  |
|  |  |  | Jul-09 | 2009 | Q3 | \$ | - |  |  | 0.55\% | \$ | - | \$ | \$ - |  |  |  |
|  |  |  | Aug-09 | 2009 | Q3 | \$ | - |  |  | 0.55\% | \$ | - | \$ | \$ - |  |  |  |
|  |  |  | Sep-09 | 2009 | Q3 | \$ | - |  |  | 0.55\% | \$ | - | \$ | \$ - |  |  |  |
|  |  |  | Oct-09 | 2009 | Q4 | \$ | - |  |  | 0.55\% | \$ | - | \$ | \$ - |  |  |  |
|  |  |  | Nov-09 | 2009 | Q4 | \$ | - |  |  | 0.55\% | \$ | - | \$ | \$ - |  |  |  |
|  |  |  | Dec-09 | 2009 | Q4 | \$ | - |  |  | 0.55\% | \$ | - | \$ | \$ - | \$ | - |  |
|  |  |  | Jan-10 | 2010 | Q1 | \$ | - | \$ | 1,289.25 | 0.55\% | \$ | - | \$ | 1,289.25 |  |  |  |
|  |  |  | Feb-10 | 2010 | Q1 | \$ | 1,289.25 | \$ | 1,496.00 | 0.55\% | \$ | 0.59 | \$ | 2,785.84 |  |  |  |
|  |  |  | Mar-10 | 2010 | Q1 | \$ | 2,785.25 | \$ | 1,510.00 | 0.55\% | \$ | 1.28 | \$ | 4,296.53 |  |  |  |
|  |  |  | Apr-10 | 2010 | Q2 | \$ | 4,295.25 | \$ | 1,504.00 | 0.55\% | \$ | 1.97 | \$ | 5,801.22 |  |  |  |
|  |  |  | May-10 | 2010 | Q2 | \$ | 5,799.25 | \$ | 1,501.00 | 0.55\% | \$ | 2.66 | \$ | 7,302.91 |  |  |  |
|  |  |  | Jun-10 | 2010 | Q2 | \$ | 7,300.25 | \$ | 1,500.00 | 0.55\% | \$ | 3.35 | \$ | 8,803.60 |  |  |  |
|  |  |  | Jul-10 | 2010 | Q3 | \$ | 8,800.25 | \$ | 1,500.00 | 0.89\% | \$ | 6.53 | \$ | 10,306.78 |  |  |  |
|  |  |  | Aug-10 | 2010 | Q3 | \$ | 10,300.25 | \$ | 1,504.00 | 0.89\% | \$ | 7.64 | \$ | 11,811.89 |  |  |  |
|  |  |  | Sep-10 | 2010 | Q3 | \$ | 11,804.25 | \$ | 1,508.00 | 0.89\% | \$ | 8.75 | \$ | 13,321.00 |  |  |  |
|  |  |  | Oct-10 | 2010 | Q4 | \$ | 13,312.25 | \$ | 1,511.00 | 1.20\% | \$ | 13.31 | \$ | 14,836.56 |  |  |  |
|  |  |  | Nov-10 | 2010 | Q4 | \$ | 14,823.25 | \$ | 1,510.00 | 1.20\% | \$ | 14.82 | \$ | 16,348.07 |  |  |  |
|  |  |  | Dec-10 | 2010 | Q4 | \$ | 16,333.25 | \$ | 1,507.00 | 1.20\% | \$ | 16.33 | \$ | 17,856.58 | \$ | 17,917.48 |  |
|  |  |  | Jan-11 | 2011 | Q1 | \$ | 17,840.25 | \$ | 1,508.00 | 1.47\% | \$ | 21.85 | \$ | 19,370.10 |  |  |  |



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 |  | Balance cipal) | Funding Adder Revenues |  | Interest Rate | Interest |  | Closing Balance |  | Annual amounts |  | Board Approved Smart Meter Funding Adder |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Feb-11 | 2011 | Q1 | \$ | 19,348.25 | \$ | 1,518.00 | 1.47\% | \$ | 23.70 |  |  |  |  |  |
|  |  |  | Mar-11 | 2011 | Q1 | \$ | 20,866.25 | \$ | 1,507.00 | 1.47\% | \$ | 25.56 | \$ | 22,398.81 |  |  |  |
|  |  |  | Apr-11 | 2011 | Q2 | \$ | 22,373.25 | \$ | 1,511.00 | 1.47\% | \$ | 27.41 | \$ | 23,911.66 |  |  |  |
|  |  |  | May-11 | 2011 | Q2 | \$ | 23,884.25 | \$ | 2,195.00 | 1.47\% | \$ | 29.26 | \$ | 26,108.51 |  |  |  |
|  |  |  | Jun-11 | 2011 | Q2 | \$ | 26,079.25 | \$ | 2,308.00 | 1.47\% | \$ | 31.95 | \$ | 28,419.20 |  |  |  |
|  |  |  | Jul-11 | 2011 | Q3 | \$ | 28,387.25 | \$ | 2,284.00 | 1.47\% | \$ | 34.77 | \$ | 30,706.02 |  |  |  |
|  |  |  | Aug-11 | 2011 | Q3 | \$ | 30,671.25 | \$ | 2,288.00 | 1.47\% | \$ | 37.57 | \$ | 32,996.82 |  |  |  |
|  |  |  | Sep-11 | 2011 | Q3 | \$ | 32,959.25 | \$ | 2,259.00 | 1.47\% | \$ | 40.38 | \$ | 35,258.63 |  |  |  |
|  |  |  | Oct-11 | 2011 | Q4 | \$ | 35,218.25 | \$ | 2,264.00 | 1.47\% | \$ | 43.14 | \$ | 37,525.39 |  |  |  |
|  |  |  | Nov-11 | 2011 | Q4 | \$ | 37,482.25 | \$ | 2,255.00 | 1.47\% | \$ | 45.92 | \$ | 39,783.17 |  |  |  |
|  |  |  | Dec-11 | 2011 | Q4 | \$ | 39,737.25 | \$ | 2,264.00 | 1.47\% | \$ | 48.68 | \$ | 42,049.93 | \$ | 24,571.19 |  |
|  |  |  | Jan-12 | 2012 | Q1 | \$ | 42,001.25 | \$ | 293.00 | 1.47\% | \$ | 51.45 | \$ | 42,345.70 |  |  |  |
|  |  |  | Feb-12 | 2012 | Q1 | \$ | 42,294.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | 42,346.06 |  |  |  |
|  |  |  | Mar-12 | 2012 | Q1 | \$ | 42,294.25 | \$ | 3.00 | 1.47\% | \$ | 51.81 | \$ | 42,349.06 |  |  |  |
|  |  |  | Apr-12 | 2012 | Q2 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | 42,349.06 |  |  |  |
|  |  |  | May-12 | 2012 | Q2 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | 42,349.06 |  |  |  |
|  |  |  | Jun-12 | 2012 | Q2 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | 42,349.06 |  |  |  |
|  |  |  | Jul-12 | 2012 | Q3 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | 42,349.06 |  |  |  |
|  |  |  | Aug-12 | 2012 | Q3 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | 42,349.06 |  |  |  |
|  |  |  | Sep-12 | 2012 | Q3 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | 42,349.06 |  |  |  |
|  |  |  | Oct-12 | 2012 | Q4 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | 42,349.06 |  |  |  |
|  |  |  | Nov-12 | 2012 | Q4 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | 42,349.06 |  |  |  |
|  |  |  | Dec-12 | 2012 | Q4 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | 42,349.06 | \$ | 917.36 |  |
|  |  |  | Jan-13 | 2013 | Q1 | \$ | 42,297.25 |  |  | 0.00\% | \$ | - | \$ | 42,297.25 |  |  |  |
|  |  |  | Feb-13 | 2013 | Q1 | \$ | 42,297.25 |  |  | 0.00\% | \$ | - | \$ | 42,297.25 |  |  |  |
|  |  |  | Mar-13 | 2013 | Q1 | \$ | 42,297.25 |  |  | 0.00\% | \$ | - | \$ | 42,297.25 |  |  |  |
|  |  |  | Apr-13 | 2013 | Q2 | \$ | 42,297.25 |  |  | 0.00\% | \$ | - | \$ | 42,297.25 |  |  |  |
|  |  |  | May-13 | 2013 | Q2 | \$ | 42,297.25 |  |  | 0.00\% | \$ | - | \$ | 42,297.25 |  |  |  |
|  |  |  | Jun-13 | 2013 | Q2 | \$ | 42,297.25 |  |  | 0.00\% | \$ | - | \$ | 42,297.25 |  |  |  |
|  |  |  | Jul-13 | 2013 | Q3 | \$ | 42,297.25 |  |  | 0.00\% | \$ | - | \$ | 42,297.25 |  |  |  |
|  |  |  | Aug-13 | 2013 | Q3 | \$ | 42,297.25 |  |  | 0.00\% | \$ | - | \$ | 42,297.25 |  |  |  |

## (2) <br>  <br> Smart Meter Model for <br> Electricity Distributors (2013 Filers)

This worksheet calculates the funding adder revenues.

Account 1555 - Sub-account Funding Adder Revenues

| Approved Deferral and Variance Accounts | CWIP | Date | Year | Quarter |  | Balance cipal) | Funding Adder Revenues | Interest Rate |  | Interest |  | ng Balance | Annual amounts | Board Approved Smart Meter Funding Adder |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Sep-13 | 2013 | Q3 | \$ | 42,297.25 |  | 0.00\% | \$ | - | \$ | 42,297.25 |  |  |
|  |  | Oct-13 | 2013 | Q4 | \$ | 42,297.25 |  | 0.00\% | \$ | - | \$ | 42,297.25 |  |  |
|  |  | Nov-13 | 2013 | Q4 | \$ | 42,297.25 |  | 0.00\% | \$ | - | \$ | 42,297.25 |  |  |
|  |  | Dec-13 | 2013 | Q4 | \$ | 42,297.25 |  | 0.00\% | \$ | - | \$ | 42,297.25 | \$ |  |
|  |  | tal Fund | ng Ad | der Reve | nue | cted | \$ 42,297.25 |  | \$ | 1,108.78 | \$ | 43,406.03 | \$ 43,406.03 |  |



## Smart Meter Model for <br> Electricity Distributors (2013 Filers)

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

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

| Prescribed Interest Rates | Approved Deferral and Variance Accounts | CWIP | Date | Year | Quarter | Opening Balance (Principal) | OM\&A Expenses | Amortization / Depreciation Expense | Closing Balance (Principal) | (Annual) Interest Rate | Interest (on opening balance) | Cumulative Interest |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2006 Q1 | 0.00\% | 0.00\% | Jan-06 | 2006 | Q1 | \$ |  |  | - | 0.00\% | - |  |
| 2006 Q2 | 4.14\% | 4.68\% | Feb-06 | 2006 | Q1 | - |  |  | - | 0.00\% | - |  |
| 2006 Q3 | 4.59\% | 5.05\% | Mar-06 | 2006 | Q1 | - |  |  | - | 0.00\% | - |  |
| 2006 Q4 | 4.59\% | 4.72\% | Apr-06 | 2006 | Q2 | - |  |  | - | 4.14\% | - |  |
| 2007 Q1 | 4.59\% | 4.72\% | May-06 | 2006 | Q2 | - |  |  | - | 4.14\% | - |  |
| 2007 Q2 | 4.59\% | 4.72\% | Jun-06 | 2006 | Q2 | - |  |  | - | 4.14\% | - |  |
| 2007 Q3 | 4.59\% | 5.18\% | Jul-06 | 2006 | Q3 | - |  |  | - | 4.59\% | - |  |
| 2007 Q4 | 5.14\% | 5.18\% | Aug-06 | 2006 | Q3 | - |  |  | - | 4.59\% | - |  |
| 2008 Q1 | 5.14\% | 5.18\% | Sep-06 | 2006 | Q3 | - |  |  | - | 4.59\% | - |  |
| 2008 Q2 | 4.08\% | 5.18\% | Oct-06 | 2006 | Q4 | - |  |  | - | 4.59\% | - |  |
| 2008 Q3 | 3.35\% | 5.43\% | Nov-06 | 2006 | Q4 | - |  |  | - | 4.59\% | - |  |
| 2008 Q4 | 3.35\% | 5.43\% | Dec-06 | 2006 | Q4 | - |  |  | - | 4.59\% | - |  |
| 2009 Q1 | 2.45\% | 6.61\% | Jan-07 | 2007 | Q1 | - |  |  | - | 4.59\% | - |  |
| 2009 Q2 | 1.00\% | 6.61\% | Feb-07 | 2007 | Q1 | - |  |  | - | 4.59\% | - |  |
| 2009 Q3 | 0.55\% | 5.67\% | Mar-07 | 2007 | Q1 | - |  |  | - | 4.59\% | - |  |
| 2009 Q4 | 0.55\% | 4.66\% | Apr-07 | 2007 | Q2 | - |  |  | - | 4.59\% | - |  |
| 2010 Q1 | 0.55\% | 4.34\% | May-07 | 2007 | Q2 | - |  |  | - | 4.59\% | - |  |
| 2010 Q2 | 0.55\% | 4.34\% | Jun-07 | 2007 | Q2 | - |  |  | - | 4.59\% | - |  |
| 2010 Q3 | 0.89\% | 4.66\% | Jul-07 | 2007 | Q3 | - |  |  | - | 4.59\% | - |  |
| 2010 Q4 | 1.20\% | 4.01\% | Aug-07 | 2007 | Q3 | - |  |  | - | 4.59\% | - |  |
| 2011 Q1 | 1.47\% | 4.29\% | Sep-07 | 2007 | Q3 | - |  |  | - | 4.59\% | - |  |
| 2011 Q2 | 1.47\% | 4.29\% | Oct-07 | 2007 | Q4 | - |  |  | - | 5.14\% | - |  |
| 2011 Q3 | 1.47\% | 4.29\% | Nov-07 | 2007 | Q4 | - |  |  | - | 5.14\% | - |  |
| 2011 Q4 | 1.47\% | 3.92\% | Dec-07 | 2007 | Q4 | - |  |  | - | 5.14\% | - |  |
| 2012 Q1 | 1.47\% | 3.92\% | Jan-08 | 2008 | Q1 | - |  |  | - | 5.14\% | - |  |
| 2012 Q2 | 1.47\% | 3.51\% | Feb-08 | 2008 | Q1 | - |  |  | - | 5.14\% | - |  |
| 2012 Q3 | 1.47\% | 3.51\% | Mar-08 | 2008 | Q1 | - |  |  | - | 5.14\% | - |  |
| 2012 Q4 | 1.47\% | 3.51\% | Apr-08 | 2008 | Q2 | - |  |  | - | 4.08\% | - |  |
| 2013 Q1 | 0.00\% | 0.00\% | May-08 | 2008 | Q2 | - |  |  | - | 4.08\% | - |  |
| 2013 Q2 | 0.00\% | 0.00\% | Jun-08 | 2008 | Q2 | - |  |  | - | 4.08\% | - |  |
| 2013 Q3 | 0.00\% | 0.00\% | Jul-08 | 2008 | Q3 | - |  |  | - | 3.35\% | - |  |
| 2013 Q4 | 0.00\% | 0.00\% | Aug-08 | 2008 | Q3 | - |  |  | - | 3.35\% | - |  |
|  |  |  | Sep-08 | 2008 | Q3 | - |  |  | - | 3.35\% | - |  |


| Oct-08 | 2008 | Q4 | - |  |  |  |  | - | 3.35\% | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nov-08 | 2008 | Q4 | - |  |  |  |  | - | 3.35\% | - | - |
| Dec-08 | 2008 | Q4 | - |  |  |  |  | - | 3.35\% | - | - |
| Jan-09 | 2009 | Q1 | - |  |  |  |  | - | 2.45\% | - | - |
| Feb-09 | 2009 | Q1 | - |  |  |  |  | - | 2.45\% | - | - |
| Mar-09 | 2009 | Q1 | - |  |  |  |  | - | 2.45\% | - | - |
| Apr-09 | 2009 | Q2 | - |  |  |  |  | - | 1.00\% | - | - |
| May-09 | 2009 | Q2 | - |  |  |  |  | - | 1.00\% | - | - |
| Jun-09 | 2009 | Q2 | - |  |  |  |  | - | 1.00\% | - | - |
| Jul-09 | 2009 | Q3 | - |  |  |  |  | - | 0.55\% | - | - |
| Aug-09 | 2009 | Q3 | - |  |  |  |  | - | 0.55\% | - | - |
| Sep-09 | 2009 | Q3 | - |  |  |  |  | - | 0.55\% | - | - |
| Oct-09 | 2009 | Q4 | - |  |  |  |  | - | 0.55\% | - | - |
| Nov-09 | 2009 | Q4 | - |  |  |  |  | - | 0.55\% | - | - |
| Dec-09 | 2009 | Q4 | . |  |  |  |  | - | 0.55\% | - | - |
| Jan-10 | 2010 | Q1 |  | \$ | 2.84 | \$ | 56.09 | 58.93 | 0.55\% |  | - |
| Feb-10 | 2010 | Q1 | 58.93 | \$ | 3.11 | \$ | 56.09 | 118.13 | 0.55\% | 0.03 | 0.03 |
| Mar-10 | 2010 | Q1 | 118.13 | \$ | 3.49 | \$ | 56.09 | 177.70 | 0.55\% | 0.05 | 0.08 |
| Apr-10 | 2010 | Q2 | 177.70 | \$ | 7.73 | \$ | 56.09 | 241.52 | 0.55\% | 0.08 | 0.16 |
| May-10 | 2010 | Q2 | 241.52 | \$ | 3.31 | \$ | 56.09 | 300.91 | 0.55\% | 0.11 | 0.27 |
| Jun-10 | 2010 | Q2 | 300.91 | \$ | 6.63 | \$ | 56.09 | 363.63 | 0.55\% | 0.14 | 0.41 |
| Jul-10 | 2010 | Q3 | 363.63 | \$ | 5.32 | \$ | 56.09 | 425.04 | 0.89\% | 0.27 | 0.68 |
| Aug-10 | 2010 | Q3 | 425.04 | \$ | 1.90 | \$ | 56.09 | 483.02 | 0.89\% | 0.32 | 1.00 |
| Sep-10 | 2010 | Q3 | 483.02 | \$ | 3.22 | \$ | 56.09 | 542.32 | 0.89\% | 0.36 | 1.35 |
| Oct-10 | 2010 | Q4 | 542.32 | \$ | 3.50 | \$ | 56.09 | 601.91 | 1.20\% | 0.54 | 1.90 |
| Nov-10 | 2010 | Q4 | 601.91 | \$ | 3.32 | \$ | 56.09 | 661.32 | 1.20\% | 0.60 | 2.50 |
| Dec-10 | 2010 | Q4 | 661.32 | \$ | 6.77 | \$ | 56.09 | 724.17 | 1.20\% | 0.66 | 3.16 |
| Jan-11 | 2011 | Q1 | 724.17 | \$ | 246.84 | \$ | 3,174.79 | 4,145.80 | 1.47\% | 0.89 | 4.05 |
| Feb-11 | 2011 | Q1 | 4,145.80 | \$ | 156.91 | \$ | 3,174.79 | 7,477.50 | 1.47\% | 5.08 | 9.13 |
| Mar-11 | 2011 | Q1 | 7,477.50 | \$ | 156.41 | \$ | 3,174.79 | 10,808.70 | 1.47\% | 9.16 | 18.29 |
| Apr-11 | 2011 | Q2 | 10,808.70 | \$ | 136.74 | \$ | 3,174.79 | 14,120.23 | 1.47\% | 13.24 | 31.53 |
| May-11 | 2011 | Q2 | 14,120.23 | \$ | 126.76 | \$ | 3,174.79 | 17,421.79 | 1.47\% | 17.30 | 48.82 |
| Jun-11 | 2011 | Q2 | 17,421.79 | \$ | 139.51 | \$ | 3,174.79 | 20,736.09 | 1.47\% | 21.34 | 70.17 |
| Jul-11 | 2011 | Q3 | 20,736.09 | \$ | 155.72 | \$ | 3,174.79 | 24,066.61 | 1.47\% | 25.40 | 95.57 |
| Aug-11 | 2011 | Q3 | 24,066.61 | \$ | 146.88 | \$ | 3,174.79 | 27,388.28 | 1.47\% | 29.48 | 125.05 |
| Sep-11 | 2011 | Q3 | 27,388.28 | \$ | 147.92 | \$ | 3,174.79 | 30,710.98 | 1.47\% | 33.55 | 158.60 |
| Oct-11 | 2011 | Q4 | 30,710.98 | \$ | 622.08 | \$ | 3,174.79 | 34,507.86 | 1.47\% | 37.62 | 196.22 |
| Nov-11 | 2011 | Q4 | 34,507.86 | \$ | 150.53 | \$ | 3,174.79 | 37,833.17 | 1.47\% | 42.27 | 238.49 |
| Dec-11 | 2011 | Q4 | 37,833.17 | \$ | 173.68 | \$ | 3,174.79 | 41,181.64 | 1.47\% | 46.35 | 284.84 |
| Jan-12 | 2012 | Q1 | 41,181.64 | \$ | 275.60 | \$ | 6,368.18 | 47,825.43 | 1.47\% | 50.45 | 335.29 |
| Feb-12 | 2012 | Q1 | 47,825.43 | \$ | 269.49 | \$ | 6,368.18 | 54,463.10 | 1.47\% | 58.59 | 393.87 |
| Mar-12 | 2012 | Q1 | 54,463.10 | \$ | 157.22 | \$ | 6,368.18 | 60,988.50 | 1.47\% | 66.72 | 460.59 |
| Apr-12 | 2012 | Q2 | 60,988.50 | \$ | 231.84 | \$ | 6,368.18 | 67,588.52 | 1.47\% | 74.71 | 535.30 |
| May-12 | 2012 | Q2 | 67,588.52 | \$ | 231.84 | \$ | 6,368.18 | 74,188.54 | 1.47\% | 82.80 | 618.10 |
| Jun-12 | 2012 | Q2 | 74,188.54 | \$ | 212.20 | \$ | 6,368.18 | 80,768.93 | 1.47\% | 90.88 | 708.98 |
| Jul-12 | 2012 | Q3 | 80,768.93 | \$ | 279.69 | \$ | 6,368.18 | 87,416.81 | 1.47\% | 98.94 | 807.92 |
| Aug-12 | 2012 | Q3 | 87,416.81 | \$ | 156.65 | \$ | 6,368.18 | 93,941.65 | 1.47\% | 107.09 | 915.00 |
| Sep-12 | 2012 | Q3 | 93,941.65 | \$ | 218.86 | \$ | 6,368.18 | 100,528.69 | 1.47\% | 115.08 | 1,030.08 |
| Oct-12 | 2012 | Q4 | 100,528.69 | \$ | 225.93 | \$ | 6,368.18 | 107,122.81 | 1.47\% | 123.15 | 1,153.23 |
| Nov-12 | 2012 | Q4 | 107,122.81 | \$ | 225.93 | \$ | 6,368.18 | 113,716.92 | 1.47\% | 131.23 | 1,284.46 |
| Dec-12 | 2012 | Q4 | 113,716.92 | \$ | 225.93 | \$ | 6,368.18 | 120,311.04 | 1.47\% | 139.30 | 1,423.76 |
| Jan-13 | 2013 | Q1 | 120,311.04 | \$ | 491.36 | \$ | 6,498.95 | 127,301.35 | 0.00\% | - | 1,423.76 |
| Feb-13 | 2013 | Q1 | 127,301.35 | \$ | 491.36 | \$ | 6,498.95 | 134,291.66 | 0.00\% | - | 1,423.76 |
| Mar-13 | 2013 | Q1 | 134,291.66 | \$ | 491.36 | \$ | 6,498.95 | 141,281.97 | 0.00\% | - | 1,423.76 |
| Apr-13 | 2013 | Q2 | 141,281.97 | \$ | 491.36 | \$ | 6,498.95 | 148,272.28 | 0.00\% | - | 1,423.76 |
| May-13 | 2013 | Q2 | 148,272.28 | \$ | 491.36 | \$ | 6,498.95 | 155,262.59 | 0.00\% | - | 1,423.76 |
| Jun-13 | 2013 | Q2 | 155,262.59 | \$ | 491.36 | \$ | 6,498.95 | 162,252.90 | 0.00\% | - | 1,423.76 |
| Jul-13 | 2013 | Q3 | 162,252.90 | \$ | 491.36 | \$ | 6,498.95 | 169,243.21 | 0.00\% | - | 1,423.76 |
| Aug-13 | 2013 | Q3 | 169,243.21 | \$ | 491.36 | \$ | 6,498.95 | 176,233.52 | 0.00\% | - | 1,423.76 |
| Sep-13 | 2013 | Q3 | 176,233.52 | \$ | 491.36 | \$ | 6,498.95 | 183,223.83 | 0.00\% | - | 1,423.76 |


| Oct-13 | 2013 | Q4 |
| :---: | :---: | :---: |
| Nov-13 | 2013 | Q4 |
| Dec-13 | 2013 | Q4 |

183,223.83 \$ 491.36 \$ 6.498 .95 | $90,214.14$ | $\$$ | 491.36 | $\$$ | $6,498.95$ |
| :--- | :--- | :--- | :--- | :--- |

 | $190,214.14$ | $0.00 \%$ |
| :--- | :--- |
| $197,204.45$ | $0.00 \%$ | 204,194.76 0.00\%

1,423.76 1,423.76


This worksheet calculates the interest on OM\&A and amortization/depreciation expense, in the absence of monthly data.


## Smart Meter Model for <br> Electricity Distributors <br> (2013 Filers)

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 RMM decisions, the Board noted that current funding adders will
 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 a de continuation of the SMFA is warranted. Press the "UPDATE WORKSHEET" button after choosing the applicable adders/riders.


| Calculation of Smart Meter Disposition Rider (per metered customer per month) |  |  |  |
| :---: | :---: | :---: | :---: |
| Years for collection or refunding | 0.666666667 |  |  |
| Deferred Incremental Revenue Requirement from 2006 to December 31, 2012 plus Interest on OM\&A and Amortization | \$ | 263,128.41 |  |
| SMFA Revenues collected from 2006 to 2013 test year (inclusive) | \$ | 43,406.03 |  |
| Plus Simple Interest on SMFA Revenues Net Deferred Revenue Requirement |  |  |  |
| Net Deferred Revenue Requirement | \$ | 19,722.38 |  |
| SMDR May 1, 2013 to December 31, 2013 | \$ | 18.06 | Match |
| Check: Forecasted SMDR Revenues | \$ | 219,754.08 |  |
| Calculation of Smart Meter Incremental Revenue Requirement Rate Rider (per metered customer per month) |  |  |  |
| Incremental Revenue Requirement for 2013 | \$ | 174,249.83 |  |
| SMIRR | \$ | 9.55 | Match |
| Check: Forecasted SMIRR Revenues | \$ | 174,306.60 |  |



## Smart Meter Model for Electricity Distributors (2013 Filers)

This worksheet calculates the class-specific SMDRs according to accepted practice. A distributor may choose to use its own methodology, but should provide analogous support for its allocation and derivation of class-specificic SMDRs and SMIRRs.

## Class-speciific SMDRs



## (a) En en en <br> Smart Meter Model for <br> Electricity Distributors (2013 Filers)

This worksheet calculates the class-specific SMIRRs according to accepted practice. A distributor may choose to use its own methodology, but should provide analogous support for its allocation and derivation of class-specific SMDRs and SMIRRs.

Class-specific SMDRs

## Revenue Requirement for 2013

Return on Capital
Depreciation/Amortization
expense

| 2013 | Explanation / Allocator <br> Check Row if SMDR/SMIRR apply to <br> class |  |
| :---: | :---: | :---: |
| $\$$ | $77,950.33$ | Weighted Meter Cost - Capital <br> Allocated per class |
| $\$$ | $77,987.44$ | Weighted Meter Cost - Capital <br> Allocated per class |
| $\$$ | $5,896.28$ | Number of Smart Meters installed by <br> Class |



## APPENDIX C - HOBNI SMART METER 2010 STUB YEAR MODEL

## Smart Meter Stub Year (2010) Calculations

Smart Meter Costs Recovery:
2010 Rate Year Entitlement (2009 Capital) 3,098,675

## Smart Meter Fixed Asset Continuity 2006 to 2009 Capital

## For Accounting

|  | Amortization Period | Opening Balance | Actual 2006 <br> Additions | Actual Amortization For 2006 | 2006 Net Book Value | 2006 Average NBV |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OH \& UG Services |  | - | - | - | - | - |
| Smart meters-1860 |  | - | - | - | - | - |
| Computers-1920-HDW |  | - | - |  | - | - |
| Computers-1925-SFT |  | - |  |  | - | - |
| Tools, Shops - 1940 |  | - |  |  | - | - |
|  |  | - | - | - | - | - |
|  | Amortization Period | ening Balance | Actual 2007 <br> Additions | Actual Amortization For 2007 | 2007 Net Book Value | 2007 Average NBV |
| OH \& UG Services |  | - |  | - | - | - |
| Smart meters-1860 | 15 | - | 4,302,123 | 143,404 | 4,158,719 | 2,079,360 |
| Computers-1920 |  | - |  |  | - | - |
| Computers-1925 |  | - |  |  | - | - |
| Tools, Shops - 1940 |  | - |  |  | - | - |
|  |  | - | 4,302,123 | 143,404 | 4,158,719 | 2,079,360 |
|  |  | Opening Balance | Actual 2008 <br> Additions | Actual Amortization For 2008 | 2008 Net Book Value | 2008 Average NBV |
| OH \& UG Services |  | - | - | - | - | - |
| Smart meters-1860 | 15 | 4,158,719 | 5,908,201 | 483,748 | 9,583,172 | 6,870,945 |
| Computers-1920 |  | - |  |  | - | - |
| Computers-1925 |  | - |  |  | - | - |
| Tools, Shops - 1940 |  | - |  |  | - | - |
|  |  | 4,158,719 | 5,908,201 | 483,748 | 9,583,172 | 6,870,945 |
|  |  | Opening Balance | Actual 2009 Additions | Actual Amortization For 2009 | 2009 Net Book Value | 2009 Average NBV |
| OH \& UG Services | 25 | - | - | - - | - | - |
| General Office | 10 |  | - | - | - | - |
| Building Renovations | 30 |  | - | - | - | - |
| Smart meters-1860 | 15 | 9,583,172 | 8,663,014 | 969,455 | 17,276,730 | 13,429,951 |
| Computers-1920 | 5 | - |  |  | - | - |
| Computers-1925 | 5 | - |  |  | - | - |
| Tools, Shops - 1940 | 10 | - |  |  | - | - |
|  |  | 9,583,172 | 8,663,014 | 969,455 | 17,276,730 | 13,429,951 |
|  |  | Opening Balance | Forecast 2010 <br> Additions | Forecast <br> Amortization For 2010 | 2010 Net Book Value | 2010 Average NBV |
| OH \& UG Services | 25 | - | - | - | - | - |
| General Office | 10 | - | - | - | - | - |
| Building Renovations | 30 | - | - | - | - | - |
| Smart meters-1860 | 15 | 17,276,730 | - | 1,258,223 | 16,018,508 | 16,647,619 |
| Computers-1920 | 5 | - | - | - | - | - |
| Computers-1925 | 5 | - | - | - | - | - |
| Tools, Shops - 1940 | 10 | - | - |  | - | - |
|  |  | 17,276,730 | - | 1,258,223 | 16,018,508 | 16,647,619 |

OH \& UG Services

Smart meters-1860
Computers-1920
Computers-1925
Tools, Shops - 1940

OH \& UG Services
Smart meters-1860
Computers-1920
Computers-1925
Tools, Shops - 1940

OH \& UG Services General Office Building Renovations Smart meters-1860
Computers-1920
Computers-1925
Tools, Shops - 1940

OH \& UG Services
General Office
Building Renovations
Smart meters-1860
Computers-1920
Computers-1925
Tools, Shops - 1940

## Smart Meter Fixed Asset Continuity 2006 to 2009 Capital

## For Tax Purposes

|  | CCA Class | CCA Rate | Opening UCC Balance | 2006 Actual Additions | CCA For Opening UCC | CCA For 2006 Additions | Total CCA - 2006 | Closing UCC Balance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OH \& UG Services | Class 47 | 8\% | 0 | - |  | - | - | - |
| Smart meters-1860 | Class 47 | 8\% | 0 | - |  | - | - | - |
| Computers-1920 | Class 45.1 | 55\% | 0 | - |  | - | - | - |
| Computers-1925 | Class 12 | 100\% | 0 | - |  | - | - | - |
| Tools, Shops - 1940 | Class 8 | 20\% | 0 | - |  | - | - | - |
|  |  |  | 0 | - |  | - | - | - |
|  |  |  |  |  | CCA For Opening | CCA For 2007 |  |  |
|  | CCA Class | CCA Rate | Opening UCC Balance | 2007 Actual Additions | UCC | Additions | Total CCA - 2007 | Closing UCC Balance |
| OH \& UG Services | Class 47 | 8\% | - | - |  | - | - | - |
| Smart meters-1860 | Class 47 | 8\% | - | 4,302,123 |  | 172,085 | 172,085 | 4,130,038 |
| Computers-1920 | Class 45.1 | 55\% | - | - |  | - | - | - |
| Computers-1925 | Class 12 | 100\% | - | - |  | - | - | - |
| Tools, Shops - 1940 | Class 8 | 20\% | - | - |  | - | - | - |
|  |  |  | - | 4,302,123 |  | 172,085 | 172,085 | 4,130,038 |


|  | CCA Class | CCA Rate | Opening UCC Balance | 2008 Actual Additions | CCA For Opening UCC | CCA For 2008 Additions | Total CCA - 2008 | Closing UCC Balance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OH \& UG Services | Class 47 | 8\% | - | - | - | - | - | - |
| Smart meters-1860 | Class 47 | 8\% | 4,130,038 | 5,908,201 | 330,403 | 236,328 | 566,731 | 9,471,508 |
| Computers-1920 | Class 45.1 | 55\% | - | - | - | - | - | - |
| Computers-1925 | Class 12 | 100\% | - | - | - | - | - | - |
| Tools, Shops - 1940 | Class 8 | 20\% | - | - | - | - | - | - |
|  |  |  | 4,130,038 | 5,908,201 | 330,403 | 236,328 | 566,731 | 9,471,508 |


|  | CCA Class | CCA Rate | Opening UCC Balance | 2009 Actual Additions | CCA For Opening UCC | CCA For 2009 Additions | Total CCA - 2009 | Closing UCC Balance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OH \& UG Services | Class 47 | 8\% | - | - | - | - | - | - |
| General Office | Class 8 | 20\% | - | - | - | - | - |  |
| Building Renovations | Class 6 | 10\% | - | - | - | - | - | - |
| Smart meters-1860 | Class 47 | 8\% | 9,471,508 | 8,663,014 | 757,721 | 346,521 | 1,104,241 | 17,030,281 |
| Computers-1921 | Class 45.1 | 55\% | - | - | - | - | - | - |
| Computers-1925 | Class 12 | 100\% | - | - | - | - | - | - |
| Tools, Shops - 1940 | Class 8 | 20\% | - | - | - | - | - | - |
|  |  |  | 9,471,508 | 8,663,014 | 757,721 | 346,521 | 1,104,241 | 17,030,281 |
|  |  |  |  |  | CCA For Opening UCC | CCA For 2010 |  |  |
|  | CCA Class | CCA Rate | Opening UCC Balance | 2010 Forecast Additions |  | Additions | Total CCA - 2010 | Closing UCC Balance |
| OH \& UG Services | Class 47 | 8\% | - | - | - | - | - | - |
| General Office | Class 8 | 20\% | - | - | - | - | - | - |
| Building Renovations | Class 6 | 10\% | - | - | - | - | - | - |
| Smart meters-1860 | Class 47 | 8\% | 17,030,281 | - | 1,362,422 | - | 1,362,422 | 15,667,858 |
| Computers-1920 | Class 45.1 | 55\% | - | - | - | - | - | - |
| Computers-1925 | Class 12 | 100\% | - | - | - | - | - | - |
| Tools, Shops - 1940 | Class 8 | 20\% | - - | - | - | - | - | - |
|  |  |  | 17,030,281 | - | 1,362,422 | - | 1,362,422 | 15,667,858 |

Hydro One Brampton Networks Inc.
EB

## 2012 Smart Meter

Revenue Requirement Calculations

Average Fixed Asset Values
OH \& UG Services
General Office
Building Renovations
Smart meters
Computer Hardware
Computer Software
Stores \& Tools
Working Capital
Operation Expense
15\% Working Capital
Smart Meters Fixed Assets in Rate Base
Return on Rate Base
Deemed Debt - Long Term
Deemed Debt - Short Term
Deemed Equity

Weighted Debt Rate - Long Term
Short Term Debt Rate
Equity Rate
Return on Rate Base
Operating Expenses
Incremental Operating Expenses
Amortization Expenses
Revenue Requirement before PILs
Calculation of Taxable Income
Incremental Operating Expenses
Depreciation Expense
Interest Expense
Taxable Income for PILs
Grossed up PILs
Revenue Requirement before PILs
Grossed up PILs
Revenue Requirement for Smart Meters
Smart Meter Rate Adder
Revenue Requirement for Smart Meters
Total Metered Customers
Annualized amount required per metered customer
Number of months in year
Smart Meter Rate Adder

Smart Meter Deferral Account Balance - PILs Calculation

## Income Tax

Net Income
Amortization
CCA
Revised Taxable Income
Tax Rate
Income Taxes Payable
Ontario Capital Tax
Smart Meter Related Fixed Assets
Less: Exemption
Deemed Taxable Capital
Ontario Capital Tax Rate
NET OCT Amount

Change in Income Taxes Payable
Change in OCT
PILs


| Prescribed Interest Rates | Approved <br> Deferral and <br> Variance <br> Accounts | CWIP | Date | Year | Quarter | Opening <br> Balance <br> (Principal) | OM\&A Expenses | Amortization / <br> Depreciation <br> Expense | Closing Balance (Principal) | (Annual) Interest Rate | Interest (on opening balance) | Cumulative Interest |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2006 Q1 | 0.00\% | 0.00\% | Jan-06 | 2006 | Q1 | \$ |  |  | - | 0.00\% | - | - |
| 2006 Q2 | 4.14\% | 4.68\% | Feb-06 | 2006 | Q1 |  |  |  | - | 0.00\% | - | - |
| 2006 Q3 | 4.59\% | 5.05\% | Mar-06 | 2006 | Q1 |  |  |  | - | 0.00\% | - | - |
| 2006 Q4 | 4.59\% | 4.72\% | Apr-06 | 2006 | Q2 |  |  |  | - | 4.14\% | - | - |
| 2007 Q1 | 4.59\% | 4.72\% | May-06 | 2006 | Q2 |  |  |  | - | 4.14\% | - | - |
| 2007 Q2 | 4.59\% | 4.72\% | Jun-06 | 2006 | Q2 |  |  |  | - | 4.14\% | - | - |
| 2007 Q3 | 4.59\% | 5.18\% | Jul-06 | 2006 | Q3 |  |  |  | - | 4.59\% | - | - |
| 2007 Q4 | 5.14\% | 5.18\% | Aug-06 | 2006 | Q3 |  |  |  | - | 4.59\% | - | - |
| 2008 Q1 | 5.14\% | 5.18\% | Sep-06 | 2006 | Q3 |  |  |  | - | 4.59\% | - | - |
| 2008 Q2 | 4.08\% | 5.18\% | Oct-06 | 2006 | Q4 |  |  |  | - | 4.59\% | - | - |
| 2008 Q3 | 3.35\% | 5.43\% | Nov-06 | 2006 | Q4 |  |  |  | - | 4.59\% | - | - |
| 2008 Q4 | 3.35\% | 5.43\% | Dec-06 | 2006 | Q4 |  |  |  | - | 4.59\% | - | - |
| 2009 Q1 | 2.45\% | 6.61\% | Jan-07 | 2007 | Q1 |  |  |  | - | 4.59\% | - | - |
| 2009 Q2 | 1.00\% | 6.61\% | Feb-07 | 2007 | Q1 |  |  |  | - | 4.59\% | - | - |
| 2009 Q3 | 0.55\% | 5.67\% | Mar-07 | 2007 | Q1 |  |  |  | - | 4.59\% | - | - |
| 2009 Q4 | 0.55\% | 4.66\% | Apr-07 | 2007 | Q2 |  |  |  | - | 4.59\% | - | - |
| 2010 Q1 | 0.55\% | 4.34\% | May-07 | 2007 | Q2 |  |  |  | - | 4.59\% | - | - |
| 2010 Q2 | 0.55\% | 4.34\% | Jun-07 | 2007 | Q2 |  |  |  | - | 4.59\% | - | - |
| 2010 Q3 | 0.89\% | 4.66\% | Jul-07 | 2007 | Q3 |  |  |  | - | 4.59\% | - | - |
| 2010 Q4 | 1.20\% | 4.01\% | Aug-07 | 2007 | Q3 |  |  |  | - | 4.59\% | - | - |
| 2011 Q1 | 1.47\% | 4.29\% | Sep-07 | 2007 | Q3 |  |  |  | - | 4.59\% | - | - |
| 2011 Q2 | 1.47\% | 4.29\% | Oct-07 | 2007 | Q4 |  |  |  | - | 5.14\% | - | - |
| 2011 Q3 | 1.47\% | 4.29\% | Nov-07 | 2007 | Q4 |  |  |  | - | 5.14\% | - | - |
| 2011 Q4 | 1.47\% | 3.92\% | Dec-07 | 2007 | Q4 |  |  |  | - | 5.14\% | - | - |
| 2012 Q1 | 1.47\% | 3.92\% | Jan-08 | 2008 | Q1 |  |  |  | - | 5.14\% | - | - |
| 2012 Q2 | 1.47\% | 3.51\% | Feb-08 | 2008 | Q1 |  |  |  | - | 5.14\% | - | - |
| 2012 Q3 | 1.47\% | 3.51\% | Mar-08 | 2008 | Q1 |  |  |  | - | 5.14\% | - | - |
| 2012 Q4 | 1.47\% | 3.51\% | Apr-08 | 2008 | Q2 |  |  |  | - | 4.08\% | - | - |
| 2013 Q1 | 0.00\% | 0.00\% | May-08 | 2008 | Q2 |  |  |  | - | 4.08\% | - | - |
| 2013 Q2 | 0.00\% | 0.00\% | Jun-08 | 2008 | Q2 |  |  |  | - | 4.08\% | - | - |
| 2013 Q3 | 0.00\% | 0.00\% | Jul-08 | 2008 | Q3 |  |  |  | - | 3.35\% | - | - |
| 2013 Q4 | 0.00\% | 0.00\% | Aug-08 | 2008 | Q3 |  |  |  | - | 3.35\% | - | - |
|  |  |  | Sep-08 | 2008 | Q3 |  |  |  | - | 3.35\% | - | - |
|  |  |  | Oct-08 | 2008 | Q4 |  |  |  | - | 3.35\% | - | - |
|  |  |  | Nov-08 | 2008 | Q4 |  |  |  | - | 3.35\% | - | - |
|  |  |  | Dec-08 | 2008 | Q4 |  |  |  | - | 3.35\% | - | - |
|  |  |  | Jan-09 | 2009 | Q1 |  |  |  | - | 2.45\% | - | - |
|  |  |  | Feb-09 | 2009 | Q1 |  |  |  | - | 2.45\% | - | - |
|  |  |  | Mar-09 | 2009 | Q1 |  |  |  | - | 2.45\% | - | - |
|  |  |  | Apr-09 | 2009 | Q2 |  |  |  | - | 1.00\% | - | - |
|  |  |  | May-09 | 2009 | Q2 |  |  |  | - | 1.00\% | - | - |


| Prescribed Interest Rates | Approved <br> Deferral and <br> Variance <br> CWIP <br> Accounts | Date | Year | Quarter | Opening <br> Balance <br> (Principal) |  | OM\&A Expenses |  | mortization I epreciation Expense | Closing Balance (Principal) | (Annual) Interest Rate | Interest (on opening balance) | Cumulative Interest |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Jun-09 | 2009 | Q2 | - |  |  |  |  | - | 1.00\% | - | - |
|  |  | Jul-09 | 2009 | Q3 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  | Aug-09 | 2009 | Q3 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  | Sep-09 | 2009 | Q3 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  | Oct-09 | 2009 | Q4 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  | Nov-09 | 2009 | Q4 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  | Dec-09 | 2009 | Q4 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  | Jan-10 | 2010 | Q1 | - | \$ | 18,115.92 | \$ | 104,851.88 | 122,967.80 | 0.55\% | - | - |
|  |  | Feb-10 | 2010 | Q1 | 122,967.80 | \$ | 19,844.98 | \$ | 104,851.88 | 247,664.66 | 0.55\% | 56.36 | 56.36 |
|  |  | Mar-10 | 2010 | Q1 | 247,664.66 | \$ | 22,228.12 | \$ | 104,851.88 | 374,744.66 | 0.55\% | 113.51 | 169.87 |
|  |  | Apr-10 | 2010 | Q2 | 374,744.66 | \$ | 49,255.24 | \$ | 104,851.88 | 528,851.77 | 0.55\% | 171.76 | 341.63 |
|  |  | May-10 | 2010 | Q2 | 528,851.77 | \$ | 21,102.59 | \$ | 104,851.88 | 654,806.24 | 0.55\% | 242.39 | 584.02 |
|  |  | Jun-10 | 2010 | Q2 | 654,806.24 | \$ | 42,265.12 | \$ | 104,851.88 | 801,923.24 | 0.55\% | 300.12 | 884.14 |
|  |  | Jul-10 | 2010 | Q3 | 801,923.24 | \$ | 33,918.14 | \$ | 104,851.88 | 940,693.25 | 0.89\% | 594.76 | 1,478.90 |
|  |  | Aug-10 | 2010 | Q3 | 940,693.25 | \$ | 12,104.82 | \$ | 104,851.88 | 1,057,649.95 | 0.89\% | 697.68 | 2,176.58 |
|  |  | Sep-10 | 2010 | Q3 | 1,057,649.95 | \$ | 20,493.36 | \$ | 104,851.88 | 1,182,995.19 | 0.89\% | 784.42 | 2,961.01 |
|  |  | Oct-10 | 2010 | Q4 | 1,182,995.19 | \$ | 22,309.14 | \$ | 104,851.88 | 1,310,156.21 | 1.20\% | 1,183.00 | 4,144.00 |
|  |  | Nov-10 | 2010 | Q4 | 1,310,156.21 | \$ | 21,161.08 | \$ | 104,851.88 | 1,436,169.17 | 1.20\% | 1,310.16 | 5,454.16 |
|  |  | Dec-10 | 2010 | Q4 | 1,436,169.17 | \$ | 43,115.51 | \$ | 104,851.88 | 1,584,136.56 | 1.20\% | 1,436.17 | 6,890.33 |
|  |  | Jan-11 | 2011 | Q1 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 8,830.89 |
|  |  | Feb-11 | 2011 | Q1 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 10,771.46 |
|  |  | Mar-11 | 2011 | Q1 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 12,712.03 |
|  |  | Apr-11 | 2011 | Q2 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 14,652.60 |
|  |  | May-11 | 2011 | Q2 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 16,593.16 |
|  |  | Jun-11 | 2011 | Q2 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 18,533.73 |
|  |  | Jul-11 | 2011 | Q3 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 20,474.30 |
|  |  | Aug-11 | 2011 | Q3 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 22,414.86 |
|  |  | Sep-11 | 2011 | Q3 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 24,355.43 |
|  |  | Oct-11 | 2011 | Q4 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 26,296.00 |
|  |  | Nov-11 | 2011 | Q4 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 28,236.57 |
|  |  | Dec-11 | 2011 | Q4 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 30,177.13 |
|  |  | Jan-12 | 2012 | Q1 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 32,117.70 |
|  |  | Feb-12 | 2012 | Q1 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 34,058.27 |
|  |  | Mar-12 | 2012 | Q1 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 35,998.84 |
|  |  | Apr-12 | 2012 | Q2 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 37,939.40 |
|  |  | May-12 | 2012 | Q2 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 39,879.97 |
|  |  | Jun-12 | 2012 | Q2 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 41,820.54 |
|  |  | Jul-12 | 2012 | Q3 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 43,761.10 |
|  |  | Aug-12 | 2012 | Q3 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 45,701.67 |
|  |  | Sep-12 | 2012 | Q3 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 47,642.24 |
|  |  | Oct-12 | 2012 | Q4 | 1,584,136.56 |  |  |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 49,582.81 |

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

| Prescribed Interest Rates | Approved <br> Deferral and Variance Accounts | CWIP | Date | Year | Quarter | Opening <br> Balance <br> (Principal) | OM\&A Expenses | Amortization / <br> Depreciation Expense | Closing Balance (Principal) | (Annual) Interest Rate | Interest (on opening balance) | Cumulative Interest |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Nov-12 | 2012 | Q4 | 1,584,136.56 |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 51,523.37 |
|  |  |  | Dec-12 | 2012 | Q4 | 1,584,136.56 |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 53,463.94 |
|  |  |  | Jan-13 | 2013 | Q1 | 1,584,136.56 |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 55,404.51 |
|  |  |  | Feb-13 | 2013 | Q1 | 1,584,136.56 |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 57,345.08 |
|  |  |  | Mar-13 | 2013 | Q1 | 1,584,136.56 |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 59,285.64 |
|  |  |  | Apr-13 | 2013 | Q2 | 1,584,136.56 |  |  | 1,584,136.56 | 1.47\% | 1,940.57 | 61,226.21 |
|  |  |  | May-13 | 2013 | Q2 | 1,584,136.56 |  |  | 1,584,136.56 | 0.00\% | - | 61,226.21 |
|  |  |  | Jun-13 | 2013 | Q2 | 1,584,136.56 |  |  | 1,584,136.56 | 0.00\% | - | 61,226.21 |
|  |  |  | Jul-13 | 2013 | Q3 | 1,584,136.56 |  |  | 1,584,136.56 | 0.00\% | - | 61,226.21 |
|  |  |  | Aug-13 | 2013 | Q3 | 1,584,136.56 |  |  | 1,584,136.56 | 0.00\% | - | 61,226.21 |
|  |  |  | Sep-13 | 2013 | Q3 | 1,584,136.56 |  |  | 1,584,136.56 | 0.00\% | - | 61,226.21 |
|  |  |  | Oct-13 | 2013 | Q4 | 1,584,136.56 |  |  | 1,584,136.56 | 0.00\% | - | 61,226.21 |
|  |  |  | Nov-13 | 2013 | Q4 | 1,584,136.56 |  |  | 1,584,136.56 | 0.00\% | - | 61,226.21 |
|  |  |  | Dec-13 | 2013 | Q4 | 1,584,136.56 |  |  | 1,584,136.56 | 0.00\% | - | 61,226.21 |
|  |  |  |  |  |  |  | \$ 325,914.03 | \$ 1,258,222.53 | \$ 1,584,136.56 |  | \$ 61,226.21 |  |

APPENDIX D - CARRYING CHARGES FOR JANUARY 1, 2013
TO APRIL 30, 2013 FOR DEPRECIATION AND OM\&A EXPENSES RELATED TO SMART METER ADDITIONS FROM 2010 TO 2012

## Summary of Carrying Charges for OM\&A, Depreciation and Funding

 Adders for Jan to Apr 2013|  <br> GS<50 <br> (Incremental) | GS>50 | Total |
| :---: | :---: | :---: |
| $\mathbf{( 1 2 , 1 5 5 )}$ |  |  |

Account 1556 - Sub-accounts Operating Expenses, Amortization Expenses, Carrying Charges for Residential \& General Service Less Than 50 kW

| Prescribed Interest Rates | Approved <br> Deferral and Variance Accounts | CWIP | Date | Year | Quarter | Opening Balance (Principal) | OM\&A Expenses | Amortization / Depreciation Expense | Closing Balance (Principal) | (Annual) Interest Rate | Interest (on opening balance) | Cumulative Interest |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2006 Q1 | 0.00\% | 0.00\% | Jan-06 | 2006 | Q1 | \$ |  |  | - | 0.00\% | - | - |
| 2006 Q2 | 4.14\% | 4.68\% | Feb-06 | 2006 | Q1 | - |  |  | - | 0.00\% | - | - |
| 2006 Q3 | 4.59\% | 5.05\% | Mar-06 | 2006 | Q1 | - |  |  | - | 0.00\% | - | - |
| 2006 Q4 | 4.59\% | 4.72\% | Apr-06 | 2006 | Q2 | - |  |  | - | 4.14\% | - | - |
| 2007 Q1 | 4.59\% | 4.72\% | May-06 | 2006 | Q2 | - |  |  | - | 4.14\% | - | - |
| 2007 Q2 | 4.59\% | 4.72\% | Jun-06 | 2006 | Q2 | - |  |  | - | 4.14\% | - | - |
| 2007 Q3 | 4.59\% | 5.18\% | Jul-06 | 2006 | Q3 | - |  |  | - | 4.59\% | - | - |
| 2007 Q4 | 5.14\% | 5.18\% | Aug-06 | 2006 | Q3 | - |  |  | - | 4.59\% | - | - |
| 2008 Q1 | 5.14\% | 5.18\% | Sep-06 | 2006 | Q3 | - |  |  | - | 4.59\% | - | - |
| 2008 Q2 | 4.08\% | 5.18\% | Oct-06 | 2006 | Q4 | - |  |  | - | 4.59\% | - | - |
| 2008 Q3 | 3.35\% | 5.43\% | Nov-06 | 2006 | Q4 | - |  |  | - | 4.59\% | - | - |
| 2008 Q4 | 3.35\% | 5.43\% | Dec-06 | 2006 | Q4 | - |  |  | - | 4.59\% | - | - |
| 2009 Q1 | 2.45\% | 6.61\% | Jan-07 | 2007 | Q1 | - |  |  | - | 4.59\% | - | - |
| 2009 Q2 | 1.00\% | 6.61\% | Feb-07 | 2007 | Q1 | - |  |  | - | 4.59\% | - | - |
| 2009 Q3 | 0.55\% | 5.67\% | Mar-07 | 2007 | Q1 | - |  |  | - | 4.59\% | - | - |
| 2009 Q4 | 0.55\% | 4.66\% | Apr-07 | 2007 | Q2 | - |  |  | - | 4.59\% | - | - |
| 2010 Q1 | 0.55\% | 4.34\% | May-07 | 2007 | Q2 | - |  |  | - | 4.59\% | - | - |
| 2010 Q2 | 0.55\% | 4.34\% | Jun-07 | 2007 | Q2 | - |  |  | - | 4.59\% | - | - |
| 2010 Q3 | 0.89\% | 4.66\% | Jul-07 | 2007 | Q3 | - |  |  | - | 4.59\% | - | - |
| 2010 Q4 | 1.20\% | 4.01\% | Aug-07 | 2007 | Q3 | - |  |  | - | 4.59\% | - | - |
| 2011 Q1 | 1.47\% | 4.29\% | Sep-07 | 2007 | Q3 | - |  |  | - | 4.59\% | - | - |
| 2011 Q2 | 1.47\% | 4.29\% | Oct-07 | 2007 | Q4 | - |  |  | - | 5.14\% | - | - |
| 2011 Q3 | 1.47\% | 4.29\% | Nov-07 | 2007 | Q4 | - |  |  | - | 5.14\% | - | - |
| 2011 Q4 | 1.47\% | 3.92\% | Dec-07 | 2007 | Q4 | - |  |  | - | 5.14\% | - | - |
| 2012 Q1 | 1.47\% | 3.92\% | Jan-08 | 2008 | Q1 | - |  |  | - | 5.14\% | - | - |
| 2012 Q2 | 1.47\% | 3.51\% | Feb-08 | 2008 | Q1 | - |  |  | - | 5.14\% | - | - |
| 2012 Q3 | 1.47\% | 3.51\% | Mar-08 | 2008 | Q1 | - |  |  | - | 5.14\% | - | - |
| 2012 Q4 | 1.47\% | 3.51\% | Apr-08 | 2008 | Q2 | - |  |  | - | 4.08\% | - | - |
| 2013 Q1 | 0.00\% | 0.00\% | May-08 | 2008 | Q2 | - |  |  | - | 4.08\% | - | - |
| 2013 Q2 | 0.00\% | 0.00\% | Jun-08 | 2008 | Q2 | - |  |  | - | 4.08\% | - | - |
| 2013 Q3 | 0.00\% | 0.00\% | Jul-08 | 2008 | Q3 | - |  |  | - | 3.35\% | - | - |
| 2013 Q4 | 0.00\% | 0.00\% | Aug-08 | 2008 | Q3 | - |  |  | - | 3.35\% | - | - |
|  |  |  | Sep-08 | 2008 | Q3 | - |  |  | - | 3.35\% | - | - |
|  |  |  | Oct-08 | 2008 | Q4 | - |  |  | - | 3.35\% | - | - |

Account 1556 - Sub-accounts Operating Expenses, Amortization Expenses, Carrying Charges for Residential \& General Service Less Than 50 kW

| Prescribed Interest Rates | Approved Deferral and Variance Accounts | CWIP | Date | Year | Quarter | Opening Balance (Principal) | OM\&A <br> Expenses |  | Amortization / Depreciation Expense |  | Closing Balance (Principal) | (Annual) Interest Rate | Interest (on opening balance) | Cumulative Interest |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Nov-08 | 2008 | Q4 | - |  |  |  |  | - | 3.35\% | - | - |
|  |  |  | Dec-08 | 2008 | Q4 | - |  |  |  |  | - | 3.35\% | - | - |
|  |  |  | Jan-09 | 2009 | Q1 | - |  |  |  |  | - | 2.45\% | - | - |
|  |  |  | Feb-09 | 2009 | Q1 | - |  |  |  |  | - | 2.45\% | - | - |
|  |  |  | Mar-09 | 2009 | Q1 | - |  |  |  |  | - | 2.45\% | - | - |
|  |  |  | Apr-09 | 2009 | Q2 | - |  |  |  |  | - | 1.00\% | - | - |
|  |  |  | May-09 | 2009 | Q2 | - |  |  |  |  | - | 1.00\% | - | - |
|  |  |  | Jun-09 | 2009 | Q2 | - |  |  |  |  | - | 1.00\% | - | - |
|  |  |  | Jul-09 | 2009 | Q3 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  |  | Aug-09 | 2009 | Q3 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  |  | Sep-09 | 2009 | Q3 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  |  | Oct-09 | 2009 | Q4 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  |  | Nov-09 | 2009 | Q4 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  |  | Dec-09 | 2009 | Q4 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  |  | Jan-10 | 2010 | Q1 | - | \$ | 1,339.39 | \$ | 10,876.24 | 12,215.63 | 0.55\% | - | - |
|  |  |  | Feb-10 | 2010 | Q1 | 12,215.63 | \$ | 1,467.22 | \$ | 12,505.96 | 26,188.80 | 0.55\% | 5.60 | 5.60 |
|  |  |  | Mar-10 | 2010 | Q1 | 26,188.80 | \$ | 1,643.42 | \$ | 5,391.96 | 33,224.19 | 0.55\% | 12.00 | 17.60 |
|  |  |  | Apr-10 | 2010 | Q2 | 33,224.19 | \$ | 3,641.65 | \$ | 9,466.60 | 46,332.43 | 0.55\% | 15.23 | 32.83 |
|  |  |  | May-10 | 2010 | Q2 | 46,332.43 | \$ | 1,560.20 | \$ | 5,836.20 | 53,728.83 | 0.55\% | 21.24 | 54.07 |
|  |  |  | Jun-10 | 2010 | Q2 | 53,728.83 | \$ | 3,124.84 | \$ | 10,876.80 | 67,730.47 | 0.55\% | 24.63 | 78.69 |
|  |  |  | Jul-10 | 2010 | Q3 | 67,730.47 | \$ | 2,507.71 | \$ | 5,142.65 | 75,380.83 | 0.89\% | 50.23 | 128.92 |
|  |  |  | Aug-10 | 2010 | Q3 | 75,380.83 | \$ | 894.96 | \$ | 7,652.38 | 83,928.18 | 0.89\% | 55.91 | 184.83 |
|  |  |  | Sep-10 | 2010 | Q3 | 83,928.18 | \$ | 1,515.16 | \$ | 7,303.24 | 92,746.58 | 0.89\% | 62.25 | 247.08 |
|  |  |  | Oct-10 | 2010 | Q4 | 92,746.58 | \$ | 1,649.41 | \$ | 8,917.88 | 103,313.87 | 1.20\% | 92.75 | 339.83 |
|  |  |  | Nov-10 | 2010 | Q4 | 103,313.87 | \$ | 1,564.53 | \$ | 19,633.60 | 124,512.00 | 1.20\% | 103.31 | 443.14 |
|  |  |  | Dec-10 | 2010 | Q4 | 124,512.00 | \$ | 3,187.71 | \$ | 12,418.44 | 140,118.15 | 1.20\% | 124.51 | 567.65 |
|  |  |  | Jan-11 | 2011 | Q1 | 140,118.15 | \$ | 2,941.64 | \$ | 24,563.79 | 167,623.58 | 1.47\% | 171.64 | 739.30 |
|  |  |  | Feb-11 | 2011 | Q1 | 167,623.58 | \$ | 1,869.92 | \$ | 22,936.44 | 192,429.94 | 1.47\% | 205.34 | 944.63 |
|  |  |  | Mar-11 | 2011 | Q1 | 192,429.94 | \$ | 1,864.02 | \$ | 27,922.49 | 222,216.46 | 1.47\% | 235.73 | 1,180.36 |
|  |  |  | Apr-11 | 2011 | Q2 | 222,216.46 | \$ | 1,629.60 | \$ | 21,394.85 | 245,240.91 | 1.47\% | 272.22 | 1,452.58 |
|  |  |  | May-11 | 2011 | Q2 | 245,240.91 | \$ | 1,510.68 | \$ | 23,805.83 | 270,557.42 | 1.47\% | 300.42 | 1,753.00 |
|  |  |  | Jun-11 | 2011 | Q2 | 270,557.42 | \$ | 1,662.63 | \$ | 21,694.59 | 293,914.63 | 1.47\% | 331.43 | 2,084.43 |
|  |  |  | Jul-11 | 2011 | Q3 | 293,914.63 | \$ | 1,855.79 | \$ | 22,193.09 | 317,963.51 | 1.47\% | 360.05 | 2,444.48 |
|  |  |  | Aug-11 | 2011 | Q3 | 317,963.51 | \$ | 1,750.38 | \$ | 21,352.70 | 341,066.58 | 1.47\% | 389.51 | 2,833.98 |

Account 1556 - Sub-accounts Operating Expenses, Amortization Expenses, Carrying Charges for Residential \& General Service Less Than 50 kW

| Prescribed Interest Rates | Approved <br> 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Sep-11 | 2011 | Q3 | 341,066.58 | \$ | 1,762.77 | \$ | 20,726.55 | 363,555.90 | 1.47\% | 417.81 | 3,251.79 |
|  |  |  | Oct-11 | 2011 | Q4 | 363,555.90 | \$ | 7,413.57 | \$ | 150,424.36 | 521,393.83 | 1.47\% | 445.36 | 3,697.14 |
|  |  |  | Nov-11 | 2011 | Q4 | 521,393.83 | \$ | 1,793.87 | \$ | 17,221.66 | 540,409.36 | 1.47\% | 638.71 | 4,335.85 |
|  |  |  | Dec-11 | 2011 | Q4 | 540,409.36 | \$ | 2,069.76 | \$ | 36,808.25 | 579,287.37 | 1.47\% | 662.00 | 4,997.85 |
|  |  |  | Jan-12 | 2012 | Q1 | 579,287.37 | \$ | 3,092.82 | \$ | 54,486.82 | 636,867.02 | 1.47\% | 709.63 | 5,707.48 |
|  |  |  | Feb-12 | 2012 | Q1 | 636,867.02 | \$ | 3,024.19 | \$ | 55,080.67 | 694,971.88 | 1.47\% | 780.16 | 6,487.64 |
|  |  |  | Mar-12 | 2012 | Q1 | 694,971.88 | \$ | 1,764.31 | \$ | 48,283.26 | 745,019.45 | 1.47\% | 851.34 | 7,338.98 |
|  |  |  | Apr-12 | 2012 | Q2 | 745,019.45 | \$ | 2,601.72 | \$ | 46,011.85 | 793,633.03 | 1.47\% | 912.65 | 8,251.63 |
|  |  |  | May-12 | 2012 | Q2 | 793,633.03 | \$ | 2,601.72 | \$ | 47,708.01 | 843,942.76 | 1.47\% | 972.20 | 9,223.83 |
|  |  |  | Jun-12 | 2012 | Q2 | 843,942.76 | \$ | 2,381.39 | \$ | 42,896.66 | 889,220.80 | 1.47\% | 1,033.83 | 10,257.66 |
|  |  |  | Jul-12 | 2012 | Q3 | 889,220.80 | \$ | 3,138.76 | \$ | 58,311.88 | 950,671.43 | 1.47\% | 1,089.30 | 11,346.96 |
|  |  |  | Aug-12 | 2012 | Q3 | 950,671.43 | \$ | 1,757.97 | \$ | 51,099.48 | 1,003,528.88 | 1.47\% | 1,164.57 | 12,511.53 |
|  |  |  | Sep-12 | 2012 | Q3 | 1,003,528.88 | \$ | 2,456.08 | \$ | 52,006.13 | 1,057,991.09 | 1.47\% | 1,229.32 | 13,740.85 |
|  |  |  | Oct-12 | 2012 | Q4 | 1,057,991.09 | \$ | 2,535.44 | \$ | 51,309.30 | 1,111,835.83 | 1.47\% | 1,296.04 | 15,036.89 |
|  |  |  | Nov-12 | 2012 | Q4 | 1,111,835.83 | \$ | 2,535.44 | \$ | 19,927.50 | 1,134,298.77 | 1.47\% | 1,362.00 | 16,398.89 |
|  |  |  | Dec-12 | 2012 | Q4 | 1,134,298.77 | \$ | 2,535.44 | \$ | 51,309.30 | 1,188,143.50 | 1.47\% | 1,389.52 | 17,788.41 |
|  |  |  | Jan-13 | 2013 | Q1 | 1,188,143.50 | \$ | 5,514.06 | \$ | 47,234.71 | 1,240,892.27 | 1.47\% | 1,455.48 | 19,243.88 |
|  |  |  | Feb-13 | 2013 | Q1 | 1,240,892.27 | \$ | 5,514.06 | \$ | 47,234.71 | 1,293,641.03 | 1.47\% | 1,520.09 | 20,763.97 |
|  |  |  | Mar-13 | 2013 | Q1 | 1,293,641.03 | \$ | 5,514.06 | \$ | 47,234.71 | 1,346,389.80 | 1.47\% | 1,584.71 | 22,348.68 |
|  |  |  | Apr-13 | 2013 | Q2 | 1,346,389.80 | \$ | 5,514.06 | \$ | 47,234.71 | 1,399,138.56 | 1.47\% | 1,649.33 | 23,998.01 |
|  |  |  | May-13 | 2013 | Q2 | 1,399,138.56 |  |  |  |  | 1,399,138.56 | 0.00\% | - | 23,998.01 |
|  |  |  | Jun-13 | 2013 | Q2 | 1,399,138.56 |  |  |  |  | 1,399,138.56 | 0.00\% | - | 23,998.01 |
|  |  |  | Jul-13 | 2013 | Q3 | 1,399,138.56 |  |  |  |  | 1,399,138.56 | 0.00\% | - | 23,998.01 |
|  |  |  | Aug-13 | 2013 | Q3 | 1,399,138.56 |  |  |  |  | 1,399,138.56 | 0.00\% | - | 23,998.01 |
|  |  |  | Sep-13 | 2013 | Q3 | 1,399,138.56 |  |  |  |  | 1,399,138.56 | 0.00\% | - | 23,998.01 |
|  |  |  | Oct-13 | 2013 | Q4 | 1,399,138.56 |  |  |  |  | 1,399,138.56 | 0.00\% | - | 23,998.01 |
|  |  |  | Nov-13 | 2013 | Q4 | 1,399,138.56 |  |  |  |  | 1,399,138.56 | 0.00\% | - | 23,998.01 |
|  |  |  | Dec-13 | 2013 | Q4 | 1,399,138.56 |  |  |  |  | 1,399,138.56 | 0.00\% | - | 23,998.01 |


| Interest Rates | Approved Deferral and Variance Accounts | CWIP | Date | Year | Quarter |  |  | Opening Balance (Principal) | Funding Adder Revenues | Interest <br> Rate |  | Interest | Closing Balance | Annual amounts | Board Approved Smart Meter Funding Adder |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2006 Q1 |  |  | Jan-06 | 2006 | Q1 | 2006 Q1 | \$ | - |  | 0.00\% | \$ | - | \$ |  |  |
| 2006 Q2 | 4.14\% | 4.68\% | Feb-06 | 2006 | Q1 | 2006 Q1 | \$ | - |  | 0.00\% | \$ | - | \$ |  |  |
| 2006 Q3 | 4.59\% | 5.05\% | Mar-06 | 2006 | Q1 | 2006 Q1 | \$ | - |  | 0.00\% | \$ | - | \$ |  |  |
| 2006 Q4 | 4.59\% | 4.72\% | Apr-06 | 2006 | Q2 | 2006 Q2 | \$ | - |  | 4.14\% | \$ | - | \$ |  |  |
| 2007 Q1 | 4.59\% | 4.72\% | May-06 | 2006 | Q2 | 2006 Q2 | \$ | - |  | 4.14\% | \$ | - | \$ |  |  |
| 2007 Q2 | 4.59\% | 4.72\% | Jun-06 | 2006 | Q2 | 2006 Q2 | \$ | - |  | 4.14\% | \$ | - | \$ |  |  |
| 2007 Q3 | 4.59\% | 5.18\% | Jul-06 | 2006 | Q3 | 2006 Q3 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2007 Q4 | 5.14\% | 5.18\% | Aug-06 | 2006 | Q3 | 2006 Q3 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2008 Q1 | 5.14\% | 5.18\% | Sep-06 | 2006 | Q3 | 2006 Q3 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2008 Q2 | 4.08\% | 5.18\% | Oct-06 | 2006 | Q4 | 2006 Q4 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2008 Q3 | 3.35\% | 5.43\% | Nov-06 | 2006 | Q4 | 2006 Q4 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2008 Q4 | 3.35\% | 5.43\% | Dec-06 | 2006 | Q4 | 2006 Q4 | \$ | - |  | 4.59\% | \$ | - | \$ | \$ |  |
| 2009 Q1 | 2.45\% | 6.61\% | Jan-07 | 2007 | Q1 | 2007 Q1 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2009 Q2 | 1.00\% | 6.61\% | Feb-07 | 2007 | Q1 | 2007 Q1 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2009 Q3 | 0.55\% | 5.67\% | Mar-07 | 2007 | Q1 | 2007 Q1 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2009 Q4 | 0.55\% | 4.66\% | Apr-07 | 2007 | Q2 | 2007 Q2 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2010 Q1 | 0.55\% | 4.34\% | May-07 | 2007 | Q2 | 2007 Q2 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2010 Q2 | 0.55\% | 4.34\% | Jun-07 | 2007 | Q2 | 2007 Q2 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2010 Q3 | 0.89\% | 4.66\% | Jul-07 | 2007 | Q3 | 2007 Q3 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2010 Q4 | 1.20\% | 4.01\% | Aug-07 | 2007 | Q3 | 2007 Q3 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2011 Q1 | 1.47\% | 4.29\% | Sep-07 | 2007 | Q3 | 2007 Q3 | \$ | - |  | 4.59\% | \$ | - | \$ |  |  |
| 2011 Q2 | 1.47\% | 4.29\% | Oct-07 | 2007 | Q4 | 2007 Q4 | \$ | - |  | 5.14\% | \$ | - | \$ |  |  |
| 2011 Q3 | 1.47\% | 4.29\% | Nov-07 | 2007 | Q4 | 2007 Q4 | \$ | - |  | 5.14\% | \$ | - | \$ |  |  |
| 2011 Q4 | 1.47\% | 3.92\% | Dec-07 | 2007 | Q4 | 2007 Q4 | \$ | - |  | 5.14\% | \$ | - | \$ | \$ |  |
| 2012 Q1 | 1.47\% | 3.92\% | Jan-08 | 2008 | Q1 | 2008 Q1 | \$ | - |  | 5.14\% | \$ | - | \$ |  |  |
| 2012 Q2 | 1.47\% | 3.51\% | Feb-08 | 2008 | Q1 | 2008 Q1 | \$ | - |  | 5.14\% | \$ | - | \$ |  |  |
| 2012 Q3 | 1.47\% | 3.51\% | Mar-08 | 2008 | Q1 | 2008 Q1 | \$ | - |  | 5.14\% | \$ | - | \$ |  |  |
| 2012 Q4 | 1.47\% | 3.51\% | Apr-08 | 2008 | Q2 | 2008 Q2 | \$ | - |  | 4.08\% | \$ | - | \$ |  |  |
| 2013 Q1 | 1.47\% | 3.51\% | May-08 | 2008 | Q2 | 2008 Q2 | \$ | - |  | 4.08\% | \$ | - | \$ |  |  |
| 2013 Q2 | 1.47\% | 3.51\% | Jun-08 | 2008 | Q2 | 2008 Q2 | \$ | - |  | 4.08\% | \$ | - | \$ |  |  |
| 2013 Q3 |  |  | Jul-08 | 2008 | Q3 | 2008 Q3 | \$ | - |  | 3.35\% | \$ | - | \$ |  |  |
| 2013 Q4 |  |  | Aug-08 | 2008 | Q3 | 2008 Q3 | \$ | - |  | 3.35\% | \$ | - | \$ |  |  |
|  |  |  | Sep-08 | 2008 | Q3 | 2008 Q3 | \$ | - |  | 3.35\% | \$ | - | \$ |  |  |
|  |  |  | Oct-08 | 2008 | Q4 | 2008 Q4 | \$ | - |  | 3.35\% | \$ | - | \$ |  |  |
|  |  |  | Nov-08 | 2008 | Q4 | 2008 Q4 | \$ | - |  | 3.35\% | \$ | - | \$ |  |  |
|  |  |  | Dec-08 | 2008 | Q4 | 2008 Q4 | \$ | - |  | 3.35\% | \$ | - | \$ | \$ |  |
|  |  |  | Jan-09 | 2009 | Q1 | 2009 Q1 | \$ | - |  | 2.45\% | \$ | - | \$ |  |  |
|  |  |  | Feb-09 | 2009 | Q1 | 2009 Q1 | \$ | - |  | 2.45\% | \$ | - | \$ |  |  |
|  |  |  | Mar-09 | 2009 | Q1 | 2009 Q1 | \$ | - |  | 2.45\% | \$ | - | \$ |  |  |
|  |  |  | Apr-09 | 2009 | Q2 | 2009 Q2 | \$ | - |  | 1.00\% | \$ | - | \$ |  |  |
|  |  |  | May-09 | 2009 | Q2 | 2009 Q2 | \$ | - |  | 1.00\% | \$ | - | \$ |  |  |
|  |  |  | Jun-09 | 2009 | Q2 | 2009 Q2 | \$ | - |  | 1.00\% | \$ | - | \$ |  |  |
|  |  |  | Jul-09 | 2009 | Q3 | 2009 Q3 | \$ | - |  | 0.55\% | \$ | - | \$ |  |  |
|  |  |  | Aug-09 | 2009 | Q3 | 2009 Q3 | \$ | - |  | 0.55\% | \$ | - | \$ |  |  |
|  |  |  | Sep-09 | 2009 | Q3 | 2009 Q3 | \$ | - |  | 0.55\% | \$ | - | \$ |  |  |


| Interest Rates | Approved Deferral and Variance Accounts | CWIP | Date | Year | Quarter |  |  | Opening Balance (Principal) |  | ding Adder evenues | Interest Rate | Interest |  | Closing Balance |  | Annual amounts |  | Board Approved Smart Meter Funding Adder |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Oct-09 | 2009 | Q4 | 2009 Q4 | \$ | \$ - |  |  | 0.55\% | \$ | - | \$ | - |  |  |  |
|  |  |  | Nov-09 | 2009 | Q4 | 2009 Q4 | \$ | \$ - |  |  | 0.55\% | \$ | - | \$ | - |  |  |  |
|  |  |  | Dec-09 | 2009 | Q4 | 2009 Q4 | \$ | - |  |  | 0.55\% | \$ | - | \$ | - | \$ | - |  |
|  |  |  | Jan-10 | 2010 | Q1 | 2010 Q1 | \$ | \$ - | \$ | 66,404.04 | 0.55\% | \$ | - | \$ | 66,404.04 |  |  |  |
|  |  |  | Feb-10 | 2010 | Q1 | 2010 Q1 | \$ | 66,404.04 | \$ | 129,468.00 | 0.55\% | \$ | 30.44 | \$ | 195,902.48 |  |  |  |
|  |  |  | Mar-10 | 2010 | Q1 | 2010 Q1 | \$ | 195,872.04 | \$ | 129,758.00 | 0.55\% | \$ | 89.77 | \$ | 325,719.81 |  |  |  |
|  |  |  | Apr-10 | 2010 | Q2 | 2010 Q2 | \$ | 325,630.04 | \$ | 130,339.00 | 0.55\% | \$ | 149.25 | \$ | 456,118.29 |  |  |  |
|  |  |  | May-10 | 2010 | Q2 | 2010 Q2 | \$ | 455,969.04 | \$ | 130,003.00 | 0.55\% | \$ | 208.99 | \$ | 586,181.03 |  |  |  |
|  |  |  | Jun-10 | 2010 | Q2 | 2010 Q2 | \$ | 585,972.04 | \$ | 130,534.00 | 0.55\% | \$ | 268.57 | \$ | 716,774.61 |  |  |  |
|  |  |  | Jul-10 | 2010 | Q3 | 2010 Q3 | \$ | 716,506.04 | \$ | 130,345.00 | 0.89\% | \$ | 531.41 | \$ | 847,382.45 |  |  |  |
|  |  |  | Aug-10 | 2010 | Q3 | 2010 Q3 | \$ | 846,851.04 | \$ | 130,728.00 | 0.89\% | \$ | 628.08 | \$ | 978,207.12 |  |  |  |
|  |  |  | Sep-10 | 2010 | Q3 | 2010 Q3 | \$ | 977,579.04 | \$ | 131,152.00 | 0.89\% | \$ | 725.04 | \$ | 1,109,456.08 |  |  |  |
|  |  |  | Oct-10 | 2010 | Q4 | 2010 Q4 | \$ | 1,108,731.04 | \$ | 131,585.00 | 1.20\% | \$ | 1,108.73 | \$ | 1,241,424.77 |  |  |  |
|  |  |  | Nov-10 | 2010 | Q4 | 2010 Q4 | \$ | 1,240,316.04 | \$ | 131,895.00 | 1.20\% | \$ | 1,240.32 | \$ | 1,373,451.36 |  |  |  |
|  |  |  | Dec-10 | 2010 | Q4 | 2010 Q4 | \$ | 1,372,211.04 | \$ | 132,191.00 | 1.20\% | \$ | 1,372.21 | \$ | 1,505,774.25 | \$ | 1,510,754.85 |  |
|  |  |  | Jan-11 | 2011 | Q1 | 2011 Q1 | \$ | 1,504,402.04 | \$ | 132,738.00 | 1.47\% | \$ | 1,842.89 | \$ | 1,638,982.93 |  |  |  |
|  |  |  | Feb-11 | 2011 | Q1 | 2011 Q1 | \$ | 1,637,140.04 | \$ | 132,818.00 | 1.47\% | \$ | 2,005.50 | \$ | 1,771,963.54 |  |  |  |
|  |  |  | Mar-11 | 2011 | Q1 | 2011 Q1 | \$ | 1,769,958.04 | \$ | 133,113.00 | 1.47\% | \$ | 2,168.20 | \$ | 1,905,239.24 |  |  |  |
|  |  |  | Apr-11 | 2011 | Q2 | 2011 Q2 | \$ | 1,903,071.04 | \$ | 133,304.00 | 1.47\% | \$ | 2,331.26 | \$ | 2,038,706.30 |  |  |  |
|  |  |  | May-11 | 2011 | Q2 | 2011 Q2 | \$ | 2,036,375.04 | \$ | 167,462.00 | 1.47\% | \$ | 2,494.56 | \$ | 2,206,331.60 |  |  |  |
|  |  |  | Jun-11 | 2011 | Q2 | 2011 Q2 | \$ | 2,203,837.04 | \$ | 203,986.00 | 1.47\% | \$ | 2,699.70 | \$ | 2,410,522.74 |  |  |  |
|  |  |  | Jul-11 | 2011 | Q3 | 2011 Q3 | \$ | 2,407,823.04 | \$ | 203,950.00 | 1.47\% | \$ | 2,949.58 | \$ | 2,614,722.62 |  |  |  |
|  |  |  | Aug-11 | 2011 | Q3 | 2011 Q3 | \$ | 2,611,773.04 | \$ | 204,421.00 | 1.47\% | \$ | 3,199.42 | \$ | 2,819,393.46 |  |  |  |
|  |  |  | Sep-11 | 2011 | Q3 | 2011 Q3 | \$ | 2,816,194.04 | \$ | 205,162.00 | 1.47\% | \$ | 3,449.84 | \$ | 3,024,805.88 |  |  |  |
|  |  |  | Oct-11 | 2011 | Q4 | 2011 Q4 | \$ | 3,021,356.04 | \$ | 205,599.00 | 1.47\% | \$ | 3,701.16 | \$ | 3,230,656.20 |  |  |  |
|  |  |  | Nov-11 | 2011 | Q4 | 2011 Q4 | \$ | 3,226,955.04 | \$ | 206,291.00 | 1.47\% | \$ | 3,953.02 | \$ | 3,437,199.06 |  |  |  |
|  |  |  | Dec-11 | 2011 | Q4 | 2011 Q4 | \$ | 3,433,246.04 | \$ | 206,702.00 | 1.47\% | \$ | 4,205.73 | \$ | 3,644,153.77 | \$ | 2,170,546.86 |  |
|  |  |  | Jan-12 | 2012 | Q1 | 2012 Q1 | \$ | 3,639,948.04 | \$ | 107,938.00 | 1.47\% | \$ | 4,458.94 | \$ | 3,752,344.98 |  |  |  |
|  |  |  | Feb-12 | 2012 | Q1 | 2012 Q1 | \$ | 3,747,886.04 | \$ | 66.00 | 1.47\% | \$ | 4,591.16 | \$ | 3,752,543.20 |  |  |  |
|  |  |  | Mar-12 | 2012 | Q1 | 2012 Q1 | \$ | 3,747,952.04 | -\$ | 15.00 | 1.47\% | \$ | 4,591.24 | \$ | 3,752,528.28 |  |  |  |
|  |  |  | Apr-12 | 2012 | Q2 | 2012 Q2 | \$ | 3,747,937.04 | \$ | 19.00 | 1.47\% | \$ | 4,591.22 | \$ | 3,752,547.26 |  |  |  |
|  |  |  | May-12 | 2012 | Q2 | 2012 Q2 | \$ | 3,747,956.04 | \$ | 2.00 | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 |  |  |  |
|  |  |  | Jun-12 | 2012 | Q2 | 2012 Q2 | \$ | 3,747,958.04 | -\$ | 10.00 | 1.47\% | \$ | 4,591.25 | \$ | 3,752,539.29 |  |  |  |
|  |  |  | Jul-12 | 2012 | Q3 | 2012 Q3 | \$ | 3,747,948.04 | \$ | 10.00 | 1.47\% | \$ | 4,591.24 | \$ | 3,752,549.28 |  |  |  |
|  |  |  | Aug-12 | 2012 | Q3 | 2012 Q3 | \$ | 3,747,958.04 | \$ | - | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 |  |  |  |
|  |  |  | Sep-12 | 2012 | Q3 | 2012 Q3 | \$ | 3,747,958.04 | \$ | - | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 |  |  |  |
|  |  |  | Oct-12 | 2012 | Q4 | 2012 Q4 | \$ | 3,747,958.04 |  |  | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 |  |  |  |
|  |  |  | Nov-12 | 2012 | Q4 | 2012 Q4 | \$ | 3,747,958.04 |  |  | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 |  |  |  |
|  |  |  | Dec-12 | 2012 | Q4 | 2012 Q4 | \$ | 3,747,958.04 |  |  | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 | \$ | 162,972.55 |  |
|  |  |  | Jan-13 | 2013 | Q1 | 2013 Q1 | \$ | 3,747,958.04 |  |  | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 |  |  |  |
|  |  |  | Feb-13 | 2013 | Q1 | 2013 Q1 | \$ | 3,747,958.04 |  |  | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 |  |  |  |
|  |  |  | Mar-13 | 2013 | Q1 | 2013 Q1 | \$ | 3,747,958.04 |  |  | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 |  |  |  |
|  |  |  | Apr-13 | 2013 | Q2 | 2013 Q2 | \$ | 3,747,958.04 |  |  | 1.47\% | \$ | 4,591.25 | \$ | 3,752,549.29 |  |  |  |
|  |  |  | May-13 | 2013 | Q2 | 2013 Q2 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - | \$ | 3,747,958.04 |  |  |  |
|  |  |  | Jun-13 | 2013 | Q2 | 2013 Q2 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - | \$ | 3,747,958.04 |  |  |  |

Account 1555 - Sub-account Funding Adder Revenues for Residential \& General Service Less Than 50 kW

| 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Jul-13 | 2013 | Q3 | 2013 Q3 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - | \$ | 3,747,958.04 |  |  |  |
|  |  |  | Aug-13 | 2013 | Q3 | 2013 Q3 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - | \$ | 3,747,958.04 |  |  |  |
|  |  |  | Sep-13 | 2013 | Q3 | 2013 Q3 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - | \$ | 3,747,958.04 |  |  |  |
|  |  |  | Oct-13 | 2013 | Q4 | 2013 Q4 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - | \$ | 3,747,958.04 |  |  |  |
|  |  |  | Nov-13 | 2013 | Q4 | 2013 Q4 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - | \$ | 3,747,958.04 |  |  |  |
|  |  |  | Dec-13 | 2013 | Q4 | 2013 Q4 | \$ | 3,747,958.04 |  |  | 0.00\% | \$ | - | \$ | 3,747,958.04 | \$ | 18,365.00 |  |
|  |  |  | tal Fund | ng Ad | Rev | nues Coll |  |  | \$ | 3,747,958.04 |  | \$ | 114,681.22 | \$ | 3,862,639.26 | \$ | 862,639.26 |  |


| Prescribed Interest Rates | Approved Deferral and Variance Accounts | CWIP | Date | Year | Quarter | Opening Balance <br> (Principal) | OM\&A Expenses | Amortization / <br> Depreciation Expense | Closing Balance (Principal) | (Annual) <br> Interest <br> Rate | Interest (on opening balance) | Cumulative Interest |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2006 Q1 | 0.00\% | 0.00\% | Jan-06 | 2006 | Q1 | \$ |  |  | - | 0.00\% | - | - |
| 2006 Q2 | 4.14\% | 4.68\% | Feb-06 | 2006 | Q1 | - |  |  | - | 0.00\% | - | - |
| 2006 Q3 | 4.59\% | 5.05\% | Mar-06 | 2006 | Q1 | - |  |  | - | 0.00\% | - | - |
| 2006 Q4 | 4.59\% | 4.72\% | Apr-06 | 2006 | Q2 | - |  |  | - | 4.14\% | - | - |
| 2007 Q1 | 4.59\% | 4.72\% | May-06 | 2006 | Q2 | - |  |  | - | 4.14\% | - | - |
| 2007 Q2 | 4.59\% | 4.72\% | Jun-06 | 2006 | Q2 | - |  |  | - | 4.14\% | - | - |
| 2007 Q3 | 4.59\% | 5.18\% | Jul-06 | 2006 | Q3 | - |  |  | - | 4.59\% | - | - |
| 2007 Q4 | 5.14\% | 5.18\% | Aug-06 | 2006 | Q3 | - |  |  | - | 4.59\% | - | - |
| 2008 Q1 | 5.14\% | 5.18\% | Sep-06 | 2006 | Q3 | - |  |  | - | 4.59\% | - | - |
| 2008 Q2 | 4.08\% | 5.18\% | Oct-06 | 2006 | Q4 | - |  |  | - | 4.59\% | - | - |
| 2008 Q3 | 3.35\% | 5.43\% | Nov-06 | 2006 | Q4 | - |  |  | - | 4.59\% | - | - |
| 2008 Q4 | 3.35\% | 5.43\% | Dec-06 | 2006 | Q4 | - |  |  | - | 4.59\% | - | - |
| 2009 Q1 | 2.45\% | 6.61\% | Jan-07 | 2007 | Q1 | - |  |  | - | 4.59\% | - | - |
| 2009 Q2 | 1.00\% | 6.61\% | Feb-07 | 2007 | Q1 | - |  |  | - | 4.59\% | - | - |
| 2009 Q3 | 0.55\% | 5.67\% | Mar-07 | 2007 | Q1 | - |  |  | - | 4.59\% | - | - |
| 2009 Q4 | 0.55\% | 4.66\% | Apr-07 | 2007 | Q2 | - |  |  | - | 4.59\% | - | - |
| 2010 Q1 | 0.55\% | 4.34\% | May-07 | 2007 | Q2 | - |  |  | - | 4.59\% | - | - |
| 2010 Q2 | 0.55\% | 4.34\% | Jun-07 | 2007 | Q2 | - |  |  | - | 4.59\% | - | - |
| 2010 Q3 | 0.89\% | 4.66\% | Jul-07 | 2007 | Q3 | - |  |  | - | 4.59\% | - | - |
| 2010 Q4 | 1.20\% | 4.01\% | Aug-07 | 2007 | Q3 | - |  |  | - | 4.59\% | - | - |
| 2011 Q1 | 1.47\% | 4.29\% | Sep-07 | 2007 | Q3 | - |  |  | - | 4.59\% | - | - |
| 2011 Q2 | 1.47\% | 4.29\% | Oct-07 | 2007 | Q4 | - |  |  | - | 5.14\% | - | - |
| 2011 Q3 | 1.47\% | 4.29\% | Nov-07 | 2007 | Q4 | - |  |  | - | 5.14\% | - | - |
| 2011 Q4 | 1.47\% | 3.92\% | Dec-07 | 2007 | Q4 | - |  |  | - | 5.14\% | - | - |
| 2012 Q1 | 1.47\% | 3.92\% | Jan-08 | 2008 | Q1 | - |  |  | - | 5.14\% | - | - |
| 2012 Q2 | 1.47\% | 3.51\% | Feb-08 | 2008 | Q1 | - |  |  | - | 5.14\% | - | - |
| 2012 Q3 | 1.47\% | 3.51\% | Mar-08 | 2008 | Q1 | - |  |  | - | 5.14\% | - | - |
| 2012 Q4 | 1.47\% | 3.51\% | Apr-08 | 2008 | Q2 | - |  |  | - | 4.08\% | - | - |
| 2013 Q1 | 0.00\% | 0.00\% | May-08 | 2008 | Q2 | - |  |  | - | 4.08\% | - | - |
| 2013 Q2 | 0.00\% | 0.00\% | Jun-08 | 2008 | Q2 | - |  |  | - | 4.08\% | - | - |
| 2013 Q3 | 0.00\% | 0.00\% | Jul-08 | 2008 | Q3 | - |  |  | - | 3.35\% | - | - |
| 2013 Q4 | 0.00\% | 0.00\% | Aug-08 | 2008 | Q3 | - |  |  | - | 3.35\% | - | - |
|  |  |  | Sep-08 | 2008 | Q3 | - |  |  | - | 3.35\% | - | - |
|  |  |  | Oct-08 | 2008 | Q4 | - |  |  | - | 3.35\% | - | - |
|  |  |  | Nov-08 | 2008 | Q4 | - |  |  | - | 3.35\% | - | - |
|  |  |  | Dec-08 | 2008 | Q4 | - |  |  | - | 3.35\% | - | - |
|  |  |  | Jan-09 | 2009 | Q1 | - |  |  | - | 2.45\% | - | - |


| 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Feb-09 | 2009 | Q1 | - |  |  |  |  | - | 2.45\% | - | - |
|  |  |  | Mar-09 | 2009 | Q1 | - |  |  |  |  | - | 2.45\% | - | - |
|  |  |  | Apr-09 | 2009 | Q2 | - |  |  |  |  | - | 1.00\% | - | - |
|  |  |  | May-09 | 2009 | Q2 | - |  |  |  |  | - | 1.00\% | - | - |
|  |  |  | Jun-09 | 2009 | Q2 | - |  |  |  |  | - | 1.00\% | - | - |
|  |  |  | Jul-09 | 2009 | Q3 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  |  | Aug-09 | 2009 | Q3 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  |  | Sep-09 | 2009 | Q3 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  |  | Oct-09 | 2009 | Q4 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  |  | Nov-09 | 2009 | Q4 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  |  | Dec-09 | 2009 | Q4 | - |  |  |  |  | - | 0.55\% | - | - |
|  |  |  | Jan-10 | 2010 | Q1 | - | \$ | 2.84 | \$ | 56.09 | 58.93 | 0.55\% | - | - |
|  |  |  | Feb-10 | 2010 | Q1 | 58.93 | \$ | 3.11 | \$ | 56.09 | 118.13 | 0.55\% | 0.03 | 0.03 |
|  |  |  | Mar-10 | 2010 | Q1 | 118.13 | \$ | 3.49 | \$ | 56.09 | 177.70 | 0.55\% | 0.05 | 0.08 |
|  |  |  | Apr-10 | 2010 | Q2 | 177.70 | \$ | 7.73 | \$ | 56.09 | 241.52 | 0.55\% | 0.08 | 0.16 |
|  |  |  | May-10 | 2010 | Q2 | 241.52 | \$ | 3.31 | \$ | 56.09 | 300.91 | 0.55\% | 0.11 | 0.27 |
|  |  |  | Jun-10 | 2010 | Q2 | 300.91 | \$ | 6.63 | \$ | 56.09 | 363.63 | 0.55\% | 0.14 | 0.41 |
|  |  |  | Jul-10 | 2010 | Q3 | 363.63 | \$ | 5.32 | \$ | 56.09 | 425.04 | 0.89\% | 0.27 | 0.68 |
|  |  |  | Aug-10 | 2010 | Q3 | 425.04 | \$ | 1.90 | \$ | 56.09 | 483.02 | 0.89\% | 0.32 | 1.00 |
|  |  |  | Sep-10 | 2010 | Q3 | 483.02 | \$ | 3.22 | \$ | 56.09 | 542.32 | 0.89\% | 0.36 | 1.35 |
|  |  |  | Oct-10 | 2010 | Q4 | 542.32 | \$ | 3.50 | \$ | 56.09 | 601.91 | 1.20\% | 0.54 | 1.90 |
|  |  |  | Nov-10 | 2010 | Q4 | 601.91 | \$ | 3.32 | \$ | 56.09 | 661.32 | 1.20\% | 0.60 | 2.50 |
|  |  |  | Dec-10 | 2010 | Q4 | 661.32 | \$ | 6.77 | \$ | 56.09 | 724.17 | 1.20\% | 0.66 | 3.16 |
|  |  |  | Jan-11 | 2011 | Q1 | 724.17 | \$ | 246.84 | \$ | 3,174.79 | 4,145.80 | 1.47\% | 0.89 | 4.05 |
|  |  |  | Feb-11 | 2011 | Q1 | 4,145.80 | \$ | 156.91 | \$ | 3,174.79 | 7,477.50 | 1.47\% | 5.08 | 9.13 |
|  |  |  | Mar-11 | 2011 | Q1 | 7,477.50 | \$ | 156.41 | \$ | 3,174.79 | 10,808.70 | 1.47\% | 9.16 | 18.29 |
|  |  |  | Apr-11 | 2011 | Q2 | 10,808.70 | \$ | 136.74 | \$ | 3,174.79 | 14,120.23 | 1.47\% | 13.24 | 31.53 |
|  |  |  | May-11 | 2011 | Q2 | 14,120.23 | \$ | 126.76 | \$ | 3,174.79 | 17,421.79 | 1.47\% | 17.30 | 48.82 |
|  |  |  | Jun-11 | 2011 | Q2 | 17,421.79 | \$ | 139.51 | \$ | 3,174.79 | 20,736.09 | 1.47\% | 21.34 | 70.17 |
|  |  |  | Jul-11 | 2011 | Q3 | 20,736.09 | \$ | 155.72 | \$ | 3,174.79 | 24,066.61 | 1.47\% | 25.40 | 95.57 |
|  |  |  | Aug-11 | 2011 | Q3 | 24,066.61 | \$ | 146.88 | \$ | 3,174.79 | 27,388.28 | 1.47\% | 29.48 | 125.05 |
|  |  |  | Sep-11 | 2011 | Q3 | 27,388.28 | \$ | 147.92 | \$ | 3,174.79 | 30,710.98 | 1.47\% | 33.55 | 158.60 |
|  |  |  | Oct-11 | 2011 | Q4 | 30,710.98 | \$ | 622.08 | \$ | 3,174.79 | 34,507.86 | 1.47\% | 37.62 | 196.22 |
|  |  |  | Nov-11 | 2011 | Q4 | 34,507.86 | \$ | 150.53 | \$ | 3,174.79 | 37,833.17 | 1.47\% | 42.27 | 238.49 |
|  |  |  | Dec-11 | 2011 | Q4 | 37,833.17 | \$ | 173.68 | \$ | 3,174.79 | 41,181.64 | 1.47\% | 46.35 | 284.84 |
|  |  |  | Jan-12 | 2012 | Q1 | 41,181.64 | \$ | 275.60 | \$ | 6,368.18 | 47,825.43 | 1.47\% | 50.45 | 335.29 |
|  |  |  | Feb-12 | 2012 | Q1 | 47,825.43 | \$ | 269.49 | \$ | 6,368.18 | 54,463.10 | 1.47\% | 58.59 | 393.87 |

Page 2



| Interest Rates | Approved Deferral and Variance Accounts | CWIP | Date | Year | Quarter |  |  | Opening Balance (Principal) |  | Adder nues | Interest Rate | Interest |  | Closing Balance |  | Annual amounts |  | Board Approved Smart Meter Funding Adder |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Oct-09 | 2009 | Q4 | 2009 Q4 | \$ | \$ - |  |  | 0.55\% | \$ | - |  | \$ |  |  |  |
|  |  |  | Nov-09 | 2009 | Q4 | 2009 Q4 | \$ | \$ - |  |  | 0.55\% | \$ | - | \$ | \$ |  |  |  |
|  |  |  | Dec-09 | 2009 | Q4 | 2009 Q4 | \$ | - |  |  | 0.55\% | \$ | - | \$ | \$ | \$ | - |  |
|  |  |  | Jan-10 | 2010 | Q1 | 2010 Q1 | \$ | \$ - | \$ | 1,289.25 | 0.55\% | \$ | - |  | \$ 1,289.25 |  |  |  |
|  |  |  | Feb-10 | 2010 | Q1 | 2010 Q1 | \$ | 1,289.25 | \$ | 1,496.00 | 0.55\% | \$ | 0.59 |  | \$ 2,785.84 |  |  |  |
|  |  |  | Mar-10 | 2010 | Q1 | 2010 Q1 | \$ | 2,785.25 | \$ | 1,510.00 | 0.55\% | \$ | 1.28 | \$ | \$ 4,296.53 |  |  |  |
|  |  |  | Apr-10 | 2010 | Q2 | 2010 Q2 | \$ | 4,295.25 | \$ | 1,504.00 | 0.55\% | \$ | 1.97 | \$ | \$ 5,801.22 |  |  |  |
|  |  |  | May-10 | 2010 | Q2 | 2010 Q2 | \$ | 5,799.25 | \$ | 1,501.00 | 0.55\% | \$ | 2.66 | \$ | \$ 7,302.91 |  |  |  |
|  |  |  | Jun-10 | 2010 | Q2 | 2010 Q2 | \$ | 7,300.25 | \$ | 1,500.00 | 0.55\% | \$ | 3.35 | \$ | \$ 8,803.60 |  |  |  |
|  |  |  | Jul-10 | 2010 | Q3 | 2010 Q3 | \$ | 8,800.25 | \$ | 1,500.00 | 0.89\% | \$ | 6.53 | \$ | \$ 10,306.78 |  |  |  |
|  |  |  | Aug-10 | 2010 | Q3 | 2010 Q3 | \$ | 10,300.25 | \$ | 1,504.00 | 0.89\% | \$ | 7.64 | \$ | \$ 11,811.89 |  |  |  |
|  |  |  | Sep-10 | 2010 | Q3 | 2010 Q3 | \$ | 11,804.25 | \$ | 1,508.00 | 0.89\% | \$ | 8.75 | \$ | \$ 13,321.00 |  |  |  |
|  |  |  | Oct-10 | 2010 | Q4 | 2010 Q4 | \$ | 13,312.25 | \$ | 1,511.00 | 1.20\% | \$ | 13.31 |  | \$ 14,836.56 |  |  |  |
|  |  |  | Nov-10 | 2010 | Q4 | 2010 Q4 | \$ | 14,823.25 | \$ | 1,510.00 | 1.20\% | \$ | 14.82 | \$ | \$ 16,348.07 |  |  |  |
|  |  |  | Dec-10 | 2010 | Q4 | 2010 Q4 | \$ | 16,333.25 | \$ | 1,507.00 | 1.20\% | \$ | 16.33 | \$ | \$ 17,856.58 | \$ | 17,917.48 |  |
|  |  |  | Jan-11 | 2011 | Q1 | 2011 Q1 | \$ | 17,840.25 | \$ | 1,508.00 | 1.47\% | \$ | 21.85 | \$ | \$ 19,370.10 |  |  |  |
|  |  |  | Feb-11 | 2011 | Q1 | 2011 Q1 | \$ | 19,348.25 | \$ | 1,518.00 | 1.47\% | \$ | 23.70 | \$ | \$ 20,889.95 |  |  |  |
|  |  |  | Mar-11 | 2011 | Q1 | 2011 Q1 | \$ | 20,866.25 | \$ | 1,507.00 | 1.47\% | \$ | 25.56 | \$ | \$ 22,398.81 |  |  |  |
|  |  |  | Apr-11 | 2011 | Q2 | 2011 Q2 | \$ | 22,373.25 | \$ | 1,511.00 | 1.47\% | \$ | 27.41 | \$ | \$ 23,911.66 |  |  |  |
|  |  |  | May-11 | 2011 | Q2 | 2011 Q2 | \$ | 23,884.25 | \$ | 2,195.00 | 1.47\% | \$ | 29.26 | \$ | \$ 26,108.51 |  |  |  |
|  |  |  | Jun-11 | 2011 | Q2 | 2011 Q2 | \$ | 26,079.25 | \$ | 2,308.00 | 1.47\% | \$ | 31.95 | \$ | \$ 28,419.20 |  |  |  |
|  |  |  | Jul-11 | 2011 | Q3 | 2011 Q3 | \$ | 28,387.25 | \$ | 2,284.00 | 1.47\% | \$ | 34.77 | \$ | \$ 30,706.02 |  |  |  |
|  |  |  | Aug-11 | 2011 | Q3 | 2011 Q3 | \$ | 30,671.25 | \$ | 2,288.00 | 1.47\% | \$ | 37.57 | \$ | \$ 32,996.82 |  |  |  |
|  |  |  | Sep-11 | 2011 | Q3 | 2011 Q3 | \$ | 32,959.25 | \$ | 2,259.00 | 1.47\% | \$ | 40.38 | \$ | \$ 35,258.63 |  |  |  |
|  |  |  | Oct-11 | 2011 | Q4 | 2011 Q4 | \$ | 35,218.25 | \$ | 2,264.00 | 1.47\% | \$ | 43.14 | \$ | \$ 37,525.39 |  |  |  |
|  |  |  | Nov-11 | 2011 | Q4 | 2011 Q4 | \$ | 37,482.25 | \$ | 2,255.00 | 1.47\% | \$ | 45.92 | \$ | \$ 39,783.17 |  |  |  |
|  |  |  | Dec-11 | 2011 | Q4 | 2011 Q4 | \$ | 39,737.25 | \$ | 2,264.00 | 1.47\% | \$ | 48.68 | \$ | \$ 42,049.93 | \$ | 24,571.19 |  |
|  |  |  | Jan-12 | 2012 | Q1 | 2012 Q1 | \$ | 42,001.25 | \$ | 293.00 | 1.47\% | \$ | 51.45 | \$ | \$ 42,345.70 |  |  |  |
|  |  |  | Feb-12 | 2012 | Q1 | 2012 Q1 | \$ | 42,294.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | \$ 42,346.06 |  |  |  |
|  |  |  | Mar-12 | 2012 | Q1 | 2012 Q1 | \$ | 42,294.25 | \$ | 3.00 | 1.47\% | \$ | 51.81 | \$ | \$ 42,349.06 |  |  |  |
|  |  |  | Apr-12 | 2012 | Q2 | 2012 Q2 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | \$ 42,349.06 |  |  |  |
|  |  |  | May-12 | 2012 | Q2 | 2012 Q2 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | \$ 42,349.06 |  |  |  |
|  |  |  | Jun-12 | 2012 | Q2 | 2012 Q2 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | \$ 42,349.06 |  |  |  |
|  |  |  | Jul-12 | 2012 | Q3 | 2012 Q3 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | \$ 42,349.06 |  |  |  |
|  |  |  | Aug-12 | 2012 | Q3 | 2012 Q3 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | \$ 42,349.06 |  |  |  |
|  |  |  | Sep-12 | 2012 | Q3 | 2012 Q3 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | \$ 42,349.06 |  |  |  |
|  |  |  | Oct-12 | 2012 | Q4 | 2012 Q4 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | \$ 42,349.06 |  |  |  |
|  |  |  | Nov-12 | 2012 | Q4 | 2012 Q4 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | \$ 42,349.06 |  |  |  |
|  |  |  | Dec-12 | 2012 | Q4 | 2012 Q4 | \$ | 42,297.25 | \$ | - | 1.47\% | \$ | 51.81 | \$ | \$ 42,349.06 | \$ | 917.36 |  |
|  |  |  | Jan-13 | 2013 | Q1 | 2013 Q1 | \$ | 42,297.25 |  |  | 1.47\% | \$ | 51.81 | \$ | \$ 42,349.06 |  |  |  |
|  |  |  | Feb-13 | 2013 | Q1 | 2013 Q1 | \$ | 42,297.25 |  |  | 1.47\% | \$ | 51.81 | \$ | \$ 42,349.06 |  |  |  |
|  |  |  | Mar-13 | 2013 | Q1 | 2013 Q1 | \$ | 42,297.25 |  |  | 1.47\% | \$ | 51.81 | \$ | \$ 42,349.06 |  |  |  |
|  |  |  | Apr-13 | 2013 | Q2 | 2013 Q2 | \$ | 42,297.25 |  |  | 1.47\% | \$ | 51.81 | \$ | \$ 42,349.06 |  |  |  |
|  |  |  | May-13 | 2013 | Q2 | 2013 Q2 | \$ | 42,297.25 |  |  | 0.00\% | \$ | - | \$ | \$ 42,297.25 |  |  |  |
|  |  |  | Jun-13 | 2013 | Q2 | 2013 Q2 | \$ | 42,297.25 |  |  | 0.00\% | \$ | - | \$ | \$ 42,297.25 |  |  |  |

## Account 1555 - Sub-account Funding Adder Revenues - General Service Greater Than 50 kW



## APPENDIX E - BILL IMPACT TABLES

Residential Bill Impact - $\mathbf{2 5 0} \mathbf{~ k W h}$

|  | CURRENT ESTIMATED BILL |  |  | PROPOSED ESTIMATED BILL |  |  | Change (\$) | Change (\%) | \% of Total RPP Bill | \% of Total TOU Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Volume | $\begin{aligned} & \text { Current Rate } \\ & \text { (\$) } \end{aligned}$ | Current Charge (\$) | Volume | Proposed Rate (\$) | Proposed Charge (\$) |  |  |  |  |
| Energy First Tier (kWh) | 258.73 | 0.0740 | 19.15 | 258.73 | 0.0740 | 19.15 | 0.00 | 0.00\% | 45.18\% |  |
| Energy Second Tier (kWh) | 0.00 | 0.0870 | 0.00 | 0.00 | 0.0870 | 0.00 | 0.00 | 0.00\% | 0.00\% |  |
|  |  |  |  |  |  |  |  |  |  |  |
| TOU - Off Peak | 165.58 | 0.0630 | 10.43 | 165.58 | 0.0630 | 10.43 | 0.00 | 0.00\% |  | 23.82\% |
| TOU - Mid Peak | 46.57 | 0.0990 | 4.61 | 46.57 | 0.0990 | 4.61 | 0.00 | 0.00\% |  | 10.53\% |
| TOU - On Peak | 46.57 | 0.1180 | 5.50 | 46.57 | 0.1180 | 5.50 | 0.00 | 0.00\% |  | 12.55\% |
|  |  |  |  |  |  |  |  |  |  |  |
| Service Charge | 1 | 9.83 | 9.83 | 1 | 9.83 | 9.83 | 0.00 | 0.00\% | 23.20\% | 22.45\% |
| Service Charge Rate Rider(s) | 1 | 0.0200 | 0.02 | 1 | 2.1195 | 2.12 | 2.10 | 10497.42\% | 5.00\% | 4.84\% |
| Distribution Volumetric Rate | 250 | 0.0143 | 3.58 | 250 | 0.0143 | 3.58 | 0.00 | 0.00\% | 8.44\% | 8.16\% |
| Low Voltage Volumetric Rate | 250 |  | 0.00 | 250 |  | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Distribution Volumetric Rate Rider(s) | 250 | 0.0000 | 0.00 | 250 | 0.0000 | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Total: Distribution |  |  | 13.43 |  |  | 15.52 | 2.10 | 15.64\% | 36.64\% | 35.45\% |
| $\begin{aligned} & \text { Retail Transmission Rate - Network Service } \\ & \text { Rate } \end{aligned}$ | 258.73 | 0.00750 | 1.94 | 258.73 | 0.00750 | 1.94 | 0.00 | 0.00\% | 4.58\% | 4.43\% |
| Retail Transmission Rate - Line and Transformation Connection Service Rate | 258.73 | 0.00550 | 1.42 | 258.73 | 0.00550 | 1.42 | 0.00 | 0.00\% | 3.36\% | 3.25\% |
| Total: Retail Transmission |  |  | 3.36 |  |  | 3.36 | 0.00 | 0.00\% | 7.94\% | 7.68\% |
| Sub-Total: Delivery (Distribution and Retail Transmission) |  |  | 16.79 |  |  | 18.89 | 2.10 | 12.51\% | 44.58\% | 43.14\% |
| Wholesale Market Service Rate | 258.73 | 0.0052 | 1.35 | 258.73 | 0.0052 | 1.35 | 0.00 | 0.00\% | 3.18\% | 3.07\% |
| Rural Rate Protection Charge | 258.73 | 0.0011 | 0.28 | 258.73 | 0.0011 | 0.28 | 0.00 | 0.00\% | 0.67\% | 0.65\% |
| Standard Supply Service - Administration Charge (if applicable) | 1 | 0.25 | 0.25 | 1 | 0.25 | 0.25 | 0.00 | 0.00\% | 0.59\% | 0.57\% |
| Sub-Total: Regulatory |  |  | 1.88 |  |  | 1.88 | 0.00 | 0.00\% | 4.44\% | 4.29\% |
| Debt Retirement Charge (DRC) | 250.00 | 0.00700 | 1.75 | 250.00 | 0.00700 | 1.75 | 0.00 | 0.00\% | 4.13\% | 4.00\% |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on RPP (before taxes) |  |  | 39.56 |  |  | 41.66 | 2.10 | 5.31\% | 98.33\% |  |
| HST |  | 13\% | 5.14 |  | 13\% | 5.42 | 0.27 | 5.31\% | 12.78\% |  |
| Total Bill (including HST) |  |  | 44.71 |  |  | 47.08 | 2.37 | 5.31\% | 111.11\% |  |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (4.47) |  | (10\%) | (4.71) | (0.24) | 5.31\% | -11.11\% |  |
| Total Bill on RPP (including OCEB) |  |  | 40.24 |  |  | 42.37 | 2.14 | 5.31\% | 100.00\% |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on TOU (before taxes) |  |  | 40.96 |  |  | 43.06 | 2.10 | 5.13\% |  | 98.33\% |
| HST |  | 13\% | 5.32 |  | 13\% | 5.60 | 0.27 | 5.13\% |  | 12.78\% |
| Total Bill (including HST) |  |  | 46.28 |  |  | 48.65 | 2.37 | 5.13\% |  | 111.11\% |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (4.63) |  | (10\%) | (4.87) | (0.24) | 5.13\% |  | -11.11\% |
| Total Bill on TOU (including OCEB) |  |  | 41.65 |  |  | 43.79 | 2.14 | 5.13\% |  | 100.00\% |

Residential Bill Impact - 800 kWh

|  | CURRENT ESTIMATED BILL |  |  | PROPOSED ESTIMATED BILL |  |  | Change (\$) | Change (\%) | \% of Total RPP Bill | \% of Total TOU Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Volume | Current Rate <br> (\$) | Current Charge (\$) | Volume | Proposed <br> Rate (\$) | Proposed Charge (\$) |  |  |  |  |
| Energy First Tier (kWh) | 827.92 | 0.0740 | 61.27 | 827.92 | 0.0740 | 61.27 | 0.00 | 0.00\% | 65.83\% |  |
| Energy Second Tier (kWh) | -172.08 | 0.0870 | -14.97 | -172.08 | 0.0870 | -14.97 | 0.00 | 0.00\% | (16.09\%) |  |
| TOU - Off Peak | 529.87 | 0.0630 | 33.38 | 529.87 | 0.0630 | 33.38 | 0.00 | 0.00\% |  | 29.59\% |
| TOU - Mid Peak | 149.03 | 0.0990 | 14.75 | 149.03 | 0.0990 | 14.75 | 0.00 | 0.00\% |  | 13.08\% |
| TOU - On Peak | 149.03 | 0.1180 | 17.59 | 149.03 | 0.1180 | 17.59 | 0.00 | 0.00\% |  | 15.59\% |
| Service Charge | 1 | 9.83 | 9.83 | 1 | 9.83 | 9.83 | 0.00 | 0.00\% | 10.56\% | 8.71\% |
| Service Charge Rate Rider(s) | 1 | 0.0200 | 0.02 | 1 | 2.1195 | 2.12 | 2.10 | 10497.42\% | 2.28\% | 1.88\% |
| Distribution Volumetric Rate | 800 | 0.0143 | 11.44 | 800 | 0.0143 | 11.44 | 0.00 | 0.00\% | 12.29\% | 10.14\% |
| Low Voltage Volumetric Rate | 800 |  | 0.00 | 800 |  | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Distribution Volumetric Rate Rider(s) | 800 | 0.0000 | 0.00 | 800 | 0.0000 | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Total: Distribution |  |  | 21.29 |  |  | 23.39 | 2.10 | 9.86\% | 25.13\% | 20.73\% |
| Retail Transmission Rate - Network Service <br> Rate <br> Real | 827.92 | 0.00750 | 6.21 | 827.92 | 0.00750 | 6.21 | 0.00 | 0.00\% | 6.67\% | 5.50\% |
| Retail Transmission Rate - Line and Transformation Connection Service Rate | 827.92 | 0.00550 | 4.55 | 827.92 | 0.00550 | 4.55 | 0.00 | 0.00\% | 4.89\% | 4.04\% |
| Total: Retail Transmission |  |  | 10.76 |  |  | 10.76 | 0.00 | 0.00\% | 11.56\% | 9.54\% |
| Sub-Total: Delivery (Distribution and Retail Transmission) |  |  | 32.05 |  |  | 34.15 | 2.10 | 6.55\% | 36.70\% | 30.27\% |
| Wholesale Market Service Rate | 827.92 | 0.0052 | 4.31 | 827.92 | 0.0052 | 4.31 | 0.00 | 0.00\% | 4.63\% | 3.82\% |
| Rural Rate Protection Charge | 827.92 | 0.0011 | 0.91 | 827.92 | 0.0011 | 0.91 | 0.00 | 0.00\% | 0.98\% | 0.81\% |
| Standard Supply Service - Administration Charge (if applicable) | 1 | 0.25 | 0.25 | 1 | 0.25 | 0.25 | 0.00 | 0.00\% | 0.27\% | 0.22\% |
| Sub-Total: Regulatory |  |  | 5.47 |  |  | 5.47 | 0.00 | 0.00\% | 5.87\% | 4.84\% |
| Debt Retirement Charge (DRC) | 800.00 | 0.00700 | 5.60 | 800.00 | 0.00700 | 5.60 | 0.00 | 0.00\% | 6.02\% | 4.96\% |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on RPP (before taxes) |  |  | 89.41 |  |  | 91.51 | 2.10 | 2.35\% | 98.33\% |  |
| HST |  | 13\% | 11.62 |  | 13\% | 11.90 | 0.27 | 2.35\% | 12.78\% |  |
| Total Bill (including HST) |  |  | 101.04 |  |  | 103.41 | 2.37 | 2.35\% | 111.11\% |  |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (10.10) |  | (10\%) | (10.34) | (0.24) | 2.35\% | -11.11\% |  |
| Total Bill on RPP (including OCEB) |  |  | 90.93 |  |  | 93.07 | 2.14 | 2.35\% | 100.00\% |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on TOU (before taxes) |  |  | 108.84 |  |  | 110.94 | 2.10 | 1.93\% |  | 98.33\% |
| HST |  | 13\% | 14.15 |  | 13\% | 14.42 | 0.27 | 1.93\% |  | 12.78\% |
| Total Bill (including HST) |  |  | 122.99 |  |  | 125.36 | 2.37 | 1.93\% |  | 111.11\% |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (12.30) |  | (10\%) | (12.54) | (0.24) | 1.93\% |  | -11.11\% |
| Total Bill on TOU (including OCEB) |  |  | 110.69 |  |  | 112.82 | 2.14 | 1.93\% |  | 100.00\% |

Residential Bill Impact - $\mathbf{1 , 5 0 0} \mathrm{kWh}$

|  | CURRENT ESTIMATED BILL |  |  | PROPOSED ESTIMATED BILL |  |  | Change (\$) | Change (\%) | \% of Total RPP Bill | \% of Total TOU Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Volume | Current Rate <br> (\$) | Current Charge (\$) | Volume | Proposed <br> Rate (\$) | Proposed Charge (\$) |  |  |  |  |
| Energy First Tier (kWh) | 1,000.00 | 0.0740 | 74.00 | 1,000.00 | 0.0740 | 74.00 | 0.00 | 0.00\% | 37.09\% |  |
| Energy Second Tier (kWh) | 552.35 | 0.0870 | 48.05 | 552.35 | 0.0870 | 48.05 | 0.00 | 0.00\% | 24.09\% |  |
| TOU - Off Peak | 993.50 | 0.0630 | 62.59 | 993.50 | 0.0630 | 62.59 | 0.00 | 0.00\% |  | 31.19\% |
| TOU - Mid Peak | 279.42 | 0.0990 | 27.66 | 279.42 | 0.0990 | 27.66 | 0.00 | 0.00\% |  | 13.78\% |
| TOU - On Peak | 279.42 | 0.1180 | 32.97 | 279.42 | 0.1180 | 32.97 | 0.00 | 0.00\% |  | 16.43\% |
| Service Charge | 1 | 9.83 | 9.83 | 1 | 9.83 | 9.83 | 0.00 | 0.00\% | 4.93\% | 4.90\% |
| Service Charge Rate Rider(s) | 1 | 0.0200 | 0.02 | 1 | 2.1195 | 2.12 | 2.10 | 10497.42\% | 1.06\% | 1.06\% |
| Distribution Volumetric Rate | 1,500 | 0.0143 | 21.45 | 1,500 | 0.0143 | 21.45 | 0.00 | 0.00\% | 10.75\% | 10.69\% |
| Low Voltage Volumetric Rate | 1,500 |  | 0.00 | 1,500 |  | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Distribution Volumetric Rate Rider(s) | 1,500 | 0.0000 | 0.00 | 1,500 | 0.0000 | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Total: Distribution |  |  | 31.30 |  |  | 33.40 | 2.10 | 6.71\% | 16.74\% | 16.64\% |
| Retail Transmission Rate - Network Service Rate | 1,552.35 | 0.00750 | 11.64 | 1,552.35 | 0.00750 | 11.64 | 0.00 | 0.00\% | 5.84\% | 5.80\% |
| Retail Transmission Rate - Line and Transformation Connection Service Rate | 1,552.35 | 0.00550 | 8.54 | 1,552.35 | 0.00550 | 8.54 | 0.00 | 0.00\% | 4.28\% | 4.25\% |
| Total: Retail Transmission |  |  | 20.18 |  |  | 20.18 | 0.00 | 0.00\% | 10.12\% | 10.06\% |
| Sub-Total: Delivery (Distribution and Retail Transmission) |  |  | 51.48 |  |  | 53.58 | 2.10 | 4.08\% | 26.86\% | 26.70\% |
| Wholesale Market Service Rate | 1,552.35 | 0.0052 | 8.07 | 1,552.35 | 0.0052 | 8.07 | 0.00 | 0.00\% | 4.05\% | 4.02\% |
| Rural Rate Protection Charge | 1,552.35 | 0.0011 | 1.71 | 1,552.35 | 0.0011 | 1.71 | 0.00 | 0.00\% | 0.86\% | 0.85\% |
| Standard Supply Service - Administration Charge (if applicable) | 1 | 0.25 | 0.25 | 1 | 0.25 | 0.25 | 0.00 | 0.00\% | 0.13\% | 0.12\% |
| Sub-Total: Regulatory |  |  | 10.03 |  |  | 10.03 | 0.00 | 0.00\% | 5.03\% | 5.00\% |
| Debt Retirement Charge (DRC) | 1,500.00 | 0.00700 | 10.50 | 1,500.00 | 0.00700 | 10.50 | 0.00 | 0.00\% | 5.26\% | 5.23\% |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on RPP (before taxes) |  |  | 194.06 |  |  | 196.16 | 2.10 | 1.08\% | 98.33\% |  |
| HST |  | 13\% | 25.23 |  | 13\% | 25.50 | 0.27 | 1.08\% | 12.78\% |  |
| Total Bill (including HST) |  |  | 219.29 |  |  | 221.67 | 2.37 | 1.08\% | 111.11\% |  |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (21.93) |  | (10\%) | (22.17) | (0.24) | 1.08\% | -11.11\% |  |
| Total Bill on RPP (including OCEB) |  |  | 197.36 |  |  | 199.50 | 2.14 | 1.08\% | 100.00\% |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on TOU (before taxes) |  |  | 195.24 |  |  | 197.34 | 2.10 | 1.08\% |  | 98.33\% |
| HST |  | 13\% | 25.38 |  | 13\% | 25.65 | 0.27 | 1.08\% |  | 12.78\% |
| Total Bill (including HST) |  |  | 220.62 |  |  | 222.99 | 2.37 | 1.08\% |  | 111.11\% |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (22.06) |  | (10\%) | (22.30) | (0.24) | 1.08\% |  | -11.11\% |
| Total Bill on TOU (including OCEB) |  |  | 198.55 |  |  | 200.69 | 2.14 | 1.08\% |  | 100.00\% |

General Service Less Than 50 kW Bill Impact - 2,000 kWh

|  | CURRENT ESTIMATED BILL |  |  | PROPOSED ESTIMATED BILL |  |  | Change (\$) | Change (\%) | \% of Total RPP Bill | \% of Total TOU Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Volume | Current Rate <br> (\$) | Current Charge (\$) | Volume | Proposed <br> Rate (\$) | Proposed Charge (\$) |  |  |  |  |
| Energy First Tier (kWh) | 750.00 | 0.0740 | 55.50 | 750.00 | 0.0740 | 55.50 | 0.00 | 0.00\% | 20.04\% |  |
| Energy Second Tier (kWh) | 1,319.80 | 0.0870 | 114.82 | 1,319.80 | 0.0870 | 114.82 | 0.00 | 0.00\% | 41.47\% |  |
| TOU - Off Peak | 1,324.67 | 0.0630 | 83.45 | 1,324.67 | 0.0630 | 83.45 | 0.00 | 0.00\% |  | 30.82\% |
| TOU - Mid Peak | 372.56 | 0.0990 | 36.88 | 372.56 | 0.0990 | 36.88 | 0.00 | 0.00\% |  | 13.62\% |
| TOU - On Peak | 372.56 | 0.1180 | 43.96 | 372.56 | 0.1180 | 43.96 | 0.00 | 0.00\% |  | 16.24\% |
| Service Charge | 1 | 17.75 | 17.75 | 1 | 17.75 | 17.75 | 0.00 | 0.00\% | 6.41\% | 6.56\% |
| Service Charge Rate Rider(s) | 1 | 0.0200 | 0.02 | 1 | 2.1195 | 2.12 | 2.10 | 10497.42\% | 0.77\% | 0.78\% |
| Distribution Volumetric Rate | 2,000 | 0.0156 | 31.20 | 2,000 | 0.0156 | 31.20 | 0.00 | 0.00\% | 11.27\% | 11.52\% |
| Low Voltage Volumetric Rate | 2,000 |  | 0.00 | 2,000 |  | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Distribution Volumetric Rate Rider(s) | 2,000 | 0.0000 | 0.00 | 2,000 | 0.0000 | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Total: Distribution |  |  | 48.97 |  |  | 51.07 | 2.10 | 4.29\% | 18.44\% | 18.86\% |
| Retail Transmission Rate - Network Service Rate | 2,069.80 | 0.00670 | 13.87 | 2,069.80 | 0.00670 | 13.87 | 0.00 | 0.00\% | 5.01\% | 5.12\% |
| Retail Transmission Rate - Line and Transformation Connection Service Rate | 2,069.80 | 0.00470 | 9.73 | 2,069.80 | 0.00470 | 9.73 | 0.00 | 0.00\% | 3.51\% | 3.59\% |
| Total: Retail Transmission |  |  | 23.60 |  |  | 23.60 | 0.00 | 0.00\% | 8.52\% | 8.71\% |
| Sub-Total: Delivery (Distribution and Retail Transmission) |  |  | 72.57 |  |  | 74.67 | 2.10 | 2.89\% | 26.96\% | 27.57\% |
| Wholesale Market Service Rate | 2,069.80 | 0.0052 | 10.76 | 2,069.80 | 0.0052 | 10.76 | 0.00 | 0.00\% | 3.89\% | 3.97\% |
| Rural Rate Protection Charge | 2,069.80 | 0.0011 | 2.28 | 2,069.80 | 0.0011 | 2.28 | 0.00 | 0.00\% | 0.82\% | 0.84\% |
| Standard Supply Service - Administration Charge (if applicable) | 1 | 0.25 | 0.25 | 1 | 0.25 | 0.25 | 0.00 | 0.00\% | 0.09\% | 0.09\% |
| Sub-Total: Regulatory |  |  | 13.29 |  |  | 13.29 | 0.00 | 0.00\% | 4.80\% | 4.91\% |
| Debt Retirement Charge (DRC) | 2,000.00 | 0.00700 | 14.00 | 2,000.00 | 0.00700 | 14.00 | 0.00 | 0.00\% | 5.06\% | 5.17\% |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on RPP (before taxes) |  |  | 270.18 |  |  | 272.28 | 2.10 | 0.78\% | 98.33\% |  |
| HST |  | 13\% | 35.12 |  | 13\% | 35.40 | 0.27 | 0.78\% | 12.78\% |  |
| Total Bill (including HST) |  |  | 305.30 |  |  | 307.67 | 2.37 | 0.78\% | 111.11\% |  |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (30.53) |  | (10\%) | (30.77) | (0.24) | 0.78\% | -11.11\% |  |
| Total Bill on RPP (including OCEB) |  |  | 274.77 |  |  | 276.91 | 2.14 | 0.78\% | 100.00\% |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on TOU (before taxes) |  |  | 264.16 |  |  | 266.26 | 2.10 | 0.79\% |  | 98.33\% |
| HST |  | 13\% | 34.34 |  | 13\% | 34.61 | 0.27 | 0.79\% |  | 12.78\% |
| Total Bill (including HST) |  |  | 298.50 |  |  | 300.87 | 2.37 | 0.79\% |  | 111.11\% |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (29.85) |  | (10\%) | (30.09) | (0.24) | 0.79\% |  | -11.11\% |
| Total Bill on TOU (including OCEB) |  |  | 268.65 |  |  | 270.78 | 2.14 | 0.79\% |  | 100.00\% |

General Service Less Than 50 kW Bill Impact - $5,000 \mathrm{kWh}$

|  | CURRENT ESTIMATED BILL |  |  | PROPOSED ESTIMATED BILL |  |  | Change (\$) | Change (\%) | \% of Total RPP Bill | \% of Total TOU Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
|  | Volume | Current Rate <br> (\$) | Current Charge (\$) | Volume | Proposed Rate (\$) | Proposed Charge (\$) |  |  |  |  |
| Energy First Tier (kWh) | 750.00 | 0.0740 | 55.50 | 750.00 | 0.0740 | 55.50 | 0.00 | 0.00\% | 8.20\% |  |
| Energy Second Tier (kWh) | 4,424.50 | 0.0870 | 384.93 | 4,424.50 | 0.0870 | 384.93 | 0.00 | 0.00\% | 56.90\% |  |
|  |  |  |  |  |  |  |  |  |  |  |
| TOU - Off Peak | 3,311.68 | 0.0630 | 208.64 | 3,311.68 | 0.0630 | 208.64 | 0.00 | 0.00\% |  | 32.28\% |
| TOU - Mid Peak | 931.41 | 0.0990 | 92.21 | 931.41 | 0.0990 | 92.21 | 0.00 | 0.00\% |  | 14.27\% |
| TOU - On Peak | 931.41 | 0.1180 | 109.91 | 931.41 | 0.1180 | 109.91 | 0.00 | 0.00\% |  | 17.01\% |
|  |  |  |  |  |  |  |  |  |  |  |
| Service Charge | 1 | 17.75 | 17.75 | 1 | 17.75 | 17.75 | 0.00 | 0.00\% | 2.62\% | 2.75\% |
| Service Charge Rate Rider(s) | 1 | 0.0200 | 0.02 | 1 | 2.1195 | 2.12 | 2.10 | 10497.42\% | 0.31\% | 0.33\% |
| Distribution Volumetric Rate | 5,000 | 0.0156 | 78.00 | 5,000 | 0.0156 | 78.00 | 0.00 | 0.00\% | 11.53\% | 12.07\% |
| Low Voltage Volumetric Rate | 5,000 |  | 0.00 | 5,000 |  | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Distribution Volumetric Rate Rider(s) | 5,000 | 0.0000 | 0.00 | 5,000 | 0.0000 | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Total: Distribution |  |  | 95.77 |  |  | 97.87 | 2.10 | 2.19\% | 14.47\% | 15.14\% |
| Retail Transmission Rate - Network Service Rate | 5,174.50 | 0.00670 | 34.67 | 5,174.50 | 0.00670 | 34.67 | 0.00 | 0.00\% | 5.13\% | 5.36\% |
| Retail Transmission Rate - Line and Transformation Connection Service Rate | 5,174.50 | 0.00470 | 24.32 | 5,174.50 | 0.00470 | 24.32 | 0.00 | 0.00\% | 3.60\% | 3.76\% |
| Total: Retail Transmission |  |  | 58.99 |  |  | 58.99 | 0.00 | 0.00\% | 8.72\% | 9.13\% |
| Sub-Total: Delivery (Distribution and Retail Transmission) |  |  | 154.76 |  |  | 156.86 | 2.10 | 1.36\% | 23.19\% | 24.27\% |
| Wholesale Market Service Rate | 5,174.50 | 0.0052 | 26.91 | 5,174.50 | 0.0052 | 26.91 | 0.00 | 0.00\% | 3.98\% | 4.16\% |
| Rural Rate Protection Charge | 5,174.50 | 0.0011 | 5.69 | 5,174.50 | 0.0011 | 5.69 | 0.00 | 0.00\% | 0.84\% | 0.88\% |
| Standard Supply Service - Administration <br> Charge (if applicable) <br> Sub | 1 | 0.25 | 0.25 | 1 | 0.25 | 0.25 | 0.00 | 0.00\% | 0.04\% | 0.04\% |
| Sub-Total: Regulatory |  |  | 32.85 |  |  | 32.85 | 0.00 | 0.00\% | 4.86\% | 5.08\% |
| Debt Retirement Charge (DRC) | 5,000.00 | 0.00700 | 35.00 | 5,000.00 | 0.00700 | 35.00 | 0.00 | 0.00\% | 5.17\% | 5.42\% |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on RPP (before taxes) |  |  | 663.04 |  |  | 665.14 | 2.10 | 0.32\% | 98.33\% |  |
| HST |  | 13\% | 86.20 |  | 13\% | 86.47 | 0.27 | 0.32\% | 12.78\% |  |
| Total Bill (including HST) |  |  | 749.24 |  |  | 751.61 | 2.37 | 0.32\% | 111.11\% |  |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (74.92) |  | (10\%) | (75.16) | (0.24) | 0.32\% | -11.11\% |  |
| Total Bill on RPP (including OCEB) |  |  | 674.31 |  |  | 676.45 | 2.14 | 0.32\% | 100.00\% |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on TOU (before taxes) |  |  | 633.36 |  |  | 635.46 | 2.10 | 0.33\% |  | 98.33\% |
| HST |  | 13\% | 82.34 |  | 13\% | 82.61 | 0.27 | 0.33\% |  | 12.78\% |
| Total Bill (including HST) |  |  | 715.70 |  |  | 718.07 | 2.37 | 0.33\% |  | 111.11\% |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (71.57) |  | (10\%) | (71.81) | (0.24) | 0.33\% |  | -11.11\% |
| Total Bill on TOU (including OCEB) |  |  | 644.13 |  |  | 646.26 | 2.14 | 0.33\% |  | 100.00\% |

General Service Less Than 50 kW Bill Impact - 10,000

|  | CURRENT ESTIMATED BILL |  |  | PROPOSED ESTIMATED BILL |  |  | Change (\$) | Change (\%) | \% of Total RPP Bill | \% of Total TOU Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Volume | Current Rate (\$) | Current Charge (\$) | Volume | Proposed <br> Rate (\$) | Proposed Charge (\$) |  |  |  |  |
| Energy First Tier (kWh) | 750.00 | 0.0740 | 55.50 | 750.00 | 0.0740 | 55.50 | 0.00 | 0.00\% | 4.13\% |  |
| Energy Second Tier (kWh) | 9,599.00 | 0.0870 | 835.11 | 9,599.00 | 0.0870 | 835.11 | 0.00 | 0.00\% | 62.21\% |  |
|  |  |  |  |  |  |  |  |  |  |  |
| TOU - Off Peak | 6,623.36 | 0.0630 | 417.27 | 6,623.36 | 0.0630 | 417.27 | 0.00 | 0.00\% |  | 32.80\% |
| TOU - Mid Peak | 1,862.82 | 0.0990 | 184.42 | 1,862.82 | 0.0990 | 184.42 | 0.00 | 0.00\% |  | 14.50\% |
| TOU - On Peak | 1,862.82 | 0.1180 | 219.81 | 1,862.82 | 0.1180 | 219.81 | 0.00 | 0.00\% |  | 17.28\% |
|  |  |  |  |  |  |  |  |  |  |  |
| Service Charge | 1 | 17.75 | 17.75 | 1 | 17.75 | 17.75 | 0.00 | 0.00\% | 1.32\% | 1.40\% |
| Service Charge Rate Rider(s) | 1 | 0.0200 | 0.02 | 1 | 2.1195 | 2.12 | 2.10 | 10497.42\% | 0.16\% | 0.17\% |
| Distribution Volumetric Rate | 10,000 | 0.0156 | 156.00 | 10,000 | 0.0156 | 156.00 | 0.00 | 0.00\% | 11.62\% | 12.26\% |
| Low Voltage Volumetric Rate | 10,000 |  | 0.00 | 10,000 |  | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Distribution Volumetric Rate Rider(s) | 10,000 | 0.0000 | 0.00 | 10,000 | 0.0000 | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Total: Distribution |  |  | 173.77 |  |  | 175.87 | 2.10 | 1.21\% | 13.10\% | 13.83\% |
| Retail Transmission Rate - Network Service Rate | 10,349.00 | 0.00670 | 69.34 | 10,349.00 | 0.00670 | 69.34 | 0.00 | 0.00\% | 5.17\% | 5.45\% |
| Retail Transmission Rate - Line and Transformation Connection Service Rate | 10,349.00 | 0.00470 | 48.64 | 10,349.00 | 0.00470 | 48.64 | 0.00 | 0.00\% | 3.62\% | 3.82\% |
| Total: Retail Transmission |  |  | 117.98 |  |  | 117.98 | 0.00 | 0.00\% | 8.79\% | 9.27\% |
| Sub-Total: Delivery (Distribution and Retail Transmission) |  |  | 291.75 |  |  | 293.85 | 2.10 | 0.72\% | 21.89\% | 23.10\% |
| Wholesale Market Service Rate | 10,349.00 | 0.0052 | 53.81 | 10,349.00 | 0.0052 | 53.81 | 0.00 | 0.00\% | 4.01\% | 4.23\% |
| Rural Rate Protection Charge | 10,349.00 | 0.0011 | 11.38 | 10,349.00 | 0.0011 | 11.38 | 0.00 | 0.00\% | 0.85\% | 0.89\% |
| Standard Supply Service - Administration Charge (if applicable) | 1 | 0.25 | 0.25 | 1 | 0.25 | 0.25 | 0.00 | 0.00\% | 0.02\% | 0.02\% |
| Sub-Total: Regulatory |  |  | 65.45 |  |  | 65.45 | 0.00 | 0.00\% | 4.88\% | 5.15\% |
| Debt Retirement Charge (DRC) | 10,000.00 | 0.00700 | 70.00 | 10,000.00 | 0.00700 | 70.00 | 0.00 | 0.00\% | 5.21\% | 5.50\% |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on RPP (before taxes) |  |  | 1,317.81 |  |  | 1,319.91 | 2.10 | 0.16\% | 98.33\% |  |
| HST |  | 13\% | 171.32 |  | 13\% | 171.59 | 0.27 | 0.16\% | 12.78\% |  |
| Total Bill (including HST) |  |  | 1,489.13 |  |  | 1,491.50 | 2.37 | 0.16\% | 111.11\% |  |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (148.91) |  | (10\%) | (149.15) | (0.24) | 0.16\% | -11.11\% |  |
| Total Bill on RPP (including OCEB) |  |  | 1,340.21 |  |  | 1,342.35 | 2.14 | 0.16\% | 100.00\% |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on TOU (before taxes) |  |  | 1,248.70 |  |  | 1,250.80 | 2.10 | 0.17\% |  | 98.33\% |
| HST |  | 13\% | 162.33 |  | 13\% | 162.60 | 0.27 | 0.17\% |  | 12.78\% |
| Total Bill (including HST) |  |  | 1,411.03 |  |  | 1,413.40 | 2.37 | 0.17\% |  | 111.11\% |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (141.10) |  | (10\%) | (141.34) | (0.24) | 0.17\% |  | -11.11\% |
| Total Bill on TOU (including OCEB) |  |  | 1,269.93 |  |  | 1,272.06 | 2.14 | 0.17\% |  | 100.00\% |

General Service Greater Than 50 kW Bill Impact - $\mathbf{3 6 , 5 0 0} \mathrm{kWh}, 100$

|  | CURRENT ESTIMATED BILL |  |  | PROPOSED ESTIMATED BILL |  |  | Change (\$) | Change (\%) | \% of Total RPP Bill | \% of Total TOU Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Volume | Current Rate <br> (\$) | Current Charge (\$) | Volume | Proposed Rate (\$) | Proposed Charge (\$) |  |  |  |  |
| Energy First Tier (kWh) | 37,773.85 | 0.0740 | 2,795.26 | 37,773.85 | 0.0740 | 2,795.26 | 0.00 | 0.00\% | 66.76\% |  |
| Energy Second Tier (kWh) | 0.00 | 0.0870 | 0.00 | 0.00 | 0.0870 | 0.00 | 0.00 | 0.00\% | 0.00\% |  |
|  |  |  |  |  |  |  |  |  |  |  |
| TOU - Off Peak | 24,175.26 | 0.0630 | 1,523.04 | 24,175.26 | 0.0630 | 1,523.04 | 0.00 | 0.00\% |  | 34.66\% |
| TOU - Mid Peak | 6,799.29 | 0.0990 | 673.13 | 6,799.29 | 0.0990 | 673.13 | 0.00 | 0.00\% |  | 15.32\% |
| TOU - On Peak | 6,799.29 | 0.1180 | 802.32 | 6,799.29 | 0.1180 | 802.32 | 0.00 | 0.00\% |  | 18.26\% |
|  |  |  |  |  |  |  |  |  |  |  |
| Service Charge | 1 | 108.32 | 108.32 | 1 | 108.32 | 108.32 | 0.00 | 0.00\% | 2.59\% | 2.47\% |
| Service Charge Rate Rider(s) | 1 | 0.0200 | 0.02 | 1 | 32.4334 | 32.43 | 32.41 | 162066.84\% | 0.77\% | 0.74\% |
| Distribution Volumetric Rate | 100 | 2.4381 | 243.81 | 100 | 2.4381 | 243.81 | 0.00 | 0.00\% | 5.82\% | 5.55\% |
| Low Voltage Volumetric Rate | 100 |  | 0.00 | 100 |  | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Distribution Volumetric Rate Rider(s) | 100 | 0.0000 | 0.00 | 100 | 0.0000 | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Total: Distribution |  |  | 352.15 |  |  | 384.56 | 32.41 | 9.20\% | 9.18\% | 8.75\% |
| Retail Transmission Rate - Network Service <br> Rate <br> Reai | 100.00 | 2.60530 | 260.53 | 100.00 | 2.60530 | 260.53 | 0.00 | 0.00\% | 6.22\% | 5.93\% |
| Retail Transmission Rate - Line and Transformation Connection Service Rate | 100.00 | 1.83070 | 183.07 | 100.00 | 1.83070 | 183.07 | 0.00 | 0.00\% | 4.37\% | 4.17\% |
| Total: Retail Transmission |  |  | 443.60 |  |  | 443.60 | 0.00 | 0.00\% | 10.59\% | 10.10\% |
| Sub-Total: Delivery (Distribution and Retail Transmission) |  |  | 795.75 |  |  | 828.16 | 32.41 | 4.07\% | 19.78\% | 18.85\% |
| Wholesale Market Senvice Rate | 37,773.85 | 0.0052 | 196.42 | 37,773.85 | 0.0052 | 196.42 | 0.00 | 0.00\% | 4.69\% | 4.47\% |
| Rural Rate Protection Charge | 37,773.85 | 0.0011 | 41.55 | 37,773.85 | 0.0011 | 41.55 | 0.00 | 0.00\% | 0.99\% | 0.95\% |
| Standard Supply Service - Administration <br> Charge (if applicable) <br> Sun | 1 | 0.25 | 0.25 | 1 | 0.25 | 0.25 | 0.00 | 0.00\% | 0.01\% | 0.01\% |
| Sub-Total: Regulatory |  |  | 238.23 |  |  | 238.23 | 0.00 | 0.00\% | 5.69\% | 5.42\% |
| Debt Retirement Charge (DRC) | 36,500.00 | 0.00700 | 255.50 | 36,500.00 | 0.00700 | 255.50 | 0.00 | 0.00\% | 6.10\% | 5.81\% |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on RPP (before taxes) |  |  | 4,084.74 |  |  | 4,117.15 | 32.41 | 0.79\% | 98.33\% |  |
| HST |  | 13\% | 531.02 |  | 13\% | 535.23 | 4.21 | 0.79\% | 12.78\% |  |
| Total Bill (including HST) |  |  | 4,615.76 |  |  | 4,652.38 | 36.63 | 0.79\% | 111.11\% |  |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (461.58) |  | (10\%) | (465.24) | (3.66) | 0.79\% | -11.11\% |  |
| Total Bill on RPP (including OCEB) |  |  | 4,154.18 |  |  | 4,187.15 | 32.96 | 0.79\% | 100.00\% |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on TOU (before taxes) |  |  | 4,287.96 |  |  | 4,320.38 | 32.41 | 0.76\% |  | 98.33\% |
| HST |  | 13\% | 557.44 |  | 13\% | 561.65 | 4.21 | 0.76\% |  | 12.78\% |
| Total Bill (including HST) |  |  | 4,845.40 |  |  | 4,882.03 | 36.63 | 0.76\% |  | 111.11\% |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (484.54) |  | (10\%) | (488.20) | (3.66) | 0.76\% |  | -11.11\% |
| Total Bill on TOU (including OCEB) |  |  | 4,360.86 |  |  | 4,393.82 | 32.96 | 0.76\% |  | 100.00\% |

General Service Greater Than 50 kW Bill Impact - 91,250 kWh, 250

| General Service Greater Than 50 kW Bill Impact - 91,250 kWh, 250 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CURRENT ESTIMATED BILL |  |  | PROPOSED ESTIMATED BILL |  |  | Change (\$) | Change (\%) | $\begin{gathered} \hline \text { \% of Total } \\ \text { RPP Bill } \\ \hline \end{gathered}$ | \% of Total TOU Bill |
|  | Volume | Current Rate <br> (\$) | Current Charge (\$) | Volume | Proposed Rate <br> (\$) | Proposed Charge (\$) |  |  |  |  |
| Energy First Tier (kWh) | 94,434.63 | 0.0740 | 6,988.16 | 94,434.63 | 0.0740 | 6,988.16 | 0.00 | 0.00\% | 68.16\% |  |
| Energy Second Tier (kWh) | 0.00 | 0.0870 | 0.00 | 0.00 | 0.0870 | 0.00 | 0.00 | 0.00\% | 0.00\% |  |
|  |  |  |  |  |  |  |  |  |  |  |
| TOU - Off Peak | 60,438.16 | 0.0630 | 3,807.60 | 60,438.16 | 0.0630 | 3,807.60 | 0.00 | 0.00\% |  | 35.36\% |
| TOU - Mid Peak | 16,998.23 | 0.0990 | 1,682.83 | 16,998.23 | 0.0990 | 1,682.83 | 0.00 | 0.00\% |  | 15.63\% |
| TOU - On Peak | 16,998.23 | 0.1180 | 2,005.79 | 16,998.23 | 0.1180 | 2,005.79 | 0.00 | 0.00\% |  | 18.62\% |
|  |  |  |  |  |  |  |  |  |  |  |
| Service Charge | 1 | 108.32 | 108.32 | 1 | 108.32 | 108.32 | 0.00 | 0.00\% | 1.06\% | 1.01\% |
| Service Charge Rate Rider(s) | 1 | 0.0200 | 0.02 | 1 | 32.4334 | 32.43 | 32.41 | 162066.84\% | 0.32\% | 0.30\% |
| Distribution Volumetric Rate | 250 | 2.4381 | 609.53 | 250 | 2.4381 | 609.53 | 0.00 | 0.00\% | 5.94\% | 5.66\% |
| Low Voltage Volumetric Rate | 250 |  | 0.00 | 250 |  | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Distribution Volumetric Rate Rider(s) | 250 | 0.0000 | 0.00 | 250 | 0.0000 | 0.00 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Total: Distribution |  |  | 717.87 |  |  | 750.28 | 32.41 | 4.52\% | 7.32\% | 6.97\% |
| Retail Transmission Rate - Network Service Rate | 250.00 | 2.60530 | 651.33 | 250.00 | 2.60530 | 651.33 | 0.00 | 0.00\% | 6.35\% | 6.05\% |
| Retail Transmission Rate - Line and Transformation Connection Service Rate | 250.00 | 1.83070 | 457.68 | 250.00 | 1.83070 | 457.68 | 0.00 | 0.00\% | 4.46\% | 4.25\% |
| Total: Retail Transmission |  |  | 1,109.00 |  |  | 1,109.00 | 0.00 | 0.00\% | 10.82\% | 10.30\% |
| Sub-Total: Delivery (Distribution and Retail Transmission) |  |  | 1,826.87 |  |  | 1,859.28 | 32.41 | 1.77\% | 18.13\% | 17.26\% |
| Wholesale Market Service Rate | 94,434.63 | 0.0052 | 491.06 | 94,434.63 | 0.0052 | 491.06 | 0.00 | 0.00\% | 4.79\% | 4.56\% |
| Rural Rate Protection Charge | 94,434.63 | 0.0011 | 103.88 | 94,434.63 | 0.0011 | 103.88 | 0.00 | 0.00\% | 1.01\% | 0.96\% |
| Standard Supply Service - Administration Charge (if applicable) | 1 | 0.25 | 0.25 | 1 | 0.25 | 0.25 | 0.00 | 0.00\% | 0.00\% | 0.00\% |
| Sub-Total: Regulatory |  |  | 595.19 |  |  | 595.19 | 0.00 | 0.00\% | 5.81\% | 5.53\% |
| Debt Retirement Charge (DRC) | 91,250.00 | 0.00700 | 638.75 | 91,250.00 | 0.00700 | 638.75 | 0.00 | 0.00\% | 6.23\% | 5.93\% |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on RPP (before taxes) |  |  | 10,048.97 |  |  | 10,081.38 | 32.41 | 0.32\% | 98.33\% |  |
| HST |  | 13\% | 1,306.37 |  | 13\% | 1,310.58 | 4.21 | 0.32\% | 12.78\% |  |
| Total Bill (including HST) |  |  | 11,355.33 |  |  | 11,391.96 | 36.63 | 0.32\% | 111.11\% |  |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (1,135.53) |  | (10\%) | (1,139.20) | (3.66) | 0.32\% | -11.11\% |  |
| Total Bill on RPP (including OCEB) |  |  | 10,219.80 |  |  | 10,252.76 | 32.96 | 0.32\% | 100.00\% |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Bill on TOU (before taxes) |  |  | 10,557.02 |  |  | 10,589.44 | 32.41 | 0.31\% |  | 98.33\% |
| HST |  | 13\% | 1,372.41 |  | 13\% | 1,376.63 | 4.21 | 0.31\% |  | 12.78\% |
| Total Bill (including HST) |  |  | 11,929.44 |  |  | 11,966.06 | 36.63 | 0.31\% |  | 111.11\% |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (1,192.94) |  | (10\%) | (1,196.61) | (3.66) | 0.31\% |  | -11.11\% |
| Total Bill on TOU (including OCEB) |  |  | 10,736.49 |  |  | 10,769.46 | 32.96 | 0.31\% |  | 100.00\% |


|  | General Service Greater Than 50 kW Bill Impact - 182,500 kWh, 500 |  |  |  |  |  |  | Change (\%) | \% of Total RPP Bill |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CURRENT ESTIMATED BILL |  |  | PROPOSED ESTIMATED BILL |  |  | Change (\$) |  |  |
|  | Volume | Current Rate (\$) | Current Charge (\$) | Volume | Proposed Rate (\$) | Proposed Charge (\$) |  |  |  |
| Energy First Tier (kWh) | 188,869.25 | 0.0740 | 13,976.32 | 188,869.25 | 0.0740 | 13,976.32 | 0.00 | 0.00\% | 68.64\% |
| Energy Second Tier (kWh) | 0.00 | 0.0870 | 0.00 | 0.00 | 0.0870 | 0.00 | 0.00 | 0.00\% | 0.00\% |
|  |  |  |  |  |  |  |  |  |  |
| TOU - Off Peak | 120,876.32 | 0.0630 | 7,615.21 | 120,876.32 | 0.0630 | 7,615.21 | 0.00 | 0.00\% |  |
| TOU - Mid Peak | 33,996.47 | 0.0990 | 3,365.65 | 33,996.47 | 0.0990 | 3,365.65 | 0.00 | 0.00\% |  |
| TOU - On Peak | 33,996.47 | 0.1180 | 4,011.58 | 33,996.47 | 0.1180 | 4,011.58 | 0.00 | 0.00\% |  |
|  |  |  |  |  |  |  |  |  |  |
| Service Charge | 1 | 108.32 | 108.32 | 1 | 108.32 | 108.32 | 0.00 | 0.00\% | 0.53\% |
| Service Charge Rate Rider(s) | 1 | 0.0200 | 0.02 | 1 | 32.4334 | 32.43 | 32.41 | 162066.84\% | 0.16\% |
| Distribution Volumetric Rate | 500 | 2.4381 | 1,219.05 | 500 | 2.4381 | 1,219.05 | 0.00 | 0.00\% | 5.99\% |
| Low Voltage Volumetric Rate | 500 |  | 0.00 | 500 |  | 0.00 | 0.00 | 0.00\% | 0.00\% |
| Distribution Volumetric Rate Rider(s) | 500 | 0.0000 | 0.00 | 500 | 0.0000 | 0.00 | 0.00 | 0.00\% | 0.00\% |
| Total: Distribution |  |  | 1,327.39 |  |  | 1,359.80 | 32.41 | 2.44\% | 6.68\% |
| Retail Transmission Rate - Network Service Rate | 500.00 | 2.60530 | 1,302.65 | 500.00 | 2.60530 | 1,302.65 | 0.00 | 0.00\% | 6.40\% |
| Retail Transmission Rate - Line and Transformation Connection Service Rate | 500.00 | 1.83070 | 915.35 | 500.00 | 1.83070 | 915.35 | 0.00 | 0.00\% | 4.50\% |
| Total: Retail Transmission |  |  | 2,218.00 |  |  | 2,218.00 | 0.00 | 0.00\% | 10.89\% |
| Sub-Total: Delivery (Distribution and Retail Transmission) |  |  | 3,545.39 |  |  | 3,577.80 | 32.41 | 0.91\% | 17.57\% |
| Wholesale Market Service Rate | 188,869.25 | 0.0052 | 982.12 | 188,869.25 | 0.0052 | 982.12 | 0.00 | 0.00\% | 4.82\% |
| Rural Rate Protection Charge | 188,869.25 | 0.0011 | 207.76 | 188,869.25 | 0.0011 | 207.76 | 0.00 | 0.00\% | 1.02\% |
| Standard Supply Service - Administration Charge (if applicable) | 1 | 0.25 | 0.25 | 1 | 0.25 | 0.25 | 0.00 | 0.00\% | 0.00\% |
| Sub-Total: Regulatory |  |  | 1,190.13 |  |  | 1,190.13 | 0.00 | 0.00\% | 5.84\% |
| Debt Retirement Charge (DRC) | 182,500.00 | 0.00700 | 1,277.50 | 182,500.00 | 0.00700 | 1,277.50 | 0.00 | 0.00\% | 6.27\% |
|  |  |  |  |  |  |  |  |  |  |
| Total Bill on RPP (before taxes) |  |  | 19,989.34 |  |  | 20,021.75 | 32.41 | 0.16\% | 98.33\% |
| HST |  | 13\% | 2,598.61 |  | 13\% | 2,602.83 | 4.21 | 0.16\% | 12.78\% |
| Total Bill (including HST) |  |  | 22,587.96 |  |  | 22,624.58 | 36.63 | 0.16\% | 111.11\% |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | (2,258.80) |  | (10\%) | $(2,262.46)$ | (3.66) | 0.16\% | -11.11\% |
| Total Bill on RPP (including OCEB) |  |  | 20,329.16 |  |  | 20,362.12 | 32.96 | 0.16\% | 100.00\% |
|  |  |  |  |  |  |  |  |  |  |
| Total Bill on TOU (before taxes) |  |  | 21,005.46 |  |  | 21,037.87 | 32.41 | 0.15\% |  |
| HST |  | 13\% | 2,730.71 |  | 13\% | 2,734.92 | 4.21 | 0.15\% |  |
| Total Bill (including HST) |  |  | 23,736.17 |  |  | 23,772.79 | 36.63 | 0.15\% |  |
| Ontario Clean Energy Benefit (OCEB) |  | (10\%) | $(2,373.62)$ |  | (10\%) | $(2,377.28)$ | (3.66) | 0.15\% |  |
| Total Bill on TOU (including OCEB) |  |  | 21,362.55 |  |  | 21,395.51 | 32.96 | 0.15\% |  |


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[^1]:    ${ }^{1}$ Composed of $\$ 1,201,435$ revenue requirement for 2013 for the Residential and General Service < 50 kW classes and $\$ 174,249$ revenue requirement for 2013 for the General Service 50 to 699 kW class. $1 / 3$ of this amount is recovered through the Smart Meter Disposition Rider, and the balance is recovered through the Smart Meter Incremental Revenue Rider, see table 21.

[^2]:    ${ }^{2}$ Twelve licensed distributors were authorized by Ontario Regulation 427-6 to conduct discretionary metering activities. Subsequently Newmarket Hydro Limited was also authorized by regulation to conduct discretionary metering activities.

[^3]:    ${ }^{3}$ G-2008-0002 Smart Meter Funding and Cost Recovery Guideline Page 12 "The Board expects that a distributor will normally file for inclusion of smart meter costs into ongoing operations and rate base when it files for a cost of service rate adjustment. When applying for recovery of smart meter costs, a distributor should ensure that all cost information has been audited, including the smart meter related deferral account balances."

[^4]:    ${ }^{4}$ Forecast values per HOBNI's 2011 cost of service rate application (EB-2010-0132) Exhibit 11 Tab 1 Schedule 1.0.

[^5]:    ${ }^{5}$ Per OEB decision on HOBNI's 2011 cost of service rate application (EB-2010-0132), page 55.

[^6]:    ${ }^{6}$ G-2008-0002 Smart Meter Funding and Cost Recovery Guideline Page 12 "The Board expects that a distributor will normally file for inclusion of smart meter costs into ongoing operations and rate base when it files for a cost of service rate adjustment. When applying for recovery of smart meter costs, a distributor should ensure that all cost information has been audited, including the smart meter related deferral account balances."

[^7]:    ${ }^{7}$ Forecasted costs for 2010 and 2011 related to Smart Meter Capital installed in same years, found in HOBNI's 2011 cost of service rate application (EB-2010-0132) Exhibit 11, Tab1, Schedule 1.0 page 15, plus the forecasted costs for the 2010 Stub Year, Exhibit 11, Tab 1, Schedule 1.0, page 16.

[^8]:    *     - From 2010 to 2012 Computer Software costs of $\$ 1,204,937.41$ (including AMI cost of $\$ 13,000$ ) were capitalized and included in the 2013 disposition capital of $\$ 6,118,372$. Much of these costs were treated as work in process at the end of 2009, and further costs were incurred in 2010 to 2012. As the Computer Software Capital was for the benefit of all low volume customers, for comparative purposes these costs have been allocated across all disposition periods.

[^9]:    ${ }^{8}$ Per HOBNI's 2011 cost of service rate application (EB-2010-0132, the capital expenditure forecast per Exhibit 11, Tab 1, Schedule 1.0, Page 14 of 23, second table (Incremental Cost for Smart Meters Installed 2010 and 2011) 2011 total of $\$ 1,100,000.00$ relates to the General Service 50 to 699 kW class. OM\&A expenditure forecast per Exhibit 11, Tab1, Schedule 1.0 , Page 15 of 23, class, 2011 total OM\&A of $\$ 103,521.97$ (also relating to the General Service 50 to 699 kW class).

