



Northern Ontario Wires Inc.
153 Sixth Avenue
P.O. Box 640
Cochrane, ON
P0L 1C0

December 7, 2012

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

Re: Smart Meter Disposition EB-2012-0353

Dear Ms. Walli:

Northern Ontario Wires Inc. ("NOW") hereby files its reply to Board staff and VECC interrogatories with respect to our application for disposition of smart meters.

This document is being filed pursuant to the Board's e-Filing Services.

Yours Truly,

Geoffrey Sutton

Geoffrey Sutton, CA
Chief Financial Officer
geoffs@nowinc.ca
Tel 705-272-2918



Northern Ontario Wires Inc.

**Smart Meter Disposition
Response to Interrogatories
EB-2012-0353**

Rates Effective: January 1, 2013

Date Filed: December 7, 2012

**Northern Ontario Wires Inc.
153 Sixth Avenue
P.O. Box 640
Cochrane, ON
P0L 1C0**



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IR Responses



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Reply to Board Staff IR's
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Reply to Board Staff IR's

1. Ref: Guideline G-2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition
[“Guideline G-2011-0001”], issued December 15, 2011

Section 3.5 of Guideline G-2011-0001 states that a utility must file a copy of the letter from the Fairness Commissioner attesting that the utility complied with the London Hydro RFP process to become authorized for discretionary metering activities (i.e. deployment of smart meters). Please file a copy of the letter from the Fairness Commissioner addressed to NOW.

NOW's Response:

Please reference attachment 1.1 (IR1/T1/S2/Att1).



2. Ref: Exhibit 1/Tab 1/Schedule 5, pages 1-2 – Stranded Meter Costs

On page 1 and 2 of the Application, NOW states that stranded meter costs will be dealt with in its next cost of service application for 2013 rates. NOW also states that it no longer books depreciation expense on the majority of these meters effective 2010.

a) The conventional meters that have been stranded by conversion to smart meters were reflected in NOW's rate base and revenue requirement in its previous cost of service rates application for 2009 rates [EB-2008-0238]. NOW's distribution rates in 2009 and subject to price cap adjustments in subsequent years are presumed to earn a return on and depreciation of these stranded meters. Please explain NOW's basis for no longer booking depreciation expense on these stranded meters.

NOW's Response:

Please reference Attachment 2.1 (IR1/T1/S2/Att2.1) which is extracted from NOW's 2013 COS application filed November 16, 2012 explaining NOW's proposal for treatment of Stranded Smart Meters. This explains how NOW has made accommodation for depreciation expense.

b) Please provide NOW's estimate of the net book value of the stranded meters as of December 31, 2012.

NOW's Response:

Please reference Attachment 2.2 (IR1/T1/S2/Att2.1) which is extracted from NOW's 2013 COS application filed November 16, 2012 showing the Boards appendix 2-S for reporting Stranded Meter Treatment.



3. Ref: Exhibit 1/Tab 1/Schedule 6, page 1 – Costs Beyond Minimum Functionality

On page 1 of the Application, NOW provides a table showing the number of smart meters installed per rate class as of July 2012. Included in the table are a total of 4 smart meters installed for the GS > 50 kW rate class as of July 2012. NOW states that the smart meters for the GS > 50 kW rate class are being installed as the conventional meters become problematic and require replacement, and that it is unable to provide forecast numbers for this rate class.

In other Applications considered, or being considered, by the Board, some distributors that have sought to recover costs for the installation of smart meters for the GS > 50 kW class. In many of these cases, Board staff observes that the utilities are replacing interval meters with updated meters that will be able to communicate a customer's interval data using the deployed AMI network; interval meters are typically replaced when they need repair or replacement or upon re-sealing.

- a) Please provide details on how the conventional meters for the GS > 50 kW rate class have become problematic and require replacement.

NOW's Response:

In September of this year Measurement Canada came in and performed an audit of our meters and as a result has directed NOW Inc. to re-verify the General Service Greater than 50 kW remaining conventional meters. NOW Inc. has opted to replace these meters with smart meters. This is scheduled to be completed by June 2013 and NOW Inc. proposes to address the costs of these replacements through the interrogatory process of the current cost of service application.



b) What are NOW's plans with respect to the replacement of meters for GS > 50 kW customers with smart meters or meters that can take advantage and communicate with NOW's AMI infrastructure.

NOW's Response:

See response to 3a) above.

c) While NOW has commenced deployment of smart meters to the GS > 50 kW class, it has only proposed to recover the costs from Residential and GS < 50 kW customers. Please provide NOW's explanation for proposing recovery of the costs of these GS > 50 kW smart meters and their operation, from Residential and GS < 50 kW customers.

NOW's Response:

See response to 3a) above.



4. Ref: Exhibit 1/Tab 1/Schedule 8, page 3 & 4 – Annual Security Audit

On page 3 and 4 of the Application, NOW provides a description of its annual security audit as well as the procurement process used to select an audit partner. NOW states that the audit was contracted as a two year term with 32 participating LDCs leveraging cost savings by sharing the costs and results of the audit amongst the LDCs. NOW further states that the project is entering year two, and that going forward NOW has budgeted for an annual security audit.

a) Please provide the budgeted amount for the annual security audit for 2012.

NOW's Response:

The budgeted amount for the annual security audit for 2012 is \$4000.

b) Please confirm whether or not the budgeted amount has been included as part of the costs reported in the Smart Meter Model. If so, please indicate where this is included on sheet 2 of the Smart Meter Model.

NOW's Response:

NOW confirms that the budgeted annual security audit cost for 2012 of \$4,000 has been included as part of the costs reported in the Smart Meter Model. It is reflected in line 2.5.6 Other AMI Costs total \$4,000.



5. Ref: Exhibit 1/Tab 1/Schedule 8, page 4 – Program Management, Business Process Re-design and Integration with MDM/R

On page 4 of the Application, NOW states:

NOW, along with the rest of the District 9 group, continued to receive consulting support from Utilassist [sic] throughout 2010, receiving a series of education sessions covering the MDM/R design specifications, meter read data, VEE and other billing processes, and the design of a testing/cutover strategy and integration with the IESO's MDM/R process and systems.

On Sheet 2 of the Smart Meter Model, NOW has not indicated any Business Process Redesign OM&A expenses (item 2.5.1).

a) Please confirm whether or not NOW has incurred any costs for business process redesign to date.

NOW's Response:

NOW did not incur any incremental costs for business process re-design. Any business process re-design requirements were implemented with existing resources.

b) Please indicate where on sheet 2 of the Smart Meter Model the costs for the services provided by Util-Assist.

NOW's Response:

The costs for services provided by Utilassist is included in line 2.5.3 Program Management for 2010 totaling \$22,751. Utilassists costs prior to 2010 have been reflected on line 1.5.3 Other AMI Capital Costs related to Minimum Functionality –



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- 1 Professional Fees while costs for 2011 have been reflected in line 2.6.3 OM&A Costs
- 2 Beyond Minimum Functionality. There are no costs for Utilassist in the 2012 forecast.
- 3
- 4



6. Ref: Guideline G-2011-0001, page 19

On page 19 of the Board's Guideline: Smart Meter Funding and Cost Recovery – Final Disposition (G-2011-0001), the Board states:

In considering the recovery of smart meter costs, the Board also expects that a distributor will provide evidence on any operational efficiencies and cost savings that result from smart meter implementation.

Board staff notes that NOW has not provided any discussion of operational efficiencies and cost savings that have been achieved to date. In many smart meter cost recovery applications considered, or being considered by the Board, the distributor has noted meter reading savings as a result of the smart meter deployment.

a) Please provide an estimate of any meter reading savings that have resulted from the deployment of smart meters to date.

NOW's Response:

NOW Inc. has seen a shift of approximately \$150,000 in costs from meter reading to Capital and Operation and Maintenance Expense accounts (mostly to capital) . As mentioned previously, NOW Inc. did not have dedicated meter reading staff; instead our linemen performed this function. With the reduction in manual meter reading requirements we have been able to allocate these resources to much needed infrastructure upgrades and maintenance.

b) Please provide a reconciliation accounting of how those savings have been accounted for in the costs documented in this Application, if applicable.



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1 **NOW's Response:**

2

3

Savings identified in a) are not accounted for in this application. The time formerly spent

4

by our linemen reading meters is now used to performed infrastructure upgrades.

5



7. Ref: Exhibit 1/Tab 1/Schedule 8, pages 5-6 – Web Presentment

On page 5 and 6 of the Application, NOW states:

The Ministry of Energy and Infrastructure has indicated that customers should ideally have web access to their consumption data with which to make informed decisions about future usage as part of a utility's rollout of TOU pricing. In 2011 NOW Inc. performed some preliminary investigation into the web presentment solutions available and plans to implement a solution in late 2012 or early 2013. NOW Inc. has included the cost of a web presentment solution [in] its smart meter OM&A forecasts for 2013.

Board staff notes that no forecasted costs for 2013 are documented in NOW's Smart Meter Model. Please provide the forecasted costs of a web presentment solution for 2013.

NOW's Response:

Forecasted costs of a web presentment solution in 2013 amounts to \$12,000.

The 2013 forecast incremental OM&A costs attributed to smart meters are reflected in the 2013 Test Year Forecast Costs in the Cost of Service Application recently file by NOW.



8. Ref: Exhibit 1/Tab 1/Schedule 8, page 6 – Costs beyond Minimum Functionality

On page 6 of the Application, NOW states:

NOW Inc. has incurred costs that are considered to be costs beyond minimum functionality. Cost related to MDM/R Integration and transition to Time of Use Billing have been categorized as "Cost beyond minimum functionality". These costs include project management, travel and training, customer education, AS2 software and sync operator costs. Web presentment costs have also been categorized as "Cost beyond minimum functionality".

a) Please provide a further description of each of these costs.

NOW's Response:

The following costs that are considered to be costs beyond minimum functionality are included in the application:

	2009 Actuals	2010 Actuals	2011 Actuals	2012 Forecast
1.6.3 Capital – Costs for TOU rate implementation, CIS system upgrades, web presentment, integration with the MDMR, etc		\$5,533	\$2,252	
Consists of:				
MDMR Integration Software - CIS		<u>5,533</u>	<u>2,252</u>	



These are additional software costs billed to NOW for MDM/R functionality.

	2009 Actuals	2010 Actuals	2011 Actuals	2012 Forecast
2.6.3 OPERATING – Costs for TOU rate implementation, CIS system upgrades, web presentment, integration with the MDMR, etc	<u>\$11,577</u>	<u>\$7,080</u>	<u>\$46,220</u>	<u>\$22,549</u>
Consists of:				
Incremental Staffing Costs for Billing and Sync Operator needs	11,577	280	27,081	21,870
Travel and training		6,800	2,071	
Customer Education and Advertising - TOU			10,747	
Project Management – re: TOU and MDMR			5,823	
AS2 Support			498	679
TOTAL	<u>\$11,577</u>	<u>\$7,080</u>	<u>\$46,220</u>	<u>\$22,549</u>

b) For travel and training, please explain how these costs were necessary for NOW's smart meter program and were incremental to training expenses factored into NOW's revenue requirement as approved in its 2009 cost of service application and recovered in approved distribution rates.

NOW's Response:

Travel and training costs – These costs were incremental to the regular training expenses factored into NOW's revenue requirements as approved in the 2009 COS. This includes training costs for IESO workshops on MDMR operations and integration, as well as onsite training required from our CIS provider.



9. Ref: Exhibit 1/Tab 1/Schedule 9, pages 1-3 – Smart Meter Costs per Unit

NOW has provided tables summarizing the average costs per meter for each rate class. Using the below table as a guide, please provide the following:

a) A table showing the cost per meter, in total and for each of Residential, GS < 50 kW, and GS > 50 kW customer classes, and broken out as follows:

- Minimum functionality: capital
- Minimum functionality: capital and OM&A
- Minimum functionality and beyond minimum functionality:
capital
- Minimum functionality and beyond minimum functionality:
capital and OM&A.

NOW's Response:

NOW has included in this application cost only related to Residential and General Service Less than 50 kW and has not included any cost for General Service Greater than 50 kW.



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Residential cost per meter

	2006	2007	2008	2009	2010	2011	2012	Total
Capital related to minimum functionality	-	10,600	12,623	929,337	58,464	93,249	4,217	1,108,490
Capital beyond minimum functionality	-	-	-	-	4,407	1,794	-	6,200
OM&A related to minimum functionality	-	-	-	72,903	101,014	104,274	87,250	365,441
OM&A beyond minimum functionality	-	-	-	10,127	6,193	40,432	19,725	76,478

Number of Smart Meters Deployed				5,150	7	51	31	5,239
---------------------------------	--	--	--	-------	---	----	----	-------

Total (capex + opex)
Capex only
OM&A only
Beyond minimum functionality Only

Total	Average per Meter
1,556,610	297.12
1,114,691	212.77
441,919	84.35
82,678	15.78

General Service Less Than 50 kW cost per meter

	2006	2007	2008	2009	2010	2011	2012	Total
Capital related to minimum functionality	-	2,709	3,227	176,015	47,567	27,032	26,783	283,333
Capital beyond minimum functionality	-	-	-	-	1,126	458	-	1,585
OM&A related to minimum functionality	-	-	-	10,437	14,461	14,928	12,490	52,316
OM&A beyond minimum functionality	-	-	-	1,450	887	5,788	2,824	10,948

Number of Smart Meters Deployed				262	253	32	203	750
---------------------------------	--	--	--	-----	-----	----	-----	-----

Total (capex + opex)
Capex only
OM&A only
Beyond minimum functionality Only

Total	Average per Meter
348,182	464.24
284,918	379.89
63,264	84.35
12,533	16.71



b) Please provide a breakdown of the meter types installed, by year, for the Residential, GS < 50 kW, and GS > 50 kW classes.

NOW's Response:

Type of meter	RES	GSLT50	GSGT50
ICON 2 S 4 jaw, 200 AMP 240V Single Phase 3 Wire	5,073	542	
A3 ALPHA METER 9S,A3RL, 3Phase, 4 WIRE		3	1
ICON A 12 S 200A,120V,3 WIRE	107	12	
ICON A 12 S 200A,120V,3 WIRE	31	10	
ICON a 3S 20A,240V,5 JAW,2WIRE	15	31	-
ICON a 3S 20A,240V,5 JAW,2WIRE	10	50	
KV2C Model	2	86	3
ELSTER s-BS 16S A3RL METERS KTI, 120 to 480V		6	
ELSTER s-BS 9S A3RL METERS KTI, 120 to 480 V	1	10	2
	5,239	750	6



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10. Ref: Smart Meter Model Version 3.0, Sheet 8A

On Sheet 8A of the Smart Meter Model, NOW has not input any OM&A and depreciation expenses for all months in 2012. This will result in an underestimate of the carrying charges on OM&A and depreciation expense used in the determination of the SMDRs.

Please update sheet 8A to include OM&A and depreciation expenses for all months in 2012. These entries should correspond with the 2012 annual OM&A shown on sheet 2 of the model and annual 2012 depreciation expense calculated on sheet 5 of the model.

NOW's Response:

Please refer to amended model attached to this response.



11. Ref: Smart Meter Model: Smart Meter Model, sheet “Rider per Class” – Class-specific SMDRs

The main difference in the calculation of the SMIRR and the SMDR is the applicability of SMFA revenues and associated interest as an offset to the deferred revenue for the SMDR. There is no SMFA revenue offset for the SMIRR.

Guideline G-2011-0001 states, at pages 19-20:

The Board views that, where practical and where the data is available, class specific SMDRs should be calculated based on full cost causality. The methodology approved by the Board in EB-2011-0128 should serve as a suitable guide. A uniform SMDR would be suitable only where adequate data is not available.

Recognizing that SMFA revenues have been collected from all metered customers since May 1, 2006, the Board’s decision in EB-2011-0128 also addressed the treatment of smart meter adder amounts collected from customer classes for which smart meter costs were not incurred, as it related to PowerStream’s smart meter deployment program. The Board directed PowerStream to allocate the smart meter adder amounts collected from the GS > 50 kW and Large Use customer classes evenly to the Residential and GS < 50 kW classes when calculating the true-up for the SMDR. The Board concluded that this approach was appropriate because the amounts involved were not significant enough to warrant a more precise allocation.¹² However, for all customer classes for which smart meter costs have been directly incurred, the SMFA revenues plus carrying costs should be directly used as an offset to the incremental revenue requirement to determine the SMDR for that class.

NOW has used the Smart Meter Model Version 3.00 for 2013 applications. Smart Meter Model Version 3.00 calculates class-specific SMDRs on sheet 10A and class-specific SMIRRs on sheet 10B.



Board staff notes that, as NOW is scheduled to file a cost of service application for 2013 rates, it does not require a SMIRR; instead, approved smart meter costs and 2013 capital and operating expenses for smart meters will be factored into NOW's 2013 rate base and revenue requirement and hence recovered through approved distribution rates.

- a) On sheet 10A, NOW shows a capital cost allocation of 73% to Residential and 27% to GS < 50 kW, on row 26. Please explain and provide support for NOW's capital weighted meter cost allocation of 73% Residential and 27% GS < 50 kW.

NOW's Response:

Now calculated the allocation of cost for smart meters by rate class based on the following purchase structure.

Type of meter	RES	GSLT50
ICON 2 S 4 jaw, 200 AMP 240V Single Phase 3 Wire	\$ 354,806	\$ 37,907
A3 ALPHA METER 9S,A3RL, 3Phase, 4 WIRE	\$ -	\$ 1,751
ICON A 12 S 200A,120V,3 WIRE	\$ 15,745	\$ 1,766
ICON A 12 S 200A,120V,3 WIRE	\$ 4,562	\$ 1,472
ICON a 3S 20A,240V,5 JAW,2WIRE	\$ 2,101	\$ 4,342
ICON a 3S 20A,240V,5 JAW,2WIRE	\$ 1,401	\$ 7,003
KV2C Model	\$ 850	\$ 36,533
ELSTER s-BS 16S A3RL METERS KTI, 120 to 480V	\$ -	\$ 2,370
ELSTER s-BS 9S A3RL METERS KTI, 120 to 480 V	\$ 395	\$ 3,950
	379,858	97,093
	79.6%	20.4%

- b) As previously examined in Board staff interrogatory # 3, why does NOW not allocate capital-related and operating expenses to the GS > 50 kW class?



NOW's Response:

NOW has installed only 6 smart meters to General Service Greater than 50 kW customers, which are based on a as needed basis, and thus have not included any costs for recovery from this rate class.

c) Please explain how NOW has determined the allocation of SMFA revenues and associated interest for the purposes of calculating class-specific SMDRs. In addition please explain why no SMFA revenues are shown for the GS > 50 kW class, even though customers in this class would have been paying the SMFA from May 1, 2006 to April 30, 2012, the same as Residential and GS < 50 kW customers.

NOW's Response:

NOW has updated the model to reflect the following allocation.

SMFA Revenue

	RES	GSLT50	GSGT50	Total
2006	8,016.56	1,243.58	102.00	9,362.15
2007	16,352.09	2,457.80	216.55	19,026.44
2008	16,520.37	2,414.80	216.46	19,151.63
2009	43,592.42	6,301.40	598.29	50,492.10
2010	62,397.43	8,953.22	897.40	72,248.06
2011	116,946.86	16,752.72	1,557.65	135,257.23
2012	65,260.39	9,281.25	852.50	75,394.14
	329,086.12	47,404.78	4,440.84	380,931.74
	2,220.42	2,220.42	-4,440.84	0.00
	331,306.55	49,625.20	0.00	380,931.74
	86.97%	13.03%	0.00%	100.00%



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12. Ref: Smart Meter Model

If NOW has changed its data inputs to the Smart Meter Model, Version 3.00 as a result of interrogatories by Board staff and/or the Vulnerable Energy Consumers Coalition, please update and re-file the smart meter model in working Microsoft Excel format. This update should include updated class-specific SMDRs for applicable classes as calculated on sheet 10A of the Smart Meter Model Version 3.00.

NOW's Response:

NOW has updated the model to reflect the all noted changes included in this reponse.



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IR # 1 Fairness Commission Letter



PRP International, Inc.

Fairness Advisory Services

August 1, 2008

Mr. Doug Theobald
President & CEO
Northern Ontario Wires Inc. - Cochrane
153 Sixth Avenue, Box 640
Cochrane, ON P0L 1C0

Dear Mr. Theobald:

Subject: Attestation of the Fairness Commissioner
Advanced Metering Infrastructure RFP, August-July 2008
London Hydro, Consortium & Add-On LDCs Smartmetering Project

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

*"It is the judgment of PRP International, Inc., as the Fairness Commissioner, that the determinations of the two (2) highest ranked Proponents for the **District 9 Collective of LDCs (Chapleau Public Utilities Corporation, Espanola Regional Hydro Distribution Corp., Great Lakes Power Limited, Hearst Power Distribution Co. Ltd., North Bay Hydro Distribution Ltd., Northern Ontario Wires Inc. - Cochrane, and PUC Distribution Inc. (Sault Ste. Marie)** requirements are:*

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

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

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

Yours truly,

Original Signed by:

Peter Sorensen
President
cc: Mr. Gary Rains, RFP Project Director



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IR # 2 Stranded Meter s



Stranded Meters
File Number: EB-2012-0153

Exhibit: 9
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Stranded Meters

NOW Inc. has applied to the Ontario Energy Board for permission to change its delivery charges beginning January 1, 2013 to reflect the recovery of costs for deployed smart meters. The application was filed on August 31, 2012 under section 78 of the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15 (Schedule B), under the Board's *Guideline G-2011-0001: Smart Meter Funding and Cost Recovery – Final Disposition*. The Board assigned it case number EB-2012-0353.

For purposes of this application NOW Inc. has transferred the net book value of the smart meter assets from the deferral account USoA 1555 into its capital assets as at January 1, 2013. For purposes of prudence NOW Inc. proposes that these expenditures be tested in the stand alone application. Should any changes be ordered by the Board, NOW Inc. will reflect those changes in this application as well. Please reference E2/T4/S4 for further details.

Stranded Meter Assets

As indicated in NOW Inc.'s smart meter application NOW Inc. is applying for disposition of its Stranded Meters in this application.

Per App.2-S_Stranded Meters of the OEB Appendices NOW Inc. use the Scenario A accounting treatment. Now Inc.'s stranded meter costs were transferred to "Sub-account Stranded Meter Costs" of Account 1555 in 2010.

The Boards appendix requests a description of the accounting treatment followed by the applicant on stranded meter costs for financial accounting and reporting purposes. For



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1 purposes of accounting NOW Inc. discontinued calculation and reporting of depreciation on
2 those assets.

3
4 The Boards appendix requests disclosure of the amount of the pooled residual net book
5 value of the removed from service stranded meters, less any contributed capital (net of
6 accumulated amortization), and less any net proceeds from sales, which were transferred to
7 this sub-account as of December 31, 2010. This is shown on App.2-S_Stranded Meters
8 (E9/T4/S1/Att2)

9
10 The Boards appendix requests a statement as to whether or not, since transferring the
11 removed stranded meter costs to the sub-account, the recording of depreciation expenses
12 was continued in order to reduce the net book value through accumulated depreciation. If
13 so, the total depreciation expense amount for the period from the time the costs for the
14 stranded meters were transferred to the sub-account to December 31, 2010 should be
15 provided. NOW Inc. hereby confirms it did not continue recording depreciation expense on
16 the transferred assets.

17
18 The Boards appendix requests that if no depreciation expense was recorded to reduce the
19 net book value of stranded meter costs through accumulated depreciation, the total
20 depreciation expense amount that would have been applicable from the time that the
21 stranded meter costs were transferred to the sub-account of Account 1555 to December 31,
22 2010 should be provided. NOW Inc. confirms that has been included and the final amount
23 should be \$173,897

24
25 The Boards appendix requests disclosure of whether or not carrying charges were recorded
26 for the stranded meter cost balances in the sub-account, and if so, the total carrying
27 charges recorded to December 31, 2012. NOW Inc. confirms that it has not included
28 carrying cost in this calculation to December 31, 2012.



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The Boards appendix requests the estimated amount of the pooled residual net book value of the removed from service meters, less any net proceeds from sales and contributed capital, at the time when the smart meters will have been fully deployed (e.g., as of December 31, 2012). If the smart meters have been fully deployed, the actual amount should be provided. This is shown on App.2-S_Stranded Meters (E9/T4/S1/Att2).

The Boards appendix requests a description as to how the applicant intends to recover in rates the remaining costs for stranded meters, including the proposed accounting treatment, the proposed disposition period, and the associated bill impacts.

The following table shows the calculation of the Stranded Asset Rate Rider to be collected over a one year period from May 1, 2013 to April 30, 2014.

NOW Inc. Stranded Meters Recovery Rate Rider By Rate Class

	Residential	GS<50kW	Total
Smart Meters Installed	5,239	750	5,989
Smart Meters Installed as a Percentage of Total	87.48%	12.52%	100.00%
NBV of Stranded Meters to be Recovered	\$152,120	\$21,777	\$173,897
Less: contributed capital	\$ -	\$ -	\$ -
	\$152,120	\$21,777	\$173,897
Number of Customers - 2013 Forecast	5,252	755	6,007
Rate Rider (\$ per customer/month for 1 year)	\$2.41	\$2.40	

The net book value is to be recorded in Account 1555 "Sub-account Stranded Meter Costs" is proposed to be recovered by means of separate rate riders for the applicable customer classes – being Residential and GS<50kW.



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1 The net book value is proposed to be allocated to these customer classes based on the actual
2 number of smart meters installed in each class.

3

4 For each customer class, the stranded meter rate rider is proposed to be a monthly fixed charge
5 since the stranded meter costs are not related to a customer's demand or consumption.
6 Therefore, each rate rider will be determined based on the forecasted number of smart meters
7 in each customer class in 2013. The proposed recovery period is one year, consistent with the
8 disposition period of the deferral and variance account balances.

9

10 The future residual balance (net of recoveries) in the "Sub-account Stranded Meter Costs" and
11 the balance in "Sub-account Stranded Meter Costs Carrying Charges" of Account 1555 will be
12 submitted for review and finalization as part of NOW Inc.'s next cost of service application.

Appendix 2-S
Stranded Meter Treatment

Year	Notes	Gross Asset Value	Accumulated Amortization	Contributed Capital (Net of Amortization)	Net Asset	Proceeds on Disposition	Residual Net Book Value
		(A)	(B)	(C)	(D) = (A) - (B) - (C)	(E)	(F) = (D) - (E)
2006					\$ -		\$ -
2007					\$ -		\$ -
2008					\$ -		\$ -
2009					\$ -		\$ -
2010		\$ 197,293	\$ 7,892		\$ 189,401	\$ 235	\$ 189,166
2011		-\$ 420	\$ 7,576		-\$ 7,996		-\$ 7,996
2012	(1)		\$ 7,273		-\$ 7,273		-\$ 7,273
							\$ 173,897

Notes:

(1) For 2012, please indicate whether the amounts provided are on a forecast or actual basis.

Some distributors have transferred the cost of stranded meters from Account 1860 - Meters to "Sub-account Stranded Meter Costs of Account 1555", while in some cases distributors have left these costs in Account 1860. Depending on which treatment the applicant has chosen, please provide the information under either of the two scenarios (A and B below), as applicable.

Scenario A: If the stranded meter costs were transferred to "Sub-account Stranded Meter Costs" of Account 1555, the above table should be completed and the following information should be provided.

- 1A description of the accounting treatment followed by the applicant on stranded meter costs for financial accounting and reporting purposes.
- 2The amount of the pooled residual net book value of the removed from service stranded meters, less any contributed capital (net of accumulated amortization), and less any net proceeds from sales, which were transferred to this sub-account as of December 31, 2010.
- 3A statement as to whether or not, since transferring the removed stranded meter costs to the sub-account, the recording of depreciation expenses was continued in order to reduce the net book value through accumulated depreciation. If so, the total depreciation expense amount for the period from the time the costs for the stranded meters were transferred to the sub-account to December 31, 2010 should be provided.

If no depreciation expenses were recorded to reduce the net book value of stranded meter costs through accumulated depreciation, the total depreciation expense amount that would have been applicable from the time that the stranded meter costs were transferred to the sub-account of Account 1555 to December 31, 2010 should be provided. In addition, the following information should be provided:

a)Whether or not carrying charges were recorded for the stranded meter cost balances in the sub-account, and if so, the total carrying charges recorded to December 31, 2010.

b)The estimated amount of the pooled residual net book value of the removed from service meters, less any net proceeds from sales and contributed capital, at the time when the smart meters will have been fully deployed (e.g., as of December 31, 2010). If the smart meters have been fully deployed, the actual amount should be provided.

c)A description as to how the applicant intends to recover in rates the remaining costs for stranded meters, including the proposed accounting treatment, the proposed disposition period, and the associated bill impacts.

Scenario B: If the stranded meter costs remained recorded in Account 1860, the above table should be completed and the following information should be provided:

- 1A description of the accounting treatment followed by the applicant on stranded meter costs for financial accounting and reporting purposes.
- 2The amount of the pooled residual net book value of the removed from service stranded meters, less any contributed capital (net of accumulated amortization), and less any net proceeds from sales, as of December 31, 2010.
- 3A statement as to whether or not the recording of depreciation expenses continued in order to reduce the net book value through accumulated depreciation. If so, provision of the total (cumulative) depreciation expense for the period from the time that the meters became stranded to December 31, 2010.
- 4If no depreciation expenses were recorded to reduce the net book value of stranded meters through accumulated depreciation, the total (cumulative) depreciation expense amount that would have been applicable for the period from the time that the meters became stranded to December 31, 2010.
- 5The estimated amount of the pooled residual net book value of the removed from service meters, less any net proceeds from sales and contributed capital, at the time when smart meters will have been fully deployed. If the smart meters have been fully deployed, please provide the actual amount.
- 6A description as to how the applicant intends to recover in rates the costs for stranded meters, including the proposed accounting treatment, the proposed disposition period and the associated bill impacts.

Distributors should also provide the Net Book Value per class of meter as of December 31, 2010 as well as the number of meters that were removed / stranded. In preparing this information, distributors should review the Board's letter of January 16, 2007 *Stranded Meter Costs Related to the Installation of Smart Meters* which stated that records were to be kept of the type and number of each meter to support the stranded meter costs.



Reply to VECC IR's

VECC Question # 1

Reference #1: Smart Meter Model V3 20120831, Tab 2

Reference #2: Exhibit 1, Tab 1, Schedule 6, Page 1

Preamble: Reference #1 shows 4 smart meter installations in 2011 for the GS>50 kW rate class and 2 forecast for 2012. Reference #2 shows 2 smart meter installations in 2011 and 4 forecast as of July 31, 2012 and an unknown total as of December 2012.

- a) Please confirm the actual smart meter installations in 2012 to date and forecast the smart meter installations as of December 2012 for the GS>50 kW customer class.

NOW's Response:

There are 2 GS>50kW smart meter installation in 2012 to date. There are no more smart meters anticipated to be installed in December 2012 for the GS>50kW customer class. In addition, there were 4 GS>50kW smart meters installed in 2011.

- b) Please provide the OM&A and capital costs by year to install smart meters for the GS>50 kW customer class.

NOW's Response:

NOW has not included any capital or OM&A costs for recovery with respect to the six smart meters installed for GS > 50 kW customers.



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1 VECC Question # 2

2
3 Reference: Exhibit 1, Tab 1, Schedule 6, Page 1

4
5 Preamble: The evidence states "The install of the remaining meters (primarily GS<50)
6 was and continues to be delayed while NOW awaited delivery of meters."

- 7
8 a) Please confirm the remaining smart meter installations are primarily for GS>50
9 kW customers, not GS<50 kW.

10
11 **NOW's Response:**

12
13 NOW wishes to clarify that the reference to waiting for delivery of meters is primarily for
14 GS<50 customers, and not GS>50 customers.

- 15
16 b) Please explain more fully the nature of the delay in the delivery of meters.

17
18 **NOW's Response:**

19
20 NOW has experienced a few episodes whereby there was delays in obtaining materials,
21 such as meters and current and potential transformers (CT's and PT's). For example
22 NOW Inc. needed to wait for Sensus to develop and offer Delta meters, which were
23 eventually available to us in November of 2011. There was subsequent delays in
24 obtaining CT's and PT's for these meters as well.
25



1 VECC Question # 3

2
3 Reference: Exhibit 1, Tab 1, Schedule 8, Page 2

4
5 Preamble: NOW Inc. evaluated the forecast effort required and costs associated with the mass
6 deployment and concluded that the most cost effective approach to converting the conventional
7 residential meters and some of the General Service (GS) less than 50kW meters to smart
8 meters was to utilize a third-party contractor.

- 9
10 a) Please discuss the analysis and results NOW relies upon to support this
11 statement

12
13 **NOW's Response:**

14
15 NOW Inc. paid Olameter approximately \$55,000 to perform the mass install of
16 approximately 5,300 meters. This represents an average of \$10 per meter. NOW Inc.
17 does not have dedicated meter readers given its size, instead we use our linemen for
18 meter reading and installation requirements. Given the time required to install these
19 meters and the nature of our staffing it would have been more costly and less efficient
20 that the mass deployment with an external contractor. Furthermore there were
21 efficiencies with having experienced and dedicated external resources handle the
22 installs, including the technological interfaces provided to record the meter change
23 electronically to our customer information system (i.e. workforce management system) .
24 Had NOW Inc. performed it in house it would have required significant incremental
25 administrative costs with a higher risk of errors.
26
27



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1 VECC Question # 4

2
3 Reference: Exhibit 1, Tab 1, Schedule 8, Page 4

4
5 Preamble: The evidence states "NOW has budgeted for an annual security, as this is a prudent
6 approach to satisfying the due diligence requirements."

- 7
8 a) Please provide the amount budgeted for an annual security audit and indicate
9 where this cost is reflected in the smart meter model

10
11 **NOW's Response:**

12
13 See NOW response to OEB Interrogatory #4
14



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1 VECC Question # 5

2
3 Reference: Exhibit 1, Tab 1, Schedule 8, Page 6

4
5 Preamble: The evidence states "NOW Inc. has included the cost of a web **presentment**
6 solution its smart meter OM&A forecasts for 2013."

7
8 a) No costs are shown in the smart meter model for 2013. Please explain.

9
10 **NOW's Response:**

11
12 NOW Inc. has included its 2013 Smart Meter OM&A Forecast Costs in its recently filed
13 Cost of Service Application. We have forecast \$12,000 for web presentment.
14
15



VECC Question # 6

Reference: Smart Meter Model V3 20120831, Tab 2

Preamble: NOW indicates it has installed 5,989 smart meters in the residential and GS<50 kW customer classes and 6 smart meters for the GS>50 kW customer classes for a total of 5,995 installed smart meters at a total cost of \$1,904,791.

a) Please provide a comparison of original budgeted costs vs. actual costs and explain any variances.

NOW's Response:

Please references attachment 3.1.1 (IR1/T1/S3/Att1.1) for details on smart meter budget.

	Budget	Actual	Difference	
Capital Cost	\$ 1,350,874	\$ 1,399,608	\$ 48,734	3.6%
OM&A Costs	\$ 666,286	\$ 505,183	-\$ 161,103	-24.2%

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

NOW's Response:

Type of meter	RES	GSLT50	GSGT50
ICON 2 S 4 jaw, 200 AMP 240V Single Phase 3 Wire	5,073	542	
A3 ALPHA METER 9S,A3RL , 3Phase, 4 WIRE		3	1
ICON A 12 S 200A,120V,3 WIRE	107	12	
ICON A 12 S 200A,120V,3 WIRE	31	10	
ICON a 3S 20A,240V,5 JAW,2WIRE	15	31	-
ICON a 3S 20A,240V,5 JAW,2WIRE	10	50	
KV2C Model	2	86	3
ELSTER s-BS 16S A3RL METERS KTI, 120 to 480V		6	
ELSTER s-BS 9S A3RL METERS KTI, 120 to 480 V	1	10	2
	5,239	750	6

c) Please complete the following table to show average customer costs based on meter type.



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NOW's Response:

Residential Cost by Meter Type												
Class	Type of meter	Quantity	Meter Cost	Average Meter Cost	Installation Cost	Average Installation Cost	Other Capital Costs	Average Other Capital Costs	Total Capital Cost	Average Total Capital Cost	OM&A Costs	Average OM&A Costs
Residential	ICON 2 S 4 jaw, 200 AMP 240V Single Phase 3 Wire	5,073	\$ 354,806	\$ 69.94	\$ 165,868	\$ 32.70	\$ 539,596	\$ 106.37	\$1,060,269	\$ 209.00	\$ 427,917	\$ 84.35
Residential	ICON A 12 S 200A, 120V, 3 WIRE	107	\$ 15,745	\$ 147.15	\$ 7,361	\$ 68.79	\$ 11,381	\$ 106.37	\$ 34,487	\$ 322.31	\$ 9,026	\$ 84.35
Residential	ICON A 12 S 200A, 120V, 3 WIRE	31	\$ 4,562	\$ 147.15	\$ 2,133	\$ 68.79	\$ 3,297	\$ 106.37	\$ 9,992	\$ 322.31	\$ 2,615	\$ 84.35
Residential	ICON a 3S 20A, 240V, 5 JAW, 2WIRE	25	\$ 3,501	\$ 140.05	\$ 1,637	\$ 65.47	\$ 2,659	\$ 106.37	\$ 7,797	\$ 311.89	\$ 2,109	\$ 84.35
Residential	KV2C Model	2	\$ 850	\$ 424.80	\$ 397	\$ 198.59	\$ 213	\$ 106.37	\$ 1,460	\$ 729.76	\$ 169	\$ 84.35
Residential	ELSTER s-B5 9S A3RL METERS KTI, 120 to 480 V	1	\$ 395	\$ 395.00	\$ 185	\$ 184.66	\$ 106	\$ 106.37	\$ 686	\$ 686.02	\$ 84	\$ 84.35
		5,239	379,858	\$ 72.51	\$ 177,579	\$ 33.90	\$ 557,253	\$ 106.37	\$1,114,691	\$ 212.77	\$ 441,919	\$ 84.35

General Service Less Than 50 kW Cost by Meter Type												
								Average Other Capital Costs	Total Capital Cost	Average Total Capital Cost	OM&A Costs	Average OM&A Costs
Class	Type of meter	Quantity	Meter Cost	Average Meter Cost	Installation Cost	Average Installation Cost	Other Capital Costs					
GS<50kW	ICON 2 S 4 jaw, 200 AMP 240V Single Phase 3 Wire	542	\$ 37,907	\$ 69.94	\$ 17,721.31	\$ 32.70	\$ 102,933	\$ 189.91	\$158,562	\$ 292.55	\$ 45,719	\$ 84.35
GS<50kW	A3 ALPHA METER 9S,A3RL, 3Phase, 4 WIRE	3	\$ 1,751	\$ 583.70	\$ 818.62	\$ 272.87	\$ 570	\$ 189.91	\$ 3,139	\$ 1,046.49	\$ 253	\$ 84.35
GS<50kW	ICON A 12 S 200A, 120V, 3 WIRE	22	\$ 3,237	\$ 147.15	\$ 1,513.40	\$ 68.79	\$ 4,178	\$ 189.91	\$ 8,929	\$ 405.85	\$ 1,856	\$ 84.35
GS<50kW	ICON a 3S 20A,240V, 5 JAW,2WIRE	81	\$ 11,344	\$ 140.05	\$ 5,303.21	\$ 65.47	\$ 15,383	\$ 189.91	\$ 32,030	\$ 395.44	\$ 6,832	\$ 84.35
GS<50kW	KV2C Model	86	\$ 36,533	\$ 424.80	\$ 17,078.66	\$ 198.59	\$ 16,333	\$ 189.91	\$ 69,944	\$ 813.30	\$ 7,254	\$ 84.35
GS<50kW	ELSTER s-B5 16S A3RL METERS KTI, 120 to 480V	6	\$ 2,370	\$ 395.00	\$ 1,107.95	\$ 184.66	\$ 1,139	\$ 189.91	\$ 4,617	\$ 769.57	\$ 506	\$ 84.35
GS<50kW	ELSTER s-B5 9S A3RL METERS KTI, 120 to 480 V	10	\$ 3,950	\$ 395.00	\$ 1,846.58	\$ 184.66	\$ 1,899	\$ 189.91	\$ 7,696	\$ 769.57	\$ 844	\$ 84.35
		750	97,093	\$ 129.46	\$ 45,390	\$ 60.52	142,435	\$ 189.91	\$284,918	\$ 379.89	\$ 63,264	\$ 84.35



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1 VECC Question # 7

2
3 Reference 1: Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery –
4 Final Disposition, dated December 15, 2011, Page 19

5
6 Preamble: The Guidelines state, “The Board also expects that a distributor will provide
7 evidence on any operational efficiencies and cost savings that result from smart meter
8 implementation.”

- 9
10 a) Please identify any operational efficiencies and cost savings such as reduced
11 meter reading costs that NOW has experienced or anticipates will result from
12 smart meter implementation.

13
14 **NOW's Response:**

15
16 NOW Inc. has seen a shift of approximately \$150,000 in costs from meter reading to
17 Capital and Operation and Maintenance Expense accounts. As mentioned previously,
18 NOW Inc. did not have dedicated meter reading staff, instead our linemen performed this
19 function. With the reduction in manual meter reading requirements we have been able to
20 allocate these resources to much needed infrastructure upgrades and maintenance.

- 21
22
23 b) Please quantify any savings and explain how any realized cost savings have
24 been reflected in this application.

25
26 **NOW's Response:**

27
28 See NOW response to OEB Interrogatory #6
29



VECC Question # 8

Reference 1: Smart Meter Model V3 20120831, Tab 10 A Reference 2: Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011, Page 19

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

- a) Please confirm the methodology used by NOW to calculate the SMDR rate riders.

NOW's Response:

NOW has allocated costs to each class in its SMDR and SMIRR calculations as follows:

Return (deemed interest plus return on equity)	Capital cost of the meters for each class.
Amortization	Capital cost of the meters for each class.
OM&A	Number of meters installed for each class.
PILs	Revenue requirement allocated to each class before PILs.
Smart Meter Rate Adder Revenues	Revenue collect from each class (revenues collected from the General Service > 50 kW class have been allocated equally between the Residential and General Service < 50 kW class.

- b)) Please complete a separate smart meter revenue requirement model by rate class based on full cost causality by rate class

NOW's Response:

NOW maintains that the calculated rate riders have been appropriately calculated using Board approved methodology and believes that the proposed results are fair and reasonable or all affected customer classes. NOW believes the data to complete smart meter recovery by rate class in the manner which VECC proposes in this interrogatory would not be materially dissimilar to the proposed results obtained with the models already submitted.



- c) Please re-calculate the SMDR & SMIRR rate riders based on full cost causality by rate class.

NOW's Response:

See response to b) above.

- d) Please provide a breakdown of the total Smart Meter Rate Adder Revenue collected by customer class.

NOW's Response:

SMFA Revenue

	RES	GSLT50	GSGT50	Total
2006	8,016.56	1,243.58	102.00	9,362.15
2007	16,352.09	2,457.80	216.55	19,026.44
2008	16,520.37	2,414.80	216.46	19,151.63
2009	43,592.42	6,301.40	598.29	50,492.10
2010	62,397.43	8,953.22	897.40	72,248.06
2011	116,946.86	16,752.72	1,557.65	135,257.23
2012	65,260.39	9,281.25	852.50	75,394.14
	329,086.12	47,404.78	4,440.84	380,931.74
	2,220.42	2,220.42	-4,440.84	0.00
	331,306.55	49,625.20	0.00	380,931.74
	86.97%	13.03%	0.00%	100.00%

- e) If NOW is unable to provide separate smart meter revenue requirement models by rate class, please provide a detailed explanation.

NOW's Response:

See response to b) above.



VECC Question # 9

Reference: Smart Meter Model V3 20120831, Tab 2

- a) Please provide a breakdown and explanation of the costs by year for line 1.5.3 Professional Fees.

NOW's Response:

	2007 Actuals	2008 Actuals	2009 Actuals	
1.5.3 Professional Fees	13,309	15,850	15,698	

Costs reported in 1.5.3 are consulting fees paid to Utilassist. The nature of their role has already been explained in the original application.

- b) Please provide a breakdown and explanation of the costs by year for line 2.3.1 Hardware Maintenance.

NOW's Response:

	2009 Actuals	2010 Actuals	2011 Actuals	2012 Forecast
2.3.1 OM&A – Hardware Maintenance	\$55,377	\$79,851	\$100,859	\$86,239
Consists of:				
SENSUS – AMI Operating Agreement				
Note: 2011 also includes \$6,912 which should be shown under 2.5.6 below – in addition to the \$4,122 already listed in c)			(6,912)	
Adjusted			93,947	



- c) Please provide a breakdown and explanation of the costs by year under 2.5.6 Other AMI Expenses.

NOW's Response:

	2009 Actuals	2010 Actuals	2011 Actuals	2012 Forecast
2.5.6 OM&A – Other AMI Costs	\$686		\$4,122	\$4,000
Consists of:				
AMI Security Audit by Bell				
See b) above – move additional security audit costs to correct line			<u>6,912</u>	
Adjusted			11,034	

- d) Please provide a breakdown and explanation of the costs by year under 1.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.

NOW's Response:

	2009 Actuals	2010 Actuals	2011 Actuals	2012 Forecast
1.6.3 Capital – Costs for TOU rate implementation, CIS system upgrades, web presentment, integration with the MDMR, etc		\$5,533	\$2,252	
Consists of:				
MDMR Integration Software - CIS		<u>5,533</u>	<u>2,252</u>	



- e) Please provide a breakdown and explanation of the costs by year under 2.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.

NOW's Response:

	2009 Actuals	2010 Actuals	2011 Actuals	2012 Forecast
2.6.3 OPERATING – Costs for TOU rate implementation, CIS system upgrades, web presentment, integration with the MDMR, etc	<u>\$11,577</u>	<u>\$7,080</u>	<u>\$46,220</u>	<u>\$22,549</u>
Consists of:				
Incremental Staffing Costs for Billing and Sync Operator needs	11,577	280	27,081	21,870
Travel and training		6,800	2,071	
Customer Education and Advertising – TOU			10,747	
Project Management – re: TOU and MDMR			5,823	
AS2 Support			498	679
TOTAL	<u>\$11,577</u>	<u>\$7,080</u>	<u>\$46,220</u>	<u>\$22,549</u>

Incremental Staffing Costs for Billing and Sync Operator needs – 2009 and 2010 costs of \$11,577 and \$280 respectively reflect the incremental costs associated with hiring someone to physically attend each meter and verify the correct details are reflected in the CIS and meter records as well as verify the actual meter register read agrees with the AMI register read. 2011 costs of \$27,081 reflect the incremental cost of additional billing/administrative staff required during the preparation, testing and transition to Time of Use. Some of the 2011 costs and the 2012 costs reflect the incremental cost of additional billing/administrative staff required on a permanent basis to perform the work associated with Time of Use Billing, specifically the continuous transfer of data with the AMI and MDMR.



1 Travel and training costs – These costs were incremental to the regular training
2 expenses factored into NOW's revenue requirements as approved in the 2009
3 COS. This includes training costs for IESO workshops on MDMR operations and
4 integration, as well as onsite training required from our CIS provider.

5
6 Customer Education and Advertising – These costs reflect the cost of customer
7 education and notification materials for the transition to Time of Use. NOW
8 partnered with other LDC's through Utilassist to issue a request for quotes and
9 ultimately acquiring lower costs due to committing as a larger group.

10
11 Project Management – These costs reflect consulting services provided by
12 Utilassist related to the transition to Time of Use phase of the smart meters
13 project.

14
15 AS2 Support –Reflects annual software and support costs paid to CLEO
16 Communications for their AS2 solution, as required providing adequate file
17 transfer security when interfacing with the MDM/R.



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VECC IR# 6a



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Date Filed: December 7, 2012

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Appendices



File Number: EB-2012-0353

Tab: 2
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Appendix 1 of 1

Appendix 1 Amended Smart Meter Model



Smart Meter Model for Electricity Distributors (2013 Filers)

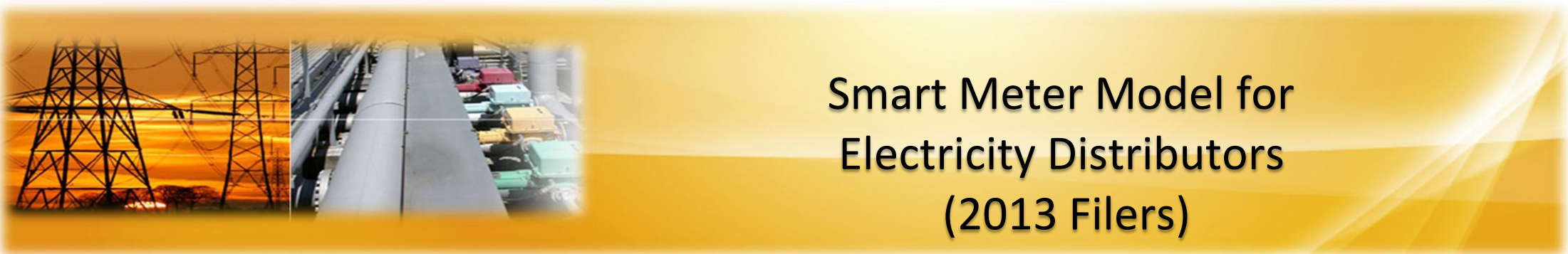
Version 3.00

Utility Name	Northern Ontario Wires Inc.
Assigned EB Number	EB-2012-0153
Name and Title	Geoffrey Sutton, Chief Financial Officer
Phone Number	(705)272-6669
Email Address	geoffs@nowinc.ca
Date	August 16, 2012
Last COS Re-based Year	2009

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. capital costs have been included in rate base and OM&A costs in revenue requirement.

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

Smart Meter Capital Cost and Operational Expense Data		2006	2007	2008	2009	2010	2011	2012	2013	Total
		Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
Smart Meter Installation Plan										
Actual/Planned number of Smart Meters installed during the Calendar Year										
Residential					5,150	7	51	31		5239
General Service < 50 kW					262	253	32	203		750
Actual/Planned number of Smart Meters installed (Residential and GS < 50 kW only)		0	0	0	5412	260	83	234	0	5989
Percentage of Residential and GS < 50 kW Smart Meter Installations Completed		0.00%	0.00%	0.00%	90.37%	94.71%	96.09%	100.00%	0.00%	100.00%
Actual/Planned number of GS > 50 kW meters installed							4	2		6
Other (please identify)										0
Total Number of Smart Meters installed or planned to be installed		0	0	0	5412	260	87	236	0	5995
1 Capital Costs										
1.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)		Asset Type Asset type must be selected to enable calculations								
1.1.1 Smart Meters (may include new meters and modules, etc.)	Smart Meter		Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
						473,588	35,500	82,835	14,000	
1.1.2 Installation Costs (may include socket kits, labour, vehicle, benefits, etc.)	Smart Meter					97,992	70,531	37,446	17,000	
1.1.3a Workforce Automation Hardware (may include fieldwork handhelds, barcode hardware, etc.)	Computer Hardware					8,615				
1.1.3b Workforce Automation Software (may include fieldwork handhelds, barcode hardware, etc.)	Computer Software					14,560				
Total Advanced Metering Communications Devices (AMCD)			\$ -	\$ -	\$ -	\$ 594,755	\$ 106,031	\$ 120,281	\$ 31,000	\$ 852,067
1.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)		Asset Type								
1.2.1 Collectors	Smart Meter		Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	
						485,125				
1.2.2 Repeaters (may include radio licence, etc.)										
1.2.3 Installation (may include meter seals and rings, collector computer hardware, etc.)										
Total Advanced Metering Regional Collector (AMRC) (Includes LAN)			\$ -	\$ -	\$ -	\$ 485,125	\$ -	\$ -	\$ -	\$ 485,125

1.3 ADVANCED METERING CONTROL COMPUTER (AMCC)		Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
1.3.1	Computer Hardware										\$ -
1.3.2	Computer Software										\$ -
1.3.3	Computer Software Licences & Installation (includes hardware and software) <i>(may include AS/400 disk space, backup and recovery computer, UPS, etc.)</i>										\$ -
Total Advanced Metering Control Computer (AMCC)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1.4 WIDE AREA NETWORK (WAN)		Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
1.4.1	Activation Fees										\$ -
Total Wide Area Network (WAN)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1.5 OTHER AMI CAPITAL COSTS RELATED TO MINIMUM FUNCTIONALITY		Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
1.5.1	Customer Equipment <i>(including repair of damaged equipment)</i>										\$ -
1.5.2	AMI Interface to CIS	Computer Software				8,273					\$ 8,273
1.5.3	Professional Fees	Computer Hardware		13,309	15,850	15,698					\$ 44,857
1.5.4	Integration										\$ -
1.5.5	Program Management										\$ -
1.5.6	Other AMI Capital	Other Equipment				1,501					\$ 1,501
Total Other AMI Capital Costs Related to Minimum Functionality			\$ -	\$ 13,309	\$ 15,850	\$ 25,472	\$ -	\$ -	\$ -	\$ -	\$ 54,631
Total Capital Costs Related to Minimum Functionality			\$ -	\$ 13,309	\$ 15,850	\$ 1,105,352	\$ 106,031	\$ 120,281	\$ 31,000	\$ -	\$ 1,391,823
1.6 CAPITAL COSTS BEYOND MINIMUM FUNCTIONALITY		Asset Type	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
<i>(Please provide a descriptive title and identify nature of beyond minimum functionality costs)</i>											
1.6.1	Costs related to technical capabilities in the smart meters or related communications infrastructure that exceed those specified in O.Reg 425/06										\$ -
1.6.2	Costs for deployment of smart meters to customers other than residential and small general service										\$ -
1.6.3	Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.	Computer Software					5,533	2,252			\$ 7,785
Total Capital Costs Beyond Minimum Functionality			\$ -	\$ -	\$ -	\$ -	\$ 5,533	\$ 2,252	\$ -	\$ -	\$ 7,785
Total Smart Meter Capital Costs			\$ -	\$ 13,309	\$ 15,850	\$ 1,105,352	\$ 111,564	\$ 122,533	\$ 31,000	\$ -	\$ 1,399,608

2 OM&A Expenses

2.1 ADVANCED METERING COMMUNICATION DEVICE (AMCD)	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast	
2.1.1 Maintenance <i>(may include meter reverification costs, etc.)</i>				6,661					\$ 6,661
2.1.2 Other <i>(please specify)</i>									\$ -
Total Incremental AMCD OM&A Costs	\$ -	\$ -	\$ -	\$ 6,661	\$ -	\$ -	\$ -	\$ -	\$ 6,661
2.2 ADVANCED METERING REGIONAL COLLECTOR (AMRC) (includes LAN)									
2.2.1 Maintenance				4,541	3,666	4,270			\$ 12,477
2.2.2 Other <i>(please specify)</i>									\$ -
Total Incremental AMRC OM&A Costs	\$ -	\$ -	\$ -	\$ 4,541	\$ 3,666	\$ 4,270	\$ -	\$ -	\$ 12,477
2.3 ADVANCED METERING CONTROL COMPUTER (AMCC)									
2.3.1 Hardware Maintenance <i>(may include server support, etc.)</i>				55,377	79,851	100,859	86,236		\$ 322,323
2.3.2 Software Maintenance <i>(may include maintenance support, etc.)</i>					9,117	9,951	9,504		\$ 28,572
2.3.2 Other <i>(please specify)</i>									\$ -
Total Incremental AMCC OM&A Costs	\$ -	\$ -	\$ -	\$ 55,377	\$ 88,968	\$ 110,810	\$ 95,740	\$ -	\$ 350,895
2.4 WIDE AREA NETWORK (WAN)									
2.4.1 WAN Maintenance									\$ -
2.4.2 Other <i>(please specify)</i>									\$ -
Total Incremental AMRC OM&A Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2.5 OTHER AMI OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY									
2.5.1 Business Process Redesign									\$ -
2.5.2 Customer Communication <i>(may include project communication, etc.)</i>				13,614	90				\$ 13,704
2.5.3 Program Management					22,751				\$ 22,751
2.5.4 Change Management <i>(may include training, etc.)</i>				2,461					\$ 2,461
2.5.5 Administration Costs									\$ -
2.5.6 Other AMI Expenses <i>(please specify)</i>				686		4,122	4,000		\$ 8,808
Total Other AMI OM&A Costs Related to Minimum Functionality	\$ -	\$ -	\$ -	\$ 16,761	\$ 22,841	\$ 4,122	\$ 4,000	\$ -	\$ 47,724
TOTAL OM&A COSTS RELATED TO MINIMUM FUNCTIONALITY	\$ -	\$ -	\$ -	\$ 83,340	\$ 115,475	\$ 119,202	\$ 99,740	\$ -	\$ 417,757
2.6 OM&A COSTS RELATED TO BEYOND MINIMUM FUNCTIONALITY <i>(Please provide a descriptive title and identify nature of beyond minimum functionality costs)</i>	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual			
2.6.1 Costs related to technical capabilities in the smart meters or related communications infrastructure that exceed those specified in O.Reg 425/06									\$ -
2.6.2 Costs for deployment of smart meters to customers other than residential and small general service									\$ -
2.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.				11,577	7,080	46,220	22,549		\$ 87,426
Total OM&A Costs Beyond Minimum Functionality	\$ -	\$ -	\$ -	\$ 11,577	\$ 7,080	\$ 46,220	\$ 22,549	\$ -	\$ 87,426
Total Smart Meter OM&A Costs	\$ -	\$ -	\$ -	\$ 94,917	\$ 122,555	\$ 165,422	\$ 122,289	\$ -	\$ 505,183

3 Aggregate Smart Meter Costs by Category

3.1	Capital																			
3.1.1	Smart Meter	\$	-	\$	-	\$	-	\$	1,056,705	\$	106,031	\$	120,281	\$	31,000	\$	-	\$	1,314,017	
3.1.2	Computer Hardware	\$	-	\$	13,309	\$	15,850	\$	24,313	\$	-	\$	-	\$	-	\$	-	\$	53,472	
3.1.3	Computer Software	\$	-	\$	-	\$	-	\$	22,833	\$	5,533	\$	2,252	\$	-	\$	-	\$	30,618	
3.1.4	Tools & Equipment	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
3.1.5	Other Equipment	\$	-	\$	-	\$	-	\$	1,501	\$	-	\$	-	\$	-	\$	-	\$	1,501	
3.1.6	Applications Software	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
3.1.7	Total Capital Costs	<u>\$</u>	<u>-</u>	<u>\$</u>	<u>13,309</u>	<u>\$</u>	<u>15,850</u>	<u>\$</u>	<u>1,105,352</u>	<u>\$</u>	<u>111,564</u>	<u>\$</u>	<u>122,533</u>	<u>\$</u>	<u>31,000</u>	<u>\$</u>	<u>-</u>	<u>\$</u>	<u>1,399,608</u>	
3.2	OM&A Costs																			
3.2.1	Total OM&A Costs	<u>\$</u>	<u>-</u>	<u>\$</u>	<u>-</u>	<u>\$</u>	<u>-</u>	<u>\$</u>	<u>94,917</u>	<u>\$</u>	<u>122,555</u>	<u>\$</u>	<u>165,422</u>	<u>\$</u>	<u>122,289</u>	<u>\$</u>	<u>-</u>	<u>\$</u>	<u>505,183</u>	



Smart Meter Model for Electricity Distributors (2013 Filers)

	2006	2007	2008	2009	2010	2011	2012	2013
Cost of Capital								
Capital Structure¹								
Deemed Short-term Debt Capitalization			0.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Deemed Long-term Debt Capitalization	50.0%	50.0%	53.3%	52.7%	56.0%	56.0%	56.0%	56.0%
Deemed Equity Capitalization	50.0%	50.0%	46.7%	43.3%	40.0%	40.0%	40.0%	40.0%
Preferred Shares								
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of Capital Parameters								
Deemed Short-term Debt Rate				1.33%	1.33%	1.33%	1.33%	1.33%
Long-term Debt Rate (actual/embedded/deemed) ²	4.73%	4.73%	4.73%	5.04%	5.04%	5.04%	5.04%	5.04%
Target Return on Equity (ROE)	9.0%	9.00%	9.00%	8.01%	8.01%	8.01%	8.01%	8.01%
Return on Preferred Shares								
WACC	6.87%	6.87%	6.72%	6.18%	6.08%	6.08%	6.08%	6.08%
Working Capital Allowance								
Working Capital Allowance Rate	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
<i>(% of the sum of Cost of Power + controllable expenses)</i>								
Taxes/PILs								
Aggregate Corporate Income Tax Rate	18.62%	18.62%	16.50%	16.50%	16.00%	15.50%	15.50%	15.50%
Capital Tax (until July 1st, 2010)	0.30%	0.225%	0.225%	0.225%	0.075%	0.00%	0.00%	0.00%

Depreciation Rates

(expressed as expected useful life in years)

Smart Meters - years	15	15	15	15	15	15	15	15
- rate (%)	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%
Computer Hardware - years	7	7	7	7	7	7	7	7
- rate (%)	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%
Computer Software - years	7	7	7	7	7	7	7	7
- rate (%)	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%
Tools & Equipment - years	7	7	7	7	7	7	7	7
- rate (%)	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%
Other Equipment - years	7	7	7	7	7	7	7	7
- rate (%)	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%	14.29%

CCA Rates

Smart Meters - CCA Class	47	47	47	47	47	47	47	47
Smart Meters - CCA Rate	8%	8%	8%	8%	8%	8%	8%	8%
Computer Equipment - CCA Class	45	50	50	50	50	50	50	50
Computer Equipment - CCA Rate	45%	55%	55%	55%	55%	55%	55%	55%
General Equipment - CCA Class	8	8	8	8	8	8	8	8
General Equipment - CCA Rate	20%	20%	20%	20%	20%	20%	20%	20%
Applications Software - CCA Class	12	12	12	12	12	12	12	12
Applications Software - CCA Rate	100%	100%	100%	100%	100%	100%	100%	100%

Assumptions

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



Smart Meter Model for Electricity Distributors (2013 Filers)

	2006	2007	2008	2009	2010	2011	2012	2013
Net Fixed Assets - Smart Meters								
Gross Book Value								
Opening Balance		\$ -	\$ -	\$ -	\$ 1,056,705	\$ 1,162,736	\$ 1,283,017	\$ 1,314,017
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ 1,056,705	\$ 106,031	\$ 120,281	\$ 31,000	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ 1,056,705	\$ 1,162,736	\$ 1,283,017	\$ 1,314,017	\$ 1,314,017
Accumulated Depreciation								
Opening Balance		\$ -	\$ -	\$ -	-\$ 35,224	-\$ 109,205	-\$ 190,730	-\$ 277,298
Amortization expense during year	\$ -	\$ -	\$ -	-\$ 35,224	-\$ 73,981	-\$ 81,525	-\$ 86,568	-\$ 87,601
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	-\$ 35,224	-\$ 109,205	-\$ 190,730	-\$ 277,298	-\$ 364,899
Net Book Value								
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 1,021,482	\$ 1,053,531	\$ 1,092,287	\$ 1,036,720
Closing Balance	\$ -	\$ -	\$ -	\$ 1,021,482	\$ 1,053,531	\$ 1,092,287	\$ 1,036,720	\$ 949,118
Average Net Book Value	\$ -	\$ -	\$ -	\$ 510,741	\$ 1,037,506	\$ 1,072,909	\$ 1,064,503	\$ 992,919
Net Fixed Assets - Computer Hardware								
Gross Book Value								
Opening Balance		\$ -	\$ 13,309	\$ 29,159	\$ 53,472	\$ 53,472	\$ 53,472	\$ 53,472
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ 13,309	\$ 15,850	\$ 24,313	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ 13,309	\$ 29,159	\$ 53,472	\$ 53,472	\$ 53,472	\$ 53,472	\$ 53,472
Accumulated Depreciation								
Opening Balance	\$ -	\$ -	-\$ 951	-\$ 3,984	-\$ 9,886	-\$ 17,525	-\$ 25,164	-\$ 32,803
Amortization expense during year	\$ -	-\$ 951	-\$ 3,033	-\$ 5,902	-\$ 7,639	-\$ 7,639	-\$ 7,639	-\$ 7,639
Retirements/Removals (if applicable)								
Closing Balance	\$ -	-\$ 951	-\$ 3,984	-\$ 9,886	-\$ 17,525	-\$ 25,164	-\$ 32,803	-\$ 40,442
Net Book Value								
Opening Balance	\$ -	\$ -	\$ 12,358	\$ 25,175	\$ 43,586	\$ 35,947	\$ 28,308	\$ 20,669
Closing Balance	\$ -	\$ 12,358	\$ 25,175	\$ 43,586	\$ 35,947	\$ 28,308	\$ 20,669	\$ 13,030
Average Net Book Value	\$ -	\$ 6,179	\$ 18,767	\$ 34,380	\$ 39,766	\$ 32,127	\$ 24,489	\$ 16,850

Net Fixed Assets - Computer Software (including Applications Software)

Gross Book Value								
Opening Balance		\$ -	\$ -	\$ -	\$ 22,833	\$ 28,366	\$ 30,618	\$ 30,618
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ 22,833	\$ 5,533	\$ 2,252	\$ -	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ 22,833	\$ 28,366	\$ 30,618	\$ 30,618	\$ 30,618
Accumulated Depreciation								
Opening Balance	\$ -	\$ -	\$ -	\$ -	-\$ 1,631	-\$ 5,288	-\$ 9,501	-\$ 13,875
Amortization expense during year	\$ -	\$ -	\$ -	-\$ 1,631	-\$ 3,657	-\$ 4,213	-\$ 4,374	-\$ 4,374
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	-\$ 1,631	-\$ 5,288	-\$ 9,501	-\$ 13,875	-\$ 18,249
Net Book Value								
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 21,202	\$ 23,078	\$ 21,117	\$ 16,743
Closing Balance	\$ -	\$ -	\$ -	\$ 21,202	\$ 23,078	\$ 21,117	\$ 16,743	\$ 12,369
Average Net Book Value	\$ -	\$ -	\$ -	\$ 10,601	\$ 22,140	\$ 22,097	\$ 18,930	\$ 14,556

Net Fixed Assets - Tools and Equipment

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

Net Fixed Assets - Other Equipment

Gross Book Value								
Opening Balance		\$ -	\$ -	\$ -	\$ 1,501	\$ 1,501	\$ 1,501	\$ 1,501
Capital Additions during year (from Smart Meter Costs)	\$ -	\$ -	\$ -	\$ 1,501	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	\$ 1,501	\$ 1,501	\$ 1,501	\$ 1,501	\$ 1,501
Accumulated Depreciation								
Opening Balance	\$ -	\$ -	\$ -	\$ -	-\$ 107	-\$ 322	-\$ 536	-\$ 751
Amortization expense during year	\$ -	\$ -	\$ -	-\$ 107	-\$ 214	-\$ 214	-\$ 214	-\$ 214
Retirements/Removals (if applicable)								
Closing Balance	\$ -	\$ -	\$ -	-\$ 107	-\$ 322	-\$ 536	-\$ 751	-\$ 965
Net Book Value								
Opening Balance	\$ -	\$ -	\$ -	\$ -	\$ 1,394	\$ 1,179	\$ 965	\$ 751
Closing Balance	\$ -	\$ -	\$ -	\$ 1,394	\$ 1,179	\$ 965	\$ 751	\$ 536
Average Net Book Value	\$ -	\$ -	\$ -	\$ 697	\$ 1,287	\$ 1,072	\$ 858	\$ 643



Smart Meter Model for Electricity Distributors (2013 Filers)

	2006	2007	2008	2009	2010	2011	2012	2013
Average Net Fixed Asset Values (from Sheet 4)								
Smart Meters	\$ -	\$ -	\$ -	\$ 510,741	\$ 1,037,506	\$ 1,072,909	\$ 1,064,503	\$ 992,919
Computer Hardware	\$ -	\$ 6,179	\$ 18,767	\$ 34,380	\$ 39,766	\$ 32,127	\$ 24,489	\$ 16,850
Computer Software	\$ -	\$ -	\$ -	\$ 10,601	\$ 22,140	\$ 22,097	\$ 18,930	\$ 14,556
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ 697	\$ 1,287	\$ 1,072	\$ 858	\$ 643
Total Net Fixed Assets	\$ -	\$ 6,179	\$ 18,767	\$ 556,419	\$ 1,100,699	\$ 1,128,206	\$ 1,108,780	\$ 1,024,968
Working Capital								
Operating Expenses (from Sheet 2)	\$ -	\$ -	\$ -	\$ 94,917	\$ 122,555	\$ 165,422	\$ 122,289	\$ -
Working Capital Factor (from Sheet 3)	15%	15%	15%	15%	15%	15%	15%	15%
Working Capital Allowance	\$ -	\$ -	\$ -	\$ 14,238	\$ 18,383	\$ 24,813	\$ 18,343	\$ -
Incremental Smart Meter Rate Base	\$ -	\$ 6,179	\$ 18,767	\$ 570,657	\$ 1,119,082	\$ 1,153,020	\$ 1,127,123	\$ 1,024,968
Return on Rate Base								
<i>Capital Structure</i>								
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 22,826	\$ 44,763	\$ 46,121	\$ 45,085	\$ 40,999
Deemed Long Term Debt	\$ -	\$ 3,090	\$ 10,003	\$ 300,736	\$ 626,686	\$ 645,691	\$ 631,189	\$ 573,982
Equity	\$ -	\$ 3,090	\$ 8,764	\$ 247,094	\$ 447,633	\$ 461,208	\$ 450,849	\$ 409,987
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capitalization	\$ -	\$ 6,179	\$ 18,767	\$ 570,657	\$ 1,119,082	\$ 1,153,020	\$ 1,127,123	\$ 1,024,968
<i>Return on</i>								
Deemed Short Term Debt	\$ -	\$ -	\$ -	\$ 304	\$ 595	\$ 613	\$ 600	\$ 545
Deemed Long Term Debt	\$ -	\$ 146	\$ 473	\$ 15,157	\$ 31,585	\$ 32,543	\$ 31,812	\$ 28,929
Equity	\$ -	\$ 278	\$ 789	\$ 19,792	\$ 35,855	\$ 36,943	\$ 36,113	\$ 32,840
Preferred Shares	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Return on Capital	\$ -	\$ 424	\$ 1,262	\$ 35,253	\$ 68,036	\$ 70,099	\$ 68,525	\$ 62,314
Operating Expenses	\$ -	\$ -	\$ -	\$ 94,917	\$ 122,555	\$ 165,422	\$ 122,289	\$ -
Amortization Expenses (from Sheet 4)								
Smart Meters	\$ -	\$ -	\$ -	\$ 35,224	\$ 73,981	\$ 81,525	\$ 86,568	\$ 87,601
Computer Hardware	\$ -	\$ 951	\$ 3,033	\$ 5,902	\$ 7,639	\$ 7,639	\$ 7,639	\$ 7,639
Computer Software	\$ -	\$ -	\$ -	\$ 1,631	\$ 3,657	\$ 4,213	\$ 4,374	\$ 4,374
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ 107	\$ 214	\$ 214	\$ 214	\$ 214
Total Amortization Expense in Year	\$ -	\$ 951	\$ 3,033	\$ 42,864	\$ 85,492	\$ 93,592	\$ 98,795	\$ 99,828
Incremental Revenue Requirement before Taxes/PILs	\$ -	\$ 1,375	\$ 4,295	\$ 173,034	\$ 276,082	\$ 329,113	\$ 289,609	\$ 162,142
Calculation of Taxable Income								
Incremental Operating Expenses	\$ -	\$ -	\$ -	\$ 94,917	\$ 122,555	\$ 165,422	\$ 122,289	\$ -
Amortization Expense	\$ -	\$ 951	\$ 3,033	\$ 42,864	\$ 85,492	\$ 93,592	\$ 98,795	\$ 99,828
Interest Expense	\$ -	\$ 146	\$ 473	\$ 15,461	\$ 32,180	\$ 33,156	\$ 32,412	\$ 29,474
Net Income for Taxes/PILs	\$ -	\$ 278	\$ 789	\$ 19,792	\$ 35,855	\$ 36,943	\$ 36,113	\$ 32,840
Grossed-up Taxes/PILs (from Sheet 7)	\$ -	-\$ 528.48	-\$ 1,098.06	\$ 2,163.55	\$ 3,014.53	\$ 5,439.19	\$ 7,628.03	\$ 8,922.65
Revenue Requirement, including Grossed-up Taxes/PILs	\$ -	\$ 846	\$ 3,197	\$ 175,197	\$ 279,097	\$ 334,552	\$ 297,237	\$ 171,065



Smart Meter Model for Electricity Distributors (2013 Filers)

For PILs Calculation

UCC - Smart Meters

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 Forecast	2013 Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ 1,014,436.80	\$ 1,035,071.62	\$ 1,067,736.00	\$ 1,012,077.12
Capital Additions	\$ -	\$ -	\$ -	\$ 1,056,705.00	\$ 106,031.00	\$ 120,281.37	\$ 31,000.00	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ 1,056,705.00	\$ 1,120,467.80	\$ 1,155,352.99	\$ 1,098,736.00	\$ 1,012,077.12
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ 528,352.50	\$ 53,015.50	\$ 60,140.69	\$ 15,500.00	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ 528,352.50	\$ 1,067,452.30	\$ 1,095,212.30	\$ 1,083,236.00	\$ 1,012,077.12
CCA Rate Class	47	47	47	47	47	47	47	47
CCA Rate	8%	8%	8%	8%	8%	8%	8%	8%
CCA	\$ -	\$ -	\$ -	\$ 42,268.20	\$ 85,396.18	\$ 87,616.98	\$ 86,658.88	\$ 80,966.17
Closing UCC	\$ -	\$ -	\$ -	\$ 1,014,436.80	\$ 1,035,071.62	\$ 1,067,736.00	\$ 1,012,077.12	\$ 931,110.95

UCC - Computer Equipment

	2006 Audited Actual	2007 Audited Actual	2008 Audited Actual	2009 Audited Actual	2010 Audited Actual	2011 Audited Actual	2012 Forecast	2013 Forecast
Opening UCC	\$ -	\$ -	\$ 9,649.03	\$ 15,833.31	\$ 41,305.84	\$ 22,599.05	\$ 11,802.27	\$ 5,311.02
Capital Additions Computer Hardware	\$ -	\$ 13,309.00	\$ 15,850.00	\$ 24,313.00	\$ -	\$ -	\$ -	\$ -
Capital Additions Computer Software	\$ -	\$ -	\$ -	\$ 22,833.00	\$ 5,533.00	\$ 2,252.00	\$ -	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ -	\$ 13,309.00	\$ 25,499.03	\$ 62,979.31	\$ 46,838.84	\$ 24,851.05	\$ 11,802.27	\$ 5,311.02
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ 6,654.50	\$ 7,925.00	\$ 23,573.00	\$ 2,766.50	\$ 1,126.00	\$ -	\$ -
Reduced UCC	\$ -	\$ 6,654.50	\$ 17,574.03	\$ 39,406.31	\$ 44,072.34	\$ 23,725.05	\$ 11,802.27	\$ 5,311.02
CCA Rate Class	45	50	50	50	50	50	50	50
CCA Rate	45%	55%	55%	55%	55%	55%	55%	55%
CCA	\$ -	\$ 3,659.98	\$ 9,665.71	\$ 21,673.47	\$ 24,239.79	\$ 13,048.78	\$ 6,491.25	\$ 2,921.06
Closing UCC	\$ -	\$ 9,649.03	\$ 15,833.31	\$ 41,305.84	\$ 22,599.05	\$ 11,802.27	\$ 5,311.02	\$ 2,389.96

UCC - General Equipment

	2006	2007	2008	2009	2010	2011	2012	2013
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ 1,350.90	\$ 1,080.72	\$ 864.58	\$ 691.66
Capital Additions Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions Other Equipment	\$ -	\$ -	\$ -	\$ 1,501.00	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ 1,501.00	\$ 1,350.90	\$ 1,080.72	\$ 864.58	\$ 691.66
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ 750.50	\$ -	\$ -	\$ -	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ 750.50	\$ 1,350.90	\$ 1,080.72	\$ 864.58	\$ 691.66
CCA Rate Class	8	8	8	8	8	8	8	8
CCA Rate	20%	20%	20%	20%	20%	20%	20%	20%
CCA	\$ -	\$ -	\$ -	\$ 150.10	\$ 270.18	\$ 216.14	\$ 172.92	\$ 138.33
Closing UCC	\$ -	\$ -	\$ -	\$ 1,350.90	\$ 1,080.72	\$ 864.58	\$ 691.66	\$ 553.33

UCC - Applications Software

	2006	2007	2008	2009	2010	2011	2012	2013
	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Audited Actual	Forecast	Forecast
Opening UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Additions Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Retirements/Removals (if applicable)								
UCC Before Half Year Rule	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reduced UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA Rate Class	12	12	12	12	12	12	12	12
CCA Rate	100%	100%	100%	100%	100%	100%	100%	100%
CCA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Closing UCC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



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	\$ -	\$ 278.06	\$ 788.76	\$ 19,792.25	\$ 35,855.40	\$ 36,942.75	\$ 36,113.02	\$ 32,839.97
Amortization	\$ -	\$ 950.64	\$ 3,033.43	\$ 42,863.86	\$ 85,491.72	\$ 93,591.54	\$ 98,795.11	\$ 99,828.44
CCA - Smart Meters	\$ -	\$ -	\$ -	\$ 42,268.20	\$ 85,396.18	\$ 87,616.98	\$ 86,658.88	\$ 80,966.17
CCA - Computers	\$ -	\$ 3,659.98	\$ 9,665.71	\$ 21,673.47	\$ 24,239.79	\$ 13,048.78	\$ 6,491.25	\$ 2,921.06
CCA - Applications Software	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CCA - Other Equipment	\$ -	\$ -	\$ -	\$ 150.10	\$ 270.18	\$ 216.14	\$ 172.92	\$ 138.33
Change in taxable income	\$ -	\$ 2,431.27	\$ 5,843.52	\$ 1,435.66	\$ 11,440.97	\$ 29,652.38	\$ 41,585.08	\$ 48,642.85
Tax Rate (from Sheet 3)	18.62%	18.62%	16.50%	16.50%	16.00%	15.50%	15.50%	15.50%
Income Taxes Payable	\$ -	\$ 452.70	\$ 964.18	\$ 236.88	\$ 1,830.56	\$ 4,596.12	\$ 6,445.69	\$ 7,539.64
ONTARIO CAPITAL TAX								
Smart Meters	\$ -	\$ -	\$ -	\$ 1,021,481.50	\$ 1,053,531.13	\$ 1,092,287.39	\$ 1,036,719.57	\$ 949,118.41
Computer Hardware	\$ -	\$ 12,358.36	\$ 25,174.93	\$ 43,585.71	\$ 35,946.86	\$ 28,308.00	\$ 20,669.14	\$ 13,030.29
Computer Software (Including Application Software)	\$ -	\$ -	\$ -	\$ 21,202.07	\$ 23,078.00	\$ 21,116.86	\$ 16,742.86	\$ 12,368.86
Tools & Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Equipment	\$ -	\$ -	\$ -	\$ 1,393.79	\$ 1,179.36	\$ 964.93	\$ 750.50	\$ 536.07
Rate Base	\$ -	\$ 12,358.36	\$ 25,174.93	\$ 1,087,663.07	\$ 1,113,735.35	\$ 1,142,677.18	\$ 1,074,882.07	\$ 975,053.62
Less: Exemption								
Deemed Taxable Capital	\$ -	\$ 12,358.36	\$ 25,174.93	\$ 1,087,663.07	\$ 1,113,735.35	\$ 1,142,677.18	\$ 1,074,882.07	\$ 975,053.62
Ontario Capital Tax Rate (from Sheet 3)	0.300%	0.225%	0.225%	0.225%	0.075%	0.000%	0.000%	0.000%
Net Amount (Taxable Capital x Rate)	\$ -	\$ 27.81	\$ 56.64	\$ 2,447.24	\$ 835.30	\$ -	\$ -	\$ -
Change in Income Taxes Payable	\$ -	\$ 452.70	\$ 964.18	\$ 236.88	\$ 1,830.56	\$ 4,596.12	\$ 6,445.69	\$ 7,539.64
Change in OCT	\$ -	\$ 27.81	\$ 56.64	\$ 2,447.24	\$ 835.30	\$ -	\$ -	\$ -
PILs	\$ -	\$ 424.90	\$ 907.54	\$ 2,210.36	\$ 2,665.86	\$ 4,596.12	\$ 6,445.69	\$ 7,539.64
Gross Up PILs								
Tax Rate	18.62%	18.62%	16.50%	16.50%	16.00%	15.50%	15.50%	15.50%
Change in Income Taxes Payable	\$ -	\$ 556.28	\$ 1,154.71	\$ 283.69	\$ 2,179.23	\$ 5,439.19	\$ 7,628.03	\$ 8,922.65
Change in OCT	\$ -	\$ 27.81	\$ 56.64	\$ 2,447.24	\$ 835.30	\$ -	\$ -	\$ -
PILs	\$ -	\$ 528.48	\$ 1,098.06	\$ 2,163.55	\$ 3,014.53	\$ 5,439.19	\$ 7,628.03	\$ 8,922.65



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 Rate	Interest	Closing Balance	Annual amounts	Board Approved Smart Meter Funding Adder (from Tariff)
2006 Q1			Jan-06	2006	Q1	\$ -		0.00%	\$ -	\$ -		
2006 Q2	4.14%	4.68%	Feb-06	2006	Q1	\$ -		0.00%	\$ -	\$ -		
2006 Q3	4.59%	5.05%	Mar-06	2006	Q1	\$ -		0.00%	\$ -	\$ -		
2006 Q4	4.59%	4.72%	Apr-06	2006	Q2	\$ -		4.14%	\$ -	\$ -		
2007 Q1	4.59%	4.72%	May-06	2006	Q2	\$ -		4.14%	\$ -	\$ -		
2007 Q2	4.59%	4.72%	Jun-06	2006	Q2	\$ -		4.14%	\$ -	\$ -		
2007 Q3	4.59%	5.18%	Jul-06	2006	Q3	\$ -	\$ 1,439.82	4.59%	\$ -	\$ 1,439.82		\$ 0.26
2007 Q4	5.14%	5.18%	Aug-06	2006	Q3	\$ 1,439.82	\$ 1,562.83	4.59%	\$ 5.51	\$ 3,008.16		\$ 0.26
2008 Q1	5.14%	5.18%	Sep-06	2006	Q3	\$ 3,002.65	\$ 1,580.18	4.59%	\$ 11.49	\$ 4,594.32		\$ 0.26
2008 Q2	4.08%	5.18%	Oct-06	2006	Q4	\$ 4,582.83	\$ 1,575.44	4.59%	\$ 17.53	\$ 6,175.80		\$ 0.26
2008 Q3	3.35%	5.43%	Nov-06	2006	Q4	\$ 6,158.27	\$ 1,599.75	4.59%	\$ 23.56	\$ 7,781.58		\$ 0.26
2008 Q4	3.35%	5.43%	Dec-06	2006	Q4	\$ 7,758.02	\$ 1,604.13	4.59%	\$ 29.67	\$ 9,391.82	\$ 9,449.91	\$ 0.26
2009 Q1	2.45%	6.61%	Jan-07	2007	Q1	\$ 9,362.15	\$ 1,604.22	4.59%	\$ 35.81	\$ 11,002.18		\$ 0.26
2009 Q2	1.00%	6.61%	Feb-07	2007	Q1	\$ 10,966.37	\$ 1,568.80	4.59%	\$ 41.95	\$ 12,577.12		\$ 0.26
2009 Q3	0.55%	5.67%	Mar-07	2007	Q1	\$ 12,535.17	\$ 1,593.89	4.59%	\$ 47.95	\$ 14,177.01		\$ 0.26
2009 Q4	0.55%	4.66%	Apr-07	2007	Q2	\$ 14,129.06	\$ 1,594.51	4.59%	\$ 54.04	\$ 15,777.61		\$ 0.26
2010 Q1	0.55%	4.34%	May-07	2007	Q2	\$ 15,723.57	\$ 1,606.19	4.59%	\$ 60.14	\$ 17,389.90		\$ 0.26
2010 Q2	0.55%	4.34%	Jun-07	2007	Q2	\$ 17,329.76	\$ 1,585.38	4.59%	\$ 66.29	\$ 18,981.43		\$ 0.26
2010 Q3	0.89%	4.66%	Jul-07	2007	Q3	\$ 18,915.14	\$ 1,594.99	4.59%	\$ 72.35	\$ 20,582.48		\$ 0.26
2010 Q4	1.20%	4.01%	Aug-07	2007	Q3	\$ 20,510.13	\$ 1,566.74	4.59%	\$ 78.45	\$ 22,155.32		\$ 0.26
2011 Q1	1.47%	4.29%	Sep-07	2007	Q3	\$ 22,076.87	\$ 1,548.32	4.59%	\$ 84.44	\$ 23,709.63		\$ 0.26
2011 Q2	1.47%	4.29%	Oct-07	2007	Q4	\$ 23,625.19	\$ 1,645.89	5.14%	\$ 101.19	\$ 25,372.27		\$ 0.26
2011 Q3	1.47%	4.29%	Nov-07	2007	Q4	\$ 25,271.08	\$ 1,515.23	5.14%	\$ 108.24	\$ 26,894.55		\$ 0.26
2011 Q4	1.47%	3.92%	Dec-07	2007	Q4	\$ 26,786.31	\$ 1,602.30	5.14%	\$ 114.73	\$ 28,503.34	\$ 19,892.04	\$ 0.26
2012 Q1	1.47%	3.92%	Jan-08	2008	Q1	\$ 28,388.61	\$ 1,878.22	5.14%	\$ 121.60	\$ 30,388.43		\$ 0.26
2012 Q2	1.47%	3.51%	Feb-08	2008	Q1	\$ 30,266.83	\$ 1,592.15	5.14%	\$ 129.64	\$ 31,988.62		\$ 0.26
2012 Q3	1.47%	3.51%	Mar-08	2008	Q1	\$ 31,858.98	\$ 1,567.14	5.14%	\$ 136.46	\$ 33,562.58		\$ 0.26
2012 Q4	1.47%		Apr-08	2008	Q2	\$ 33,426.12	\$ 1,557.90	4.08%	\$ 113.65	\$ 35,097.67		\$ 0.26
2013 Q1			May-08	2008	Q2	\$ 34,984.02	\$ 1,494.18	4.08%	\$ 118.95	\$ 36,597.15		\$ 0.26
2013 Q2			Jun-08	2008	Q2	\$ 36,478.20	\$ 1,486.24	4.08%	\$ 124.03	\$ 38,088.47		\$ 0.26
2013 Q3			Jul-08	2008	Q3	\$ 37,964.44	\$ 1,732.35	3.35%	\$ 105.98	\$ 39,802.77		\$ 0.26
2013 Q4			Aug-08	2008	Q3	\$ 39,696.79	\$ 1,605.29	3.35%	\$ 110.82	\$ 41,412.90		\$ 0.26
			Sep-08	2008	Q3	\$ 41,302.08	\$ 1,516.48	3.35%	\$ 115.30	\$ 42,933.86		\$ 0.26
			Oct-08	2008	Q4	\$ 42,818.56	\$ 1,577.67	3.35%	\$ 119.54	\$ 44,515.77		\$ 0.26
			Nov-08	2008	Q4	\$ 44,396.23	\$ 1,563.51	3.35%	\$ 123.94	\$ 46,083.68		\$ 0.26
			Dec-08	2008	Q4	\$ 45,959.74	\$ 1,580.50	3.35%	\$ 128.30	\$ 47,668.54	\$ 20,599.84	\$ 0.26
			Jan-09	2009	Q1	\$ 47,540.24	\$ 1,692.51	2.45%	\$ 97.06	\$ 49,329.81		\$ 0.26
			Feb-09	2009	Q1	\$ 49,232.75	\$ 1,580.27	2.45%	\$ 100.52	\$ 50,913.54		\$ 0.26
			Mar-09	2009	Q1	\$ 50,813.02	\$ 1,552.46	2.45%	\$ 103.74	\$ 52,469.22		\$ 0.26
			Apr-09	2009	Q2	\$ 52,365.48	\$ 1,553.18	1.00%	\$ 43.64	\$ 53,962.30		\$ 0.26
			May-09	2009	Q2	\$ 53,918.66	\$ 1,586.06	1.00%	\$ 44.93	\$ 55,549.65		\$ 0.26
			Jun-09	2009	Q2	\$ 55,504.72	\$ 5,871.61	1.00%	\$ 46.25	\$ 61,422.58		\$ 1.00
			Jul-09	2009	Q3	\$ 61,376.33	\$ 6,088.28	0.55%	\$ 28.13	\$ 67,492.74		\$ 1.00
			Aug-09	2009	Q3	\$ 67,464.61	\$ 6,127.79	0.55%	\$ 30.92	\$ 73,623.32		\$ 1.00
			Sep-09	2009	Q3	\$ 73,592.40	\$ 5,904.94	0.55%	\$ 33.73	\$ 79,531.07		\$ 1.00
			Oct-09	2009	Q4	\$ 79,497.34	\$ 6,400.74	0.55%	\$ 36.44	\$ 85,934.52		\$ 1.00
			Nov-09	2009	Q4	\$ 85,898.08	\$ 6,088.56	0.55%	\$ 39.37	\$ 92,026.01		\$ 1.00
			Dec-09	2009	Q4	\$ 91,986.64	\$ 6,045.70	0.55%	\$ 42.16	\$ 98,074.50	\$ 51,138.99	\$ 1.00
			Jan-10	2010	Q1	\$ 98,032.34	\$ 6,085.70	0.55%	\$ 44.93	\$ 104,162.97		\$ 1.00
			Feb-10	2010	Q1	\$ 104,118.04	\$ 5,951.79	0.55%	\$ 47.72	\$ 110,117.55		\$ 1.00
			Mar-10	2010	Q1	\$ 110,069.83	\$ 6,086.24	0.55%	\$ 50.45	\$ 116,206.52		\$ 1.00
			Apr-10	2010	Q2	\$ 116,156.07	\$ 6,050.87	0.55%	\$ 53.24	\$ 122,260.18		\$ 1.00
			May-10	2010	Q2	\$ 122,206.94	\$ 6,019.82	0.55%	\$ 56.01	\$ 128,282.77		\$ 1.00
			Jun-10	2010	Q2	\$ 128,226.76	\$ 5,985.10	0.55%	\$ 58.77	\$ 134,270.63		\$ 1.00
			Jul-10	2010	Q3	\$ 134,211.86	\$ 6,000.65	0.89%	\$ 99.54	\$ 140,312.05		\$ 1.00
			Aug-10	2010	Q3	\$ 140,212.51	\$ 5,945.61	0.89%	\$ 103.99	\$ 146,262.11		\$ 1.00
			Sep-10	2010	Q3	\$ 146,158.12	\$ 6,079.40	0.89%	\$ 108.40	\$ 152,345.92		\$ 1.00
			Oct-10	2010	Q4	\$ 152,237.52	\$ 5,985.23	1.20%	\$ 152.24	\$ 158,374.99		\$ 1.00
			Nov-10	2010	Q4	\$ 158,222.75	\$ 6,012.05	1.20%	\$ 158.22	\$ 164,393.02		\$ 1.00
			Dec-10	2010	Q4	\$ 164,234.80	\$ 6,045.61	1.20%	\$ 164.23	\$ 170,444.64	\$ 73,345.81	\$ 1.00
			Jan-11	2011	Q1	\$ 170,280.41	\$ 6,010.16	1.47%	\$ 208.59	\$ 176,499.16		\$ 1.00
			Feb-11	2011	Q1	\$ 176,290.57	\$ 5,984.61	1.47%	\$ 215.96	\$ 182,491.14		\$ 1.00
			Mar-11	2011	Q1	\$ 182,275.18	\$ 6,013.34	1.47%	\$ 223.29	\$ 188,511.81		\$ 1.00
			Apr-11	2011	Q2	\$ 188,288.52	\$ 6,018.25	1.47%	\$ 230.65	\$ 194,537.42		\$ 1.00
			May-11	2011	Q2	\$ 194,306.77	\$ 6,039.97	1.47%	\$ 238.03	\$ 200,584.77		\$ 1.00
			Jun-11	2011	Q2	\$ 200,346.74	\$ 15,024.97	1.47%	\$ 245.42	\$ 215,617.13		\$ 2.50
			Jul-11	2011	Q3	\$ 215,371.71	\$ 14,951.72	1.47%	\$ 263.83	\$ 230,587.26		\$ 2.50
			Aug-11	2011	Q3	\$ 230,323.43	\$ 14,985.90	1.47%	\$ 282.15	\$ 245,591.48		\$ 2.50
			Sep-11	2011	Q3	\$ 245,309.33	\$ 15,108.45	1.47%	\$ 300.50	\$ 260,718.28		\$ 2.50
			Oct-11	2011	Q4	\$ 260,417.78	\$ 14,951.58	1.47%	\$ 319.01	\$ 275,688.37		\$ 2.50
			Nov-11	2011	Q4	\$ 275,369.36	\$ 15,085.61	1.47%	\$ 337.33	\$ 290,792.30		\$ 2.50
			Dec-11	2011	Q4	\$ 290,454.97	\$ 15,085.17	1.47%	\$ 355.81	\$ 305,895.95	\$ 138,480.30	\$ 2.50



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 Rate	Interest	Closing Balance	Annual amounts	Board Approved Smart Meter Funding Adder (from Tariff)
			Jan-12	2012	Q1	\$ 305,540.14	\$ 15,066.58	1.47%	\$ 374.29	\$ 320,981.01		\$ 2.50
			Feb-12	2012	Q1	\$ 320,606.72	\$ 15,082.06	1.47%	\$ 392.74	\$ 336,081.52		\$ 2.50
			Mar-12	2012	Q1	\$ 335,688.78	\$ 15,066.75	1.47%	\$ 411.22	\$ 351,166.75		\$ 2.50
			Apr-12	2012	Q2	\$ 350,755.53	\$ 15,086.73	1.47%	\$ 429.68	\$ 366,271.94		\$ 2.50
			May-12	2012	Q2	\$ 365,842.26	\$ 15,083.96	1.47%	\$ 448.16	\$ 381,374.38		\$ 2.50
			Jun-12	2012	Q2	\$ 380,926.22	\$ 8.06	1.47%	\$ 466.63	\$ 381,400.91		\$ 2.50
			Jul-12	2012	Q3	\$ 380,934.28		1.47%	\$ 466.64	\$ 381,400.92		
			Aug-12	2012	Q3	\$ 380,934.28		1.47%	\$ 466.64	\$ 381,400.92		
			Sep-12	2012	Q3	\$ 380,934.28		1.47%	\$ 466.64	\$ 381,400.92		
			Oct-12	2012	Q4	\$ 380,934.28		1.47%	\$ 466.64	\$ 381,400.92		
			Nov-12	2012	Q4	\$ 380,934.28		1.47%	\$ 466.64	\$ 381,400.92		
			Dec-12	2012	Q4	\$ 380,934.28		1.47%	\$ 466.64	\$ 381,400.92	\$ 80,716.70	
			Jan-13	2013	Q1	\$ 380,934.28		0.00%	\$ -	\$ 380,934.28		
			Feb-13	2013	Q1	\$ 380,934.28		0.00%	\$ -	\$ 380,934.28		
			Mar-13	2013	Q1	\$ 380,934.28		0.00%	\$ -	\$ 380,934.28		
			Apr-13	2013	Q2	\$ 380,934.28		0.00%	\$ -	\$ 380,934.28		
			May-13	2013	Q2	\$ 380,934.28		0.00%	\$ -	\$ 380,934.28		
			Jun-13	2013	Q2	\$ 380,934.28		0.00%	\$ -	\$ 380,934.28		
			Jul-13	2013	Q3	\$ 380,934.28		0.00%	\$ -	\$ 380,934.28		
			Aug-13	2013	Q3	\$ 380,934.28		0.00%	\$ -	\$ 380,934.28		
			Sep-13	2013	Q3	\$ 380,934.28		0.00%	\$ -	\$ 380,934.28		
			Oct-13	2013	Q4	\$ 380,934.28		0.00%	\$ -	\$ 380,934.28		
			Nov-13	2013	Q4	\$ 380,934.28		0.00%	\$ -	\$ 380,934.28		
			Dec-13	2013	Q4	\$ 380,934.28		0.00%	\$ -	\$ 380,934.28	\$ -	
Total Funding Adder Revenues Collected							\$ 380,934.28		\$ 12,689.31	\$ 393,623.59	\$ 393,623.59	



Smart Meter Model for 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%	0.00%	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%	-	-

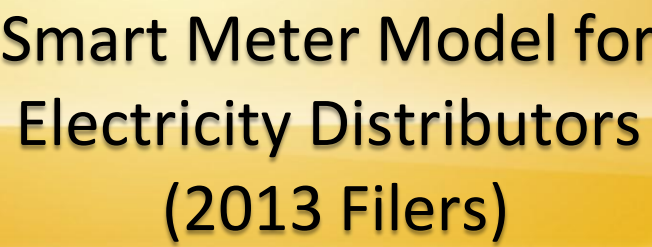
Jun-09	2009	Q2	-			-	1.00%	-	-
Jul-09	2009	Q3	-	\$ 1,527.27		1,527.27	0.55%	-	-
Aug-09	2009	Q3	1,527.27	\$ 4,173.00		5,700.27	0.55%	0.70	0.70
Sep-09	2009	Q3	5,700.27	\$ 1,350.61		7,050.88	0.55%	2.61	3.31
Oct-09	2009	Q4	7,050.88	\$ 7,165.05		14,215.93	0.55%	3.23	6.54
Nov-09	2009	Q4	14,215.93	\$ 43,614.83		57,830.76	0.55%	6.52	13.06
Dec-09	2009	Q4	57,830.76	\$ 37,086.56	\$ 37,202.00	132,119.32	0.55%	26.51	39.57
Jan-10	2010	Q1	132,119.32	\$ 7,162.68	\$ 6,200.00	145,482.00	0.55%	60.55	100.12
Feb-10	2010	Q1	145,482.00	\$ 1,094.28	\$ 6,200.00	152,776.28	0.55%	66.68	166.80
Mar-10	2010	Q1	152,776.28	\$ 1,148.83	\$ 6,200.00	160,125.11	0.55%	70.02	236.82
Apr-10	2010	Q2	160,125.11	\$ 24,408.71	\$ 6,200.00	190,733.82	0.55%	73.39	310.21
May-10	2010	Q2	190,733.82	\$ 8,964.85	\$ 6,200.00	205,898.67	0.55%	87.42	397.63
Jun-10	2010	Q2	205,898.67	\$ 1,094.66	\$ 6,200.00	213,193.33	0.55%	94.37	492.00
Jul-10	2010	Q3	213,193.33	\$ 8,743.18	\$ 6,200.00	228,136.51	0.89%	158.12	650.12
Aug-10	2010	Q3	228,136.51	\$ 8,962.56	\$ 6,200.00	243,299.07	0.89%	169.20	819.32
Sep-10	2010	Q3	243,299.07	\$ 9,588.89	\$ 6,200.00	259,087.96	0.89%	180.45	999.77
Oct-10	2010	Q4	259,087.96	\$ 9,590.49	\$ 6,200.00	274,878.45	1.20%	259.09	1,258.86
Nov-10	2010	Q4	274,878.45	\$ 9,710.83	\$ 6,200.00	290,789.28	1.20%	274.88	1,533.74
Dec-10	2010	Q4	290,789.28	\$ 32,087.40	\$ 31,015.00	353,891.68	1.20%	290.79	1,824.52
Jan-11	2011	Q1	353,891.68	\$ 19,617.67	\$ 6,985.00	380,494.35	1.47%	433.52	2,258.04
Feb-11	2011	Q1	380,494.35	\$ 10,026.47	\$ 6,985.00	397,505.82	1.47%	466.11	2,724.15
Mar-11	2011	Q1	397,505.82	\$ 10,183.00	\$ 6,985.00	414,673.82	1.47%	486.94	3,211.09
Apr-11	2011	Q2	414,673.82	\$ 15,630.31	\$ 6,985.00	437,289.13	1.47%	507.98	3,719.07
May-11	2011	Q2	437,289.13	\$ 10,089.80	\$ 6,985.00	454,363.93	1.47%	535.68	4,254.75
Jun-11	2011	Q2	454,363.93	\$ 9,464.95	\$ 6,985.00	470,813.88	1.47%	556.60	4,811.34
Jul-11	2011	Q3	470,813.88	\$ 9,051.84	\$ 6,985.00	486,850.72	1.47%	576.75	5,388.09
Aug-11	2011	Q3	486,850.72	\$ 8,151.74	\$ 6,985.00	501,987.46	1.47%	596.39	5,984.48
Sep-11	2011	Q3	501,987.46	\$ 8,155.59	\$ 6,985.00	517,128.05	1.47%	614.93	6,599.42
Oct-11	2011	Q4	517,128.05	\$ 15,029.01	\$ 6,985.00	539,142.06	1.47%	633.48	7,232.90
Nov-11	2011	Q4	539,142.06	\$ 10,624.11	\$ 6,985.00	556,751.17	1.47%	660.45	7,893.35
Dec-11	2011	Q4	556,751.17	\$ 39,396.34	\$ 11,731.00	607,878.51	1.47%	682.02	8,575.37
Jan-12	2012	Q1	607,878.51	\$ 10,190.75	\$ 8,232.93	626,302.19	1.47%	744.65	9,320.02
Feb-12	2012	Q1	626,302.19	\$ 10,190.75	\$ 8,232.93	644,725.86	1.47%	767.22	10,087.24
Mar-12	2012	Q1	644,725.86	\$ 10,190.75	\$ 8,232.93	663,149.54	1.47%	789.79	10,877.03
Apr-12	2012	Q2	663,149.54	\$ 10,190.75	\$ 8,232.93	681,573.21	1.47%	812.36	11,689.39
May-12	2012	Q2	681,573.21	\$ 10,190.75	\$ 8,232.93	699,996.89	1.47%	834.93	12,524.31
Jun-12	2012	Q2	699,996.89	\$ 10,190.75	\$ 8,232.93	718,420.57	1.47%	857.50	13,381.81
Jul-12	2012	Q3	718,420.57	\$ 10,190.75	\$ 8,232.93	736,844.24	1.47%	880.07	14,261.87
Aug-12	2012	Q3	736,844.24	\$ 10,190.75	\$ 8,232.93	755,267.92	1.47%	902.63	15,164.51
Sep-12	2012	Q3	755,267.92	\$ 10,190.75	\$ 8,232.93	773,691.59	1.47%	925.20	16,089.71
Oct-12	2012	Q4	773,691.59	\$ 10,190.75	\$ 8,232.93	792,115.27	1.47%	947.77	17,037.48
Nov-12	2012	Q4	792,115.27	\$ 10,190.75	\$ 8,232.93	810,538.94	1.47%	970.34	18,007.83
Dec-12	2012	Q4	810,538.94	\$ 10,190.75	\$ 8,232.93	828,962.62	1.47%	992.91	19,000.74
Jan-13	2013	Q1	828,962.62			828,962.62	0.00%	-	19,000.74
Feb-13	2013	Q1	828,962.62			828,962.62	0.00%	-	19,000.74
Mar-13	2013	Q1	828,962.62			828,962.62	0.00%	-	19,000.74
Apr-13	2013	Q2	828,962.62			828,962.62	0.00%	-	19,000.74
May-13	2013	Q2	828,962.62			828,962.62	0.00%	-	19,000.74
Jun-13	2013	Q2	828,962.62			828,962.62	0.00%	-	19,000.74
Jul-13	2013	Q3	828,962.62			828,962.62	0.00%	-	19,000.74
Aug-13	2013	Q3	828,962.62			828,962.62	0.00%	-	19,000.74
Sep-13	2013	Q3	828,962.62			828,962.62	0.00%	-	19,000.74
Oct-13	2013	Q4	828,962.62			828,962.62	0.00%	-	19,000.74
Nov-13	2013	Q4	828,962.62			828,962.62	0.00%	-	19,000.74
Dec-13	2013	Q4	828,962.62			828,962.62	0.00%	-	19,000.74
			\$ 505,184.51	\$ 323,778.11	\$ 828,962.62				



Smart Meter Model for Electricity Distributors (2013 Filers)

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

Year	OM&A (from Sheet 5)	Amortization Expense (from Sheet 5)	Cumulative OM&A and Amortization Expense	Average Cumulative OM&A and Amortization Expense	Average Annual Prescribed Interest Rate for Deferral and Variance Accounts (from Sheets 8A and 8B)	Simple Interest on OM&A and Amortization Expenses
2006	\$ -	\$ -	\$ -	\$ -	4.37%	\$ -
2007	\$ -	\$ 950.64	\$ 950.64	\$ 475.32	4.73%	\$ 22.47
2008	\$ -	\$ 3,033.43	\$ 3,984.07	\$ 2,467.36	3.98%	\$ 98.20
2009	\$ 94,917.00	\$ 42,863.86	\$ 141,764.93	\$ 72,874.50	1.14%	\$ 828.95
2010	\$ 122,555.00	\$ 85,491.72	\$ 349,811.65	\$ 245,788.29	0.80%	\$ 1,960.16
2011	\$ 165,422.00	\$ 93,591.54	\$ 608,825.19	\$ 479,318.42	1.47%	\$ 7,045.98
2012	\$ 122,289.00	\$ 98,795.11	\$ 829,909.30	\$ 719,367.25	1.47%	\$ 10,574.70
2013	\$ -	\$ 99,828.44	\$ 929,737.75	\$ 879,823.53	0.00%	\$ -
Cumulative Interest to 2011						\$ 9,955.76
Cumulative Interest to 2012						\$ 20,530.46
Cumulative Interest to 2013						\$ 20,530.46



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

Check if applicable

<input type="checkbox"/>	Smart Meter Funding Adder (SMFA)
<input checked="" type="checkbox"/>	Smart Meter Disposition Rider (SMDR)
<input checked="" type="checkbox"/>	Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)

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

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

		2006	2007	2008	2009	2010	2011	2012	2013	Total
Deferred and forecasted Smart Meter Incremental Revenue Requirement (from Sheet 5)	\$	-	\$ 846.37	\$ 3,197.25	\$ 175,197.34	\$ 279,097.00	\$ 334,551.71	\$ 297,236.71	\$ 171,065.04	\$ 1,090,126.38
Interest on Deferred and forecasted OM&A and Amortization Expense (Sheet 8A/8B) (Check one of the boxes below)	\$	-	\$ -	\$ -	\$ 39.57	\$ 1,784.96	\$ 6,750.84	\$ 10,425.37		\$ 19,000.74
<input checked="" type="checkbox"/> Sheet 8A (Interest calculated on monthly balances)	\$	-	\$ -	\$ -	\$ 39.57	\$ 1,784.96	\$ 6,750.84	\$ 10,425.37	\$ -	\$ 19,000.74
<input type="checkbox"/> Sheet 8B (Interest calculated on average annual balances)										
SMFA Revenues (from Sheet 8)	\$	9,362.15	\$ 19,026.46	\$ 19,151.63	\$ 50,492.10	\$ 72,248.07	\$ 135,259.73	\$ 75,394.14	\$ -	\$ 380,934.28
SMFA Interest (from Sheet 8)	\$	87.76	\$ 865.58	\$ 1,448.21	\$ 646.89	\$ 1,097.74	\$ 3,220.57	\$ 5,322.56	\$ -	\$ 12,689.31
Net Deferred Revenue Requirement	-\$	9,449.91	-\$ 19,045.67	-\$ 17,402.59	\$ 124,097.92	\$ 207,536.14	\$ 202,822.26	\$ 226,945.38	\$ 171,065.04	\$ 715,503.52
Number of Metered Customers (average for 2013 test year) - Number of metered customers for which smart meter were deployed as part of program). Residential and GS < 50 kW customer classes and any other metered classes involved (e.g. GS 50 to 4999 kW for which interval meters were upgraded to utilize AMI and ODS assets)									6020	

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

Years for collection or refunding	1.333333333	
Deferred Incremental Revenue Requirement from 2006 to December 31, 2012 plus Interest on OM&A and Amortization	\$ 1,109,127.11	
SMFA Revenues collected from 2006 to 2013 test year (inclusive) Plus Simple Interest on SMFA Revenues	\$ 393,623.59	
Net Deferred Revenue Requirement	\$ 715,503.52	} Match
SMDR Jan 1, 2013 to April 30, 2014	\$ 7.43	
Check: Forecasted SMDR Revenues	\$ 715,657.60	

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

Incremental Revenue Requirement for 2013	\$ 171,065.04	} Match
SMIRR	\$ 2.37	
Check: Forecasted SMIRR Revenues	\$ 171,208.80	



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-specific SMDRs

Revenue Requirement for Historical Years	2006	2007	2008	2009	2010	2011	2012	Total 2006 to 2012	Explanation / Allocator Check Row if SMDR/SMIRR apply to class	Residential	GS < 50 kW
										X	X
										%	%
Return on Capital	\$ -	\$ 424.20	\$ 1,261.89	\$ 35,252.94	\$ 68,035.74	\$ 70,098.98	\$ 68,524.57	\$ 243,598.31	Weighted Meter Cost - Capital Allocated per class	79.64%	20.36%
										\$ 194,009.08	\$ 49,589.22
Depreciation/Amortization expense and related interest	\$ -	\$ 950.64	\$ 3,033.43	\$ 42,863.86	\$ 85,491.72	\$ 93,591.54	\$ 98,795.11		Weighted Meter Cost - Capital Allocated per class	80%	20%
	\$ -	\$ -	\$ -	\$ 12.31	\$ 733.49	\$ 2,439.34	\$ 4,658.75	\$ 332,570.19		\$ 264,868.99	\$ 67,701.20
Operating Expenses and related interest	\$ -	\$ -	\$ -	\$ 94,917.00	\$ 122,555.00	\$ 165,422.00	\$ 122,289.00		Number of Smart Meters installed by Class	#	#
	\$ -	\$ -	\$ -	\$ 27.26	\$ 1,051.47	\$ 4,311.50	\$ 5,766.62	\$ 516,339.85	Allocated per class	5,239	750
	\$ -	\$ -	\$ -	\$ 94,944.26	\$ 123,606.47	\$ 169,733.50	\$ 128,055.62	\$ 1,092,508.34		\$ 451,678.83	\$ 64,661.03
Revenue Requirement before Taxes/PILs								\$ 1,092,508.34	Revenue Requirement before PILs	83.35%	16.65%
Grossed-up Taxes/PILs	\$ -	-\$ 528.48	-\$ 1,098.06	\$ 2,163.55	\$ 3,014.53	\$ 5,439.19	\$ 7,628.03	\$ 16,618.77		\$ 13,851.00	\$ 2,767.77
Total Revenue Requirement plus interest on OM&A and depreciation expense								\$ 1,109,127.11	Percentage of costs allocated to each class	\$ 924,407.90	\$ 184,719.22
								\$ -	Percentage of costs for classes with SMDR/SMIRR	83.35%	16.65%
										83.35%	16.65%
										83.35%	16.65%
									SMFA Revenues directly attributable to class	%	%
										86.97%	13.03%
									Residual SMFA Revenues (from other metered classes) attributed evenly	86.97%	13.03%
									Total	0.00%	0.00%
										86.97%	13.03%
SMFA Revenues plus interest expense								\$ 393,623.59		\$ 342,344.99	\$ 51,278.60
Net Deferred Revenue Requirement to be recovered via SMDR								\$ 715,503.52		\$ 582,062.91	\$ 133,440.61
Average number of metered customers by class (2013)								Average number of customers (2013)		5255	767
Number of Years for SMDR recovery								1.333333333 years		1.333333333	1.333333333
Smart Meter Disposition Rider (\$/month per metered customer in the customer class)										\$ 6.92	\$ 10.87
Estimated SMDR Revenues								\$ 715,230.24		\$ 581,833.60	\$ 133,396.64



Smart Meter Model for 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

	2013	Explanation / Allocator	Residential	GS < 50 kW
		Check Row if SMDR/SMIRR apply to class	X	X
			%	%
Return on Capital	\$ 62,313.95	Weighted Meter Cost - Capital Allocated per class	79.64% \$ 49,628.72	20.36% \$ 12,685.23
Depreciation/Amortization expense	\$ 99,828.44	Weighted Meter Cost - Capital Allocated per class	79.64% \$ 79,506.40	20.36% \$ 20,322.04
Operating Expenses	\$ -	Number of Smart Meters installed by Class	# 5,239	# 750
	\$ -	Allocated per class	\$ -	\$ -
Revenue Requirement before Taxes/PILs	\$ 162,142.39		\$ 129,135.12	\$ 33,007.27
		Revenue Requirement before PILs	79.64%	20.36%
Grossed-up Taxes/PILs	\$ 8,922.65		\$ 7,106.27	\$ 1,816.38
Total Revenue Requirement for 2013	\$ 171,065.04		\$ 136,241.39	\$ 34,823.65
	\$ -	Percentage of costs allocated to each class	79.64%	20.36%
		Percentage of costs for classes with SMDR/SMIRR	79.64%	20.36%
Average number of metered customers by class (2013)			5,255	767
The SMIRR is recovered as an annualized rate until the effective date of the distributor's next rebased rates resulting from a cost of service application	1 year		1	1
Smart Meter Incremental Revenue Requirement Rate Rider (\$/month per metered customer in the customer class)			\$ 2.16	\$ 3.78
Estimated SMIRR Revenues	\$ 171,000.72		\$ 136,209.60	\$ 34,791.12