ORILLIAPOWER

Energizing Our Community

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July 16, 2012

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

Dear Ms. Walli:

RE: Orillia Power Distribution Corporation – Board File No. EB-2012-0261
2012 Smart Meter Cost Recovery Application
Responses to Board Staff and VECC Interrogatories

Orillia Power Distribution Corporation is submitting responses to Board Staff interrogatories filed June 27, 2012 and VECC interrogatories filed July 3, 2012 in the above matter.

An electronic copy of responses will be filed using the OEB e-filing services and includes:

- PDF document that includes responses to both Board Staff and VECC interrogatories
- OEB Smart Meter Model revised as requested in Board Staff IR #5(a) and updated for actual SMFA amounts collected for May and June 2012
- Excel spreadsheets requested in Board Staff IR# 6(a), 6(b) and 8(b)

Two hard copies of the PDF response will be sent by courier.

Respectfully submitted,

Pauline Welsh

Pauline Welsh
Regulatory Officer
Orillia Power Distribution Corporation

cc. Pat Hurley, Treasurer
Keith McAllister, President & CEO

ORILLIA POWER DISTRIBUTION CORPORATION
2012 Smart Meter Cost Recovery Application
EB-2012-0261
Responses to Board Staff Interrogatories

1. Letters of Comment

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

Response:

Orillia has not received any letters of comment with respect to this application.

2. Tax Rates

A portion of sheet "3. Cost_of_Service_Parameters" from the Smart Meter Model is reproduced below.

	2006	2007	2008	2009	2010	2011	2012 and
Taxes/PILs							
Aggregate Corporate Income Tax Rate	36.12%	36.12%	33.50%	33.00%	31.00%	28.25%	26.25%
Capital Tax (until July 1st, 2010)	0.30%	0.225%	0.225%	0.225%	0.075%	0.00%	0.00%

Board staff notes that for the years 2010, 2011 and 2012, Orillia has used maximum tax rates (Aggregate Corporate Income Tax Rate) of 31%, 28.25% and 26.25% respectively. Board staff also notes that the Settlement Proposal related to Orillia's 2010 cost-of-service rate application (EB-2009-0273) reflects an effective tax rate of 28.8% for 2010.

Please confirm that the tax rates shown on sheet 3 correspond to the taxes or PILs actually paid by Orillia in each of the historical years, and that Orillia forecasts it will pay for 2012. In the alternative, please explain the tax rates input and their derivation.

Response:

Orillia used maximum tax rates for the years 2010, 2011 and 2012 as this was its understanding in completing the smart meter model. Table 1 provides effective tax rates based on audited actual financial statements for 2009 through 2011 and budgeted for 2012. Orillia has not revised the tax rates in the model at this time. It should be noted that the average for 2010 to 2012 of the effective rates under both methods is the same at 28.5%. Further clarification would be appreciated.

Table 1: Effective Tax Rate Calculations - Actual

		2009	2010	2011	2012
Provision for payments in lieu of taxes per financial statements (FS)		**Audited FS**	**Audited FS**	**Audited FS**	**Budgeted FS**
Current	**A**	$ 300,000	$ 454,000	$ 227,000	$ 366,000
Future		-$ 6,000	$ 170,000	$ 65,000	$ -
Total payments in lieu of taxes per financial statements		$ 294,000	$ 624,000	$ 292,000	$ 366,000
Earnings before payment in lieu of taxes	**B**	$ 839,000	$ 1,188,000	$ 1,079,000	$ 1,396,000
Effective tax rates based on audited actual FS or budgeted FS	**A / B**	**35.76%**	**38.22%**	**21.04%**	**26.22%**
Effective tax rates per smart meter model inputs		33.00%	31.00%	28.25%	26.25%

3. Stranded Meter Costs

On page 13 of its Application, Orillia states that it will seek disposition of stranded meter costs through a rate rider in its next cost of service application in 2014. Orillia states that the NBV of stranded meters as of December 31, 2011 is $458,308 and that it will amortize the cost of the stranded meters over the period remaining until its next cost of service application. Please provide Orillia's estimate of the NBV of the stranded meters as of December 31, 2013.

Response:

Orillia will amortize the cost of the stranded meters over the period remaining until its cost of service application in 2014. The estimated NBV of the stranded meters is $342,301 as of December 31, 2013.

4. Annual Security Audit

On pages 10-11 of its Application, Orillia documents the requirement for and the conducting of an annual security audit. On page 11, Orillia concludes:

> The selected audit firm first completed an in-depth security review at one participating LDC in the consortium that has the Sensus solution. Once completed the audit firm then reviewed an infrastructure questionnaire completed by all the participating LDC's to confirm that their Sensus AMI systems are configured in the same manner as the lead LDC. The security audits included end to end AMI infrastructure from the meter to utility systems and home area network. The final security audit report was issued in February, 2012.

a) What were Orillia's costs for participation in this completed audit? Were these costs incurred in 2011 or 2012?

Response:

Orillia's costs for participating in the completed audit were $13,441.90. Of this total amount spent, $10,119.81 was spent in 2011 and the remainder $3,322.09 was spent in 2012.

b) What, if any costs for 2012, has Orillia included in its forecasted 2012 capital and OM&A costs to deal with the findings of the 2012 security audit report?

Response:

No costs have been included in Orillia's forecasted 2012 capital and OM&A costs to deal with the findings of the 2012 security audit based on the expectation that the

outcome and/or corrective actions will be the responsibility of Orillia's Smart Meter AMI provider (Sensus).

5. Interest on OM&A and Depreciation Expense

In filling out sheet "8A. Opex_Interest_monthly" of the Smart Meter Model to calculate the interest on the opening monthly principal balance of OM&A and depreciation expenses, Board staff observes that Orillia has not shown any monthly entries for depreciation expense. This data should be available from sub-account entries of Account 1556 – Smart Meter Operating Expenses. Omission of the depreciation expense results in a lower principal balance for OM&A and depreciation expense and, as a result, will understate the interest at the prescribed interest rate for deferral and variance accounts as issued quarterly by the Board.

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

Response:

Orillia has revised the smart meter model to include monthly depreciation expense.

b) If this is not possible, please explain.

Response: N/A

6. Cost Allocation (Ref: Application p.15)

a) Please provide further explanation of Orillia's method for the derivation of the class-specific SMDRs, including the approach for allocating the costs in the deferred revenue requirement and the SMFA revenues and interest. If available, please provide the spreadsheet that shows the calculations.

Response:

Orillia used class-specific costs to derive SMDRs for residential and general service less than 50 kW wherever possible. Olameter completed the deployment of 10,393 1-phase smart meters by December 31, 2009 with an additional 1,214 1-phase smart meters completed by June 30, 2010. The related costs are readily identifiable to the 11,607 smart meters installed during this period. Deployment of 3-phase smart meters began with delivery of the modules for the meters in late 2010 followed by the smart meters in 2011. Rodan Energy was contracted to install the remaining smart meters and completed the deployment in 2011. The related costs are readily identifiable to the 826 3-phase smart meters installed with the exception of the installation of 431 multi-unit residential network meters delayed until 2011. Since the cost of these network meters is included in the smart meter purchases from KTI in 2009/10, it is only necessary to assign the cost of installing the network meters. Orillia estimated this cost using Rodan's hourly rate for one staff for one half hour. Table 2 below shows the allocation of capital costs by year and meter type.

Table 2: Allocation of Capital Costs to Customer Class

	CAPITAL EXPENDITURES				Residential	GS<50kW 1-phase	GS<50kW 3-phase	Total GS<50kW
Year	**2009**	**2010**	**2011**	**Total**				
Total Number of Smart Meters	10,393	1,214	1,257	12,864	11,542	496	826	1,322
1-Phase Smart Meters	10,393	1,214		11,607	11,111	496		496
Network Smart Meters			431	431	431			
Smart Meters	$ 937,738	$ 165,785		$ 1,103,523	$ 1,056,367	$ 47,157		$ 47,157
Installation 1-phase	$ 126,201	$ 17,140		$ 143,341	$ 137,215	$ 6,125		$ 6,125
Installation network meters (estimate)					$ 15,538			
3-Phase Meters			826	826			826	826
Smart Meters		$ 134,869	$ 274,757	$ 409,626			$ 409,626	$ 409,626
Installation			$ 245,322	$ 245,322			$ 245,322	$ 245,322
Less: Installation network meters							-$ 15,538	-$ 15,538
	$ 1,063,939	**$ 317,795**	**$ 520,080**	**$ 1,901,813**	**$ 1,209,120**	**$ 53,282**	**$ 639,411**	**$ 692,693**
Costs per Meter								
Meter Cost				$ 1,513,150	$ 91.52	$ 95.07	$ 495.92	$ 345.52
Installation Cost				$ 388,663	$ 13.23	$ 12.35	$ 278.19	$ 178.45
Total cost per meter				**$ 1,901,813**	**$ 104.76**	**$ 107.42**	**$ 774.11**	**$ 523.97**
Estimated Installation Cost per Meter								
Network meters (one staff, 1/2 hour)					$ 36.05			

Table 3 provides a summary of costs allocated by customer class, and by meter type for general service less than 50 kW due to the higher cost of 3-phase meters.

Table 3: Summary of Costs Allocated by Customer Class

Class	Type	Quantity	Meter Cost	Install Cost	Total Cost	Average Cost
Residential	1 Phase	11,542	$ 1,056,367	$ 152,753	$ 1,209,120	$ 104.76
GS<50kW	1 Phase	496	$ 47,157	$ 6,125	$ 53,282	$ 107.42
GS<50kW	3 Phase	826	$ 409,626	$ 229,785	$ 639,411	$ 774.11
		12,864	**$ 1,513,150**	**$ 388,663**	**$ 1,901,813**	**$ 147.84**

Table 4 provides updated SMFA amounts collected through billing from May 1, 2006 to April 30, 2012. Orillia has allocated SMFA revenues and interest in the deferred revenue requirement following the guidelines in the OEB Guideline G-2011-0001 Smart Meter Funding and Cost Recovery – Final Disposition:

> "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."

Table 4 - Smart Meter Funding Adder Collected by Customer Class

Summary of SMFA Collected	Total Amount	Residential	GS<50 kW	GS>50 kW
SMFA Collected by customer class	-$ 595,171	-$ 525,116	-$ 62,702	-$ 7,353
Allocation of GS>50 kW	$ -	-$ 3,676	-$ 3,676	$ 7,353
SMFA Collected - Residential and GS<50 kW	-$ 595,171	-$ 528,792	-$ 66,378	$ -
Interest on SMFA Collected	-$ 22,011	-$ 19,556	-$ 2,455	
Total Smart Meter Funding Adder Collected	**-$ 617,182**	**-$ 548,349**	**-$ 68,833**	**$ -**

Using data from table 2, allocation factors for the deferred revenue requirement are determined in table 5 below.

Table 5 - Smart Meter Initiative (SMI) Capital Cost - Allocation Factor by Customer Class

Customer Class		Residential	GS Less Than 50 kW	Total
Number of meters		11,542	1,322	12,864
Smart Meter Costs				
Smart Meters		$ 1,056,367	$ 456,783	$ 1,513,150
Installation		$ 152,753	$ 235,910	$ 388,663
Total Smart Meter Costs	**A**	$ 1,209,120	$ 692,693	$ 1,901,813
Costs per meter				
Smart Meters		$ 91.52	$ 345.52	$ 117.63
Installation		$ 13.23	$ 178.45	$ 30.21
Total Smart Meter Costs per Meter		**$ 104.76**	**$ 523.97**	**$ 147.84**
Other SMI Capital Costs				
Allocation Factor Based on Number of Meters		89.72%	10.28%	100.00%
Other SMI Capital Costs	**B**	$ 406,466	$ 46,556	$ 453,022
Total SMI Capital Costs	**A + B**	**$ 1,615,586**	**$ 739,249**	**$ 2,354,835**
Allocation Factor Based on Total SMI Capital Costs		**68.61%**	**31.39%**	**100.00%**

Orillia has recalculated the revenue requirement associated with smart meter investment costs in Tables 6 and 7.

Table 6 – Rate Base Calculation by Year

Rate Base	2007	2008	2009	2010	2011
Average Net Fixed Assets	$ 7,965	$ 23,325	$ 676,415	$ 1,461,432	$ 1,823,315
Working Capital Allowance	$ -	$ -	$ 5,035	$ 16,852	$ 27,307
Total Rate Base	$ 7,965	$ 23,325	$ 681,450	$ 1,478,284	$ 1,850,622

Table 7 – Revenue Requirement Calculation for SMDR by Year and in Total

Revenue Requirement	2007	2008	2009	2010	2011	Total
Short Term Interest	$ -	$ -	$ -	$ 786	$ 985	$ 1,771
Long Term Interest	$ 289	$ 901	$ 28,013	$ 51,740	$ 64,772	$ 145,714
Return on Equity	$ 358	$ 980	$ 26,556	$ 58,244	$ 72,915	$ 159,054
Total Return on Rate Base	$ 647	$ 1,882	$ 54,569	$ 110,771	$ 138,671	$ 306,539
OM&A	$ -	$ -	$ 33,566	$ 112,344	$ 182,049	$ 327,959
Amortization	$ 549	$ 1,646	$ 49,515	$ 110,744	$ 146,504	$ 308,958
Grossed-up PILs	$ 177	$ 424	$ 8,292	$ 15,918	$ 21,292	$ 46,103
Revenue Requirement	$ 1,373	$ 3,952	$ 145,942	$ 349,777	$ 488,516	**$ 989,559**
Interest on Deferred OM&A and Amortization	$ 12	$ 49	$ 272	$ 1,641	$ 6,617	$ 8,591
Total Revenue Requirement	$ 1,385	$ 4,001	$ 146,214	$ 351,418	$ 495,133	**$ 998,150**

Table 8 summarizes the revised Smart Meter True-up balance of $380,968 representing the difference between the revenue requirement shown above and the amount of smart meter funding adder collected from May 1, 2006 to April 30, 2012 (Table 4).

Table 8 - Net Deferred Revenue Requirement (SMDR)

Total Revenue Requirement	$	998,150
Smart Meter Funding Adder Collected to April 30, 2012	-$	595,171
Carrying Cost on Smart Meter Funding Adder	-$	22,011
Smart Meter True-up Balance for Disposition Rider	**$**	**380,968**

Orillia has allocated the true-up balance of $380,968 to the residential and general service less than 50 kW customer classes in Table 9.

Table 9 - Revenue Requirement and Smart Meter Funding Adder by Customer Class

Revenue Requirement	Total Amount	Allocation Factor - Residential	Residential	Allocation Factor - GS Less Than 50 kW	GS Less Than 50 kW
Return on Smart Meter Rate Base	$ 306,539	68.61%	$ 210,308	31.39%	$ 96,231
OM&A Expenses	$ 327,959	89.72%	$ 294,256	10.28%	$ 33,703
Amortization Expense	$ 308,958	68.61%	$ 211,967	31.39%	$ 96,991
Revenue Requirement before PILs	$ 943,456		$ 716,531		$ 226,925
Grossed-up PILs	$ 46,103	75.95%	$ 35,014	24.05%	$ 11,089
Interest Expense	$ 8,591	75.95%	$ 6,525	24.05%	$ 2,066
Total Revenue Requirement	$ 998,150		$ 758,069		$ 240,081
Total Smart Meter Funding Adder Collected	-$ 617,182		-$ 548,349		-$ 68,833
Total Smart Meter True-up Balance	**$ 380,968**		**$ 209,721**		**$ 171,248**

Orillia allocated the true-up revenue requirement using the following methodology:

- Return (deemed interest plus return on equity) and Amortization are allocated to Residential and General Service Less Than 50kW classes based on the capital costs of the meters installed for each class, 68.6% and 31.4% respectively;
- OM&A is allocated to Residential and General Service Less Than 50kW classes based on the number of meters installed for each class, 89.7% and 10.3% respectively;
- PILs are allocated based on the revenue requirement allocated to each class before PILs; and
- Smart Meter Funding Adder collected, including carrying costs, has been allocated to each class based on actual amounts collected from each class as calculated in Table 4 above.

The revised Smart Meter Disposition Rider (SMDR) is calculated in Table 10.

Table 10 - Calculation of Smart Meter Disposition (SMDR) Over 2 Years

	Residential	GS Less Than 50 kW	Total
Total Smart Meter True-up for Disposition	$ 209,721	$ 171,248	$ 380,968
Number of Customers	11,542	1,322	12,864
Total Smart Meter Disposition Rider (SMDR)	**$ 0.76**	**$ 5.40**	**$ 1.23**

The excel file that accompanies Orillia's responses to Board Staff interrogatories includes Tables 2 through 10.

b) A common approach for cost allocation is to do the following:
   - OM&A expenses have been allocated on the basis of the number of meters installed for each class.
   - The Return and Amortization have been allocated on the basis of the capital costs of the meters installed for each class.
   - PILs have been allocated based on the revenue requirement derived for each class before PILs.
   - SMFA revenues and interest on the principal first calculated directly for the Residential and GS < 50 kW classes. The residual SMFA revenues and interest collected from other metered customer classes (i.e., GS 50-4999 kW and Large Use) is then allocated 50:50 to the Residential and GS < 50 kW classes. This approach has been used and approved in some recent cost of service applications, including that for Guelph Hydro's 2012 rates application [EB-2011-0123].

Using the attached spreadsheet taken from Guelph Hydro's draft Rate Order filing, please provide calculations for class-specific SMDRs using the methodology described above. This should also reflect any and all revisions to Smart Meter Model, Version 2.17 made as a result of Orillia's responses to interrogatories.

Response:

Table 9 calculates class-specific Smart Meter Revenue Requirement using the methodology described in Board Staff IR# 6(b) above. Orillia has completed Guelph Hydro's spreadsheet in excel as requested by Board staff. The SMDRs calculated in this spreadsheet agree with the SMDRs calculated in Table 10. The excel file that accompanies Orillia's responses to Board Staff interrogatories includes this spreadsheet.

7. Class-specific SMIRRs (Ref: Application p.17 and 18)

If Orillia has made revisions to its Smart Meter Model, Version 2.17 as a result of its

responses to interrogatories, please update its proposed class-specific SMIRRs.

Response:

The revisions made to its Smart Meter Model, Version 2.17 relate to carrying charges and SMFA collected. The 2012 Smart Meter Incremental Revenue Requirement (SMIRR) remains unchanged at $478,221. The calculation is reproduced below in Tables 11 and 12.

Table 11 - Rate Base Calculation 2012

Rate Base	**2012**
Average Net Fixed Assets	$ 1,961,699
Operating Expenses	$ 135,318
Working Capital Allowance	$ 20,298
Total Rate Base	**$ 1,981,996**

Table 12 - Smart Meter Incremental Revenue Requirement (SMIRR)

Revenue Requirement	**2012**
Short Term Interest	$ 1,054
Long Term Interest	$ 69,370
Return on Equity	$ 78,091
Total Return on Rate Base	$ 148,515
OM&A	$ 135,318
Amortization	$ 168,355
Grossed-up PILs	$ 26,033
Total Revenue Requirement	**$ 478,221**

Orillia has allocated the incremental revenue requirement balance of $478,221 to the residential and general service less than 50 kW customer classes in Table 13.

Table 13 - Smart Meter Incremental Revenue Requirement by Customer Class

Revenue Requirement	Total Amount	Allocation Factor - Residential	Residential	Allocation Factor - GS Less Than 50 kW	GS Less Than 50 kW
Return on Smart Meter Rate Base	$ 148,515	68.61%	$ 101,892	31.39%	$ 46,623
OM&A Expenses	$ 135,318	89.72%	$ 121,412	10.28%	$ 13,906
Amortization Expense	$ 168,355	68.61%	$ 115,504	31.39%	$ 52,851
Revenue Requirement before PILs	$ 452,188		$ 338,807		$ 113,381
Grossed-up PILs	$ 26,033	74.93%	$ 19,506	25.07%	$ 6,527
Total Smart Meter True-up Balance	**$ 478,221**		**$ 358,313**		**$ 119,908**

Orillia allocated the incremental revenue requirement using the following methodology:

- Return (deemed interest plus return on equity) and Amortization are allocated to Residential and General Service Less Than 50kW classes based on the capital costs of the meters installed for each class, 68.6% and 31.4% respectively;
- OM&A is allocated to Residential and General Service Less Than 50kW classes based on the number of meters installed for each class, 89.7% and 10.3% respectively;
- PILs are allocated based on the revenue requirement allocated to each class before PILs

The SMIRR to be collected over a 19 month period (October 1, 2012 to April 30, 2014) is shown in Table 14.

Table 14 - Calculation of Smart Meter Incremental Rate Rider (SMIRR)

	Residential	GS Less Than 50 kW	Total Smart Meter Customers
Total Incremental Revenue Requirement	$ 358,313	$ 119,908	$ 478,221
Number of Customers	11,542	1,322	12,864
Smart Meter Incremental Rate Rider (SMIRR)	**$ 2.59**	**$ 7.56**	**$ 3.10**

The excel file that accompanies Orillia's responses to Board Staff interrogatories includes Tables 11 through 14.

8. Foregone Revenues

In its Application, Orillia is seeking an effective date of October 1, 2012 for the SMDR and the SMIRR. In its application, Orillia proposed an effective date of October 1, 2012 for the SMDR, with a recovery period of 24 months. With respect to the SMIRR, Orillia states that it is requesting class-specific SMIRRs as follows:

> A forecasted cost recovery rate rider of $2.59 per Residential customer per month and $7.56 per General Service Less Than 50kW customer per month for the period **October 1, 2012 to April 30, 2014**. This rate rider represents the incremental revenue requirement related to smart meter costs to be incurred from January 1, 2012 to December 31, 2012. *[Emphasis added]*

Board staff observes that, if the SMDR and SMIRR are both effective October 1, 2012, the SMIRR will only be in effect for 19 months (from October 1, 2012 to April 30, 2014). The SMIRR is a rate adjustment to recover the ongoing (prospective) capital-related and operating expenses for installed smart meters. In effect, Orillia would not be recovering these costs for the period from May 1 to September 30, 2012.

In Orangeville Hydro Limited's recent smart meter application (EB-2012-0039), the Board, in its decision, stated:

> In developing its draft Rate Order, Orangeville is directed to establish the SMDRs based on an 11-month recovery period to April 30, 2013 and to accommodate within the SMDR the applicable revenue requirement amounts related to the month of May.

In another recently filed application for smart meter cost recovery, Waterloo North Hydro Inc. has proposed an effective date of November 1, 2012, and has adjusted the SMDR similarly to account for six months of foregone SMIRR revenues from May 1, 2012 to October 31, 2012.

Board staff observes that this approach can be applied at a customer class level to calculate revised class-specific SMDRs.

a) Please provide Orillia's views on the appropriateness of "bumping up" the

deferred revenue requirement to be recovered through the SMDR to recover the foregone SMIRR revenues for the period May 1 to September 30, 2012.

Response:

In the OEB Guideline G-2011-0001, the Board stated its expectation that distributors would file for a final review for prudence and disposition of smart meter costs at the earliest possible opportunity following the availability of audited costs. Section 3.5 states that "The Board expects the majority (i.e. 90% or more) of the total program costs for which the distributor is seeking recovery will be audited." Orillia reached 90% of total program costs in 2011 and audited financial statements were issued in April 2012. Orillia submitted its application for recovery of smart meter costs on May 23, 2012. Given the time period expected to complete the application process and receive a Decision, Orillia requested both SMDR and SMIRR to be effective October 1, 2012. At the time of filing its application, Orillia understood there would not be an opportunity to recover costs for the period from May 1 to September 30, 2012. However, this is not Orillia's preferred choice and given that other LDCs have been allowed to recover SMIRR revenues from May 1, 2012, Orillia would like to do so as well.

Orillia believes it is appropriate to "bump up" the deferred revenue requirement to be recovered through the SMDR to recover the foregone SMIRR revenues for the period May 1 to September 30, 2012. The Smart Meter Model was intended for an implementation date of May 1, 2012. In the Smart Meter Model, the SMDR covers costs up to December 31, 2011 and the SMIRR is meant to capture 2012 forecast costs. An implementation date of May 1, 2012 would result in 8 months of collection of SMIRR in 2012, 12 months in 2013 and 4 months in the year that Orillia's next cost of service rates take effect and the SMIRR ceases. In this scenario, a full 12 months of incremental revenue requirement would be collected for each year leading up to the next cost of service application effective May 1, 2014.

b) If Orillia proposes to avail itself of this approach, please provide re-estimated class-specific SMDRs including estimated foregone SMIRR revenues for the period May 1 to September 30, 2012. Please show the calculations, and file any applicable spreadsheets.

Response:

Orillia has recalculated class-specific SMDRs including estimated foregone SMIRR revenues for the period May 1 to September 30, 2012 in Table 15.

Table 15 - Calculation of Smart Meter Disposition (SMDR) including Foregone SMIRR Revenue

	Residential	GS Less Than 50 kW	Total
Smart Meter Disposition Revenue Requirement - SMDR (Table 9)	$ 209,721	$ 171,248	$ 380,968
Smart Meter Incremental Revenue Requirement - SMIRR for 2012 (Table 13)	$ 358,313	$ 119,908	$ 478,221
Foregone SMIRR Revenue May 1, 2012 to September 30, 2012 (5 months)	**$ 149,297**	**$ 49,962**	**$ 199,259**
Smart Meter Disposition Revenue Requirement - SMDR "Bumped up" to include Foregone SMIRR Revenue	$ 359,018	$ 221,209	$ 580,227
Number of Customers	11,542	1,322	12,864
Smart Meter Disposition Rider (SMDR) including Foregone SMIRR Revenue over 2 years	**$ 1.30**	**$ 6.97**	**$ 1.88**

The excel file that accompanies Orillia's responses to Board Staff interrogatories includes Table 15.

ORILLIA POWER DISTRIBUTION CORPORATION
2012 Smart Meter Cost Recovery Application
EB-2012-0261
Responses to VECC Interrogatories

Information Requests of the Vulnerable Energy Consumers Coalition (VECC)

VECC Question # 1

Reference: Application, Page 2, Status of Implementation of Smart Meters

Preamble: In Table 1, Orillia Power provides a summary of the smart meters installed and the capital expenditures and operating expenses by year.

a) Please provide a calculation of the average costs per meter on a total cost basis (capex + opex) and capex only. Please break out the costs beyond minimum functionality separately from costs related to minimum functionality.

Response:

Table 16a provides a calculation of the average costs per meter on a total cost basis and capital costs only including costs related to minimum functionality. Table 16b provides a calculation of the average costs per meter on a total cost basis and capital costs only excluding costs related to minimum functionality. Orillia's capital cost per meter of $183.06 compares favorably to the sector average capital cost of $186.76 derived from the "Sector Smart Meter Audit Review Report" issued by the OEB Regulatory Audit and Accounting Group on March 31, 2010 (based on 3,053,931 meters with a capital cost of $570,339,200 as at September 30, 2009).

Table 16a: Summary of Smart Meter Capital Costs (including costs beyond minimum functionality)

	2006	2007	2008	2009	2010	2011	2012	Total Cost
Capital		$ 16,479	$ 16,436	$ 1,340,907	$ 389,387	$ 591,626		$ 2,354,835
OM&A				$ 33,566	$ 112,344	$ 182,049	$ 135,318	$ 463,277
Number of smart meters				10,393	1,214	1,257		12,864

	Total	Average per meter
Total (capex + opex)	$ 2,818,112	$ 219.07
Capex only	$ 2,354,835	$ 183.06

Table 16b: Summary of Smart Meter Capital Costs (excluding costs beyond minimum functionality)

	2006	2007	2008	2009	2010	2011	2012	Total Cost
Capital		$ 16,479	$ 16,436	$ 1,340,286	$ 381,645	$ 580,336		$ 2,335,182
OM&A				$ 32,513	$ 98,863	$ 122,137	$ 105,554	$ 359,067
Number of smart meters				10,393	1,214	1,257		12,864

	Total	Average per meter
Total (capex + opex)	$ 2,694,249	$ 209.44
Capex only	$ 2,335,182	$ 181.53

b) Please provide a schedule that compares the smart meter financial forecasts (capital & OM&A) in Orillia Power's previous applications to the current application and explain any variances greater than 5%.

Response:

Orillia received approval from the Board to bill the standard monthly fixed funding adder of $0.27 per metered customer from May 1, 2006 until April 30, 2009 and $1.00 per metered customer from May 1, 2009 until April 30, 2012 in Decision and Orders issued during this period. Orillia did not file any other application for smart meter funding.

c) Please provide a summary of incremental internal labour costs incurred by Orillia Power to deploy smart meters in terms of positions, contract type (permanent vs. temporary, part-time vs. full-time), length of employment and work activities.

Response:

During the smart meter deployment project, Orillia incurred incremental internal labour costs of $139,719.

Of this amount, $89,842 was incurred related to two temporary part-time (contract) staff that were hired to assist within the billing group. These individuals were hired during periods of the heaviest project workload. The first contract ran from May 2009 through July 2010. The second contract ran from January 2011 through September 2011. During the deployment project, as required, Orillia seconded its most senior and knowledgeable billing staff member to spearhead the project and deal with various issues related to the Customer Information System (CIS). This included processing of meter changes, AMI integration, system testing and a variety of other CIS functions as they related to smart meters. Temporary staff was hired to back fill for this senior billing staff member. This strategy allowed Orillia to devote its most skilled staff to ensuring a successful transition to an AMI environment, while cost effectively maintaining the ongoing billing operations. Only the cost of the temporary (backfill) workers was charged to the smart meter project.

The remaining incremental staff costs of $49,877 were related to managing the physical deployment of meters and overall project management through the early stages of the deployment, including setup of the communications infrastructure (regional network interface, tower gateway base, etc.). During the period of January 2009 through May 2010, Orillia utilized an engineering staff member hired subsequent to the May 2006 rate rebasing and consequently not in our revenue requirement at the time. This staff member was utilized on a permanent part-time basis to manage the deployment. Costs related to this staff member were only charged to the project until May 2010, at which time the costs of this position were included in Orillia's revenue requirement during the May 2010 rate rebasing.

VECC Question # 2

Reference: Application, Page 2, Status of Implementation of Smart Meters

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

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

Response:

Table 3 in Orillia's response to Board Staff IR #6(a) provides a summary of smart meter costs including installation allocated by customer class and meter type.

VECC Question # 3

Reference: Application, Page 8, Transition to Time-of-Use Pricing

Preamble: Orillia Power indicates it requested and was granted an extension to its mandated date of June 2011 to November 2011 due to prolonged delays experienced in the delivery of 3-phase meters.

a) Please discuss any other challenges Orillia Power encountered during its smart meter implementation. Please include the corresponding impact on pricing, costs, process/timelines.

Response:

As with any major project that involves deployment of new technology and significant changes in operating processes and procedures, the smart meter implementation had its' share of challenges. However, aside from the delays experienced in the delivery of 3-phase meters, none of the challenges experienced were considered material and were handled through day-to-day problem solving and by utilizing rigorous project management practices.

VECC Question # 4

Reference: Application, Page 12, Justification for Costs that Exceed Minimum Functionality

Preamble: The Board's Guideline G-2011-0001 (Section 3.4 Costs Beyond Minimum Functionality) states on Page 17:

> Costs for other matters such as CIS changes or TOU bill presentment may be recoverable, but the distributor will have to support these costs and will have to demonstrate how they are required for the smart meter deployment program and that they are incremental to the distributor's normal operating costs.

a) Please provide a breakdown and description of the costs by year identified in the smart meter model under sections 1.6.3 and 2.6.3.

Response:

Tables 17a and 17b summarize incremental capital and OM&A costs that Orillia has reported for TOU rate implementation, CIS upgrades and web presentation in categories 1.6.3 and 2.6.3 in the Smart Meter Model. All of the costs were incurred as a result of implementing smart meters and transitioning to an AMI environment.

Orillia incurred incremental costs to establish the communication link between the web presentment platform and MDM/R via a secure data transfer link. Orillia's billing staff required systems training to understand and troubleshoot the new flow of meter data between the ODS, CIS and MDM/R as well as new processes required to import and bill the smart meter interval and TOU data to the customers. Incremental costs were incurred to upgrade Orillia's billing software to efficiently integrate with the MDM/R and to bill the customer on TOU buckets and rates versus the former two tiered regulated pricing.

Web presentment costs were incurred in order to provide customers with access to daily usage and timely access to billing information. Furthermore, in an effort to educate Orillia's customer base on the provincially mandated smart meter program and the impact of TOU billing, Orillia incurred incremental costs for customer information / education packages that included bill impact comparators, TOU billing information and energy management tips. None of these costs would have been incurred if Orillia was still operating with conventional meters and billing customers

on former two tiered regulated pricing and are thus, all considered to be incremental to normal operating costs.

Table 17a: Summary of Incremental Capital Costs Beyond Minimum Functionality (1.6.3)

	2009	2010	2011	2012 Forecast	Total
Professional fees - Operational Data Store	$ 621	$ 242			$ 863
Operational Data Store set up costs		$ 7,500	$ 750		$ 8,250
Billing System upgrade - service order automation			$ 6,200		$ 6,200
Interval data extract for bill comparator - TOU customer education			$ 2,400		$ 2,400
Set up TOU server - AMI interface to CIS			$ 440		$ 440
TOU bill print set up			$ 1,500		$ 1,500
Total Incremental Capital Costs Beyond Minimum Functionality (1.6.3)	**$ 621**	**$ 7,742**	**$ 11,290**	**$ -**	**$ 19,653**

Table 17b: Summary of Incremental OM&A Costs Beyond Minimum Functionality (2.6.3)

	2009	2010	2011	2012 Forecast	Total
Hosting - service order automation	$ 1,053	$ 4,056	$ 3,900	$ 3,900	$ 12,909
Maintenance - service order automation				$ 3,496	$ 3,496
Secure data transfer - web presentment		$ 2,758	$ 1,928	$ 900	$ 5,586
Training - Operational Data Store		$ 92	$ 3,334		$ 3,427
Maintenance - Operational Data Store		$ 6,372	$ 19,043	$ 19,968	$ 45,383
Customer TOU communication materials			$ 21,087		$ 21,087
Web presentment training		$ 201			$ 201
TOU Web Portal License/Annual Support			$ 10,620	$ 1,500	$ 12,120
Total Incremental OM&A Costs Beyond Minimum Functionality (2.6.3)	**$ 1,053**	**$ 13,480**	**$ 59,911**	**$ 29,764**	**$ 104,209**

VECC Question # 5

Reference: Smart Meter Model (V2_17) 20120523

a) Please provide a breakdown of Other AMI Expenses under section 2.5.6 on Sheet 2 of the model.

Response:

Table 18 provides a breakdown of Other AMI Expenses reported in the Smart Meter Model category 2.5.6. They are incremental costs related to the minimum functionality of the smart meter network.

Table 18: Summary of Other AMI Expenses (2.5.6)

	2009	2010	2011	2012 Forecast	Total
Repair / replace meter bases	$ 4,393	$ 885	$ 114		$ 5,392
Smart Meter Network communication (AS2)		$ 587	$ 2,346	$ 2,340	$ 5,273
Security audit			$ 10,120	$ 20,000	$ 30,120
MDMR support Jan1/12 o Dec 31/12 ie V7.2 testing				$ 1,854	$ 1,854
Workforce Automation - Annual Support			$ 600	$ 480	$ 1,080
Benner St tower lease				$ 6,480	$ 6,480
Total Other AMI Expenses (2.5.6)	**$ 4,393**	**$ 1,472**	**$ 13,180**	**$ 31,154**	**$ 50,199**

b) On line1.1.2 on Sheet 2 of the model, Orillia Power shows installation costs of $126,201, $17,140 and $245,322 for 2009 to 2011, respectively. Please explain the significant decrease in 2010 and increase in 2011.

Response:

The swing in costs from 2009 through 2011 is related to the timing of the deployment of the 1-phase meters in 2009 and 2010 and the 3-phase general service meters in 2011 as described in Board Staff IR# 6(a). The significant increase in 2011 also reflects the higher installation cost for a 3-phase meter as compared to a 1-phase meter.

c) Column S of Sheet 2 shows OM&A expenses for 2012. Please provide a table that summarizes the one-time expenses (in 2012 only) and ongoing expenses for meters installed, as of December 31, 2011.

Response:

Orillia did not include any one-time costs in OM&A expenses forecasted for 2012. Table 19 provides a summary of OM&A costs reported in the Smart Meter Model.

Table 19: Summary of OM&A Expenses for 2012 Forecast Year

	One-time	Ongoing	Total
Maintenance AMRC Collector (2.2.1)	$ -	$ 48,000	$ 48,000
Change Management (2.5.4)	$ -	$ 26,400	$ 26,400
Other AMI Expenses (2.5.6)	$ -	$ 31,154	$ 31,154
Costs Beyond Minimum Functionality (2.6.3)	$ -	$ 29,764	$ 29,764
Total OM&A Expenses for 2012 Forecast Year	**$ -**	**$ 135,318**	**$ 135,318**

VECC Question # 6

Reference: Application, Page 16, Smart Meter Incremental Rate Rider Calculation

Preamble: Orillia Power indicates that cost savings realized from lower meter reading costs in 2012 are offset by increased labour costs related to the projected administrative and meter maintenance costs.

a) Please quantify the operational savings by year related to the reduction of meter reading expenses and confirm how these savings are reflected in the smart meter application.

Response:

Orillia transitioned its single phased, smart meter customers from manual meter readings over to AMI based meter reading in the June – July 2011 timeframe. Customers with 3-phase meters had a similar transition in the November – December 2011 timeframe. Following these transitions, Orillia was able to discontinue its manual meter readings and as a result, savings of $32,000 were recognized in 2011. For 2012 and future years, it is anticipated that annual savings of $100,000 will be recognized as a result of not having to perform manual (walk-up) meter reads for customer accounts that are equipped with a smart meter.

These savings are reflected in the smart meter model as an offset against increased labour costs related to administrative and meter maintenance costs. Orillia hired an additional staff member within the billing group in 2012 as a result of increased responsibilities related to smart meters and operating within an AMI environment.

b) Please identify any other operational efficiencies and cost savings that Orillia Power has experienced or anticipates will result from smart meter implementation.

Response:

At this early stage following the conversion to an AMI based system, the savings recognized from no longer requiring manual (walk-up) meter reads are the only operational efficiencies that have been realized. At this stage, no other operational efficiencies or cost savings are anticipated.

VECC Question # 7

Reference 1: Smart Meter Model (V2_17)

Preamble: Orillia Power completed the Smart Meter Model provided by the OEB and used the data to arrive at the proposed Smart Meter Incremental Rate Rider and the proposed Smart Meter Disposition Rate Rider.

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

Response:

Orillia did not track costs on a rate class basis and is not able to complete a separate smart meter model by rate class.

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

Response:

As Orillia did not track costs on a rate class basis, we are not able to calculate SMDR and SMIRR rate riders based on full cost causality by rate class.

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

Response:

Total Smart Meter Funding Adder revenue collected by customer class and associated interest is provided in Table 4 in Orillia's response to Board Staff IR# 6(a).