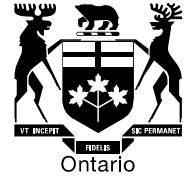


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**BY E-MAIL**

April 19, 2012

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

Dear Ms. Walli:

**Re: Board staff Interrogatories  
PUC Distribution Inc.  
Application for 2012 Smart Meter Cost Recovery effective May 1, 2012  
Application Board File Number EB-2012-0084**

In accordance with the procedure documented in the Notice of Application and Hearing, please find attached Board staff's interrogatories in the above proceeding with respect to PUC Distribution Inc.'s application for rate riders to recover smart meter costs. Please forward the following to PUC Distribution Inc. and to all other registered parties to this proceeding.

Sincerely,

*Original Signed By*

Stephen Vetsis  
Analyst - Applications

Attachment

**PUC Distribution Inc. (“PUC”)  
2012 Smart Meter Cost Disposition and Recovery  
EB-2012-0084**

**Board staff Interrogatories**

***General***

**1. Responses to Letters of Comment**

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

***Application***

**2. Ref: Application, Tab 1, Schedule 2, page 1 – Stranded Meter Costs**

On page 1 of its application, PUC states that it is planning to file a cost of service application for 2013 rates. PUC states that stranded meter costs will be addressed in that application. Please provide PUC’s estimate of the net book value of the stranded meters as of December 31, 2012.

**3. Ref: Application, Tab 1, Schedule 2, page 4 – Annual Security Audit**

On page 4 of the application, PUC provides a description of its annual security audit as well as the procurement process used to select an audit partner. PUC states:

Going forward, PUC has budgeted for a security audit, as this is a prudent approach to satisfying the due diligence requirements for protection not only of the customer information, but also to ensure that access to the infrastructure is properly protected...

Therefore, PUC joined a consortium of Ontario Util-assist LDC customers in the issuance of the May 2010 “Smart Meter Network Security Audit Services” Request for Proposal.

The objective of the RFP is to select an audit partner who would complete a security audit of the Sensus AMI systems for consortium

members with Sensus technology in place, and to then work with Sensus towards the implementation of viable countermeasures to resolve all security concerns. The selected audit firm will first complete an in-depth security review at one participating utility that has the Sensus solution. Once the review is complete, the audit firm would then review the technology at all remaining participating utilities to confirm that their Sensus AMI systems are configured to the same standard as that declared as the standard for the audit group. Audits are anticipated to include end-to-end from the meter to utility systems and home area network.

- a) Please confirm whether or not the RFP process has been completed and the audit partner has been selected.
- b) If the audit partner has been selected, please provide the budgeted amount for the annual security audit for 2012. Please confirm whether or not the budgeted amount has been included as part of the costs reported in the Smart Meter Model.

**4. Ref: Application, Tab 1, Schedule 2, page 7– Business Process Redesign**

On page 7 of the application, PUC states:

Actual business process redesign consultations were well underway at PUC in late 2010 and is an ongoing process leading up to and after cutover.

On Sheet 2 of the Smart Meter Model, PUC has provided \$40,000 in Business Process Redesign OM&A expenses (item 2.5.1) for 2012 only.

- a) Please confirm whether or not PUC has incurred any costs for business process redesign to date.
- b) Please provide further information on the business process redesign activities for 2012 corresponding to the \$40,000 in forecasted business process redesign expenses for 2012 in the Smart Meter Model.
- c) Does PUC view that these costs will be one-time or will continue past 2012?

**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 PUC has not provided any discussion of operational efficiencies and cost savings that have been achieved to date. In many smart meter cost recovery applications currently before 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. Please provide a reconciliation accounting for how those savings have been accounted for in the costs documented in this application.

**7. Ref: Application, Tab 1, Schedule 2, page 9 – Web Presentment**

On page 9 of the Application, PUC states:

PUC anticipates implementing a web presentment solution in 2012 once implementation of TOU billing is complete and reliable data (current and to some extent historical) is readily available for our customers.

Board staff notes that no costs were documented in PUC's Smart Meter Model for costs related to Web Presentment.

If available, please provide any updated estimate of the costs that PUC expects to incur for the development and implementation of web presentment of TOU data.

**8. Ref: Application, Tab 1, Schedule 2, page 10 – Costs Beyond Minimum Functionality**

On page 10 of Tab 1, Schedule 2 of the Application, PUC states:

As part of the smart meter deployment program, PUC has decided to install smart meters for the general service > 50 kW customers.

PUC has a total of about 3,611 general service customers of which only 372 are in the greater than 50 kW class. As a further breakdown of these 372 customers, 31 already have interval meters. Of the general service customers in the > 50 kW segment, to date approximately 158 customers have smart meters installed and it is planned to convert the remaining 183 customers to smart meters. PUC determined that these customers will have more detailed needs for data than will typical residential and general service < 50 kW customers, and providing them with better information on how much and when they consume electricity may provide these customers with opportunities for more energy conservation and load shifting. In addition, the contracted services of monthly on-site electric meter reading will be completely discontinued once all the customers have been converted to smart meters...

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.<sup>1</sup>

- a) In determining that GS > 50 kW customers would have more detailed needs for data than typical residential and GS < 50 kW customers, did PUC seek input from any of its GS > 50 kW class customers to confirm a desire and need for that additional information? If so, please provide details regarding the customer's responses including the number of customers that were contacted.
- b) Please provide the following:
  - i. An estimate of the remaining useful life of the 158 meters that were replaced for customers in the GS > 50 kW class, to date.
  - ii. An estimate of the net book value of the 158 meters that were replaced for customers in the GS > 50 kW class, as of December 31, 2011.

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<sup>1</sup> Horizon Utilities Corporation's smart meter application (EB-2011-0417) currently before the Board is one example where "smart meter" deployment includes replacement of interval meters in the GS > 50 kW class.

- c) Please provide a description of how PUC plans to treat the remaining net book value of the 341 GS > 50 kW customer meters it expects to have replaced by the end of 2012.

***Per Meter Costs***

**9. Ref: Application, Tab 1, Schedule 4, page 1 – Smart Meter Costs Per Unit**

On page 1 of Tab 1, Schedule 4 of the Application, PUC has provided tables summarizing the average costs per meter for each rate class. PUC shows an average capital cost per meter of \$499.37 for the GS < 50 kW class and an average capital cost per meter of \$862.01 for the GS > 50 kW class.

- a) Please provide a breakdown of the meter types installed, by year, for the GS < 50 kW class including the total number of each type of meter that was installed.
- b) Similarly, please provide a breakdown of the meter types installed, by year, for the GS > 50 kW class.
- c) PUC's calculation of the average capital cost per meter for the GS > 50 kW class shows \$293,945 in capital costs for 341 meters installed. On page 10 of Tab 1, Schedule 2 of the Application, PUC states that it has installed 158 meters for the GS > 50 kW class, to date. Please confirm that the average capital cost per meter shown for the GS > 50 kW class includes capital costs for meters forecasted to be installed in 2012. If so, please provide an average capital cost per meter for the GS > 50 kW meters installed to the end of 2011.

***Smart Meter Model, Version 2.17***

**10. Ref: Excel Smart Meter Model, Version 2.17, Sheet 2 – Smart Meter Costs**

On sheet 2 of the Smart Meter Model, PUC has provided the costs incurred in the installation of smart meters, per year, for their smart meter deployment.

- a) Column S of sheet 2 forms the basis for the calculation of the SMIRR. In column S, PUC has shown \$287,600 in capital costs and \$356,733 in OM&A expenses for 2012. Please provide a table summarizing the amounts entered in column S that are one-time (i.e. 2012 only) expenses and amounts that are ongoing expenses for meters installed, as of December 31, 2011. Please use a format similar to column S of sheet 2 of

the Smart Meter Model. For each line item, please provide a description for activities underlying the costs that are shown.

- b) Sheet 2 of the Smart Meter Model shows customer communication costs of \$13,129, \$129,661 and \$30,000 for 2010, 2011 and 2012, respectively. Please explain the significant jump in customer communication expenses for the 2011 year.
- c) Sheet 2 of the Smart Meter Model shows forecasted smart meter capital costs of \$129,000 and installation costs of \$50,000 for 2012 but no forecasted meter installations for residential and GS < 50 kW customers in 2012. Please explain the nature of these costs. If these costs are for expected customer growth in 2012, please provide the estimated number of additional customers for the forecasted capital and installation costs.
- d) On page 1 of Tab 1, Schedule 4 of the Application, PUC provided a total capital cost of \$293,945 for the installation of smart meters for the GS > 50 kW class. On Sheet 2 of the Smart Meter Model, PUC has documented \$251,318 in capital costs (under line 1.6.2) for the deployment of smart meters to customers other than the residential of GS < 50 kW classes. Please reconcile the difference between the two values.
- e) On line 2.1.2 of Sheet 2 of the Smart Meter Model, PUC has shown AMI Operating Fees of \$19,587, \$94,437 and \$150,000 for 2010, 2011 and 2012, respectively. Please explain the significant increase in AMI Operating Fees between 2011 and 2012.
- f) On line 2.5.6 of Sheet 2 of the Smart Meter Model, PUC has provided a total of \$179,702 in Other AMI expenses. Please provide a description of the nature of the these costs.
- g) On line 2.5.3 of Sheet 2 of the Smart Meter Model, PUC has provided costs for Project Management. Please explain the \$45,000 documented for Project Management costs as estimated OM&A expenses for 2012. Please describe the activities and projects for which PUC is incurring or plans to incur for project management. Does PUC expect these expenses will be one-time or that they will continue past 2012?

**11. Ref: Excel Smart Meter Model, Version 2.17, Sheet 3 – Taxes/PILs Rates**

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

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

Please confirm that these are the tax rates corresponding to the taxes or PILs actually paid by PUC in each of the historical years, and that PUC forecasts it will pay for 2012. For historical years to 2011, these would be the aggregate rate derived for calculating the taxes/PILs included in the revenue requirement in cost of service applications, or as calculated in taxes/PILs calculations as part of IRM applications. Otherwise, please explain the tax rates entered and their derivation.

**12. Ref: Excel Smart Meter Model, Version 2.17, Sheet 3 – Cost of Capital Parameters**

On Sheet 3 of the Smart Meter Model, PUC has provided its cost of capital parameters for the years 2006 through 2012.

- a) On sheet 2, in cell G23, PUC has input a debt capitalization of 56% for 2006. In its 2006 EDR application (RP-2005-0020/EB-2005-0412), PUC had rates approved on a deemed debt capitalization of 50%. Please explain the reason for using a different debt capitalization than that approved. Otherwise, please update the model.
- b) On sheet 2, in cell G30, PUC shows a long-term debt rate of 5.80%. It also has documented an ROE of 8.60% for 2006. A review of the 2006 EDR model used for final rate setting shows that PUC was approved a debt rate of 6.35% and an ROE of 9.00%. Please explain PUC's inputs. Otherwise, please update the model. Note that, these inputs would also be carried forward to 2007.
- c) For 2008, Board staff observes that the cost of capital parameters (ROE and deemed short-term and long-term debt rates) correspond with what PUC was approved in its cost of service rebasing application (EB-2007-0931). In 2009, 2010, 2011 and 2012, it appears that PUC has updated the cost of capital parameters with those announced by the Board for May 1 rates in each year. However, these changes in the cost of capital parameters apply for rates rebased through a cost of service application. PUC has had its rates adjusted through the IRM adjustment process in each year. The Board's policy and practice is that the cost of capital parameters from the last approved cost of



service application continue until the next rebasing application. Please explain PUC's inputs. Otherwise, please update the model.

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

In the Smart Meter Model Version 2.17 filed by PUC, the utility has relied upon sheet 8B to calculate the interest on OM&A and depreciation/amortization expenses. Sheet 8B calculates the interest based on the average annual balance of deferred OM&A and depreciation/amortization expenses based on the annual amounts input elsewhere in the model.

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

Please re-file the smart meter model using the monthly OM&A and depreciation/amortization expense data from Account 1556 records. If this is not possible, please explain.

**14. Ref: Smart Meter Model**

If PUC has changed its data inputs to the Smart Meter Model, Version 2.17 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.

***Cost Allocation***

**15. Ref: Application, Tab 1, Schedule 5, pages 2 and 3 – Smart Meter Disposition Rider (SMDR) and Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR)**

On pages 2 and 3 of Tab 1, Schedule 5 of the Application, PUC has provided tables showing the calculation of class specific SMDRs and SMIRRs.

- a) Please confirm the allocator used to allocate costs to each class in PUC's SMDR and SMIRR calculations for the following:
  - i. Return (deemed interest plus return on equity);
  - ii. Amortization;
  - iii. OM&A;
  - iv. PILs; and
  - v. Smart Meter Rate Adder revenues

**16. Ref: Application, Section 16 – Cost Allocation**

- a) If PUC 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 SMDRs.
- b) Similarly, please update the calculation of class-specific SMIRRs.