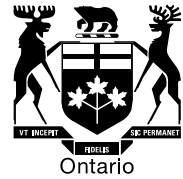


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**BY E-MAIL**

June 1, 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  
Oakville Hydro Electricity Distribution Inc.  
Application for 2012 Smart Meter Cost Recovery effective May 1, 2012  
Application Board File Number EB-2012-0193**

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 Oakville Hydro Electricity Distribution Inc.'s application for rate riders to recover smart meter costs.

Sincerely,

*Original Signed By*

Stephen Vetsis  
Analyst - Applications

Attachment

**Oakville Hydro Electricity Distribution Inc. (“Oakville Hydro”)  
2012 Smart Meter Cost Disposition and Recovery  
EB-2012-0193**

**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 Oakville Hydro has received any letters of comment. If so, please file a copy of any letters of comment. Please ensure that the author’s contact information, except for the name, is redacted. For each, please confirm whether a reply was sent from Oakville Hydro to the author of the letter. If confirmed, please file that reply with the Board. If not confirmed, please explain why a response was not sent and confirm if Oakville Hydro intends to respond.

***Application***

**2. Ref: Application, page 24 – Stranded Meter Costs**

On page 24 of its application, Oakville Hydro states that it is not requesting approval for recovery of its stranded meter costs at this time, and that stranded meter costs will be addressed in its next cost of service application (scheduled for 2014 rates). Please provide Oakville Hydro’s estimate of the net book value of the stranded meters as of December 31, 2013.

**3. Ref: Application, pages 5-6 – Smart Meter Pilot Project**

On pages 5-6 of its Application, Oakville Hydro states:

On October 24, 2006, Oakville Hydro submitted a proposal for approval to implement a pilot project involving TOU electricity prices and eligible TOU meters for certain condominium residents that had recently changed from bulk metering to individual metering (EB-2006-0306). The proposal included an independent evaluation of the project results as well as a commitment to share the results of the proposed pilot project with the Board. The Board approved the pilot on December 1, 2006 on the condition that Oakville Hydro consult Board staff before the independent analysis was carried out in order to ensure consistency with the analytical approach being

used by the Board and that Oakville Hydro agree to share the results from the proposed pilot project.

Over the course of the pilot, residents in three condominium buildings in Oakville changed from bulk metering with billing based on the overall building consumption to individual metering and billing under RPP tiered prices and subsequently to individual metering and billing under RPP Time-of-Use ("TOU") prices. In total across the three buildings, 286 residents participated in the pilot.

In November 2007, Oakville Hydro engaged the services of Navigant Consulting to conduct an independent review of the smart meter pilot project. The report summarized the design, operation and outcomes of the Oakville Smart Metering and TOU pricing pilot study undertaken from January 2006 through the end of October 2007. On April 3, 2008, Oakville Hydro filed the Navigant report with the Board. The costs associated with this study are included in this Application.

- a) Please provide a table that breaks down the capital and OM&A costs associated with Oakville Hydro's smart meter pilot project that are included in this application.
- b) In the Board's Decision on Oakville Hydro's TOU pricing pilot proposal (EB-2006-0306), the Board approved the pilot subject to four conditions. One condition was that "Oakville Hydro is required to consult Board staff before the independent analysis referenced above is carried out in order to ensure consistency with the analytical approach being used by the Board and Newmarket Hydro in relation to their pilot projects." Please provide a summary of discussions with Board staff related to the Smart Meter Pilot Project, subsequent to the Board's approval on December 1, 2006.
- c) Oakville Hydro rebased its rates through a cost of service application for the 2010 rate year (EB-2009-0271).
  - i. Please explain how the capital costs for the individual suite meters and ongoing operating costs for these customers were addressed in Oakville Hydro's 2010 rates application. Were these treated as individually metered Residential customers with costs reflected in the revenue requirement and recovered through distribution rates?
  - ii. Please confirm that the costs related to Oakville Hydro's Smart Meter Pilot Project for which Oakville Hydro is seeking recovery of in this

Application have not been addressed for recovery in any other proceeding.

**4. Ref: Application, page 6-7 and Smart Meter Model, Sheet 2 – OM&A Expenses**

On pages 6 and 7 of its Application, Oakville Hydro explains that its became authorized for smart meter deployment through compliance with the London Hydro RFP process, and that it successfully negotiated agreements for procurement and deployment smart meter and related systems in 2009. This corresponds with capital costs shown on Sheet 2 of the Smart Meter Model, which begin in 2009.

However, Oakville Hydro shows OM&A expenses related to Software Maintenance for Total Incremental AMCC (Advanced Metering Control Computer) (row 2.3.2) of \$76,232 in 2007 and \$20,811 for 2008. Similarly, Oakville Hydro shows OM&A expenses related to WAN (Wide Area Network) Maintenance (row 2.4.1) of \$13,601 in 2007 and \$43,148.

Please explain:

- a) the nature of the work done for these expensed costs incurred prior to Oakville Hydro becoming authorized and commencing its smart meter deployment;
- b) why these costs are expensed rather than capitalized; and
- c) whether or not these costs were necessary for and integral to the implementation of Oakville Hydro's smart meter program and do not replace operating expenses for legacy distribution operations whose costs are reflected in Oakville Hydro's normal revenue requirement and recoverable through base distribution rates.

**5. Ref: Application, page 10 – Security Audit**

On page 10 of the application, Oakville Hydro provides a description of its annual security audit as well as the procurement process used to select an audit partner. Oakville Hydro states:

Oakville Hydro partnered with a consortium of LDCs to complete an end-to-end security audit of its Sensus AMI system in July 2010. The consortium completed an RFP in October of 2010, whereby the group selected its preferred auditor. The audit is intended to span two full years and evaluate the security of the Sensus AMI system from meter

to Advanced Meter Collector Computer (AMCC). Oakville Hydro is working with the auditor, Sensus, and the consortium to address any security concerns raised through the audit process.

Please provide the budgeted amount for the annual security audit for 2011 (if applicable) and 2012. Please confirm whether or not the budgeted amounts have been included as part of the costs reported in the Smart Meter Model.

**6. Ref: Application, page 10 and Smart Meter Model, Sheet 2 – 2012 Capital Costs**

Oakville Hydro states that it expects to incur \$200,000 in capital costs in 2012, and these are shown on Sheet 2 under Computer Software, as being related to TOU implementation, CIS upgrades, web presentment, integration with the MDM/R, etc. (row 1.6.3). Please provide further explanation of the \$200,000 of capitalized software costs forecasted for 2012. Please also document what portion of these forecasted costs have been incurred to date.

**7. Ref: Application, page 15 and Smart Meter Model, Sheet 2 – OM&A Costs Beyond Minimum Functionality**

In Table 6 on page 15, Oakville Hydro documents that it has incurred \$305,410 in OM&A expenses to December 31, 2011 for beyond minimum functionality. This corresponds with row 2.6.3 of Sheet 2 of the Smart Meter Model, where Oakville Hydro documents \$147,811 in 2010, \$157,599 for 2011 and then \$58,250 for 2012.

- a) Please provide explanation of the activities for which these costs were incurred in 2010 and 2011, and which are forecasted to be incurred in 2012.
- b) Please provide explanation as to why these are expensed costs rather than being capitalized.

**8. Ref: Application, pages 15-16 – Smart Meter Implementation**

On pages 15 and 16, Oakville Hydro documents staffing and expenses related to its smart meter deployment. It notes that it had to do additional beta testing for customer data encryption in response to a customer enquiry filed with the Information and Privacy Commissioner's office. Oakville Hydro states:

Being the first distributor to implement full encryption, additional software testing was required. Oakville Hydro did not incur additional costs from its vendor for implementation of encryption

however, this placed an increased burden on Oakville Hydro's staff to conduct the software testing.

- a) Please provide Oakville Hydro's additional internal costs related to software testing for full encryption of customer data as included in this Application.
- b) Please explain whether these costs are incremental (e.g. resulted in additional overtime costs) beyond the normal operating expenses reflected in Oakville Hydro's revenue requirement and recovered in distribution rates.

**9. Ref: Application, page 16 – OM&A Costs for Regional Collectors and WAN**

Oakville Hydro states:

Oakville Hydro has incurred incremental OM&A costs of \$214,094 for third party support for its collectors and incremental costs \$116,526 for new data and phone lines required to monitor and capture reads for the smart meters. These costs will be ongoing.

Based on the 63,734 Residential and GS < 50 kW customers served by Oakville Hydro, this works out to over \$3.00 per customer per year for third party support for regional collectors, and just under \$2.00 per customer per year for data and phone lines.

Please provide explanation of:

- a) what these costs are for, and justification for the levels of these costs; and
- b) why these costs are expected to be ongoing at these levels.

**10. Ref: Application, page 17 – OM&A Costs for AMCC**

Oakville Hydro states:

Oakville Hydro incurred incremental OM&A costs of \$237,171 for the setup and testing of its AMCC. The majority of the OM&A costs recorded in this category relate to incremental employee costs.

Please provide explanation of:

- a) what these costs were incurred for;
- b) why these costs were expensed rather than capitalized; and
- c) what does Oakville Hydro mean when it states: [t]he majority of the OM&A costs recorded in this category relate to incremental employee costs."

**11. Ref: Application, pages 19, 20, 21 and 23 – OM&A Expenses for Contract Positions**

On pages 19, 20, 21 and 23 of the application, Oakville Hydro mentions staffing costs for smart meter deployment activities (e.g. Communications Coordinator, AMI Analyst, etc.). In many cases, Oakville Hydro has expensed the costs.

- a) Please provide a table summarizing the capital and OM&A expenses, by year, for staffing resources. Please separate the expenses by project function (e.g. communications, software testing, etc.).
- b) Please provide further explanation as to how the staffing costs are incremental (i.e., beyond the staffing complement factored into Oakville Hydro's revenue requirement in its 2010 cost of service application).
- c) Please provide the rationale for recovering the staffing costs as either capital or OM&A expenses.
- d) Please indicate which staffing resources Oakville Hydro anticipates will be temporary and which it expects will be required going forward.

**6. Ref: Guideline G-2011-0001, page 19  
Ref: Application, page 23 – Reduced Operating Costs**

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.

On page 23 of the application, Oakville Hydro states:

In its 2010 cost of service process, Oakville Hydro anticipated and budgeted operational savings related to the reduction of traditional,

home to home, meter reading expenses with the activation of remote meter reading through the AMI network. However, the tuning process took longer than anticipated and Oakville Hydro continued to incur a portion of those costs to read the smart meters manually.

In most 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) Has Oakville Hydro included any costs for the manual reading of smart meters in its application? If so, please provide a table outlining the amounts per year of the smart meter deployment program. Please indicate any manual meter reading costs projected for 2012 and beyond, if applicable.
- b) Please provide Oakville Hydro's best estimate of when it expects the manual reads of smart meters, with the exceptions of special reads (e.g. final reads related to a customer moving out), to cease.
- c) Please explain how the budgeted operational savings from Oakville Hydro's 2010 cost of service application have been accounted for in this application. Please provide the amount budgeted for operational savings in Oakville Hydro's 2010 cost of service application.

**7. Ref: Application, Tab 1, Schedule 2, pages 17 and 19 – Business Process Redesign**

On page 17 of the Application, Oakville Hydro states:

Oakville Hydro incurred incremental costs of \$28,909 in relation to business process redesign. In 2011, Oakville Hydro contracted a third party to assist with a review of its meter-to-cash process, concentrating mainly on its Metering Solutions Department post smart meter implementation. Some of the findings of the review recommended that Oakville Hydro initiate a process improvement project to improve its processes, ensure data integrity and recover lost efficiencies as a result of the smart meter implementation. Oakville Hydro is undertaking to complete this project in 2012.

On page 19 of the Application, Oakville Hydro states:

It is estimated that Oakville Hydro will incur incremental costs of \$143,480 for the implementation of Oakville Hydro's Business



Process Redesign project in 2012. It was Oakville Hydro's position that a process review would be completed once the implementation of the Smart Meters was completed, and it had sufficient opportunity to develop an understanding of the requirements as a direct result of this implementation. In 2011, Oakville Hydro's initial step to the business process redesign was to have a third party assist in a review of its business processes with respect to post smart meter implementation. The smart meter initiative presents an opportunity for processes to be improved by reducing manual effort and inefficiencies which were implemented to fill the gaps created by the initial implementation process. Currently additional time, effort and resources are required to address problems and issues which arose from the requirement to make the new systems (i.e. AMI, MDM/R), fit into the existing framework. The many manual work-arounds required to support the AMI that [sic] have created lost efficiencies rather than eliminating them.

- a) On page 17, what is meant by "recover[ing] lost efficiencies as a result of the smart meter implementation"?
- b) Please explain how this business process redesign is related to and necessary for the deployment of smart meters and TOU implementation.
- c) Please explain the realized or expected benefits to Oakville Hydro's ratepayers as a result of this project.
- d) Please explain why all of the costs for this are expensed.
- e) Why does Oakville Hydro believe that the business process redesign should be dealt with here, rather than in its next cost of service application, where both the costs and benefits can be addressed?

**8. Ref: Application, page 18 – Other AMI Costs**

On page 18, Oakville Hydro states:

Oakville Hydro incurred incremental OM&A costs of \$34,771 associated with the setup and testing of its ODS detailed in Other AMI capital.

This corresponds with line 2.5.6 of Sheet 2 of the Smart Meter Model, with OM&A expenses of \$3,393 for 2009, \$18,870 for 2010 and \$12,509 for 2011. Oakville Hydro also shows \$116,794 as OM&A expenses in the row for 2012.

Please provide explanation of:

- a) the historical expenses for the period 2009 to 2011; and
- b) the forecasted expenses of \$116,794.
- c) Please provide a further disaggregation of 2012 costs between one-time and ongoing expenses.

***Per Meter Costs***

**9. Ref: Application, pages 11 and 24 – Smart Meter Costs Per Unit**

On page 11 of the Application, Oakville Hydro has provided a table summarizing the overall average capital cost per installed smart meter. Oakville Hydro shows an average capital cost per meter of \$162.10.

On page 24 of the Application, Oakville Hydro states:

In keeping with the Guideline, Oakville Hydro has directly allocated class specific costs where reliable data is available. For costs that cannot be directly allocated by rate class, Oakville Hydro has allocated the costs on the basis of the number of installed smart meters.

- a) Please complete the following table for the Residential and GS < 50 kW classes.

	2006	2007	2008	2009	2010	2011	2012	Total
Capital related to minimum functionality								
Capital beyond minimum functionality								
OM&A related to minimum functionality								
OM&A beyond minimum functionality								

Number of Smart Meters Deployed								
							Total	Average per meter
							Total (capex + opex)	
							Capex only	
							OM&A only	
							Beyond minimum functionality only	

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

***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, Oakville Hydro 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, Oakville Hydro has shown \$200,000 in capital costs and \$585,147 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. Additionally, please confirm that each amount is an annualized amount.
- b) On line 2.3.2 of Sheet 2 of the Smart Meter Model, Oakville Hydro shows software maintenance OM&A costs of \$76,232, \$20,811, \$50,169, \$38,153, \$51,806 and \$127,848 for 2007 through 2012, respectively. Please explain the significant jump in software maintenance expenses for the 2012 year.

- c) On line 2.5.6 of Sheet 2 of the Smart Meter Model, Oakville Hydro has provided a total of \$151,565 in Other AMI expenses. Please provide a description of the nature of these costs. Please explain the significant jump in Other AMI expenses projected for 2012.

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

Oakville Hydro 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
<b>Aggregate Federal and provincial income tax rate</b>	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 Oakville Hydro in each of the historical years, and that Oakville Hydro forecasts it will pay for 2012. For historical years up to and including 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 – Smart Meter Funding Adder Revenues**

On Sheet 8, Board staff observes that interest is calculated to December 2012. The impact is to increase the carrying charges used to offset the deferred revenue requirement, and hence to decrease the amount to be recovered through the SMDR. Please explain Oakville Hydro's rationale for calculating interest beyond April 2012.

**13. Ref: Smart Meter Model, Sheet 8A – Depreciation Expense**

While Oakville Hydro has documented smart meter capital costs since 2009, on Sheet 8A, Oakville Hydro only documents depreciation expense from February 2011 to December 2011. Please explain why Oakville Hydro does not have depreciation expenses documented in Account 1556 either before or after this time period.

**14. Ref: Smart Meter Model**

If Oakville Hydro 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, pages 25 and 26 – Smart Meter Disposition Rider Calculation and Smart Meter Incremental Revenue Requirement Rate Rider Calculation**

On pages 25 and 26 of the Application, Oakville Hydro 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 Oakville Hydro'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 Oakville Hydro 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.