



March 1, 2013

BY EMAIL/COURIER/RESS

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

Dear Ms. Walli,

**RE: Whitby Hydro Electric Corporation
Application for 2013 Smart Meter Cost Recovery
Board File Number EB- 2012-0479
Interrogatory Response – Vulnerable Energy Consumers Coalition**

As directed by the Board's Notice of Application and Hearing for the above proceeding, Whitby Hydro Electric Corporation has provided responses to Vulnerable Energy Consumers Coalition's (VECC) interrogatories dated February 13, 2013. Two paper copies will follow via courier. A copy has also been filed electronically through the Board's RESS system.

Respectfully submitted,

Original Signed by

Ramona Abi-Rashed
Treasurer

cc: Mr. Michael Janigan (email)
Ms. Shelley Grice (email)
Mr. Keith Ritchie

ONTARIO ENERGY BOARD

IN THE MATTER OF

the *Ontario Energy Board Act*, 1998, S.O. 1998, c. 15 (Schedule B), as amended;

AND IN THE MATTER OF an Application by

Whitby Hydro Electric Corporation (Whitby Hydro) for an order or orders
approving or fixing just and reasonable
distribution rates to be effective May 1, 2013 to reflect the
recovery of costs for deployed smart meters.

Whitby Hydro response to Vulnerable Energy Consumers Coalition (VECC)

VECC Question # 1

Reference: Manager's Summary, Page 7, Capital and Operating Costs

a) Please confirm the basis for forecasted 2012 costs in the application.

Response:

Whitby Hydro Electric Corporation's ("WHEC") 2012 forecast was based on preliminary November 2012 year-to-date actual costs plus a projection for December costs.

b) If 2012 actuals are available, please update the smart meter model and rate riders accordingly.

Response:

WHEC does not have final 2012 actuals available at this time.

c) Please provide a comparison of original budgeted costs vs. actual costs and explain any variances greater than 10%.

Response:

The 2012 IRM Submission for Smart Meters did not budget for any 2012 Capital costs as it was anticipated that the Smart Meter Project would be completed in 2011. However, there were 75 delayed smart meter installations for existing customers that were completed in 2012. Further work was required on Web presentment and TOU/MDMR implementation which occurred in 2012 (see IRR #7.(e)). As a result, the total 2012 capital costs presented in the original application were forecasted at \$61k.

VECC Question # 2

Reference: Manager's Summary, Page 4

Preamble: The evidence indicates WHEC participated in the London Hydro RFP process along with a consortium of Local Distribution Companies ("LDCs").

- a) Please discuss if Whitby Hydro worked in collaboration with other utilities in addition to the London RFP process, to implement its smart meter program.

Response:

Although WHEC did not work directly with other utilities, WHEC engaged Util-Assist (a local consulting company) that had been retained to work with other Ontario LDCs. This provided WHEC with the opportunity for collaborative knowledge transfer with other LDCs for educational and informational purposes. Much knowledge and experience was gained through this information exchange which was then leveraged in the implementation of WHEC's smart meter program.

- b) Please discuss any operational efficiencies and benefits resulting from any collaboration with other utilities and explain how any savings are accounted for in this application.

Response:

WHEC engaged Util-Assist, who worked with many LDCs to negotiate terms with the AMI vendor and lead the procurement process for other services such as meter installation vendors and Operational Data Storage systems. By working with a consultant in a collaborative environment with many other Ontario LDCs, WHEC was able to significantly "mitigate" the costs for the development of procurement materials such as RFPs, evaluation protocols, selection reports for the WHEC board etc. WHEC also reduced costs by participating in LDC cost sharing for an AMI test environment (see IRR#7(j)).

VECC Question # 3

Reference: Manager's Summary, Page 5

Preamble: The evidence indicates "Util-Assist lead a competitive process on behalf of WHEC for the disposal of old meter assets. Barrie Metals Ltd. was the successful bidder on the price per pound for the meter quotation submitted." (Meter Disposal 2008)

- a) Please confirm how meter disposal costs are reflected in the current application.

Response:

The net proceeds from the disposal of the stranded meters have been recorded in a sub-account of 1555 for stranded meters. As indicated on page 3 of WHEC's application, no costs associated with stranded meters have been included as per the Board's Smart Meter Funding and Cost Recovery – Final Disposition Guideline (G-2011-001). These amounts will be dealt with as part of WHEC's next cost of service application.

VECC Question # 4

Reference: Manager's Summary, Page 6

Preamble: The evidence states "During contract negotiations, WHEC decided on the purchasing option to own its AMI system and to have it operated by the AMI Vendor."

- a) Please provide the cost benefit analysis that this decision is based on.

Response:

WHEC's cost benefit analysis considered 3 different options for the ownership and operation of the Sensus AMI network.

Option 1- Sensus owns and operates the AMI network. In this model, WHEC would only own the meters (AMCD) and Sensus would own the AMCC and the AMRC infrastructure. With Sensus funding the capital for this infrastructure, the monthly O&M fees payable to Sensus over the life of the asset were not cost effective. WHEC also considered the risk of Sensus insolvency or assignment as in this model; WHEC would not have control over the software or the hardware for the data that we would be utilizing for customer billing.

Option 2 – WHEC owns and operates the AMI network. In this model, WHEC owns the meters, the AMRCs, the AMCCs and manages the operation of the AMI network. At the onset of the smart meter initiative, AMI technology was new to Ontario utilities and when considering with the requirement to deploy the system as well as begin to understand the enrollment with the provincial meter data repository, WHEC did not have the technical expertise required to manage the system and did not want to risk achieving the provincial mandate. This model would have also created the requirement for redundant staffing at a skill level that WHEC did not have in-house as with complex technology, redundancy must be in place to limit risk. When considering these factors, the costs analysis indicated that this was not the most cost effective solution.

Option 3 – WHEC owns and Sensus operates the AMI network. In this model, WHEC owns the meters, the AMRCs, the AMCCs and Sensus is responsible for the management and operation of the AMI network. It was felt that this strategy mitigated risk as much as possible as Sensus was required to meet the performance guarantees as the operator of the network ensuring that WHEC would achieve the performance requirements as per section 2.3.1 of the Ministry of Energy's Functional Specification. This model was considered to be cost effective and prudent and would also provide WHEC with the contractual right to move the management of the network to WHEC personnel at any time. If there are AMI network infrastructure issues or performance issues, 100% of the burden is on Sensus, which provides cost certainty for WHEC.

- b) Please identify the AMI Vendor and confirm Whitby Hydro's annual fees to the AMI Vendor to operate the AMI system.

Response:

Sensus is the AMI vendor. WHEC's annual fees paid to Sensus to host, operate and maintain the system are approximately \$92,000 USD and are payable to the AMI vendor based on a monthly fee per AMRC site and monthly per meter charges based on the quantity of smart meters deployed in the field.

VECC Question # 5

Reference: Manager's Summary, Page 6

Preamble: The evidence states "Projected 2012 operating costs include monthly user fees for meter reading and communication costs, salary and expenses for an incremental Settlement Analyst staff position to administer the Smart Meter and TOU programs."

- a) Please confirm when the Settlement Analyst position was filled in 2012.

Response:

Please see Response to Board Staff IRR #3

VECC Question # 6

Reference: Manager's Summary, Page 9

- a) Please confirm how Costs for Customer Owned Equipment are reflected in the current application.

Response:

WHEC has outlined the treatment and costs by year for Customer Owned Equipment on pages 8-9 of the original application. In summary, labour and associated costs have been capitalized in account 1555 and material and part costs have been expensed in account 1556.

VECC Question # 7

Reference: Smart Meter Recovery Model, Sheet 2

- a) Please explain the \$136,799 in line 1.3.1 Computer Hardware costs in 2010.

Response:

This cost is for the acquisition of the AMCC (Sensus Regional Network Interface)

- b) Please provide a breakdown and details of the costs under line 1.5.3 Professional Fees by year.

Response:

Please see Board Staff IRR #7.

- c) Please provide a breakdown and details of the costs under line 1.5.4 Integration by year.

Response:

All costs relate to the activities described in Board Staff IRR#3 (a) during 2009 and 2010.

- d) Please provide a breakdown and details of the costs under line 1.5.5 Program Management by year.

Response:

Costs reflect incremental resources to plan, develop and lead the Smart Meter project team. Please see Board Staff IRR #8 and #3 for additional discussion and details.

- e) Please provide a breakdown and details of the costs under line 1.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc. by year to show how these costs are required for Whitby Hydro's smart meter program and how these costs are incremental.

Response:

The cost breakdown for 1.6.3 was provided in table 7 of the application and has been reproduced below:

Table 7 - Capital Costs Exceeding Minimum Functionality

Expenditure	2010	2011	2012	2013	Total
Web Presentment and Consumption Data Presentation	\$0	\$0	\$27,474	\$0	\$27,474
MDMR/TOU software	\$9,378	\$16,870	\$6,243	\$0	\$32,491
MDMR/TOU integration costs	\$0	\$172,970	\$4,153	\$0	\$177,123
Total Capital Costs Exceeding Minimum Functionality	\$9,378	\$189,840	\$37,870	\$0	\$237,088

The costs for 2010 are for the acquisition of the Harris CIS MDMR interface module which was necessary to integrate the CIS to the centralized MDMR. There were also some costs associated with the procurement of the CLEO As2 interface which was on the Drummond Approved List of AS2 vendors provided by the IESO for LDCs to choose from to interface with the centralized MDMR for the submission of synchronization files.

The 2011 software costs include additional fees paid to the CIS vendor for MDMR modules that were required for the implementation of TOU rates as well as vendor support for the management of the AS2 interface.

The 2011 MDMR/TOU integration costs include costs for the System/Settlement Analyst and the Project Manager. (See Board Staff IRR- #3 and #8). In addition, Util-assist and Olameter provided support for this phase of the project.

Util-Assist supported the WHEC project team in the education process that would be required for the extensive amount of business process re-engineering necessary to implement TOU billing. In order to effectively manage the transition to TOU billing it would be essential to have a thorough understanding of the functionality of the interface and the exceptions that are generated by the complicated meter data scenarios. The exceptions that would be encountered through the management of the interface would be new and the education component to prepare for this included support through the business process redesign to manage this.

Olameter was engaged to provide on-site support to WHEC in the testing for the MDMR enrollment process. As the CIS requirements and functionality were new to the market, combined with a new centralized MDMR interface, utilizing experienced external resources to support the actual testing provided WHEC with timely resolution of issues identified during the testing process. Having this resource on site for the IESO System Integration Testing (SIT) enabled WHEC to complete the required testing in the required timeframe.

The 2012 costs include the acquisition and implementation of Web Presentment software which was acquired to provide WHEC customers with a mechanism to view their TOU consumption data. The remaining 2012 costs relate to loading meter data into the CIS system.

f) Please provide a breakdown and details of the costs under line 2.1.2 Other, by year.

Response:

Please see Board Staff IRR #9

- g) Please explain the costs under line 2.2.1 maintenance costs and account for the increase in 2012.

Response:

These costs are for payment to the AMI vendor for the management and maintenance of the AMRC devices (base station / TGB Towers). The AMRCs are used to collect and transmit smart meter data to the AMCC.

The AMI vendor bills WHEC on a monthly basis and in 2011, only nine months' worth of maintenance costs were recorded, while 2012 includes a full twelve months of maintenance fees.

- h) Please explain the \$42,000 cost in 2013 for Software Maintenance (line 2.3.2).

Response:

These costs are for payment to the AMI vendor for the monitoring and meter reading of the smart meters. The forecasted amount in 2013 (\$42,000) was included in line 2.3.2 but should have been grouped in line 2.3.2-Other so as to be aligned with similar costs from 2011 and 2012. There is no impact to the SMDR or SMIRR, however for clarification purposes, WHEC has included this cost classification update in the revised Smart Meter model provided in the response to Board Staff IRR#14.

- i) Please provide a breakdown and details of the costs under line 2.3.2 Other, by year.

Response:

Please see Board Staff IRR #10

- j) Please provide a breakdown and details of the costs under line 2.5.6 Other AMI Expenses, by year.

Response:

	2009	2010	2011	2012	2013	Total
Escrow Costs		700	700	1,000	1,000	3,400
Sandbox Testing					5,000	5,000
Material costs - Customer Owned Equipment	2,260	10,143	2,068	2,730		17,201
Security Audits			9,281	2,991	10,000	22,272
Misc		1,431	710	(146)		1,995
	2,260	12,274	12,759	6,575	16,000	49,868

WHEC recognizes the critical nature of the Sensus AMI system and as such elected to contract a 3rd party company to hold the Sensus source code in an escrow account as part of a risk mitigation strategy.

Sandbox Testing allows WHEC to ensure that new software releases, new meter types and new functionality are working properly before going into the live AMI production system. The test environment was installed and configured by PowerStream and the cost is shared by multiple

LDCs who selected Sensus as their AMI vendor in order to reduce the costs that would otherwise be required for setting up individual LDC test environments.

With respect to material costs associated with customer owned equipment, please refer to page 8-9 of the application.

Additional costs in Other AMI Expenses consist of fees payable for annual AMI security audits which were considered due diligence by WHEC. The introduction of AMI devices on the WHEC distribution system, created the responsibility for WHEC to complete this process of due diligence to ensure that customer data is secure.

- k) Please provide a breakdown and details of the costs under line 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.

Response:

The costs that were originally included in 2.6.1 relate to customer communications (newspaper notices, bill inserts, brochures, Q&A booklet, door hangers, postage for a separate mailing in 2011 etc.) for new smart meters (2010 - \$11,066) and Time-Of-Use billing (2011 - \$62,942, 2012 - \$763). 2011 costs are more significant as the focus was on ensuring customer communication and education was provided in light of the shift to TOU and the resulting impact to the customer's bill. As these costs do not relate to the communications infrastructure, they might be more appropriately reallocated to 2.5.2 (2010 costs) and 2.6.3 (2011/2012 costs) as defined below:

- 2.5.2 Other AMI OM&A Costs Related to Minimum Functionality – Customer Communications (may include project communication, etc.)
- 2.6.3 OM&A costs Related To Beyond Minimum Functionality – Costs for TOU implementation, CIS system upgrades, web presentation, integration with the MDM/R etc.

While these changes do not affect the SMDR or SMIRR rates, for clarification purposes, they have been reallocated in the revised Smart Meter model included in Board Staff IRR#14 and the impacts have been summarized below:

	2009	2010	2011	2012	2013
2.6.1					
Original	0	11,066	62,942	763	0
Reallocate to 2.5.2 (note 1)	0	(11,066)	0	0	0
Reallocate to 2.6.3 (note 2)			(62,942)	(763)	0
Revised	0	0	0	0	0
2.5.2					
Original	0	0	0	0	0
Reallocate to 2.5.2 (note 1)	0	11,066	0	0	0
Revised	0	11,066	0	0	0
2.6.3					
Original	0	0	10,227	88,045	122,000
Reallocate to 2.6.3 (note 2)	0	0	62,942	763	0
Revised	0	0	73,169	88,808	122,000

Notes:

- (1) Customer communication costs for new smart meters
- (2) Customer communications costs for TOU billing

- l) Please provide a breakdown and details of the costs under line 2.6.3 Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc. to show how these costs are required for Whitby Hydro's smart meter program and how these costs are incremental.

Response:

2.6.3 Breakdown of Costs				
	2011	2012	2013	Total
CIS license fees*	10,227	10,045	16,000	36,272
Sync Operator		40,000	45,000	85,000
System Analyst		38,000	57,000	95,000
Web Presentment			4,000	4,000
	10,227	88,045	122,000	220,272
* TOU, MDMR, meter management				

Please refer to Board Staff IRR# 3 & 4 for details regarding the System Analyst and Sync Operator and how these are integral roles which were incremental due to the Smart Meter initiative. Costs for web presentment have been included as it is important for customers to have tools to better understand their usage patterns, the impacts of conservation efforts etc. so that they have the opportunity to more actively manage their costs by taking full advantage of Smart Meter information. Costs identified and described in response (k) above have been re-classified to 2.6.1 in the revised Smart Meter model provided with Board Staff IRR#14.

VECC Question # 8

Reference 1: Manager's Summary, Cost Allocation, Page 12

Reference 2: Smart Meter Model

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

Preamble: Reference 1 indicates Whitby Hydro applied the methodology provided in version 3.01 of the Smart Meter Model provided by the Board for the purpose of allocating the SMDR and SMIRR. The Guideline states (Reference 2), "The Board views that, where practical and where data is available, class specific SMDRs should be calculated on full cost causality."

- a) Whitby Hydro tracked cost data by customer class. Please complete a separate smart meter revenue requirement model by rate class based on full cost causality by rate class.

Response:

WHEC is unable to complete a separate smart meter revenue requirement model by rate class as it does not have all of the costs allocated by rate class. To clarify, WHEC's allocation methodology included the weighted allocation of meter costs (as described on page 11-12 and outlined in Tables 12 and 13 of the application), the number of meters, and the revenue requirement (before PILS). These allocation methodologies are summarized in Tables 16 and 17 of the application and were consistent with the allocations performed in the Smart Meter Model 3.01 (sheet 10a). The model used these allocations to develop the SMDR and SMIRR by rate class. WHEC submits that this methodology is reasonable and has been accepted by the Board in cases where full cost causality is not available or practical (ie. PowerStream EB-2010-0209 and EB-2011-0128, and Waterloo-North EB-2012-0266).

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

Response:

Please see response (a) above.

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

Response:

Please see response (a) above.