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November 08, 2013

VIA MAIL and E-MAIL

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

Dear Ms. Walli:

Re: Vulnerable Energy Consumers Coalition (VECC)
Toronto Hydro-Electric System Limited (THESL)
Board File No. EB-2013-0287
Final Submissions of VECC

Please find enclosed the submissions of VECC in the above-noted proceeding. We have also directed a copy of the same to the Applicant.

Thank you.

Yours truly,

A handwritten signature in black ink, appearing to be 'Michael Janigan', written in a cursive style.

Michael Janigan
Counsel for VECC
Encl.

cc: Toronto Hydro-Electric System Limited

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 Toronto Hydro-Electric System Limited (“THESL”) for an order or orders approving or fixing just and reasonable distribution rates to reflect the recovery of costs for deployed smart meters, effective May 1, 2014.

Submissions of Vulnerable Energy Consumers Coalition (VECC)

VECC will address the following matters in its submissions:

- Prudence Review of Smart Meter Costs
- Cost Allocation & Calculation of Smart Meter Rate Riders
- THESL’s Calculations Compared to the Board’s Smart Meter Model

THESL filed an application August 1, 2013 for smart meter recovery based on actual audited costs incurred from 2008 to 2010. THESL’s smart meter costs include costs related to minimum functionality and smart meter costs beyond minimum functionality as defined in the Board’s Guideline G-2011-0001¹ and shown in the table below.² THESL indicates that as of the end of 2010, its disposition of smart meters was substantially complete and has been finalized as of the end of 2012.

Table 1: Summary of Smart Meter Costs

	2008		2009		2010		Total
	Minimum	Beyond Min	Minimum	Beyond Min	Minimum	Beyond Min	
Capital	\$26,211.7	\$8,600.8	\$16,088.0	\$6,745.2	\$13,719.7	\$6,079.7	\$77,445.1
OM&A	\$751.5	111.2	\$2,521.4	\$610.7	\$2,391.7	\$718.7	\$7,105.2
Total	\$26,963.2	\$8,712.0	\$18,609.4	\$7,355.9	\$16,111.4	\$6,798.3	\$84,550.2

THESL has previous applications approved by the Board regarding the disposition of smart meter balances as follows:

- EB-2007-0582: 2006 amounts combined as part of the Combined Proceeding EB-2007-0582; approved
- EB-2009-0069: 2007 amounts; approved
- EB-2010-0142; future smart meter costs in rate base approved

¹ Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011

² EB-2013-0287 Page 5 Table 2

In this application, THESL is applying for activities undertaken in 2008, 2009 and 2010 as shown below. THESL confirms all expenditures are incremental to those recovered through distribution rates.³

- a) Disposition of the separate 2008, 2009, and 2010 year-end balances and corresponding revenue requirements up to December 31, 2013 in the Smart Meter Deferral Account, by way of the SMDR, effective for 36 months from May 1, 2014 until April 30, 2017 collected from rate classes that had smart meters installed;
- b) Implementation of the SMIRR for rate classes that had smart meters installed to recognize assets that remain outside of ratebase, effective from May 1, 2014 until THESL’s next rebasing; and
- c) Discontinuation of the Smart Meter Rate Adder effective April 30, 2014.

Prudence Review of Smart Meter Costs

Table 3 below from the application provides the total average per unit capital costs and total average per unit costs (capital & operating costs).⁴

Table 3: Smart Meter Costs (\$/Unit Installed)

	2006	2007	2008	2009	2010	Average
Installed Meter Capital Costs						
Residential & GS<50 ⁽¹⁾	158.57	127.78	156.49	266.21	307.39	166.37
GS>50	948.62	546.38	1431.47	1441.08	1277.42	1091.94
Total Average Capital Costs	160.85	135.98	221.13	395.96	456.28	206.61
Total Average Cost (including OPEX)	163.56	144.19	226.61	450.27	527.96	220.69
% Change vs average 2006 cost		-12%	39%	175%	223%	34%
<small>Note 1: Includes Collectors</small>						

The Table shows the total average per unit cost (capital & operating) for an installed smart meter has increased 223% from \$163.56 in 2006 to \$527.96 in 2010.

THESL indicates that the increase over the 2006 to 2010 period in per unit smart meter costs can be partly attributed to a greater number of smart meter installations in difficult and/or costly locations. THESL explains that in 2010, the installations although fewer compared to prior years, involved more travel for scattered inside and difficult to access premises and special arrangements for access (power interruptions for small commercial customers). In addition, the shift in later years from the initial installation of less costly residential meters to a

³ EB-2013-0287, Page 3

⁴ EB-2013-0287, Page 6

greater proportion of the more expensive three-phase meters for commercial customers and some residential customers, can also account for the increase.

In response to VECC interrogatory #3(c), THESL indicates that of the 700,000 total meters installed, approximately 140,000 were in difficult and more costly locations.

In response to Board Staff interrogatory #3, THESL provided a summary of additional factors that influenced additional costs as the number of installations as a percentage of total related to these factors increased in the latter years:

- More expensive A-Base meter installations required for adaptor installations (double the cost) compared to external socket meter installation
- Replacement of specific meter bases initially installed found to be prone to meter lug failures, power isolations
- Presence of asbestos meter backer board
- Need for appointments for commercial meter changes
- Difficult to access residential meter changes

THESL also provides an explanation of the increase in OM&A costs in 2009 and 2010 resulting from increased customer communication costs and meter communications costs.⁵

Board Staff notes in its submissions that costs for 2006, 2007 and 2011 and beyond have already been approved by the Board.

In its evidence THESL stated the following:

“Overall, THESL’s average per unit cost (capital and OM&A) of \$220.69 for all residential and commercial smart meters installed from 2006 through 2010 is within 6% of the average per unit cost for all distributors in the Province of Ontario (the “Smart Meter Audit Review Report” of March 31, 2010 details an average costs of \$207.37 based on 3,053,931 smart meters installed at a total capital and OM&A cost of \$633,294,140). Excluding the GS>50kW class, THESL’s average per unit costs are actually 10.5% below the average, at \$185.58.”⁶

VECC points out the Board followed up on this review on October 26, 2010 and issued a letter to all distributors requiring them to provide information on their smart meter investments on a quarterly basis. The first distributors’ quarterly update represented life-to-date investments in smart meter implementation as of September 30, 2010 and as of this date, the average total cost per meter is \$226.92 (based on 4,382,194 meters (94% complete) with the total provincial investment in smart meter installation of \$994,426,187).⁷

VECC notes THESL’s average per unit costs are 3% below the updated provincial average.

⁵ Board Staff IR#5, VECC IR#5

⁶ EB-2013-0287 Page 6

⁷ Monitoring Report Smart Meter Investment – September 2010, March 3, 2011

VECC submits THESL has provided adequate documentation in its evidence and interrogatory responses on the nature, quantum and variance in its smart meter costs over the period 2006 to 2010. In considering the above, VECC submits THESL’s costs are reasonable.

Cost Allocation & Calculation of Smart Meter Rate Riders

Section 3.5 of the Board’s Guideline G-2011-0001 states:

“In the Board’s decision with respect to PowerStream’s 2011 Smart Meter Disposition Application (EB-2011-0128), the Board approved an allocation methodology based on a class-specific revenue requirement, offset by class-specific revenues. The Board noted that this approach may not be appropriate or feasible for all distributors as the necessary data may not be readily available.

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

In response to VECC interrogatory #1(a), THESL provided information on the breakdown of installed smart meter costs between a residential and GS<50 kW customer as follows:

	2008	2009	2010
Residential ⁽¹⁾	120.83	172.45	178.70
GS<50	648.69	564.11	508.30

Note 1: Includes Collectors

VECC notes that the average per unit cost of an installed meter for a commercial customer is three to five times more expensive compared to a residential customer. As shown in Table 3 above, the unit cost of an installed smart meter for a GS>50 kW customer averages 2.4 times that of a GS<50 kW customer over the 2008 to 2010 period. Given the difference in meter installation costs between customer classes, VECC submits the only way to avoid undue cross subsidy between customer classes is to calculate class specific rate riders that reflect the full costs for each customer class. On this basis, VECC sought separate smart meter revenue requirement and SMDR and SMIRR rate riders calculations for each customer class using the Board’s smart meter model based on full cost causality.⁸

In response to VECC interrogatory #7(b) THESL indicates that it does not keep records in accounts 1556 and 1555 by rate class and is not aware of a requirement to do so. VECC notes that other LDCs for example Lakeland Power tracked smart meter costs by customer class and was able to calculate separate revenue requirements and rate riders by customer

⁸ VECC IR#7(c)

class based on full cost causality. The Board accepted this approach on the basis that is more exacting and principled and the utility has calculated it and is reasonably confident with the underlying data at the customer class level.⁹

THESL indicates its proposed cost allocation methodology most closely reflects actual cost causality that is limited only by the available data. VECC accepts that THESL does not have the customer class data necessary to complete a separate smart meter model by customer class and therefore takes no issue with THESL’s methodology to allocate smart meter costs by customer class as detailed on page 14 of the application, subject to the comments below.

THESL’s Calculations Compared to Board’s Smart Meter Model

THESL calculated the revenue requirement from smart meters without the use of the Board’s smart meter model based on in-service capex. In addition, THESL populated the Board’s smart meter model as a comparative tool. The table below provides the revenue requirement results from the two methodologies and provides a variance of the results of the Board’s model compared to THESL’s approach.

THESL updated the Board’s smart meter model and its calculations as a result of interrogatory responses and the updates are shown in the table. THESL indicates the changes produced marginally different results in the Board’s model than originally filed and THESL’s calculations did not change as a result of the interrogatory responses.¹⁰

	As Filed			Updated as per Board Staff IR#15		
	Board Model \$ M	THESL’s Approach \$ M	Variance \$ M	Board Model \$ M	THESL’s Approach \$ M	Variance \$ M
SMDR Revenue Requirement	\$23.905	\$23.927	(\$0.022)	\$23.572 (\$333 lower than as filed)	\$23.927	(\$0.354)
SMIRR Revenue Requirement	\$9.792	\$9.631	\$0.161	\$9.75 M (\$3k higher than as filed)	\$9.631	\$0.164
Net						\$0.190

THESL indicates the variance between the results of its revenue requirement calculation compared to the values calculated by the Board’s smart meter model can be explained by three main differences: using in-service vs. capex spent in the year, and differences in how PILS and carrying costs are calculated. Specifically, THESL incurred IT capex of \$5,611,816

⁹ EB-2011-0413 Lakeland Power Distribution Ltd. Decision, Page 6

¹⁰ Board Staff IR#16

in 2008 that did not come into service until 2009. In the Board's model, THESL has shown the cost in 2008 whereas in THESL's calculation the \$5,611,816 is included in the 2009 value (the year it came into service).¹¹ VECC with agrees with Board Staff that the impact of this is that the deferred revenue requirement using the Board's model will be higher as there is an additional year of return on capital, associated PILs expense and depreciation expense by adding IT capital expenditures one year earlier (2008 compared to 2009).¹²

THESL submits that its calculations of the SMDR and SMIRR based on an in-service capital approach are more consistent with the manner in which its revenue requirement is determined. THESL also submits its calculation produces more accurate values than those generated by the smart meter model and requests that the Board approve its values. In THESL's view the Smart Meter Filing Guidelines identify the purpose of the Board-issued model as one to assist utilities in preparing their applications and is intended only to guide applicants' calculations. Where a utility has provided more accurate calculations, THESL submits that those calculations are the appropriate basis on which to calculate revenue requirement¹³.

In its submission Board Staff made the following comments:

"With respect to the major capital costs incurred for the deployment of smart meters and the AMI and computer infrastructure, it would appear that for most distributors, as in many applications that have been reviewed and approved by the Board, the costs, particularly for the meters and the meter installation costs, are generally correlated with the smart meter deployments in each year.

Board staff notes however that in a few cases, alignment between smart meter costs and meter installations was missing. The Board has directed at least one distributor to better align the smart meter costs with when the meters were deployed and went into service.

Based on the above, Board staff submits that THESL has misinterpreted the Board's policy and practice, and that the distinction between capital expenditures and capital additions is not as acute as THESL has suggested where the Board issued smart meter model is concerned. As such, Board staff believes that it would be consistent for THESL to also reflect the \$5,611,816 computer software capital expenditure in 2009 when the assets went into service in the Board issued smart meter model.

Board staff submits that the Model can accommodate in-service assets and given the unique circumstances of THESL's smart meter cost recovery should be filed on this basis. Board staff therefore submits that both the quanta and timing of costs are matched for the Model and THESL's model."¹⁴

¹¹ Board Staff IR #1(b)

¹² Board Staff Submission November 4, 2013 Page 5

¹³ Board Staff IR#15

¹⁴ Board Staff Submission November 4, 2013, Pages 5-6

VECC agrees with Board Staff's comments above and on this basis submits that the Board should request that THESL utilize the Board's smart meter model to calculate the revenue requirements and SMDRs and SMIRRS by customer class (Sheets 10A and 10B) making any further necessary adjustments provided the IT capex is reflected in 2009 capital costs to align with the in-service year. VECC sees value in consistency between distributors and submits a departure from following the Board's approach with respect to recovery of smart meter costs is not warranted in the current application. Any issues regarding in-service capital and capital in the year can be resolved using the Board's model.

With respect to calculating carrying costs, Board Staff clarified in its submissions how THESL's approach deviates from Board's standard practice and the methodology incorporated into the Board's smart meter model.¹⁵ VECC supports Board Staff's clarification regarding policy on these matters and submits THESL departure from Board practice further supports the use of the Board's smart meter model to calculate the SMDRs and SMIRRS.

Recovery of Reasonably Incurred Costs

VECC submits that its participation in this proceeding has been focused and responsible.

Accordingly, VECC requests an order of costs in the amount of 100% of its reasonably-incurred fees and disbursements.

All of which is respectfully submitted this 7th day of November 2013.

¹⁵ Board Staff Submission November 4, 2013 Pages 6-7