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Michael Janigan  
Counsel for VECC

December 16, 2014

**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)**  
**Essex Powerlines Corporation**  
**Board File No. EB-2014-0301**  
**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,

Michael Janigan  
Counsel for VECC  
Encl.

cc: Essex Powerlines Corporation

**EB-2014-0301**

## **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 Essex Powerlines Corporation (“Essex”) to reflect the final disposition of smart meter costs effective January 1, 2015.

### **Submissions of Vulnerable Energy Consumers Coalition (VECC)**

#### **2014 SMART METER COST RECOVERY APPLICATION**

Essex filed an application September 12, 2014 for recovery of \$3.35 million in costs incurred under its Smart Meter Initiative for the years 2008 to 2011.

VECC will address the following matters in its submissions:

- Prudence Review of Smart Meter Costs
- Cost Allocation & Calculation of Smart Meter Rate Riders
- Bill Impacts

Essex’s application requests recovery for 27,922 smart meters installed in its service territory.

Essex indicates capital and OM&A costs related to new (growth) smart meter installs post – 2011 (i.e. 2012 to 2014) have not been included for recovery in the application.<sup>1</sup> Essex indicated it will include any costs beyond the period of this application as part of its next Cost of Service application. In response to interrogatories Essex utilized the latest version of the smart meter model (version 5.0) instead of version 4.0 filed with the application and updated the smart meter model to include actual smart meter costs for 2012-2013 and forecasted costs for 2014 and 2015. Essex also updated the number of smart meters installed to 28,775.

In the application, Essex requested that the SMDR and SMIRR rate riders be effective for January 1, 2015 for 12 months to align with its Cost of Service filing for rates effective January 1, 2016. In response to Board Staff IR#18 Essex revised its effective date to May 1, 2015 to align with its Price Cap IR application currently before the Board and to allow time to process the smart meter application. VECC agrees an effective date of May 1, 2015 is appropriate in order to align with its Price Cap IR application.

VECC has reviewed Board Staff’s submissions and notes that Board Staff discovered as did VECC that input errors in the revised smart meter model provided by Essex corrupted many of the calculations.<sup>2</sup> Board Staff attempts to correct the calculation errors and has provided a

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<sup>1</sup> Application paragraph 33

<sup>2</sup> Board Staff Submission dated December 15, 2014 Page 8

revised smart meter model for review. Board Staff's corrections revise the SMDR for the GS<50 kW rate class. Table 1 below provides the SMDR & SMIRR Rate Riders requested in the application compared to revisions as a result of interrogatories plus Board Staff's correction to the SMDR for the GS<50 kW class.

**Table 1: SMDR & SMIRR Rate Riders: As Filed Compared to Revised**

	SMDR (\$ month)		SMIRR (\$ month)	
Class	As Filed	Revised	As Filed	Revised as per Interrogatory Responses
From	January 1, 2015	May 1, 2015	January 1, 2015	May 1, 2015
<b>Residential</b>	\$(1.15)	\$(0.04)	\$1.11	\$1.07
<b>GS&lt;50 kW</b>	\$10.49	\$15.53 <b>\$9.32</b>	\$3.81	\$3.80

VECC's comments on the proposed rate riders are included in the section below on Cost Allocation & Calculation of Smart Meter Rate Riders.

### Prudence Review of Smart Meter Costs

Table 1 below<sup>3</sup> shows the smart meter costs applied for in the application for the years 2008 to 2011 totaling \$3,353,340, compared to the updated costs of \$3,519,015 provided in the updated smart meter model.<sup>4</sup>

	Total Cost As Filed	Cost per Meter as Filed	Total Cost Updated	Cost per Meter Updated
<b>Capital</b>	\$3,262,923	\$116.85	\$3,354,090	\$116.56
<b>OM&amp;A</b>	\$90,417	\$3.24	\$165,015	\$5.73
<b>Total</b>	<b>\$3,353,340</b>	<b>\$120.10</b>	<b>\$3,519,105</b>	<b>\$122.29</b>
# smart meters installed	27,922		28,775	

The Board's Guideline G-2011-0001<sup>5</sup> states the following:

"The Board expects that the majority (90% or more) of costs for which the distributor is seeking recovery will be audited."

Essex indicates all actual costs reported in the smart meter model (2008 to 2011) have been audited.<sup>6</sup>

<sup>3</sup> Board Staff IR#18

<sup>4</sup> Essex\_Smart Meter Model Version 5\_20141126

<sup>5</sup> Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011, Section 3.5, Page 18

Essex'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-2011-0001<sup>7</sup> and shown below.

**Table 2: Average Cost per Meter<sup>8</sup>**

Description	Total Costs	Average Cost per Meter
Total Meters Installed	28,775	
<b>Total Capital Costs</b>	<b>\$3,354,090</b>	<b>\$116.56</b>
Capital Costs Beyond Minimum Functionality	\$3,791	\$(0.13)
Less Capital (Excluding Costs Beyond Minimum Functionality)	\$3,350,299	\$116.43
Total OM&A	\$165,015	\$5.73
Less OM&A (Costs Beyond Minimum Functionality)	\$(30,441)	\$(1.06)
OM&A (Excluding Costs Beyond Minimum Functionality)	\$134,574	\$4.68
<b>Total Capital &amp; OM&amp;A</b>	<b>\$3,519,105</b>	<b>\$122.29</b>
Capital & OM&A (Excluding Costs Beyond Minimum Functionality)	<b>\$3,484,873</b>	<b>\$121.11</b>

In 2008, EPLC became authorized by regulation (O. Reg. 427/06) to conduct Smart meter activities, conditional on its meters being acquired pursuant to and in compliance with the Request for Proposal issued by London Hydro Inc.<sup>9</sup>

Essex utilized its own metering staff to deploy smart meters. A contract employee was utilized to manage the smart meter implementation.<sup>10</sup>

Conversion of customers by billing cycle to TOU billing was initiated in February 2011 and completed by April 2011 which was two months ahead of the mandatory schedule of June 2011.<sup>11</sup>

Essex indicates certain cost savings have resulted due to the implementation of smart meters, namely the manual meter reading costs.<sup>12</sup> In response to VECC IR#5, Essex further discussed its reduced costs and customer service improvements. Essex plans to reflect and consider these savings in its next Cost of Service rate application. VECC notes that this approach is consistent with the approach taken by other distributors.

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<sup>6</sup> Application paragraph 31

<sup>7</sup> Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011

<sup>8</sup> Board Staff IR#18, Updated Table 2

<sup>9</sup> Application paragraph 10

<sup>10</sup> Application paragraph 16

<sup>11</sup> Application paragraph 22

<sup>12</sup> Application paragraph 34

In response to interrogatories Essex further explained its smart meter costs and resulting revisions incorporated in the updated model.

As shown above, Essex's Average Capital Cost per meter is \$116.56 and Total Average Cost per meter is \$122.29 including costs exceeding minimum functionality. Essex submits its total program costs and its cost per installed meter are reasonable and prudently incurred.<sup>13</sup>

VECC observes that Essex's costs compare favourably as they are below the sector average of \$186.76 capital cost per meter and \$207.37 total cost per meter (based on September 2009 data)<sup>14</sup> and the total cost per meter of \$226.92 (based on September 2010 data).<sup>15</sup>

VECC submits Essex has provided adequate documentation on the nature and quantum of its smart meter costs. On this basis, VECC takes no issue with respect to the prudence of Essex's incurred smart meter costs.

### Costs Beyond Minimum Functionality

The Board's Guideline (G-2011-0001) indicates that a distributor may incur costs that are beyond the minimum functionality as defined in O. Reg. 425/06.

Specifically the Guideline states,

#### 3.4 Costs Beyond Minimum Functionality

While authorized smart meter deployment must meet the requirements for minimum functionality, a distributor may incur costs that are beyond the minimum functionality as defined in O.Reg. 425/06. To date, the Board has reviewed three types of costs that are beyond minimum functionality:

- Costs for technical capabilities in the smart meters or related communications infrastructure that exceed those specified in O.Reg 425/06;
- Costs for deployment of smart meters to customers other than residential and small general service (i.e. Residential and GS < 50 kW customers); and
- Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.

The Board's Guideline indicates these costs may be recoverable provided a distributor shows how these costs are required for its smart meter program and how these costs are incremental.<sup>16</sup>

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<sup>13</sup> Application Paragraph 8

<sup>14</sup> Sector Smart Meter Audit Review Report", dated March 31, 2010

<sup>15</sup> Monitoring Report Smart Meter Investment – September 2010, March 3, 2011

<sup>16</sup> Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011, Pages 15-17

EPLC incurred the capital cost of \$3,791 for MDMR integration software. Additional OM&A costs of \$30,441 included meter set up and consultation costs for integration with the MDMR.<sup>17</sup> VECC considers these costs to be reasonable and incremental to implement the smart meter program; otherwise they would not have been incurred. VECC submits Essex's costs beyond minimum functionality are in accordance with the Board's Guideline G-2011-0001.

## 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 IR#7 requesting Essex to complete a separate smart meter revenue requirement model by customer class, Essex indicates it did not keep cost records by rate class. Essex notes this was not required by the Board's Guideline and it is now not practical and the data is not available to determine cost causality by customer class.

Essex installed 26,795 residential smart meters and 1,980 GS<50 kW smart meters.<sup>18</sup> In response to VECC IR# 3, Essex provided the average costs for a meter installation for the residential class compared to GS<50 kW.

Class	Type of Meter	Quantity	Installed Cost	Average Costs
Residential	Elster Rex 2	26,795	\$ 2,791,302	\$ 104.17
GS<50 kW	Elster 1 ph TX	1,056	\$ 128,168	\$ 121.37
	Elster 3 ph TX	924	\$ 599,635	\$ 648.96

Depending on the type of meter, VECC notes the average cost of an installed smart meter for a GS<50 kW customer ranges from 16% greater to six times greater than the cost to install a smart meter for a residential customer. VECC submits the only way to avoid undue cross

<sup>17</sup> Application paragraph 35

<sup>18</sup> Essex\_Smart Meter Model Version 5\_20141126

subsidy between customer classes is to calculate class specific rate riders that reflect the full costs for each customer class. VECC accepts that Essex does not have the cost data by rate class to complete separate smart meter models by customer class based on full cost causality.

Based on estimated material and labour costs Essex implemented in its view a more reasonable cost allocation split as shown in the table below.<sup>19</sup>

<b>Smart Meter Cost Allocation Estimate</b>					
	# customers	Total Estimated Mat'l Cost	Total Estimated Labour \$ Cost	Total cost	% split
Residential	26,031	2,420,883	300,658	2,721,541	80%
GS<50 kW	1,891	660,675	40,203	700,878	20%
<b>Total</b>	<b>27,922</b>	<b>3,081,558</b>	<b>340,861</b>	<b>3,422,419</b>	<b>100%</b>

VECC takes no issue with Essex's proposed cost allocation proposal. However, in the updated Smart Meter Model provided by Essex with the interrogatory responses, VECC notes that the % split shows residential at 80% and GS<50 kW at 22% for a total of 102%. VECC submits this should be corrected.

VECC accepts Essex's cost allocation methodology as a proxy for revenue requirement with one exception. Essex collected the smart meter funding adder revenue from other classes other than Residential and GS<50 kW. Essex deemed the amount as not significant based on the overall revenues collected and Essex reallocated the costs to the residential customer class (93.5%) and GS<50 kW customer class (6.5%).

VECC submits that as a matter of principle, the SMFA revenues collected from other rate classes should be returned instead of the allocation proposed by Essex between the residential and GS<50 kW customer classes.

## Bill Impacts

For the GS<50 kW customer class, the overall bill impact is over 10% based on Essex's interrogatory responses and a SMDR of \$15.53. Essex indicates it could mitigate this increase by recovering the amount over a longer period of time than the 12 months proposed such as 18 months to align with rates effective January 1, 2017.

Board Staff's corrected model has revised the SMDR for the GS<50 kW customer class to \$9.32. VECC submits Essex should confirm the accuracy of its smart meter model calculations and recalculate the bill impacts for the GS<50 kW customer class and if greater than 10%, VECC supports an 18 month recovery period for the GS<50 kW customer class.

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<sup>19</sup> Paragraph 37

**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 16<sup>th</sup> day of December 2014.