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September 19, 2012

**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)**  
**Entegrus Powerlines Inc. EB-2012-0289**  
**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: Entegrus Powerlines Inc.  
Mr. Christopher Cowell

## 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 Entegrus Powerlines Inc. (“EPI”) for an order or orders approving or fixing just and reasonable distribution rates to reflect the recovery of costs for deployed smart meters, effective November 1, 2012.

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

VECC will address the following matters in its submissions:

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

EPI filed an application July 5, 2012 for smart meter recovery based on actual costs incurred from 2009 to December 31, 2011 and forecasted costs to December 31, 2012 related to ongoing incremental OM&A. There are no smart meter implementation costs in 2012. Table 1 provides a summary of smart meter costs.

EPI service territory is made up of 16 non-contiguous communities interspersed between large expanses of rural territory serviced by Hydro One.<sup>1</sup> EPI (formerly Chatham-Kent Hydro) maintains 4 sets of rates as follows that reflect acquisitions and amalgamations from 2005 to 2011:

- Chatham-Kent (CK)
- Strathroy, Mount Brydges & Parkhill (SMP)
- Dutton
- Newbury

**Table 1: Summary of Smart Meter Costs<sup>2 3</sup>**

	<b>Previously Approved</b>	<b>Current Application</b>	<b>Total</b>
Capital	\$6,023,276	\$2,507,683	\$8,530,959
OM&A	\$900,138	\$397,418	\$1,297,556
<b>Total</b>	<b>\$6,923,414</b>	<b>\$2,905,101</b>	<b>\$9,828,515</b>

<sup>1</sup> Response to Board Staff Interrogatory #2(a)

<sup>2</sup> Response to Board Staff Interrogatories #3 & #4

<sup>3</sup> Response to VECC Interrogatory #2 Response to Board Staff Interrogatory #2(a)

In previous applications, EPI applied for recovery of smart meter costs for smart meters installed to the end of 2008. In this application, EPI seeks the recovery of costs for smart meters installed from 2009 to the end of 2011. During this period, EPI installed 6,529 smart meters: 3,228 residential, 2,940 GS<50 kW smart meters and 361 GS>50 kW meters. Table 2 below summarizes EPI's full deployment of smart meters. EPI has installed a total of 40,486 smart meters.

**Table 2: Summary of Smart Meters Installed<sup>4</sup>**

<b>Customer Class</b>	<b>To end of 2008</b>	<b>2009 to end of 2011</b>	<b>Total</b>
Residential	32,882	3,228	36,110
GS<50 kW	963	2,940	3,903
GS>50 kW	112	361	473
<b>Total</b>	<b>33,957</b>	<b>6,529</b>	<b>40,486</b>

EPI'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>5</sup>

In this application, EPI seeks:

- Approval to recover the deferred revenue requirement related to smart meters costs not included in previous cost recovery applications to December 31, 2011 (and associated interest costs) less the Smart Meter Funding Adder (SMFA) revenues not included in previous applications to April 30, 2012 (and associated interest) to be collected via a Smart Meter Disposition Rider (SMDR) by rate zone and customer class. The SMDRs would be in effect from November 1, 2012 for one year or 3.5 years depending on the rate zone.
- A Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR) to recover the annual incremental revenue requirement related to smart meter costs to be incurred from January 1 to December 31, 2012. The SMIRR will be in effect from November 1, 2012 to April 30, 2016 until EPI's next cost of service application planned for 2016 rates.
- EPI proposes that SMDRs and SMIRRs apply to the residential, GS<50 kW and GS>50 kW customer classes in the CK, SMP and Newbury rate zones. For Newbury, EPI proposes that rate riders apply to the residential and GS<50 kW customer classes as there is no GS>50 kW customer class for Newbury.

### **Prudence Review of Smart Meter Costs**

EPI played a pioneering role in the rollout of smart meters in Ontario. EPI indicates it was an early adopter of AMI and smart meter technology and demonstrated leadership in smart

<sup>4</sup> Response to Board Staff Interrogatory #3

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

meter implementation both in its own service area and by sharing its learnings and experience with the industry.

EPI was among the 13 licensed distributors authorized by Ontario Regulation 427/06 to carry out discretionary Smart Metering activities. EPI participated in the Board's 2007 Combined Proceeding with respect to smart meter costs (EB-2007-0063). EPI also contributed to the provincial target to reach 800,000 smart meter installations by December 31, 2007.<sup>6</sup>

EPI completed smart meter deployment and Time of Use billing implementation on deadline for June 2011.

VECC submits it is reasonable to conclude that EPI's early and lengthy involvement in the deployment process would have resulted in some efficiencies over time.

In response to VECC interrogatory #5, EPI summarized \$40,550 in savings by customer class and rate zone that EPI experienced as a result of smart meter deployment, noting that annual cost savings of \$23,000 are already reflected in CKH's 2010 COS application. This leaves \$17,550 in savings that EPI notes were inadvertently not included in the application but have been included in the updated models filed under Board Staff interrogatory #8. In its submissions, Board Staff notes that the revised smart meter models filed under Board Staff interrogatory #8 reflect revisions resulting from response to interrogatories and show a decrease in OM&A costs.<sup>7</sup> It appears to Board Staff that the \$17,500 in savings identified in VECC #5 may explain some of the reduction. VECC agrees with Board Staff that EPI should provide a more detailed explanation of the changes in OM&A.

Table 3 below shows EPI's updated total average costs per smart meter including all rate zones.<sup>8</sup> EPI's average capital cost per meter is \$201 based on 40,013 installed smart meters. On a total cost basis (capital & OM&A), EPI's average cost per meter is \$233.

**Table 3: Average Cost per Meter**

Description	Previously Approved Capital Costs	Current Capital Costs	Total Capital Costs	Previously Approved OM&A Costs	Current OM&A Costs	Total OM&A Costs	TOTAL UNIT COST	Total Installed Meters
Residential	\$171	\$136	\$168	\$27	\$113	\$34	<b>\$202</b>	36,110
GS<50 kW	\$341	\$557	\$504	\$25	\$12	\$15	<b>\$519</b>	3,903
Res & GS<50 kW	\$176	\$337	\$201	\$27	\$65	\$32	<b>\$233</b>	40,013
GS>50 kW	\$697	\$1,190	\$1,074	\$12	-\$10	-\$5	<b>\$1,069</b>	473

<sup>6</sup> Application, Page 10

<sup>7</sup> Board Staff Submission, Page 4

<sup>8</sup> Response to Board Staff Interrogatory # 3 & VECC Interrogatory #2(b)

Appendix A of the Combined Proceeding Decision (EB-2007-0063, September 21, 2007) compares data for 9 out of 13 utilities and shows the total cost per meter ranged from \$123.59 to \$189.96, with Hydro One Networks Inc. being the main exception at \$479.47, due in part for the need for more communications infrastructure and increased costs to install smart meters for customers over a larger and less dense service area. VECC notes that the EB-2007-0063 Decision shows Chatham-Kent and Middlesex at the top of the range with a total unit cost of \$189.34 and \$189.96, respectively.

The Board's report, "Sector Smart Meter Audit Review Report", dated March 31, 2010, indicates a sector average capital cost of \$186.76 per meter (based on 3,053,931 meters (64% complete) with a capital cost of \$570,339,200 as at September 30, 2009). The review period was January 1, 2006 to September 30, 2009. The average total cost per meter (capital and OM&A) is \$207.37 (based on 3,053,931 meters (64% complete) with a total cost of \$633,294,140 as at September 30, 2009).

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).<sup>9</sup>

VECC observes that EPI's total average costs per meter of \$233 are above the range in the combined proceeding and higher than the most recent sector average.

EPI's average capital and OM&A costs show in some cases significant variances between previously approved costs and current costs, as well as cost variances in the average capital and OM&A costs by customer class when comparing the four rate zones.

In Board Staff interrogatory #4, EPI explained that it experienced an increase in average unit costs since the time of prior approvals primarily as a result of the timing of commercial deployment. Residential meters are relatively less expensive and less complex to install in comparison to commercial smart meters. VECC agrees that timing of commercial deployment will have an impact on average unit costs.

With respect to cost variances between rate zones, EPI notes that CK has relatively higher costs due to its larger geographic service territory as well as the relatively higher mix of commercial meters.<sup>10</sup> EPI indicates the CK and SMP rate zones are more industrialized than the Dutton and Newbury rate zones and the GS<50 kW rate classes in CK and SMP require a substantially higher mix of polyphase meters. In response to VECC interrogatory # 1(d) and 2(c), EPI further explained the variances in costs within customer classes across the rate zones. VECC submits EPI's responses assist in explaining the variances in total costs, however, VECC still has some concerns regarding EPI's total unit costs.

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<sup>9</sup> Monitoring Report Smart Meter Investment – September 2010, March 3, 2011

<sup>10</sup> Application, Page 26

In response to VECC interrogatory #8 asking EPI to explain why its average total costs are higher than the recent distributor average of \$226.92, EPI stated that it expects that the final industry average will be higher than \$230 per meter due to a higher anticipated industry GS<50 kW and polyphase meter mix within the last phase of industry development. EPI stated that this suggests that the comparison of EPI's fully complete unit costs, against an average of partially complete industry unit costs from a period of one year prior, is of limited use.

VECC notes that Board Staff, in its recent submissions in Bluewater Power's smart meter recovery application (EB-2012-0263), compared Bluewater Power's total average smart meter costs to LDCs in its peer group (Mid-Size Southern Medium-High Undergrounding).<sup>11</sup> CKH is part of this peer group.<sup>12</sup> Table 3 below provides the total cost per meter data and includes data for EPI.

**Table 4: Peer Group Smart Meter Costs**

<b>Distributor</b>	<b>Total Cost per Meter (including costs beyond minimum functionality if applicable)</b>
COLLUS	\$191.86
Peterborough	\$161.42
Welland	\$146.83
Bluewater Power (in progress)	\$261.01
Festival (in progress)	\$215.94
<b>Entegrus (in progress)</b>	<b>\$233.00</b>

VECC notes that EPI has the highest total average cost per smart meter when compared to the three LDCs in its peer group that have smart meter decisions and are not in progress. It is VECC's understanding that LDCs in EPI's peer group have similar circumstances to CKH, i.e. non-contiguous nature of the service territory.

In the Bluewater Power proceeding, Bluewater Power provided a summary of minimum functionality costs per customer and beyond minimum functionality costs per customer for 14 smart meter applications that have been filed to date in 2012. The data showed average minimum functionality costs per customer of \$194.93 and average beyond minimum functionality costs per customer of \$11.84.<sup>13</sup>

<sup>11</sup> Board Staff Submission EB-2012-0263, Page 5

<sup>12</sup> PEG Report

<sup>13</sup> EB2012-0263 Response to VECC interrogatory #1

Although the provincial smart meter review data referenced above has been used as the metric to test reasonableness of costs to date, VECC questions whether recent peer to peer data or group data may also have some merit.

Based on this peer group comparison, VECC questions whether EPI's costs are too high. VECC suggests the Board may wish to consider whether the peer to peer data or group data provides additional adequate insight to determine whether a reduction in EPI's costs should be considered or if the data warrants a closer look at the reasons for the difference in costs.

### **Recovery of Smart Meter Costs**

The Board's Guideline G-2011-0001<sup>14</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."

EPI confirmed that 100% of the costs submitted for disposition are included in the audited financial statements to December 31, 2011 (with the exception of ongoing costs).<sup>15</sup> Ongoing costs refer to 2012 costs. In response to Board Staff interrogatory #1(a), EPI confirms that the costs incurred in all four rate zones are reflected in the audited financial statements.

VECC submits EPI has conformed to the Board's Guidelines.

### **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.

EPI provided information on how costs were tracked and allocated:

- Capital costs were tracked separately for each rate zone and applicable rate class.<sup>16</sup>

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<sup>14</sup> Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011, Section 3.5, Page 18

<sup>15</sup> Application, Page 14

<sup>16</sup> Application, Page 25

- The costs of providing smart meters to GS>50 kW customers are to be borne by the customers in that class.<sup>17</sup>
- For OM&A, EPI proposes that all customers across its service area share equally in the OM&A costs and the savings realized over through more efficient deployment and installation processes.<sup>18</sup>
- The OM&A costs for 2012 and later (hardware maintenance & software maintenance) are in support of all four rate zones and accordingly have been allocated among the rate zones based on number of smart meters.<sup>19</sup>

EPI also provided information on the variance in meter costs:

- A polyphase meter costs more than a single phase meter and requires a more expensive communications module.
- The quantity of communications of each polyphase meter is equivalent to that of approximately 10 single phase meters.<sup>20</sup>
- The costs associated with GS>50 kW smart meters and their installation are relatively higher than both residential and GS<50 kW smart meters. This is due to the fact that these meters are more expensive and complex to install.<sup>21</sup>

VECC submits the difference in costs per customer class warrants class-specific smart meter models that reflect the costs borne by each customer class consistent with the principle of cost causality.

EPI prepared separate smart meter recovery models for each customer class in each rate zone which resulted in 11 separate models.

VECC takes no issue with EPI's proposed calculation and allocation of costs to each customer class.

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<sup>17</sup> Application, Page 30

<sup>18</sup> Application, Page 27

<sup>19</sup> Application, Page 27

<sup>20</sup> Application Page 26

<sup>21</sup> Application, Page 30



In response to interrogatories<sup>22</sup>, EPI updated the proposed rate riders as follows:

**Entegrus Powerlines Inc.**

**Summary of Requested SMDR & SMIRR**

Rate Class	No. of Customers	SMDR			SMIRR	
		Amount	Duration	Rate Rider	Amount	Rate Rider
Chatham-Kent						
Residential	28,649	\$175,149	1 Year	\$0.51	\$95,953	\$0.28
General Service <50	3,083	\$387,375	3.5 Years	\$2.99	\$204,713	\$5.53
General Service >50	400	\$93,397	1 Year	\$19.46	\$47,216	\$9.84
Strathroy, Mount Brydges & Parkhill						
Residential	6,422	-\$64,181	1 Year	-\$0.83	\$23,983	\$0.31
General Service <50	662	\$92,649	3.5 Years	\$3.33	\$41,996	\$5.29
General Service >50	89	\$14,808	1 Year	\$13.87	\$11,713	\$10.97
Dutton						
Residential	521	\$25,467	3.5 Years	\$1.16	\$14,136	\$2.26
General Service <50	89	\$8,146	3.5 Years	\$2.18	\$3,998	\$3.74
Newbury						
Residential	168	\$5,091	3.5 Years	\$0.72	\$4,693	\$2.33
General Service <50	31	\$1,597	3.5 Years	\$1.23	\$1,144	\$3.07
General Service >50	5	\$820	1 Year	\$13.66	\$400	\$6.66

**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 18<sup>th</sup> day of September 2012.

<sup>22</sup> Response to Board Staff Interrogatory #8