

## PUBLIC INTEREST ADVOCACY CENTRE LE CENTRE POUR LA DEFENSE DE L'INTERET PUBLIC

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Michael Janigan Counsel for VECC (613) 562-4002 (x 26)

March 11, 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)** 

Hydro One Brampton Networks Inc. EB-2012-0440

**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: Hydro One Brampton Networks Inc.

Mr. Scott Miller

#### **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 Hydro One Brampton Networks Inc. ("HOBNI") 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, 2013.

#### **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

HOBNI filed an application December 17, 2012 for final smart meter disposition and recovery for the period January 1, 2010 to December 31, 2012. HOBNI has two previous Board Decisions (EB-2007-0882, EB-2010-0132) related to \$20,156,683 in smart meter costs for 125,192 installed smart meters between 2006 and 2009.

HOBNI's original application was based on actual audited costs incurred from January 1, 2010 to December 31, 2011 and forecast costs for 2012 and 2013 as shown in Table 1 below.<sup>2</sup>

**Table 1: Summary of Smart Meter Costs** 

	2010	2011	2012	2013	Total
Capital	\$3,500,850	\$3,793,357	(\$6,023)		\$7,288,184
OM&A	\$350,061	\$30,485	\$33,136	\$72,065	\$485,747
Total	\$3,850,911	\$3,823,842	\$27,113	\$72,065	\$7,773,931
% Allocator	100%	6.9%	8.1%	8.1%	

In the original application, HOBNI indicates 100% of the 2010 OM&A costs are recoverable in this application. For 2011, 2012 and 2013, HOBNI estimates 6.9%, 8.1% and 8.1% of OM&A costs are recoverable. The % allocations for each year were derived based on the expected number of smart meters installed compared to the life to date in each year.

As a result of interrogatory responses<sup>3</sup> HOBNI updated its OM&A costs and smart meter recovery models. HOBNI indicates that as a result of its analysis pertaining to cost allocation, cost causality, and analysis performed to answer Board Staff IR#1, HOBNI recalculated the

<sup>2</sup> Board Staff IR #1(a)

<sup>&</sup>lt;sup>1</sup> VECC IR #1(a)

<sup>&</sup>lt;sup>3</sup> Board Staff #1, 3, 6(a),6(b) & VECC #1(d), 11(a)

original smart meter OM&A costs submitted, adjusted the % allocators for the years 2011 to 2013, amended its application and is seeking recovery as detailed in Table 1A. VECC calculates that the adjustment increases OM&A by \$98,661 (\$584,408-\$485,747). VECC takes no issue with HOBNIs explanation of the revised costs.

**Table 1A: Updated Summary of Smart Meter Costs** 

	2010	2011	2012	2013	Total
Capital	\$3,500,850	\$3,793,357	(\$6,023)	\$ -	\$7,288,184
OM&A⁴	\$350,061	\$41,178	\$35,832	\$157,337	\$584,408
Total	\$3,850,911	\$3,834,535	\$29,809	\$157,337	\$7,872,592
% Allocator	100%	8.7%	8.7%	8.7%	
# smart meters	7554	4330	57	0	11,941

In response to VECC IR#2, HOBNI updated its costs to reflect 2012 audited actual costs. VECC notes HOBNI's updated smart meter models do not incorporate the updated 2012 audited actuals. VECC submits that the 2012 actual audited costs should be incorporated in the calculation of the final rate riders.

HOBNI confirms it completed 100% of smart meter installations (10,964) for the residential and GS<50 kW rate classes by December 31, 2011: 6,328 residential & 4,636 GS<50 kW smart meters. In addition, HOBNI completed the installation of 977 smart meters for the GS 50 to 699 kW customer class on customers with demands up to 200 kW, from January 1, 2010 to the end of September 30, 2012.<sup>5</sup> HOBNI's application does not include any forecast smart meter capital expenditures for 2013 as HOBNI indicates it will fund these costs as part of normal operations. HOBNI has included forecast OM&A costs for 2013.

HOBNI'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>6</sup>

In this application, HOBNI seeks:

- Approval to recover the deferred incremental revenue requirement related to smart meters costs from January 1, 2010 April 30, 2013 (plus interest on OM&A and depreciation expenses) less the Smart Meter Funding Adder (SMFA) revenues collected from January 1, 2010 to December 31, 2011 and associated interest collected via a Smart Meter Disposition Rider (SMDR). The proposed recovery period is 8 months from May 1, 2013 to December 31, 2013.
- Approval to add a Smart Meter Incremental Revenue Requirement Rate Rider (SMIRR) to recover the annual incremental revenue requirement associated with the smart meters that would have occurred if the assets and operating expenses were incorporated into rate base on January 1, 2013. The SMIRR is proposed to be in place from May 1, 2013 until

<sup>5</sup> Application, Pages 17-18

<sup>&</sup>lt;sup>4</sup> Board Staff IR#1

<sup>&</sup>lt;sup>6</sup> Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011

HOBNI's next planned Cost of Service application for 2015 rates.<sup>7</sup>

 HOBNI proposes that the SMDRs and SMIRRs apply to the residential, GS<50 kW and GS 50 to 699 kW customer classes.

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

In 2007, HOBNI was one of 13 licensed distributors authorized by Ontario Regulation 427/06 to participate in the combined proceeding (EB-2007-0063) and conduct discrete metering activities followed by a prudence review of the Board. The Board found that due diligence was exercised in smart meter purchasing decisions and buying economies were maximized and HONI and HOBNI received the same prices. HOBNI indicates its smart meter procurement activities for the period 2010 to 2012 are a continuation of the same procurement processes accepted by the Board in the combined proceeding.<sup>8</sup>

In response to Board Staff IR#4 regarding operational efficiencies and costs savings achieved by HOBNI, HOBNI indicates the installation of smart meters has saved approximately \$1.3 million since 2008 in meter reading costs which were reflected in HOBNI's 2011 cost of service application and therefore are reflected in the current revenue requirement. HOBNI also identifies future projects and programs under development but is unable to determine the costs savings as this time.

As shown in Table 2 below prepared by VECC based on data in the application, VECC calculates the total average cost per smart meter as \$659.29 based on 11,941 installed smart meters.

Table 2: Average Cost per Meter

Description	Costs	Costs 2010 to	Forecast	Sub-Total	Total
	2006 to 2009 <sup>9</sup>	Dec 31, 2012	2013	2010 to 2013	
Total Meters Installed	125,192	11,941		11,941	137,133
Capital	\$17,440,950	\$7,288,184		\$7,288,184	
OM&A	\$343,345	\$427,071	\$157,337	\$584,408	
TOTAL	\$20,156,683	\$7,715,255		\$7,872,592	\$2,802,927
Average Cost per Smart Meter Installed	\$161.01			\$659.29	\$204.39

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.

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

<sup>8</sup> Application, Page 20

<sup>&</sup>lt;sup>7</sup> VECC IR #1(e)

<sup>&</sup>lt;sup>9</sup> VECC IR#1(a)

(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). 10

VECC observes that HOBNI's total average smart meter cost (CAPEX + OM&A) of \$659.29 for the period 2010 to 2013 is significantly above HOBNI's average cost per smart meter installed for the years 2006 to 2009 of \$161.01, as well above the provincial average of \$226.92.

VECC agrees with Board Staff in its submission that the reason for the lower costs is that lower cost single phase meters were installed first from years 2006 to 2009 for the Residential and GS < 50 kW customer classes. From years 2010 to 2012 the balance of the lower cost smart meters were installed with a larger proportion of the more expensive poly phase meters installed for both the GS < 50 kW and GS 50 to 699 kW customer class. 11 On this basis. VECC submits it is appropriate to review costs for the period 2006 to 2013, where HOBNI's average cost per installed meter is \$204.39 which is within the Board's range in EB-2007-0063 and well below the recent sector averages.

In considering the above, VECC finds HOBNI's smart meter unit costs to be reasonable.

#### Costs Beyond Minimum Functionality

HOBNI's application includes \$1,396,624 for costs beyond minimum functionality (capital costs of \$1,377,580 and OM&A costs of \$19,044). VECC observes that the total of these expenditures represents approximately 17% of HOBNI's total smart meter program spending (\$1,396,624/\$7,872,592).

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,

<sup>11</sup> Board Staff Submission, Page 4

<sup>&</sup>lt;sup>10</sup> Monitoring Report Smart Meter Investment – September 2010, March 3, 2011

<sup>&</sup>lt;sup>12</sup> HONIBrampton\_SM IRR\_Residential GS\_20130221, Sheet 2 HONIBrampton\_SM IRR\_GS\_20130221, Sheet 2

#### 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</li>
- Costs for TOU rate implementation, CIS system upgrades, web presentation, integration with the MDM/R, etc.

HOBNI's costs beyond minimum functionality include capital costs related to smart meter installations for the residential and GS<50 kW customer classes during 2010 and 2011 that have outage management notification capabilities built in (\$207,768), and capital and operating costs (\$1,188,856) to install smart meters in the GS 50 to 699 kW customer class in 2011 and 2012.

In response to VECC IR#5, HOBNI confirmed that in its previous smart meter recovery in EB-2010-0132, the Board approved incremental costs of \$18.95 per meter for meters with the capability of facilitating an outage management response system. VECC notes the incremental costs in this application for this capability is the same at \$18.95 per meter.<sup>13</sup>

The Board's Guideline G-2011-0001 indicates that a distributor may apply for the recovery of costs for smart meter installations or conversions for the GS>50 kW customer class. The application should document the nature, the justification and the cost per meter separately from those for the residential and GS < 50 kW customers. VECC submits HOBNI's application appropriately reflects the Board's Guidelines.

VECC agrees with Board Staff<sup>15</sup> that the Board has allowed the above types of expenses in the past for other smart meter applications. VECC notes HOBNI's percentage of costs beyond minimum functionality (17%) is higher than what the Board has typically seen in other smart meter applications. However, VECC submits this can be explained for the most part by the enhanced smart meter technical capabilities (outage management response system) for the residential and GS<50 kW customer classes. VECC takes no issue with the nature or quantum of HOBNI's costs beyond minimum functionality.

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

<sup>&</sup>lt;sup>13</sup> VECC IR #12(b)

<sup>&</sup>lt;sup>14</sup> Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011, Page 16

<sup>&</sup>lt;sup>15</sup> Board Staff Submission, Page 6

The Board's Guideline G-2011-0001<sup>16</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."

In response to VECC IR#2 HOBNI updated its smart meter costs to reflect 2012 audited actual costs. Based on this update VECC notes over 99% of HOBNI's costs (2010 to 2012) are audited.

VECC submits the audited costs conform 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.

In the original application, HOBNI proposed that the residential and GS<50 kW share the same SMDR and SMIRR rate riders, as HOBNI was unable to reliably disaggregate smart meter costs associated with these two customer classes. <sup>17</sup> Class specific SMDR and SMIRR rate riders were proposed for the GS 50 to 699 kW service classification as HOBNI had segregated costs pertaining to smart meters associated with this customer class as the costs are beyond minimum functionality and the Board's Guidelines requires that these costs be tracked separately.

In response to VECC IR#7, HOBNI confirms 94.89% of its 136,173 installed meters are single phase meters (primarily for the residential class) and the remaining 5% are polyphase meters for the GS<50 kW and GS 50 to 699 kW customer classes. VECC notes smart meter capital and OM&A costs differ materially depending on the customer class and the type of smart meter deployed. This point is illustrated by HONI's average material cost per unit of approximately \$480 for a polyphase meter for the GS<50 kW customer class compared to \$920 for the GS 50 to 699 kW customer class. HOBNI confirms the installation of the

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<sup>&</sup>lt;sup>16</sup> Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011, Section 3.5, Page 18

<sup>&</sup>lt;sup>17</sup> Application, Page 15

<sup>18</sup> VECC IR#10

polyphase meters in 2011 for the GS 50 to 699 kW customer class was more complex and costly. 19

In considering the above, VECC submits that the only way to avoid undue cross subsidy between customer classes is to calculate rate riders on a class specific basis based on full cost causality.

In response to Board Staff IR#3, HOBNI reviewed its data and disaggregated the smart meter costs between the residential and GS<50 kW customer classes derived from separate cost data by class based on the number of smart meters by type and estimated average installed cost for each type of meter. HOBNI updated the smart meter models and allocated costs between the residential and GS<50 kW customer classes based on the following cost allocation methodology (similar to the methodology approved by the Board in EB-2011-0128):

- Allocation of OM&A based on number of meters installed for each rate class);
- Allocation of the return (deemed interest plus return on equity) and amortization based on total direct meter cost by class;
- Allocation of PILs based on the revenue requirement allocated to each class before PILs;
- Direct allocation of SMFA plus carrying costs to the customer classes for which smart meter costs have been directly incurred.<sup>20</sup>

The revised rate riders compared to the original rate riders are shown in Table 3.

Table 3: SMDR & SMIRR Rate Riders: As Filed Compared to Revised

	SMDR (\$ month)		SMIRR (\$ month)		
Class	As Filed	Revised Board Staff IR#3	As Filed	Revised Board Staff IR#3	
Period	8 months	8 months			
From	May 1, 2013	May 1, 2013 to	May 1, 2013 to	May 1, 2013 to	
	to December	December 31,	next Cos	next Cos	
	31, 2013	2013	application	application	
Residential	\$1.39	\$0.35	\$0.71	\$0.41	
GS<50 kW	\$1.39	\$17.93	\$0.71	\$6.16	
GS50 to 699 kW	\$22.87	\$23.15	\$9.55	\$9.93	

VECC submits HOBNI's methodology provides a proxy for revenue requirement but it does not reflect full cost causality. However, given HOBNI's available data by customer class, VECC accepts the methodology used by HOBNI to calculate revised SMDR and SMIRR rate riders by customer class. As noted above, VECC suggests 2012 audited actual costs be incorporated in the final calculation.

<sup>&</sup>lt;sup>19</sup> Application, Page 35 <sup>20</sup> Application, Page 20

### **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 8<sup>th</sup> day of March 2013.