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ONE Nicholas Street, Suite 1204, Ottawa, Ontario, Canada K1N 7B7

Tel: (613) 562-4002. Fax: (613) 562-0007. e-mail: piac@piac.ca. <http://www.piac.ca>

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

January 30, 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)
Algoma Power Inc. EB-2012-0104
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: Algoma Power Inc.
Mr. R. Scott Hawkes

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 Algoma Power Inc. (“API”) for an order or orders approving or fixing just and reasonable distribution rates to reflect the recovery of costs for deployed smart meters effective January 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

API filed an application October 22, 2012 for smart meter cost recovery based on actual audited costs incurred to December 31, 2011 and forecasted costs to December 31, 2012.

In response to interrogatories, API made adjustments to its smart meter recovery model and on January 28, 2013 API filed revised smart meter costs and SMDR and SMIRR rate riders (Schedules 1, 2 & 3 respectively).

API installed a total of 11,535 smart meters at the end of 2011, which represents 100% installation to applicable customers: 7,040 residential, 3,548 seasonal and 947 GS<50 kW.

API’s revised capital and OM&A costs are shown in Table 1 below.¹

Table 1: Summary of Smart Meter Costs

	Audited Actual to end of 2011	Actual 2012	Forecast 2013	Total
Capital	\$4,272,096	\$149,346	\$37,000	\$4,458,441
OM&A	\$99,868			\$99,868
Total	\$4,371,964	\$149,346		\$4,558,309

API’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-2011-0001.²

In this application, API seeks:

¹ Updated Schedule 1 , Smart Meter Recovery Model, Sheet 2, 20130128

² Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011

- Approval to recover the deferred revenue requirement related to smart meters costs from 2006 to December 31, 2012 (plus interest on OM&A and depreciation expenses) less the Smart Meter Funding Adder (SMFA) revenues collected from 2006 to December 31, 2012 and associated interest collected via a Smart Meter Disposition Rider (SMDR). The proposed recovery period is four years (January 1, 2013 to December 31, 2016).
- 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 January 1, 2013, from an effective date of January 1, 2013 to December 31, 2013.

API proposes that the SMDRs and SMIRRs apply to the R1 (residential & GS<50 kW) and seasonal customer classes.

Prudence Review of Smart Meter Costs

API documented its collaboration with its affiliate company Canadian Niagara Power Inc. (CNPI), which in turn collaborated with its associate LDCs Westario Power Inc. (WPI) and Grimsby Power Inc. (GPI). API indicates this collaboration allowed all parties to benefit from cost sharing on specific aspects of the project such as IT development costs that was further facilitated by the common CIS shared by the parties (i.e. SAP system hosted by CNPI).

In addition, API indicates that, as part of the District 9 (D9) group of seven utilities in northeastern Ontario, it worked collectively with these utilities to develop a single project plan, single AMI solution, single vendors and pooled resources for educational and research activities. D9 also participated in the London Hydro Phase Two RFP Proposal process that resulted in a contract with Sensus. All Regional Collectors are owned by API and the D9 utilities share a single Regional Network Interface (RNI).

As a result of the above collaboration, API documented some operational benefits as follows³:

- Elimination of manual meter reading (Meter reading costs occurred in 2012 totalled \$416,684 compared to 2011 costs of \$457,913)⁴
- Utilization of loading data for system planning purposes
- Acquisition of data such as outage and voltage alarms to enhance operations functions
- Automation of billing data collection & processing & centralization of billing functions at CNPI; CNPI & API operate as single entity in interactions with SME & MDM/R
- Management of AMI network centralized at CNPI Fort Erie

In response to VECC IR #2(a) to quantify any savings, API indicated that a preliminary analysis performed by Util-Assist in 2007 indicated that API would save approximately 6.4% on total smart meter capital costs and approximately 27% on ongoing smart meter O&M costs as a result of

³ Application, Pages 3-6

⁴ Board Staff IR#7(a)

implementing AMI in a D9 groups as opposed to a stand-alone implementation. These savings resulted largely from the use of a shared RNI among the D9 LDC's, as well as the ability to obtain volume discounts on certain items.

In response to Board Staff IR#7(c) to identify further areas of operational benefits and efficiencies, API indicates it uses the Smart Meter technology during and after hours to confirm power flow to the customer's meter prior to dispatching crews and that give API's service area is large, doing so results in savings due to reduced call-outs for the operations group. Another area of operational benefits and efficiencies is that upon receiving complaints of high/low voltage from customers, API is now using voltage history from Smart Meters to determine whether there is in fact a problem on its system, and to come up with the most effective/efficient solution where problems are confirmed. API provided further details on operational efficiencies, benefits and savings in response to VECC IR #1 and #2 and Board Staff IR #7, 8 and 11.

In considering the above, VECC agrees API realized operational efficiencies, benefits and costs savings as a result of its collaboration with other utilities in its smart meter implementation program.

API provided a comparison and explanation of its smart meter budget to actual costs which showed a favourable variance of 14%.⁵

As shown in Table 2 below prepared by VECC using data from the updated smart meter recovery model, API's average total cost (capital & OM&A costs) per smart meter (excluding costs beyond minimum functionality) is \$380.58, based on 11,535 installed smart meters. Including costs beyond minimum functionality, the average cost per meter is \$391.97.

Table 2: Average Cost per Meter⁶

Description	Audited Costs to Dec 31, 2012	Average Costs per Meter	Forecast Costs 2013	Average Costs per Meter
Total Meters Installed	11,535			
Capital Costs – Minimum Functionality	\$4,290,051	\$371.92	\$37,000	\$3.20
OM&A – Minimum Functionality	\$99,868	\$8.66		
Total Capital & OM&A – Minimum Functionality	\$4,389,919	\$380.58		
Capital Costs Beyond Minimum Functionality	\$131,390	\$11.39		
OM&A Beyond Minimum Functionality	\$0	\$0		
Total Capital & OM&A – Beyond Minimum Functionality	\$131,390	\$11.39		
TOTAL	\$4,521,309	\$391.97		

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

⁵ Manager's Summary, Table #3

⁶ Updated Schedule 1 , Smart Meter Recovery Model, Sheet 2, 20130128

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 (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).⁷

VECC observes that API's total average smart meter cost of \$380.58 (excluding costs beyond minimum functionality) is approximately 68% above the most recent sector average of \$226.92. When costs beyond minimum functionality are included, the total average meter cost of \$391.97 is approximately 73% above recent sector averages.

API describes the several challenges it experienced during its smart meter installation as result of the unique nature of its service territory as follows:⁸

- Expansive service territory covering 14,200 square km
- Rural and rugged terrain with dense vegetation (less than .1% considered urban)
- Low customer density – 6.3 customers per km of line or 0.8 customers per square km of geographic area
- Reliance on Rural or Remote Rate Protection (RRRP) funding to prevent significant and unsustainable rate increases due to API's higher per customer cost to deliver distribution services

VECC notes that other utilities in API's cohort also have average costs per smart meter above the recent sector averages due to their non-contiguous service territories, which the Board has taken into consideration along with other factors in determining the prudence of smart meter costs. API's peer group, Small Northern Low Undergrounding, includes West Nipissing Energy Services, Renfrew Hydro, Espanola Regional Hydro Distribution, Fort Frances Power, Northern Ontario Wires, Parry Sound Power, Terrace Bay Superior Wires, Sioux Lookout Hydro, Chapleau Public Utilities, Atikokan Hydro, and Great Lakes Power (API's

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

⁸ Application, Page 19

predecessor).⁹ Table 3 below prepared by VECC shows the average smart meter costs of LDCs in API's cohort.

Table 3: Average Costs per Smart Meter in API's Cohort

LDC	Average Cost per Meter (Including Costs Beyond Minimum Functionality)	Average Cost per Meter (Excluding Costs Beyond Minimum Functionality)	Reference
Algoma	\$391.97	\$380.58	EB-2012-0104
Fort Frances	\$262.57	\$248.16	EB-2012-0327 Board Decision, Page 4
NOW	\$318.05		EB-2012-0353, Board Decision Page 4
Parry Sound	\$286.69	\$276.06	EB-2012-0344, EB-2012-0159 Board Decision, Page 12
Sioux	\$338.90		Board Staff Sub EB-2012-0327 Fort Frances, Pages 7-8
Atikokan	\$420		Board Staff Sub EB- 2012- 0327 Fort Frances, Pages 7-8

VECC notes that next to Atikokan, API's average per meter costs are the highest at \$397.97. API's costs are approximately 15.6% greater than the next highest, Sioux Lookout at \$338.90.

VECC submits that although this approach has not been tested to establish reasonableness, a comparison of API to utilities in its cohort that have recent smart meter recovery decisions, provides additional data and has some merit in determining if API's costs are reasonable.

VECC submits API's description of its unique circumstances (noted above) adequately explains its higher smart meter costs. Based on this, coupled with API's documented operational efficiencies, benefits and cost savings resulting from smart meter implementation, VECC takes no issue with API's higher costs and submits API has provided adequate documentation on the prudence of its costs.

Costs Beyond Minimum Functionality

API's application includes \$131,390 in capital costs beyond minimum functionality (audited costs of \$43,369 in 2011 and \$88,022 in 2012).¹⁰ VECC observes that the total of these expenditures represents approximately 2.8% of API's total smart meter program spending (\$131,390/\$4,558,309). VECC further notes this percentage is consistent with the percentage of costs beyond minimum functionality seen in other recent smart meter applications.

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

⁹ PEG Report, Table 5

¹⁰ Updated Schedule 1 , Smart Meter Recovery Model, Sheet 2, 20130128

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.

API confirmed two aspects of its project exceed minimum functionality: MDM/R integration and TOU implementation and Operational Data Storage (ODS) implementation. API documented the nature of these costs related to new business processes to support MDM/R and TOU functionality and the need for the ODS to support data management functionality. API indicates these costs were incremental to normal day-to-day operations and do not duplicate functions.¹¹

VECC takes no issue with the nature or quantum of API's costs beyond minimum functionality and submits recovery of these costs is justified.

Recovery of Smart Meter Costs

The Board's Guideline G-2011-0001¹² states the following:

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

API's updated evidence indicates its smart meter cost recovery is based on audited costs incurred to December 31, 2011, actual 2012 costs and forecast 2013 costs. VECC submits 96% of API's costs in this application are audited (\$4,371,963/\$4,558,309).

VECC submits API's 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

¹¹ Application, Pages 15-16

¹² Board Guideline G-2011-0001, Smart Meter Funding and Cost Recovery – Final Disposition, dated December 15, 2011, Section 3.5, Page 18

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.

API's smart Meter Costs (2007 to 2012) were allocated by rate class based on actual/forecasted costs incurred. Total Return on Capital (Deemed Interest Plus Return on Equity), Amortization and PILS amounts were allocated based on the Smart Meter Costs (2007 to 2012) by class as a proportion of total Smart Meter Costs (2007 to 2012) for all classes. OM&A costs, Smart Meter Funding Adder (SMFA) revenues, and Carrying Charges were allocated based on the number of meters installed by class as a proportion of the total number of meters installed. The Net Deferred Revenue Requirement was then divided by average number of metered customers in 2013, and then also divided by the 48 month recovery period proposed.¹³

VECC notes that the PowerStream methodology approved by the Board regarding the treatment of SMFA revenues is to allocate the SMFA revenues and interest collected from each customer class that receives smart meters, directly to that customer class with a 50:50 allocation of residual SMFA and interest collected from other metered customers (i.e. GS 50-4999 kW & Large Use) to the customers that received smart meters (typically residential and GS<50 kW classes). In response to VECC IR #8(d) to provide a breakdown of the total SMFA revenue collected by customer class, API indicates that because of the way it posted the revenues it not possible to break out the amounts collected by rate class. VECC submits API's proposed allocation of SMFA revenue based on the number of meters installed by class is acceptable given its customer classes and circumstances.

API's revised rate riders compared to the original rate riders in the application are shown in Table 4. The revised rate riders include adjustments to the model resulting from the interrogatory process.

Table 4: SMDR & SMIRR Rate Riders: As Filed Compared to Revised

Class	SMDR (\$/month) (48 months)		SMIRR (\$/month) (12 months)	
	As Filed	Revised Board Staff #19 20130128	As Filed	Revised Board Staff #19 20130128
Residential	\$3.01	\$2.97	\$5.09	\$4.82
Seasonal	\$2.99	\$2.92	\$5.06	\$4.75
GS<50 kW	\$4.01	\$4.85	\$6.61	\$7.56
R1		\$3.19		\$5.15

¹³ VECC IR#8(a)

In response to VECC IR #6(c), API provided average meter capital costs by customer class based on a calculation that allocated total costs to each type of meter which were then allocated by rate class, based on the number of each type of meter by class. This calculation resulted in the following average costs per meter.

Table 5: Capital Cost per Meter by Customer Class

Customer Class	Average Cost per Meter
Residential	\$369.09
Seasonal	\$363.70
GS<50 kW	\$578.80

VECC observes smart meter capital costs differ materially depending on the customer class and the type of smart meter deployed. API confirms that the total costs of meters and meter installations are higher for poly-phase and transformer-rated meters. These types of meters are found in larger proportions in the GS<50 class than in the Residential or Seasonal classes.¹⁴

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.

VECC IR #8 sought the calculation of class specific rate riders based on full cost causality. Specifically, VECC sought separate smart meter models for each customer class in order to recalculate the rate riders using class specific revenue requirements based on available data at the customer class level.

In its response API indicated that completing separate Smart Meter revenue requirement models by customer class would ultimately result in the same Net Deferred Revenue Requirement by rate class as provided in the original application. This is because the same principles and assumptions that were used would have to be made in the live models to provide the necessary breakdown by rate class. API also noted the residential and GS<50 customers fall under the Residential - R1 service classification. Therefore, those costs are pooled together to calculate one common disposition rider.¹⁵ VECC agrees that since the costs are pooled together to reflect the R1 customer class, separate smart meter models are not required. As such, VECC supports API's proposed cost allocation methodology and the calculation of revised SMDR and SMIRR rate riders filed as an updated response to Board Staff IR#19 on January 28, 2013.

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.

¹⁴ VECC IR#7(a)

¹⁵ VECC IR#8(e)

All of which is respectfully submitted this 30th day of January 2013.