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March 6, 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) Hydro Hawkesbury Inc. EB-2011-0173 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,

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Michael Buonaguro Counsel for VECC Encl.

cc: Hydro Hawkesbury Inc. Mr. Michel Poulin

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 Hawkesbury Inc. for an order or orders approving or fixing just and reasonable distribution rates to be effective May 1, 2012.

FINAL SUBMISSIONS

On Behalf of The

Vulnerable Energy Consumers Coalition (VECC)

March 6, 2012

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Vulnerable Energy Consumers Coalition (VECC)

Final Argument

1 The Application

- 1.1 Hydro Hawkesbury Inc. ("Hydro Hawkesbury", "the Applicant", or "the Utility") filed an application ("the Application") with the Ontario Energy Board ("the Board" or "the OEB"), under section 78 of the *Ontario Energy Board Act, 1998* for electricity distribution rates effective May 1, 2012. The Application was filed in accordance with the OEB's guidelines for 3rd Generation Incentive Regulation which provides for a mechanistic and formulaic adjustment to distribution rates between cost of service applications.
- 1.2 As part of its application, Hydro Hawkesbury included a request to recover the impact of lost revenues associated with various conservation and demand management (CDM) activities (i.e. an LRAM recovery), the recovery of costs of replacing two transformer stations and the use of 2010 Actuals vs. Forecasted. The following section sets out VECC's final submission regarding these aspects of the application.

2 Lost Revenue Adjustment Mechanism (LRAM)

- 2.1 Hydro Hawkesbury applied to the Board in this application for the recovery of lost revenue of \$48,918.88 (excluding carrying charges), through one year rate riders effective May 1, 2012 in relation to CDM program activities.
- 2.2 Hydro Hawkesbury's LRAM claim in this application includes energy and demand savings resulting from 2006-2010 OPA CDM programs that persist into 2011 and to April 30, 2012.
- 2.3 There has been no previous LRAM application by Hydro Hawkesbury. Hydro Hawkesbury confirms that the amounts it is seeking to recover in this LRAM filing are for new amounts not included in past LRAM recoveries.¹
- 2.4 Hydro Hawkesbury hired Elenchus Research Associates Inc. to calculate the LRAM claim using the OPA's verification of CDM savings based on 2006-2009 Final OPA CDM Results and 2010 OPA Final CDM Summary Results (September 16, 2011).²

¹ Response to VECC Interrogatory # 4 (b) & (c)

² Exhibit 1, Tab 2, Schedule 6, Page 1

2.5 Hydro Hawkesbury received 2006-2010 Final OPA CDM Results on November 15, 2011 and updated the LRAM claim to \$48,981.41, an increase of \$62.53.³

Input Assumptions - OPA Programs

- 2.6 In the Board's Decision in the Horizon Application (EB-2009-0192), the Board indicated that distributors are to use the most current input assumptions which have been adopted by the Board when preparing their LRAM recovery as these assumptions represent the best estimate of the impacts of the programs.
- 2.7 VECC accepts for LRAM purposes, the OPA's verification of the energy savings for Hydro Hawkesbury's OPA-funded CDM programs used to calculate the LRAM amounts.
- 2.8 VECC submits Hydro Hawkesbury has confirmed through interrogatory responses that savings for the OPA's 2006 Every Kilowatt Counts Program regarding 13-15 W Energy Star CFL's have been removed from the LRAM claim beginning in 2010.

Load Forecast

- 2.9 Hydro Hawkesbury's last load forecast approved by the Board was in respect to its 2010 Cost of Service (COS) application (EB-2009-0186). Hydro Hawkesbury indicates that there were no direct CDM savings from OPA programs included in its Board approved load forecast.
- 2.10 The Board's Guideline states "The LRAM is determined by calculating the energy savings by customer class and valuing those energy savings using the distributor's Board-approved variable distribution charge appropriate to the class. The calculation does not include any Regulatory Asset Recovery rate riders, as these funds are subject to their own independent true-up process. Lost revenues are only accruable until new rates (based on a new revenue requirement and load forecast) are set by the Board, as the savings would be assumed to be incorporated in the load forecast at that time."⁴
- 2.11 In the recent Hydro Ottawa Decision (EB-2011-0054), the Board disallowed a true-up of the effects of CDM. The Board noted firstly, that the Board's CDM Guidelines do not consider symmetry with respect to LRAM; and secondly, that there have been expectations related to LRAM including no-true up of the effects of CDM activities embedded in a rebasing year.⁵

³ Response to Board Staff Interrogatory # 20 (d)

⁴ Guidelines for Electricity Distributor Conservation and Demand Management (EB-3008-0037), Page 18

⁵ EB-2011-0054 Hydro Ottawa Decision, Page 24

- 2.12 VECC notes that in other recent Decisions, the Board disallowed LRAM claims in the rebasing year and beyond for CDM programs implemented prior to (and including) the rebasing year.
- 2.13 In the Whitby Hydro Decision (EB-2011-0206), the Board disallowed the LRAM claim for the rebasing year as the Board is of the view that it is not appropriate to vary from the stated policy which states that lost revenues are only accruable until new rates are set by the Board, as the CDM savings would be assumed to be incorporated in the load forecast at that time.⁶
- 2.14 In the Hydro One Brampton Decision (EB-2011-0174), the Board found the request for LRAM in 2011 (its rebasing year) inconsistent with the Guidelines and agreed these savings should have been incorporated into the 2011 load forecast at the time of rebasing.⁷

<u>2006 to 2010 CDM Programs – Recovery of Lost Revenue in 2010, 2011 & January 1, 2012 to April 30, 2012</u>

2.15 In accordance with the Board's guidelines and recent Decisions, VECC submits that energy savings from the OPA's CDM programs deployed between 2006 and 2010 are not accruable in 2010, 2011, and January 1, 2012 to April 30, 2012 as these savings should have been incorporated into the 2010 load forecast at the time of rebasing.

2006 to 2009 CDM Programs - Recovery of Lost Revenue in 2006, 2007, 2008 & 2009

- 2.16 VECC supports the approval of the lost revenues requested by Hydro Hawkesbury for the years 2006, 2007, 2008 and 2009 from the impact of CDM programs implemented in 2006 to 2009, as these savings occurred prior to rebasing and have not been claimed.
- 2.17 In summary, VECC submits that the LRAM claim approved by the Board should be adjusted to include lost revenue for the years 2006, 2007, 2008 and 2009 from the impact of 2006-2009 CDM programs, for the reasons noted above.

3 Incremental Capital Module (ICM) & Z-Factor

- 3.1 Hydro Hawkesbury requests an ICM for the approval of rate riders to recover the cost of replacing an existing 110 KV distribution transformer with a 25MVA transformer that will have the capability to support the entire service area.⁸
- 3.2 Hydro Hawkesbury also requests a Z-Factor for the approval of rate riders to recover amounts for the purchase of a replacement transformer for a faulty 44 KV distribution transformer and site preparations. The Z-factor requested is in

⁶ EB-2011-0206 Whitby Hydro Decision, Page 14

⁷ EB-2011-0174 Hydro Brampton Decision, Page 13

⁸ Exhibit, Tab 2, Page 9

the amount of \$712,909.25. Hydro Hawkesbury indicates the expense is required to insure reliability and continuity of power delivery to the utility's customers.⁹

- 3.3 Hydro Hawkesbury's original objective was to budget for the replacement of both transformers in its next Cost of Service application in 2014.
- 3.4 Hydro Hawkesbury debated whether to file an ICM combining both requests (replacement of the 110 KV and 44 KV transformers) or file a Z-factor for the 44 KV transformer. The reason for the choice of Z-Factor vs. ICM was that Hydro Hawkesbury felt that the safety of its customers and the reliability of its distribution system were at serious risk and it needed to take immediate action to address the issue without prior approval from the OEB. Hydro Hawkesbury indicates it needs some type of funding adder to recover the cost of the replacement transformer and whether it comes in the form of an ICM or Z-factor is irrelevant to the utility.¹⁰
- 3.5 The Board's Report on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors dated July 14, 2008 indicates that Z-factors are events that are not within management's control. The Board expects that any application for a Z-factor will be accompanied by a clear demonstration that the management of the distributor could not have been able to plan and budget for the event and that the harm caused by the extraordinary events is genuinely incremental to their experience or reasonable expectations.¹¹
- 3.6 Hydro Hawkesbury considers the sudden failure of the 44 KV transformer to be beyond the control of management considering that up until late 2009, this transformer had been the most reliable of all transformers. Hydro Hawkesbury indicates there is nothing it could have done to predict and prevent this failure.¹²
- 3.7 VECC submits that given the age of the assets, the recent studies documenting the condition of the transformers and the timeline of events and preventive measures undertaken by Hydro Hawkesbury, the need to replace the asset should not be treated as an unforeseen event. Rather, VECC submits Hydro Hawkesbury should seek recovery of the amounts under an ICM, not a Z-factor.
- 3.8 VECC notes that Hydro Hawkesbury based the Z-factor rate adder calculation on the ICM module and in response to Board Staff interrogatory # 7, Hydro Hawkesbury filed an Incremental Capital Workform and Incremental Capital Project Summary Workform that combined the two transformer projects.

⁹ Exhibit 1, Tab 2, Schedule 3, Page 3

¹⁰ Response to Board Staff Interrogatory # 2

¹¹ Appendix Pages V - VI

¹² Response to Board Staff Interrogatory # 2, 3

- 3.9 The following submissions address Hydro Hawkesbury's current proposal to replace a transformer at the 110 KV substation under ICM, and considers the replacement of the transformer at the 44 KV substation under ICM, instead of a Z-factor.
- 3.10 The ICM module is intended to address the treatment of new capital investment needs that arise during the IRM plan term which are incremental to capital investment needs.
- 3.11 For incremental capital expenditures to be considered for recovery prior to rebasing, the Board's Guidelines indicate the amounts must satisfy the following eligibility criteria: *materiality*, *need* and *prudence*.¹³
- 3.12 <u>Materiality:</u> The amounts must exceed the Board-defined materiality threshold and clearly have a significant influence on the operation of the distributor; otherwise they should be dealt with at rebasing. Distributors are to use a Board-approved formula to calculate a materiality threshold.¹⁴
- 3.13 **<u>Need:</u>** Amounts should be directly related to the claimed driver, which must be clearly non-discretional. The amounts must be clearly outside of the base upon which rates were derived.
- 3.14 **Prudence:** The amounts to be incurred must be prudent. This means that the distributor's decision to incur the amounts must represent the most cost-effective option (not necessarily least initial cost) for ratepayers.

Replacement of One Existing 110 KV transformer with a new 25MVA

- 3.15 Hydro Hawkesbury has two delivery points for electricity supply: A 110 KV substation at the west end of town (two transformers) and a 44 KV station at the east end of town (one transformer).
- 3.16 In its evidence, Hydro Hawkesbury indicates the two transformers are approximately 45 years of age and have shown signs of deterioration, and their operating condition has been a growing concern for the utility and its customers. At their current load capacity, they can only partially cover the load of each other and Hydro Hawkesbury cannot feed the entire load with a single unit. Reliability and continuity of power supply is threatened by the loss of either substation. The two transformers at the 110 KV station are reaching end of life¹⁵ and have no oil

¹³ Report of the Board on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors – July 14, 2008, Section 2.5, Page 24

¹⁴ Chapter 3 of the Filing Requirements for Transmission and Distribution Applications, June 22, 2011, Page 10

¹⁵ Exhibit 1, Tab 2, Schedule 2, Page 3

containment and fuse protection.¹⁶

- 3.17 In its 2010 COS application, Hydro Hawkesbury sought funding for an assessment of each transformer to further assess and monitor the condition of its aging assets.
- 3.18 In November 2010, a station assessment study was performed by GE Canada that included electrical and mechanical inspections and oil analysis to assess the condition of the two station transformers.^{17'} GE's recommendation was that both transformers would need an overhaul to extend their life expectancy and reliability. Since the overhaul would include new accessories, gauges replacement, gasket replacement and new paint, GE recommended starting the process of purchasing new transformers and substation modernization.¹⁸ In response, Hydro Hawkesbury had BPR conduct a transformer replacement study (September 2011) to evaluate options. BPR proposed four alternatives including "Do Nothing" (not an option), and recommended alternative # 3 as the optimal solution, which is the incremental capital project before the Board in this application. Alternative # 3 is the preferred option as it resolves all the problems on site and provides the best flexibility, risk management and forward thinking. Redundancy is provided for power continuity, in the event major repairs or failure of the transformers occurs.
- 3.19 GE did not provide a cost estimate of overhauling the existing transformers. In response to Board Staff interrogatory # 10, Hydro Hawkesbury indicates the total price for a revamp of a transformer (including the winding replacement) is approximately 80% of the cost of replacing a transformer, and the expected life would be approximately the same as a new transformer. ¹⁹ The overhaul only will take 16 to 20 weeks and the cost per month to rent a transformer over that timeframe is estimated at \$1,240,000 per month. Total cost would be in the range of \$5,215,000 to \$6,455,000.
- 3.20 Exhibit 1, Tab 2, Schedule 2 and Appendices as well as the interrogatory responses explain the reasoning, rationale and justification for the project and show that potential alternatives were analyzed. In general, VECC submits the incremental capital meets the Board's materiality, need and prudence criteria based on the evidence provided. However, VECC notes that the failing condition of the aging assets at the West substation have been identified by Hydro Hawkesbury on an ongoing basis and was most recently identified in its last COS application in 2010.

¹⁶ Appendix 2, Executive Summary, Page 1

¹⁷ Exhibit 1, Tab 2, Schedule 2, Attachment 1

¹⁸ Exhibit 1, Tab 2, Schedule 2, Page 6

¹⁹ Response to Board Staff Interrogatory # 10

- 3.21 In response to SEC Interrogatory # 5, Hydro Hawkesbury confirms it was very well aware that these 2 twin transformers are getting closer to the end of life.
- 3.22 VECC does not dispute that the transformers require replacing. In VECC's view, the question for the Board to resolve in this application is *when* the transformers should be replaced: now or as part of Hydro Hawkesbury's 2014 COS application.
- 3.23 VECC notes that given its aging infrastructure, Hydro Hawkesbury has assessed and tested components of the substation often. In response to SEC interrogatory # 6, Hydro Hawkesbury provided the reliability, maintenance and repair history of the transformer over the past five years. VECC notes that in 2010, gas levels were stable and no action was required. And the GE station assessment was done. In 2011, as recommended in the station assessment report, the tap changers on both transformers were placed and an inhibitor was added to both transformers one at a time while they were out of service.
- 3.24 The Board's Guidelines state "*The ICM module is intended to address the treatment of new capital investment needs that arise during the IRM plan term which are incremental to capital investment needs.*"²⁰
- 3.25 In VECC's view, the overall condition of the 110 KV transformer has not changed significantly or deteriorated since 2010, the year Hydro Hawkesbury re-based its rates. VECC acknowledges the recommendation of GE to start the process of purchasing new transformers and modernizing the substation. VECC supports Hydro Hawkesbury's completion of the BPR comprehensive engineering study to commence the replacement process. However, VECC submits the proposed capital investment is not new, and because its condition has not changed significantly since 2010, VECC submits Hydro Hawkesbury should continue with its original plan to budget for the replacement of this transformer in its next Cost of Service application in 2014.

Replacement Transformer for 44 KV Substation

3.26 As noted above, VECC does not support a Z-factor in the amount of \$713K to purchase a replacement transformer on the basis that the need to replace the asset should not be treated as an unforeseen event. Hydro Hawkesbury is aware of the deteriorating aging asset and has been monitoring it closely. Instead, VECC suggests an ICM is the more appropriate element of the IRM plan to address new capital investment needs.

²⁰ Report of the Board on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors – July 14, 2008, Appendix: Filing Guidelines, Page II

- 3.27 Hydro Hawkesbury provided evidence on causation, materiality and prudence in its Z-factor Claim (Exhibit 1, Tab 2, Schedule 3). Materiality and prudence are two of the three criteria in an ICM. Need is the third criterion.
- 3.28 Hydro Hawkesbury calculated an updated materiality threshold of \$121,150.²¹ VECC notes that Sheet E1.1 Threshold Parameters (HH_2012 both ICM Workform_20120210) shows a Price Escalator of 1.3%. In November 2011 the Board updated the price escalator (inflation index) to be used in the IRM model to 1.7%. VECC notes the price cap index should reflect 1.7% on Sheet E1.1 and will need to be updated to reflect the price escalator when updated data becomes available.
- 3.29 Hydro Hawkesbury confirms that none of the capital costs (\$1.52M and \$713K) have previously been included in rate base. Hydro Hawkesbury also indicates that it does not operate with a revenue requirement that allows the utility to incur capital expenditures that are discretionary. However, Hydro Hawkesbury indicates that it could potentially defer \$20,000 in capital projects under account 1830 (Poles, Tower, Fixtures) to a later date.²² For the purposes of ICM, VECC submits that the 2012 proposed capital expenditures of \$228,118.00, less the \$20,000 under account 1830 can be reasonably viewed as non-discretionary.
- 3.30 The evidence indicates that over the last several years, the 44 KV although aging has remained fairly reliable. In addition to frequently assessing the condition 110 KV substation, Hydro Hawkesbury tested components of the 44 KV substation often.
- 3.31 In response to SEC interrogatory # 6, Hydro Hawkesbury provided the reliability, maintenance and repair history of the 44 KV transformer over the past five years. VECC notes that in 2009, gas in oil had doubled since the last sampling in 2008 and GE recommended following closely the evolution of these gases. In 2010, oil tests showed progression in combustible gases and the recommendation was to closely monitor the transformer in order to make a sound decision on the action to be taken. In February 2011, the oil tests showed progression (an increase of 10% from the test results of December 2010).²³ GE inspected the inside of the transformer in April 2011 and did some minor repairs but did not expect this to be the cause of high gases. GE noted that overheating at over 700 degrees Celsius is happening inside the transformer and the amount of combustible gas may generate to a major failure in the transformer. If the unit had to be physically removed for further inspection, Hydro Hawkesbury could not satisfy the demand with its remaining transformer stations.²⁴

²¹ Updated ICM Workform, February 10, 2010

²² Response to Board Staff Interrogatory # 9

²³ Exhibit 1, Tab 2, Schedule 3, Page 5

²⁴ Exhibit 1, Tab 2, Schedule 3, Page 5

- 3.32 Hydro Hawkesbury claims the unexpected sudden deterioration and test results impacted the utility's capital plans and thus, Hydro Hawkesbury submitted its purchase order for the 44 KV transformer in August of 2011 and expected delivery has been revised from January 2012 to February 2012.²⁵ Hydro Hawkesbury expects this transformer to be in service within a month of delivery. As of December 31, 2011, the total spending (capital) is \$269,797.94.²⁶
- 3.33 Hydro Hawkesbury considered several options to resolve the reliability issues including purchasing a used transformer, utilizing a Hydro One Mobile Station in case of failure, physical removal and major maintenance of the existing transformer and purchasing a new transformer to resolve redundancy, safety and continuity of power delivery (the option chosen). With the expertise of BPR Engineering, Hydro Hawkesbury obtained three quotes for the transformer which represents the major capital expense of the whole project.
- 3.34 VECC submits that Hydro Hawkesbury has satisfied the Board's materiality, need and prudence criteria regarding this incremental capital project. The evidence clearly demonstrates that the overall condition of the 44 KV transformer has deteriorated since 2010 and failure is a risk. In VECC's view, waiting until rebasing (2014) to address the issues identified could expose Hydro Hawkesbury to reliability and safety risks and is not recommended.
- 3.35 In summary, VECC submits that the replacement of the 44 KV transformer should be eligible for recovery through the ICM. In VECC's view the condition of the transformers at the 110 KV substation has not significantly changed since 2010, and Hydro Hawkesbury should continue with its original plan to budget for the replacement of one existing transformer in its next Cost of Service application in 2014.

Use of Actual Vs Forecasted

- 3.36 In this application Hydro Hawkesbury applied the actual kWh from 2010 year end instead of the load forecast approved as part of its 2010 COS application. The rationale is that in its COS application, the kWhs used came from a Cost Allocation Study following the loss of the only large user. Hydro Hawkesbury feels the data is less representative than the 2010 actual data. Hydro Hawkesbury seeks approval to utilize real kWh data as at December 31, 2010.
- 3.37 The Board's Chapter 3 Guidelines indicate:

"The IRM application process is intended to streamline the processing of a large volume of rate adjustment applications, and is therefore mechanistic in nature. For this reason, the Board has determined that the IRM process is not the

²⁵ Exhibit 1, Tab 2, Schedule 3

²⁶ Response to Board Staff Interrogatory # 5

appropriate venue by which a distributor should seek relief on issues which are substantially unique to an individual distributor or more complicated and potentially contentious.²⁷

3.38 On this basis, VECC does not support Hydro Hawkesbury's proposal to use 2010 actuals. VECC considers changes to revenue forecasts to be an exclusion from IRM applications and any changes should be addressed in Hydro Hawkesbury's next cost of service application, not in this 2012 IRM application.

4 Recovery of Reasonably Incurred Costs

4.1 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 6th day of March 2012.

²⁷ Chapter 3, Section 4.0, Specific Exclusions from IRM Applications, Page 24