



*PUBLIC INTEREST ADVOCACY CENTRE*

*LE CENTRE POUR LA DEFENSE DE L'INTERET PUBLIC*

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July 30, 2010

**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: Board File No.: EB-2010-0002**  
**HYDRO ONE NETWORKS INC TRANSMISSION RATE APPLICATION**  
**Interrogatories of the Vulnerable Energy Consumers Coalition (VECC)**

Attached are Interrogatories to the Applicant on behalf of the Vulnerable Energy Consumers Coalition. A copy has been directed to Hydro One.

Thank you.

Yours truly,

Michael Buonaguro  
Counsel for VECC  
Encl.

Cc Regulatory at Hydro One (regulatory@hydroone.com)

**Ontario Energy Board**

**IN THE MATTER OF** the *Ontario Energy Board Act*, 1998,  
S.O. 1998, c. 15, Schedule B;

**AND IN THE MATTER OF** a review of an Application by  
Hydro One Networks Inc. for an Order or Orders approving  
rates for the transmission of electricity commencing January 1, 2011.

**HYDRO ONE NETWORKS INC.  
2011/2012 ELECTRICITY TRANSMISSION REVENUE REQUIREMENT AND  
RATES APPLICATION  
Interrogatories of the Vulnerable Energy Consumers Coalition (VECC)**

**1. GENERAL**

**Issue 1.1: Has Hydro One responded appropriately to all relevant Board directions from previous proceedings**

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #1***

**Reference:** Exhibit A/Tab 16/Schedule 1/Page 1 Table 1

- a) Does Hydro One agree/disagree that the evidence on Issue iii) Key Performance Indicators and Cost Allocation Accounting Processes is fully compliant with this Directive?
- b) Provide a list of evidentiary references on this issue including, but not limited to Exhibit A, Tab 14, Schedule 1.

**Issue 1.2: Are Hydro One's economic and business planning assumptions for 2011/2012 appropriate?**

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #2***

**Reference:** Exhibit A/Tab12/Schedule1/Appendix A/Page 1

- a) Provide a copy of the February 2010 Business plan approved by the Hydro One Board.
- b) Provide a variance report for 2009-2012 actual and forecast Economics, Interest rates, Labour rates and Payroll Burden that shows the major changes from the Approved Business Plan underpinning Hydro One Networks' 2009/2010 Transmission Rate Application.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #3***

**References:** i) Exhibit A/Tab 14/Schedule 2, pages 1-6)  
ii) Exhibit A-12-3 Appendix 5

- a) Given the volatility in economic conditions worldwide, does Hydro One Networks consider it reasonable to rely on a Global Insight Forecast that is almost 2 years old? If yes, please explain why.
- b) Is Hydro One Networks aware of any more recent projections of inflation and cost escalation for 2011 and 2012? If yes, please provide these.
- c) Provide an update of the interest rate forecast for 2011 and 2012 based on the latest edition of Consensus Forecasts.
- d) Update the exchange rate forecast based on the latest edition of Consensus Forecasts.
- e) What is the sensitivity of Hydro One Networks' proposed 2011 and 2012 revenue requirements to:
  - A 100 basis point change in forecast interest rates. (Note: Please exclude any impact on ROE or short-term interest rates used in determining the cost of capital)
  - A 10 cent change in the forecast exchange rate (CDN\$ per US\$)?
- f) What labour escalation assumptions were used for the 2010 bridge year?

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #4***

**References:** Exhibit A/Tab 12/Schedule 1, page 2

- a) Please provide copies of the Business Plan instructions issued Q1-2009 and the Business Plan approved in June 2009.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #5***

**Reference:** i) Exhibit A/Tab 12/Schedule 1, App A, page 1 and Schedule 2, pages 1-3;  
ii) Exhibit A/Tab 12/Schedule 3, page 2 and Appendix 5

- a) Explain why the forecasts for CPI and Exchange rates (Reference (ii)) were based on 3<sup>rd</sup> party forecasts prepare in November/December 2008 where as the forecast

of economic indicators (GDP and Housing Starts) used in the Load Forecast were prepared in mid to late 2009 (Reference (ii) – Appendix 5).

- b) Exhibit A/Tab 12/Schedule 3, page 2 states that the economic assumptions used in the business planning process are consistent with those used for the load forecast. Reconcile this with the discrepancy in sources noted in part (a).
- c) What is the source and date of issue for the Provincial Population, Provincial Housing, Commercial Floor Space and Industrial Production forecasts presented in Reference (ii)?
- d) Compare the economic assumptions for 2010-2012 (CPI, GDP, Industrial Output, Commercial Floor Space) used by Hydro One Networks with the most recent projections made by the various 3<sup>rd</sup> party sources Hydro One Networks has relied upon.

#### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #6***

**Reference:** Exhibit A/Tab 9/Schedule 1 Annual Report 2008 Financial Statements page 83 Five-Year Summary of Financial and Operating Statistics

- a) Provide an update/projection of overall financial statistics and transmission data for 2009 and proforma 2010-2012. Reconcile with Exhibit A/Tab 8/Schedule 2/Page 1.

#### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #7***

**Reference:** Exhibit A/Tab 9/Schedule 2/Page 1

- a) Provide a copy of the 2010 Q2 proforma.

#### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #8***

**References:** i) Exhibit A/Tab 13/Schedule 1:  
ii) EB-2008-0272 VECC IRR #2

- a) Provide/update the 2003-2009 results for each of the performance measures summarized in the following table.

Performance Measure	2003	2004	2005	2006	2007	Comments
# of LTI per 200,000 hours worked	0.29	0.40	0.50	0.50	0.40	
Customer Satisfaction (%)	61	76	81	81	86	
Smart Meters Installed (units)	n/a	n/a	n/a	n/a	222,831	Installation of Smart Meters commenced 2007
Tx Frequency of Customer Unplanned Interruptions (Ave # Interruptions per Delivery Point)*	0.20	.027	0.24	0.29	.021	
Tx Duration of Customer Unplanned Interruptions (Ave # Minutes of Interruptions per Delivery Point)*	9.6	12.5	15.9	18.9	5.1	
Major Projects (on time, on budget)	n/a	n/a	n/a	n/a	On Time/On Budget	
Dx Duration of Customer Interruptions (Hrs)	n/a	6.4	7.7	6.7	8.2	
Environmental Index	n/a	n/a	n/a	n/a	n/a	New in 2008
Skills and Safety Training	n/a	n/a	n/a	n/a	93%	
Management Development	n/a	n/a	n/a	n/a	n/a	New in 2008
Net Income After Tax (M\$)	396	498	483	455	399	
Credit Rating	A -	A	A	A	A	Provided in Exhibition A-15-1, page 15
Productivity Index	n/a	n/a	n/a	n/a	n/a	New in 2008

Notes: n/a = not applicable or not explicitly tracked at corporate level

\* Tx Reliability for multi-circuit supplied delivery points

**Issue 1.3: Is the overall increase in 2011 and 2012 revenue requirement reasonable?**

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #9***

**Reference:** Exhibit A/Tab 2/Schedule 1

- Provide a schedule that shows the proposed bill impacts for 2011 and 2012.
- Provide a schedule that shows the impact on a typical residential LDC customer consuming 500 and 1000 kWh/month.

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #10***

**Reference:** Exhibit E1/Tab 1/Schedule 1/Page 3 Table 2

- a) Provide a version of Table 2 that compares the test year to the historic year 2009:
  - i. Add a column for 2009 Actual.
  - ii. Update the Bridge year to reflect the latest forecast.
  - iii. For each line provide the % change relative to 2009 for each of 2010,2011 and 2012.
- b) Provide detailed explanations for the changes in lines 7-9.

## 2. LOAD FORECAST and REVENUE FORECAST

**Issue 2.1: Is the load forecast and methodology appropriate and have the impacts of Conservation and Demand Management initiatives been suitably reflected?**

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #11***

**References:** i) Exhibit A, Tab 12, Schedule 3, page 3, pages 6-8 and page 19  
ii) OEB Letter of June 22, 2010 re: EB-2010-0126, Appendix B

- a) With respect to page 3, please provide the load forecast as prepared in September 2009 and indicate specifically what adjustments were made to account for i) 2009 actual load and ii) the revised annual CDM impact for 2010-2012.
- b) Please provide details regarding the revised CDM impact for 2010-2012 referenced on page 3 including how it was developed, what specific revisions were made and why and, finally, the new impact forecast.
- c) Reference (ii) (pages 11-13) indicates that the OPA has revised the near term (2008-2013) provincial conservation projections. Are Hydro One's projected CDM impacts consistent with the OPA's revised outlook? In responding please provide details for the OPA revised CDM projections for each year through to 2013, contrast with Hydro One's CDM impact forecast for 2008 through 2012 and explain any differences.
- d) With respect to the Maximum Peak Demand Impacts show in Table 2 and the types of CDM programs discussed on page 7, please indicate what portion of the incremental and cumulative impact for each year is due to demand response programs (i.e., programs focused specifically on system peak and/or critical system hours) versus impacts due to more broader focused CDM programs.
- e) Please confirm at what "point on the system" (e.g., point of generation) the following are measured:
  - The 2007 IPSP CDM Impacts
  - The OPA's revised conservation estimates
  - HON's Maximum Peak Demand Impacts
  - System Peak Demand as forecast by HON (per page 19)If they are not all measured at the same point on the system please explain what adjustments were made to reconcile the differences.
- f) Please indicate how the Maximum Peak Demand CDM impact set out in Table 2 was translated into the impact on the 12-month average peak demand. In doing so please include an explanation as to how differences in system measurement points (per part (e)) and differences in the impact of different types of CDM programs (per part (d)) were accounted for.
- g) With respect to page 8, please provide the referenced OPA reports and HON analysis demonstrating the government's peak reduction target for 2007 was met.
- h) Please provide any reports by the OPA indicating the 2008 peak reduction results.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #12***

**Reference:** Exhibit A, Tab 12, Schedule 3, pages 13-15 and page 19

- a) Please outline what historical years' data are used by each of the three load forecasting models.
- b) How does Hydro One Networks ensure that the impact of self-generation and CDM undertaken in these years is not "double-counted" by its subsequent adjustments as shown in Table 3?
- c) Please provide the load forecasts for 2009, 2010 and 2011 produced in September 2009 by each of the three forecasting models.
- d) What is the basis for the incremental embedded generation shown in Table 3 for 2009-2012?

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #13***

**References:** i) EB-2008-0272, Exhibit I/Tab 6/Schedules 17 and 18  
ii) Exhibit A, Tab 12, Schedule 3, Appendix 4

- a) Please provide the forecast data for 2010 and 2011 consistent with the historical data set out in Reference (ii).
- b) Please update the response to VECC IR #17 to include actual data for 2008 and 2009 and revised forecast data for 2010 to 2011.
- c) With respect to part (b), please also provide a schedule that sets out, for 2009 by month, the day and time (hour) of the peak for Ontario overall and for each region.

**Issue 2.2: Are Other Revenue (including export revenue) forecasts appropriate?**

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #14***

**Reference:** Exhibit H1, Tab 5, Schedule 1

**Preamble:** It is anticipated that the following questions may be addressed by the IESO.

- a) Please provide a schedule that, for the years 2007-2009 and for January to June 2010, sets out the monthly volumes of exports from Ontario. Note: Please clarify the point of "measurement" for export volumes.
- b) With respect to part (a) please also provide the following additional details:
  - Breakdown the monthly values as between peak and off-peak. Use the definition of peak and off-peak consistent with that in the IESO's ETS study and confirm what the definition is.



- For each time period, provide a breakdown of the volumes by source and sink for the exports (e.g., Ontario -> MISO; MISO -> NYISO (i.e. linked wheel), etc.).

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #15***

**References:** i) Exhibit H1, Tab 5, Schedule 2, page 4  
ii) Exhibit H1, Tab 5, Schedule 2, Attachment 1, pages 7 & 9

**Preamble:** It is anticipated that the following questions will be addressed by the IESO.

- Please indicate which “neighbours” the IESO held discussions with regarding the elimination of all ETS tariffs.
- Please clarify whether the “discussions” were with respect to the reciprocal elimination of the Transmission Service charges or both the Transmission Service Charges and Other Charges – as set out in Table 1 (page 7) of Reference (ii).
- With respect to Table 1, please clarify that the Transmission Service and Other Charges are charges levied by the “source”. In each case, are there any “charges” levied by the “sink” jurisdiction?
- With respect to Table 1, please indicate what the “Other Charges” levied by each jurisdiction (including the IESO) are for.
- What is the IESO’s understanding as to why jurisdictions (other than New York) did not consider reciprocal elimination of transmission tariffs as being a “priority” at that time (Reference (i) – page 4)?
- What is the current status of the IESO’s discussions with New York on this issue?
- When does the IESO expect to be able to “engage in meaningful discussions with our neighbours” on this issue (Reference (ii) – page 9)?
- Please discuss the incentive there is for neighbours such as MISO to engage in such discussions when they currently only face an ETS of \$1/MWH in Ontario but receive more than four times this for exports to Ontario (Reference (i) – page 7).

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #16***

**Reference:** Exhibit H1, Tab 5, Schedule 1, Attachment 1 page 9

**Preamble:** It is anticipated that the following questions will be addressed by the IESO.

- Please confirm that the results of the quantitative and qualitative analysis undertaken as part of the ETS Tariff Study indicated that a tariff based on Average Embedded Network Transmission cost was the option that best satisfied the established selection principles. If not, please reconcile response with first paragraph on page 9.

- b) Please confirm that the IESO's recommendation to retain the \$1/MWh ETS tariff was based on changing conditions that led to concerns regarding i) increased surplus base load generation and ii) increased volatility in the supply/demand balance and the view that the higher level of exports associated with the \$1/MWh tariff would help mitigate these concerns.
- c) If there are any other issues (besides those articulated in part (b)) that maintaining a lower export tariff is meant to address please describe what they are and how a lower export tariff/higher export levels serve to address the concerns.
- d) Please indicate when the IESO first became aware of the each of the following changing conditions:
  - Load deterioration due to economic conditions
  - Legislative changes through the GEGEA
  - Increase occurrence of base load generation
- e) Why was the consultant not requested to update the analysis of the study to reflect these emerging conditions?

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #17***

**Reference:** i) Exhibit H1, Tab 5, Schedule 2, page 5  
 ii) Exhibit H1, Tab 5, Schedule 2, Attachment 1

**Preamble:** It is anticipated that the following questions may be addressed by the IESO.

- a) The IESO claims that recent events have led to the view that there will be increased periods of surplus base load generation. Please provide a schedule that contrasts the amount and times of occurrence for surplus base load generation as identified in the ETS Study (assuming Status Quo ETS tariffs) for 2010 and 2015 with the IESO's current expectations for the same years.
- b) With respect to the impact of different ETS tariffs on export volumes (Reference (ii) – page 16) did the consultant's model indicate how much of the impact was in the peak versus off-peak period for 2010 and 2015? If yes, please provide.
- c) For each potential export path out of Ontario where exports have actually occurred between January 2007 and June 2010, please provide a schedule (and "live" data file) that sets out the following for each hour during this period:
  - The level of exports
  - The "cost" of the export power
  - The "price" received" for the export power from the sink.
  - Any other applicable hourly charges apart from the ETS tariff.
  - Indication if the hour is considered peak or off-peak
  - Indication if the hour was one with surplus base load generation.
- d) Based on the data from part (c), how many MWhs of exports would be still be economic versus now uneconomic if the ETS Tariff was \$5/MWh versus \$1/MWh?
- e) Based on the data from part (c), how many MWhs of exports during periods of surplus base load generation would be still be economic vs. now uneconomic if the ETS Tariff was \$5/MWh versus \$1/MWh?

- f) As an alternative to simply maintaining the Status Quo, did the IESO consider addressing its concerns regarding increased surplus base load generation by means of an ETS tariff that would be based on \$1/MWh in the off-peak and set based on the Average Embedded Network Transmission cost during the peak period?
- If not, please explain why not. Please also comment now on the merits of such an approach.
- If yes, please explain why this approach was rejected.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #18***

**Reference:** i) Exhibit H1, Tab 5, Schedule 2, page 5  
ii) Exhibit H1, Tab 5, Schedule 2, Attachment 1

**Preamble:** It is anticipated that the following questions will be addressed by the IESO.

- a) Please explain how a higher level of exports (presumably due to lower ETS tariffs) will facilitate the management of the supply/demand balance in real time.
- b) If not addressed in response to part (a), please describe (in lay terms) how exports are “scheduled” in the IESO market and the ability of the IESO to alter such schedules as forecast and real conditions on the system change.
- c) Can the IESO “cut” an export in real time in response to variation (i.e. a decline) in real time output from renewable resources such as wind and solar?
- d) Can additional exports be authorized in real time in response to variation (i.e., an increase) in real time output from renewable resources such as wind and solar?

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #19***

**Reference:** i) Exhibit H1, Tab 5, Schedule 2, page 2  
ii) Exhibit H1, Tab 5, Schedule 2, Attachment 1, page 4

**Preamble:** It is anticipated that the following questions may be addressed by the IESO.

- a) When were the findings of the consultant’s study and the view that Option 2 best satisfied the four selection principles first shared/reviewed with Stakeholders?
- b) Was any analysis or further work undertaken to address stakeholder comments? If yes, please outline.
- c) When was the IESO Management recommendation to remain with the \$1/MWh ETS tariff first shared with Stakeholders?
- d) Were the concerns of IESO Management regarding changing conditions shared with Stakeholders and Stakeholder input sought regarding the alternative means of addressing these concerns prior to the formulation of the IESO Management recommendation? If not why not? If yes, what input was received and provide any analysis undertaken/options considered in response to this input?

- e) Please provide copies of any comments received regarding the IESO's Stakeholder Engagement Process on this issue.

### 3. OM&A Costs

**Issue 3.1: Are the proposed spending levels for, Sustaining, Development and Operations OM&A in 2011 and 2012 appropriate, including consideration of factors such as system reliability and asset condition?**

#### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #20***

**Reference:** Exhibit A/Tab 14/Schedule 1/Pages 5-6

Preamble: Hydro One Transmission also uses benchmarking (internal and external) and information on best practices to identify ways to operate more effectively and efficiently. Internal analyses are performed to compare performance across geographic regions and identify performance trends

- a) Provide a copy of the latest Benchmarking study.
- b) Update Hydro One's metrics in the benchmarking study for the historic years and Bridge year.
- c) Provide a schedule that for the Asset Replacement metrics and those Cost Metrics that are expressed in percentage terms sets out the average (two-year) results for Hydro One Networks .

#### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #21***

**Reference:** Exhibit A/Tab 14/Schedule 1/Page 12

Preamble: In 2009, Hydro One started to report *Transmission Unit Cost* defined as Capital and O&M Costs (\$) per Asset Value (\$) as an indicator of productivity using costs per unit in the Corporate Scorecard. Hydro One will continue to benchmark this measure against comparable Utilities. In this way we can demonstrate how productive we are against peer utilities.

- a) Provide a copy of the latest Benchmarking study.
- b) Update Hydro One's metrics in the benchmarking study for the historic years and Bridge year and forecast test years.
- c) Provide the following Metrics for the Historic years Bridge year and forecast test years:
  - i. OM&A per customer
  - ii. OM&A per Gw transmitted

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #22***

**Reference:** Exhibit C1/Tab 2/Schedule 1/Page 2 Table 1

- a) Based on Table 1 provide a benchmark analysis of Hydro One's overall OM&A:
  - i. OM&A per MW peak
  - ii. OM&A per MWH energy transmitted
  - iii. OM&A per customer
  - iv. OM&A per Km of transmission line
- b) Provide in table form the data used to generate the ratios.
- c) Graph the ratios and discuss trends.
- d) Provide a comparison to other neighboring jurisdictions including interconnected transmission.
- e) If other cost comparisons are available from the IESO or NERC please provide these.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #23***

**Reference:** Exhibit C1/Tab 2/Schedule 1/Page 5/ Tables 2 and 3

- a) Provide an updated version of Table 3 that provides 2010 Board-Approved OM&A and 2010 YTD and forecast 2010 year end OM&A.
- b) In Table 3, provide a variance explanation of the increase in 2009 Shared Services & Other Costs. Relate this to the claimed cost reductions from Cornerstone.
- c) Provide an updated variance explanation for any material change in forecast 2010 OM&A by category. Where relevant also relate this to cost reductions from Cornerstone.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #24***

**Reference** Exhibit C1/Tab 2/Schedule 3/Page 3/Table 1

- a) Provide a schedule that compares the Board – approved Sustaining OM&A spending for 2009 with the actual level of Sustaining OM&A for 2009 using a similar break down. Please explain major variances by line item.
- b) Provide an Update of the 2010 Bridge Year Sustaining OM&A compared to the Board Approved. Please Explain YTD major variances.
- c) For 2011 and 2012 please explain major drivers and why Stations require significantly increased maintenance despite the replacement/upgrade Capital program.
- d) Explain in more detail than provided on page 26 the drivers for the significant increase in OM&A for Ancillary Systems.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #25***

**Issues:** 3.1 & 3.2; 9.1

**References :** i) Exhibit C1/Tab 2/Schedule 4/Page 2/Table 1;  
ii) Exhibit C1/Tab 2/Schedule 4/Page 10/Table 1

- a) In Table 1 (first reference) provide an overall Total for Development OM&A and a line that shows the percentage increase proposed for 2011 and 2012.
- b) Extend Table 1 (second Reference) showing GEGEA Development OM&A to provide a projection for 2013 and 2014 for the 20 listed projects.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #26***

**Reference :** Exhibit C1/Tab 4/Schedule 1/Page 15 Table 3 Fleet Management Budget

- a) Confirm whether or not the figures in Table 3 include HST.
- b) Indicate the amount of the increase/decrease in categories 1 and 3 that is attributable to HST.
- c) For Operations and Repairs indicate how much is outsourced and the basis of the charges.
- d) For the fuel cost estimate provide the basis of the 2011 and 2012 projections.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #27***

**References:** i) Exhibit C1/Tab 6/Schedule 1/Page 2 Table 1;  
ii) Exhibit C2/Tab 4/Schedule 1/Page 1

- a) Provide an explanation of the drivers for increased Asset Removal costs in 2010-2012.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #28***

**Issues:** 3.1 and 4.2

**Reference:** i) Exhibit A, Tab 13, Schedule 1  
ii) BC Hydro's F2011 Revenue Requirement Application, page 2-10  
([http://www.bcuc.com/Documents/Proceedings/2010/DOC\\_24719\\_B-1\\_BCHydro-F11RR-Application.pdf](http://www.bcuc.com/Documents/Proceedings/2010/DOC_24719_B-1_BCHydro-F11RR-Application.pdf))

- a) In its F2011 Rate Application, BC Hydro indicated that it participated in T&D Benchmarking Studies undertaken by First Quartile Consulting in 2008 and 2009. Did Hydro One Networks participate in either of these benchmarking studies? If yes,

please provide copies of the relevant reports and identify Hydro One Networks' participant code.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #29***

**Issues:** 3.1 and 4.2

**References:** i) EB-2008-0272, Exhibit J2.7  
ii) Exhibit A, Tab 12, Schedule 5, pages 4-8

- a) Please provide an updated version of Exhibit J2.7 that sets out the minimum and proposed OM&A and Capital Spending for 2011 and 2012 as established by Hydro One Networks' Investment Prioritization Process.

**Issue 3.2:** Are the proposed spending levels for Shared Services and Other O&M in 2011 and 2012 appropriate?

**Issue 3.4:** Are the methodologies used to allocate Shared Services and Other O&M costs to the transmission business and to determine the transmission overhead capitalization rate for 2011/12 appropriate?

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #30***

**Reference:** Exhibit A/Tab 7/Schedule 3/Page 6/Table 2

- a) Explain the decrease in 2010-2012 General Counsel and Secretary Service costs charged to affiliates.  
b) Explain the decrease 2010-2012 in Financial Services costs charged to affiliates.  
c) Confirm that due to lower recoveries, the amount of costs for the above referenced services at Hydro One Networks is increased in 2010-2012. Provide the increase in these costs.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #31***

**Reference:** Exhibit A/Tab 7/Schedule 3/Page 8

- a) Explain the more than 10% increase in 2011/12 charges to Hydro One Networks from Telecommunication Services from 2010.  
b) Provide the multi-year costs for telecom services 2008-2012.  
c) Compute the year over year % increases and the overall increase from 2008 to 2012.  
d) Provide a detailed explanation of the multi year and test year cost increases with reference to cost drivers such as employees.



- e) How does Hydro One Networks know that its 2011 and 2012 telecommunications services and costs are at market rates?

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #32***

**Reference:** Exhibit A/Tab 7/Schedule 3/Page 6/Table 2

- a) Describe the basis on which the charges for the services provided by Hydro One Networks were established.

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #33***

**Reference:** Exhibit A/Tab7/Schedule3/Appendix A

- a) Provide a copy of the 2011 and 2012 Affiliate Services Agreements and/or Schedules A and B (pricing) of 2011/2012 services and costs corresponding to Exhibit A/Tab 7/Schedule 3/Page 6/Tables 2 and 3

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #34***

**References:**

- i) Exhibit C1/Tab 2/Schedule 7/Page 2 Table 1;
- ii) Exhibit C1/Tab 5/Schedule 1/Page 3 Table 1 and Table 2;
- iii) Exhibit C1-5-1 Attachment 1

- a) The first reference shows total CCFS costs of \$155 million in 2011 and 162.1 million in 2012. The second reference shows Total CCFS costs of \$101 million in 2011 and 107.2 million in 2012. The difference appears to be Real Estate Costs -please confirm this is the only difference.
- b) Provide a version of Exhibit C1/Tab 2/Schedule 7/Page 2 Table 1 that shows the total year over year % increase and the % increase in allocation to Tx.
- c) C1-5-1, Attachment 1 page 2 indicates "The Updated BP 2010-2014 includes 2011 costs aggregating approximately C\$303.3 million and 2012 costs aggregating approximately C\$324.9 million, incurred to provide the corporate functions and services" and "Approximately 43% of the CF&S costs are incurred under an outsourcing arrangement with Inergi LP ("Inergi"). In this Report, CF&S includes the portions of Inergi services identified in Updated BP 2010-2014 as sustainment". Reconcile this statement with costs shown at C1/Tab 5/Schedule 1/Page 3 Table 1 and Table 2.
- d) Provide a version of C1/Tab 2/Schedule 7/Page 2 Table 1 that shows the total CCFS costs as reviewed by B&V and as allocated to the Business Units per Table 3 of the B&V Report.
- e) Reconcile the CCFS costs for 2011 and 2012 with the Schedules in the Service Level Agreements for the two years.

**Issue 3.3: Are the 2011/12 Human Resources related costs (wages, salaries, benefits, incentive payments, labour productivity and pension costs) including employee levels appropriate? Has Hydro One demonstrated improvements in efficiency and value for dollar associated with its compensation costs?**

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #35***

**References :** i) Exhibit C1/Tab 3/Schedule 2/Page 9/Table 3 ;  
ii) EB-2008-0272 Exhibit I-6-7 Attachment 1;  
iii) Exhibit C2/Tab 3/Schedule 1 Tables 1,2,3

- a) Provide a version of Table 3 that shows the Total Compensation for Hydro One Networks broken down between Distribution and Transmission.
- b) Provide an updated copy of the IR response in the second reference.
  - i. Update the 2009 data to show an actual comparison and
  - ii. 2010 data to show the latest projection in comparison
- c) Provide the projections for the test years 2011 and 2012.
- d) Provide a comparison table that shows the increases in each category from the 2009 Board- approved data.
- e) Reconcile the answers to parts b-d with disaggregated compensation for Hydro One Transmission in the requested version of Table 3 in part a).
- f) Confirm that the 2005 data noted in the footnote to reference iii) Table 2 have not been filed in this case, but are the same as EB-2008-0272 Exhibit I-6-7 Attachment 1.

**Issue 3.6: Is Hydro One Networks' proposed depreciation expense for 2011 and 2012 appropriate?**

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #36***

**Reference:** i) Exhibit A/Tab 11/Schedule 3/Page 6

**Preamble:** IFRS requires the use of depreciation service lives that are more reflective of the asset's actual accounting life than those used currently. This change will generally lengthen asset service lives from the lives previously mandated by the Board and will provide a depreciation expense reduction that could have the effect of offsetting the increase on revenue requirement from adopting IAS 16-compliant overhead accounting. Hydro One Transmission will not experience this offsetting impact as its depreciation service lives, as assessed by its independent depreciation consultant, will not change significantly in moving from CGAAP to MIFRS. This is because Hydro One Transmission was not subject to the Board's mandated service lives. Instead, service lives and asset componentization definitions that meet IFRS requirements were inherited from Ontario Hydro.

- a) Provide a schedule that shows for major asset classes the difference between GAAP and IFRS, including Accumulated depreciation, NBV and 2011 and 2012 depreciation expense.

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #37***

**Reference:** Exhibit A/Tab 11/Schedule 3/Page 8

**Preamble:** Finally, Hydro One Transmission is requesting that the Board approve a new Impact for Changes in IFRS Variance Account with exactly the same parameters as it recently approved for Hydro One Distribution (EB-2009-0069). This is a contingency account to guard against future changes to MIFRS that cannot be reasonably predicted at the time of filing. Such changes could possibly disadvantage either customers or the shareholder and it would be applied symmetrically.

- a) Provide details of the costs that would be tracked/recorded in the proposed account and explain why these costs cannot be:
- predicted and
  - recorded in the existing IFRS Deferral/Variance account.

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #38***

**References:**

- i) Exhibit C1/Tab 6/Schedule 1/Page 2 Table 1;
- ii) Exhibit C2/Tab 4/Schedule 1/Page 1

- a) Provide an explanation of the drivers for increased Asset Removal costs in 2010-2012

#### **4. CAPITAL EXPENDITURES and RATE BASE**

**Issue 4.1:** Are amounts proposed in rate base in 2011 and 2012 appropriate?

**Issue 4.2** Are the proposed 2011 and 2012 Sustaining and Development and Operations capital expenditures appropriate, including consideration of factors such as system reliability and asset condition?

#### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #39***

**Reference:** i) Exhibit D1/Tab 3/Schedule 2 ii) Exhibit A/Tab 14/Schedule 4, page 3

- a) Based on Hydro One Networks' investment prioritization process please respond to the following:
- What areas of Sustainment CAPEX would be reduced if Hydro One Networks' Sustainment funding was reduced by 10% - 20%. Please explain, with reference to risks and impacts, why these areas were selected.
  - What areas of Sustainment CAPEX would be increased if Hydro One Networks' Sustainment funding was increased by 10%-20%. Please explain, with reference to risks and impacts, why these areas were selected.

#### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #40 (Issues 4.2 and 9.1)***

**Reference:** Exhibit D1/Tab 1/Schedule 2/Table 1

- a) Provide a version of Table 1 that shows the historic year and breaks out the Capital additions in each group that are considered GEGEA/Minister's Instruction.
- b) Provide a percentage increase for each capital group with and without GEGEA/Minister's Instruction Additions.
- c) Provide an estimate of the revenue requirement impact for each year with and without GEGEA/Minister's Instruction Additions.

#### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #41***

**References:** Exhibit D1/Tab 1/Schedule 3/Tables 1 and 2

- a) Provide a version of Table 1 that shows the effect of the introduction of HST on July 1, 2010.
- b) Provide a version of Table 2 that shows the effect of introduction of HST on July 1, 2010.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #42***

**References:** i) Exhibit D1/Tab 3/Schedule 1/Page 2/Table 1;ii) Exhibit D1/Tab 3/Schedule 1/Page 5/Table 3

- a) Provide an update to the Bridge year 2010 forecast in Tables 1 and 3. Add a column for latest YTD.
- b) Provide Explanation for all material variances in 2010 CAPEX Spend, including the revised completion in service dates.
- c) Provide an estimate of the impact of the change in 2010 spend and timing on the 2011 capital additions and 2011 Revenue Requirement.
- d) Discuss the impact of delays and under-spending in 2010 on the 2011 and 2012 capital program and provide an updated estimate of capital additions in each test year.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #43***

**Reference:** Exhibit D1/Tab 3/Schedule 2 Table 5

- a) With regard to S16 explain the need and rationale for purchasing spare transformers.
- b) Indicate the current inventory value of both spare and other transformers scheduled to be installed under the 2011/2012 capital program.
- c) Discuss the logistics of moving spare transformers and placing these in service.
- d) Discuss the regulatory treatment of these transformers including if they are additions to inventory and/or how the costs are to be recovered if the units are not in service.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #44***

**Reference:** Exhibit D1/Tab 3/Schedule 4/Page 2 Table 1.

- a) Provide details of the Wide Area Network project including when approved, capital expenditures cash flow and in-service dates.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #45***

**Reference:** Exhibit D2/Tab 1/Schedule 1/Page 1

- a) Provide a version of D2/1/1 that shows the Historic and Bridge year data.

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #46***

**Reference:** Exhibit D2, Tab 2, Schedule 2 and Schedule 3

- a) Please confirm that all eight Inter-Area Network Transfer Capability projects are aimed at increasing the capability of the transmission system to transport the increased generation output from specific areas of the province.
- b) Based on the nature of the generation being supported please discuss the anticipated loading on the related transmission facilities associated with each project over the different months of the year and during the hours within each month.

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #47  
(Issues 4.2 and 9.1)***

**References:** i) Exhibit D2/Tab 2/Schedule 1Pages 1-2  
ii) Exhibit D2/Tab 2/Schedule2/Pages 1

- a) Provide a version of the Net Capital Expense Table that extracts for each major category, the "Government Instruction Capital and displays this as a separate Subtotal line and provide a new line for Total CAPEX.
- b) Provide an annotation that shows which projects are GEGEA/Government instruction projects.
- c) Reconcile the total GEGEA costs 2010-2012 indicated in part c) with the response to part a).

## 5. COST OF CAPITAL/CAPITAL STRUCTURE

**Issue 5.3: Is the forecast of long term debt for 2010-2012 appropriate?**

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #48***

**References:** i) Exhibit B1/Tab 2/Schedule 1Table 4;  
ii) Exhibit B2/Tab 1Schedule 2/Page 4

- a) For historical 2009 and bridge year 2010 debt (listed in B1/2/1 Table 4) and B2/1/2 page 4 at lines 23-31 provide a schedule that shows for each issue, the difference between the Board Approved forecast and actual (or if not yet issued, current forecast):
  - i. Amount of issue per EB-2008-0272
  - ii. Coupon rate forecast approved by the Board
  - iii. The premium discount and expenses
  - iv. the total principal amount
  - v. the annual carrying cost
- b) For material differences in the schedule provide an explanation including in particular,
  - i. The external forecasts relied upon
  - ii. Timing differences and
  - iii. Bond premiums

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #49***

**References:** i) Exhibit B1/Tab 1/Schedule 1, page 3  
ii) Exhibit B2/Tab 1/Schedule 2/Page 5

- a) Provide a schedule that sets out for B1/2 page 6 lines 28-33 the basis of the proposed coupon rates, other financing costs and annual carrying costs for all proposed 2011/12 debt issues:
  - i. Sources and dates of forecasts of LC Bonds
  - ii. Sources and dates of forecast of Hydro One Spread and details of calculation
  - iii. Sources and dates of forecast(s) other financing costs
- b) Reconcile answer with Tables 3 and 4 of B1/2/1.
- c) When will Hydro One provide an update of the forecast 2011/12 debt costs?
- d) Explain in detail how the 2011/12 debt issues and costs are mapped to Hydro One Networks and to Hydro One Transmission.
- e) Based on the 2011 and 2012 financing plan provide an estimate of the revenue requirement impact to Hydro One Networks transmission of a 10 basis point change in the average effective coupon rate.

## **6. DEFERRAL/VARIANCE ACCOUNTS**

**Issue 6.1: Are the proposed amounts, disposition and continuance of Hydro One's existing Deferral and Variance accounts appropriate?**

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #50***

**References:** i) Exhibit F1/Tab 2/Schedule 1/Page 1/Table 1;  
ii) Exhibit F1/Tab2/Schedule/1Page 2/Table 2

- a) Explain the use of different time frames for the disposition of the regulatory assets in Table 2 and why there should be a delay in disposing the IPSP and Other Long Term Planning and Pension Cost Differential.

**Issue 6.2: Are the proposed new Deferral and Variance Accounts appropriate?**

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #51***

**Reference:** Exhibit A/Tab11/Schedule 3/pages1-9.

**Preamble:** The second exception described and for which a variance account is requested is for gains and losses on tangible and intangible asset sales or losses resulting from premature asset retirement in 2012.

- a) If the requested variance account is approved by the Board, confirm that the account should be reduced by the amount of depreciation expense otherwise included in rates under the existing methodology.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #52***

**Reference:** Exhibit F1/Tab 1/Schedule 2/Page 2 IFRS - INCREMENTAL TRANSITION COSTS

- a) Why does Hydro One require the continuing use of this account in 2011 and 2012, given that the implementation date for IFRS is January 2011?  
b) Explain why Hydro One expects to incur incremental transition costs after the implementation date?



***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #53***

**Reference:** Exhibit F1/Tab 1/Schedule 2/Page 4 of 5

- a) Why is it necessary to record the impact of HST in the Tax Rate Changes Account since the HST Tax Change will have occurred in 2010 and no new changes to the rate are contemplated?

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #54***

**Reference:** Exhibit F1/Tab 1/Schedule 2

**Preamble:** This account will track the difference between the annual OEB Cost Assessments, intervenor cost awards, and costs associated with OEB-initiated studies and the amount for these expenditures approved by the OEB as part of 2011 and 2012 Transmission Rates.

- a) Why should the OEB approve this account for Hydro One Networks, since a similar account was only approved for the period 2004-2006 for electricity distributors and the approval of the account in EB-2008-0272 was for variances in OEB Assessments only?

## **7. COST ALLOCATION**

**Issue 7.1: Is the cost allocation proposed by Hydro One appropriate?**

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #55***

**References:** i) Exhibit G1, Tab 2, Schedule 1, pages 11-13  
ii) Exhibit G2, Tab 2, Schedule 1

- a) Please describe how the costs of a Dual Function Line with both load customers and generation customers connected to it will be allocated as between Network and Line Connection. Please provide an illustrative example.
- b) What year's "customer demand" was used to determine the allocation percentages for Dual Function Line Assets?

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #56***

**References:** i) Exhibit G2, Tab 1, Schedule 1  
ii) EB-2008-0272, Exhibit G2, Tab 1, Schedule 1

- a) Please provide a listing of those transmission lines in this Schedule whose Functional Category designation has changed since EB-2008-0272 and provide explanations as to the reason for each change.
- b) Please provide a schedule that lists the new Transmission Lines noted in Exhibit G2, Tab 1, Schedule 1 (i.e., not included in EB-2008-0272). In each case please indicate the relevant project reference number (from either the EB-2008-0272 Application or this Application) that describes the investment.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #57***

**Reference:** Exhibit G2, Tab 1, Schedule 2

EB-2008-0272, Exhibit G2, Tab 1, Schedule 2

- a) Please provide a listing of those transmission stations in this Schedule whose Functional Category designation has changed since EB-2008-0272 and provide explanations as to the reason for each change.
- b) Please provide a schedule that lists the new Transmission Stations noted in Exhibit G2, Tab 1, Schedule 2 (i.e., not included in EB-2008-0272). In each case please indicate the relevant project reference number (from either the EB-2008-0272 Application or this Application) that describes the investment.

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #58***

**Reference:** Exhibit G2, Tab 3, Schedule 1

- a) Are there any Generator Line Connections listed in this schedule that were included in EB-2008-0272 but were not deemed to Generator Line Connections at that time? If so, what is the basis for the change in classification?
- b) Please identify those Generator Line Connections that are new since EB-2008-0272.
- c) What year's load and generator capacity values were used to determine the generator/load split?

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #59***

**Reference:** Exhibit G2, Tab 3, Schedule 2

- a) Are there any Generator Station Connections listed in this Schedule that were included in EB-2008-0272 but not considered to be Generator Station Connections at that time? If so, what is the basis for the change in classification?
- b) Please identify those Generator Station Connections that are new since EB-2008-0272.
- c) What year's load and generator capacity was used to determine the generator/load split?

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #60***

**References:** i) Exhibit G2, Tab 4, Schedule 1  
ii) EB-2008-0272, Exhibit G2, Tab 4, Schedule 1

- a) Please explain why the Gross Book value for the Other Category has increased from roughly \$40 M in EB-2008-0272 to over \$300 M.
- b) Please explain why the Gross Book value of Generator Station Connections has decreased as between 2010 (per EB-2008-0272) and 2011.
- c) Please explain why the Gross Book value of Line Connection – Dual Function Lines has decreased as between 2010 (per EB-2008-0272) and 2011.
- d) Please explain why the Gross Book value of Transformation Connection decreased as between 2010 (per EB-2008-0272) and 2011.

***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #61***

**References:**

- i) Exhibit G2, Tab 4, Schedules 1 & 2
  - ii) EB-2008-0272, Exhibit G2, Tab 4, Schedules 1 & 2
- a) Please provide a schedule that sets out the 2010 (per EB-2008-0272) and 2011 Gross Book value and Depreciation for each Function Category and calculate year over year percentage change for each.
- b) In virtually all cases the percentage change in Gross Book Value differs materially from the percentage change in Depreciation; please provide an explanation as to why.

## **8. CHARGE DETERMINANTS**

**Issue 8.1: Is it appropriate to implement “AMPCO’s High 5 Proposal” in place of the status quo charge determinants for Network service?**

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #62***

**Reference:** Exhibit H1, Tab 2, Schedule 1

- a) With respect to Table #1, please provide a schedule that sets out the total number of Delivery Points, for each customer category, for 2011 and the number where 85% of NCP from 7 am to 7 pm is greater than the Monthly CP.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #63***

**References:** i) Exhibit H1, Tab 3, Schedule 1, page 5  
ii) Exhibit H1, Tab 2, Schedule 1, Table #1

- a) Please provide a Schedule that for each Transmission delivery point in 2011 lists the total of the 12 monthly Network billing determinants. In the same schedule please set out percentage each billing point contributed to the total for all Network billing determinants in 2011. (Note: It is not necessary to identify the specific customer associated with each delivery point.)
- b) Please include in the schedule prepared for part (a), the each delivery point’s 2011 contribution (in percentage terms) to the All Customers’ Average Coincident Peak Demand as defined by AMPCO’s “High Five Proposal” and discussed in reference (i).
- c) What is the anticipated costs that will be incurred by the IESO to implement the necessary tool and business process changes that would be required by AMPCO’s “High 5 Proposal”?

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #64***

**Reference:** Exhibit H1, Tab 3, Schedule 1, Attachment 1, Sections 2.1 and 2.2

- a) With respect to page 3, please explain why the “second criterion” is considered a “demand ratchet” when its value is also based on the actual load in the billing period.
- b) With respect to page 9, can Power Advisory provide its views regarding Dr. Sen’s suggestion that the fact the coefficients have the right sign and are statistically significant is “more important” than the fact the R-squared values were low?

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #65***

**Reference:** Exhibit H1, Tab 3, Schedule 1, Attachment 1, Section 2.3.1 and Section 6

- a) Please provide the evidence/analysis that Power Advisory relied on to support the comments/conclusions presented in the first paragraph of Section 6.1 about load growth by customer class.
- a) With respect to pages 69-70, what is the basis for Power Advisory's conclusion that for four of the six local area supply projects there is no potential for the High 5 Proposal to defer transmission investment?
- b) With respect to pages 69-70, did Power Advisory investigate the degree to which the timing of the peak load requirements driving the need for additional capacity in the Woodstock and Guelph areas was consistent with the timing of the overall system peak? If yes, what were the results?
- c) Could Hydro One Networks please provide a revised version of Table 18 that indicates the annual Development spending (by type) that will be classified as Network costs by Hydro One Networks' cost allocation methodology.
- d) Please comment (by Zone) on the reasonableness of using 1% and/or 2% as the future load growth assumption.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #66***

**Reference:** Exhibit H1, Tab 3, Schedule 1, Attachment 1, Section 2.3.2 and Section 3.1

- a) If the peak hour can currently occur anywhere between 1 PM and 6 PM (inclusive) and the introduction of the High 5 Proposal encourages shifting away from the peak hours, doesn't this:
  - Increase the likelihood that the High 5 Peaks will occur in the shoulder hours of 1 PM and 6 PM? If not, why not?
  - Create the possibility that the High 5 Peaks will occur outside the 1PM to 6 PM window? If not, why not?

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #67***

**Reference:** Exhibit H1, Tab 3, Schedule 1, Attachment 1, Sections 2.3.2 and 3.2

- a) Please provide copies of the Deal and Mountain (Footnote #103); the Cheng and Mountain (Footnote #106); and the Fraser Institute (Footnote #107) articles referenced in Section 3.2.
- b) With respect to pages 35-36, please confirm Power Advisory's view that the appropriate elasticity estimate to be used is the elasticity of substitution (between peak and off-peak) as opposed to a peak period own-price elasticity estimates.
- c) Is it reasonable to expect that the value for the elasticity of substitution between peak and off-peak electricity will vary depending upon the definition of "peak" and "off-peak"? If not, why not?

- d) Please confirm that the range referenced for the Deal and Mountain results are for the “elasticity of substitution” between peak and off-peak electricity. Also, please confirm the definition of “peak” and “off-peak” used.
- e) Please confirm that the range referenced for the Cheng and Mountain results are for the “elasticity of substitution” between peak and off-peak electricity. Also, please confirm the definition of “peak” and “off-peak” used.
- f) Please confirm that the elasticity estimates quoted from the Fraser Institute Technical Paper are own-price elasticities as opposed to elasticities of substitution. If not, what were the definitions of “peak” and “off-peak” used in the Paper?
- g) With respect to Table 7, please confirm that the various studies referenced used different definitions for “peak” and “off-peak”. If available, please provide the definition of “peak” used for each study.
- h) Please comment on the extent to which the time of use pricing in the various sources referenced was “voluntary” or “mandatory” and if this is likely to affect the observed value for the elasticity of substitution.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #68***

**Reference:** Exhibit H1, Tab 3, Schedule 1, Attachment 1, Sections 3.1 and 3.3

- a) Please confirm that the various shadow prices set out in Table 3 are each associated with a different definition of “peak” hours (i.e., ranging from 60 hours to 200 hours).
- b) What definition of “peak” hours was used to determine the Average Peak HOEP set out in Table 11 and how does this compare with the “peak” definitions used to determine the shadow prices for transmission in Table 3.
- c) Please confirm that this definition of peak (per part (b)) was used to determine the “peak demand” for each industry as set out in Table 12 and the values in Table 12 are the average demand during this peak period (as opposed to the peak demand in the peak period).
- d) Table 11 uses a GA “price” of \$3.47 / GWh. What is the source of this value? What was the value for 2009?
- e) With respect to Table 12, what does the Low Demand Shift value represent, i.e., is it the result of using the low elasticity value in combination with the low High 5 Shadow price value? Similarly, what do the Centre and High Demand Shift values represent?
- f) With respect to Table 12, please provide an illustrative calculation (using the Pulp and Paper sector) showing precisely how the demand shift values were calculated using the assumed elasticity estimates.
- g) The formula for the elasticity of substitution involves off-peak prices and quantities as well as those for the peak period (see page 35 of the Power Advisory Report). What off-peak prices and loads were used in the estimation of the demand shifts shown in Table 12 and how were they determined?
- h) Please re-do Table 12 using a current (implicit) shadow price for transmission of \$102.80 (per page 48).

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #69***

**Reference:** Exhibit H1, Tab 3, Schedule 1, Attachment 1, Sections 2.3.3 and 5

- a) With respect to page 63 and Table 16, please show separately the calculation of the on-peak cost reduction and the off-peak increase.
- b) What is Power Advisory's assumption regarding the off-peak hours to which the load is shifted? For example, does Power Advisory assume the load is shifted to i) the off-peak period as defined by the current transmission tariff (7 PM to 7 AM), ii) other hours in the current transmission tariff's on-peak period but outside the window assumed to capture the High 5 Hours; or iii) all hours outside the High 5 Hours?
- c) Given that the supply curve is not smooth (per Figure 4), does the selection of the off-peak hours the load is assumed to shift to have an impact on the Total Cost change?
- d) What would the Total Cost Change under the High Case if:
  - The load shifted just to the remaining on-peak hours (i.e., 7 AM to 7 PM) in the same day,
  - The load shifted to the off-peak hours in the same day.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #70***

**Reference:** Exhibit H1, Tab 3, Schedule 1, Attachment 1, Section 7

- a) Please comment on the extent to which, in Power Advisory's view, there is an overlap between the load shifting targeted by Demand Response programs (e.g., those offered by the OPA) and that which would result from the adoption of the High 5 Proposal
- b) If an overlap does exist, what are Power Advisory's views as to which approach is more effective in reducing demand when supply is tight and/or market prices are high.



## **9. GREEN ENERGY PLAN**

**Issue 9.1:** Are the OM&A and capital amounts in the Green Energy Plan appropriate and based on appropriate planning criteria?

**Issue 9.2:** Are Hydro One's accelerated cost recovery proposals for the Bruce-to-Milton line and for Green Energy projects appropriate?

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #71***

**References:** i) Exhibit A/Tab 11/Schedule 4/Page 8  
ii) Exhibit A/Tab 11/Schedule 4/Page 9 Table 1

**Preamble:** Projects driven by this Green Energy Plan will constitute a major portion of the Transmission Development capital work program in the near term, 2010 – 2014 and over the longer term, 2015 – 2020. Hydro One expects to spend \$2.5B in the 2010 – 2014 timeframe and an additional \$4.5B in the 2015 – 2020 period on these investments.

- a) Provide a list of Major Capital Investments 2010-2014 indicating capital investment, year to be completed, requirement(s) for OEB approval and transmission capacity.
- b) Relate/cross reference the list to the 2011/2012 capital program for which approval is sought in this application.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #72***

**Reference:** Exhibit A/Tab 11/Schedule 4/Page 47 Exhibit A/Tab 11/Schedule 5/Page 10 and Table 3

**Preamble:** However, given the materiality of these development costs, currently projected at \$160 million in total (see Exhibit C1, Tab 2, Schedule 4) Hydro One is considering the need for a mechanism to recover these costs as incurred and might propose a rate rider mechanism.

- a) Is Hydro One proposing to apply under the current Docket for either a new deferral account and/or Rate rider for GEA projects
- b) If so, provide details of how the \$160 million of development costs would be recovered from ratepayers

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #73***

**Reference:** Exhibit A/Tab 11/Schedule 5/page 5

- a) Provide an update on the status of approvals and percentage completion of the BxM project.
- b) What is the current anticipated in-service date?
- c) What is the Total Capital cost (or current estimate)?

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #74***

**References:** i) Exhibit A/Tab 11/Schedule 5/Page 4/Table 1  
ii) Exhibit A/Tab 11/Schedule 5/Page 8/ Table 2  
iii) Exhibit A/Tab 12/Schedule 2/Page 6/Table 6

- a) For the BxM project, provide a calculation on based on Table 2. of the 2011 and 2012 CWIP/AFUDC using Hydro One's All Corporate Mid-Term Average Weighted Bond Yield (rather than the full cost of capital)
- b) Explain why other than GEA projects, Accelerated CWIP treatment is appropriate?
- c) Explain why Hydro one should recover the full cost of capital including ROE for "standard" transmission assets that are not used or useful?
- d) Explain in more detail why BxM qualifies for accelerated CWIP treatment.

### ***Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #75***

**References:** Exhibit A/Tab 11/Schedule 5/Page 6 and Table 2

- a) Hydro One Networks claims that the accelerated cost recovery will lower the overall cost to ratepayers over the life of the facility. Please provide a schedule that sets out the annual revenue requirement impact starting in 2011 and extending for the life of the facility (similar to impact shown in Table 2 for 2011 & 2012) for two cases: i) BxM project with normal current treatment of CWIP and ii) BxM project with the proposed accelerated cost recovery of CWIP. Note: For post 2012 assume the cost of debt and equity is the same as that in 2012.
- b) For both cases in part (a) please calculate the 2011 NPV of the revenue requirement impact using Hydro One Networks' weighted average cost of capital.