

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #1**

2

3 **Interrogatory**

4

5 Please provide a table with the results of ROE calculations for HONI's transmission  
6 network business for each of the years 2012-2014, compared to Board approved ROE.

7

8 **Response**

9

10 Please see Hydro One's reponse to SEC's interrogatory filed at Exhibit I, Tab 10,  
11 Schedule 5.

12

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #2**

2  
3 **Interrogatory**

4  
5 **Ref: A-15-2 Table 1**

6  
7 The table shows a forecast average monthly peak in Ontario Demand of 20,595MW and  
8 an Average Monthly Network Connection Charge Determinant of 20,457 MW. Does the  
9 difference between these two numbers represent Hydro One's share of Ontario demand or  
10 is there another cause? Please provide an explanatory and quantitative discussion if the  
11 latter is the case.

12  
13 **Response**

14  
15 The difference is not attributed to Hydro One's share of Ontario Demand. Ontario  
16 Demand (12-month average peak) forecast of 20,595 MW is a coincident peak measured  
17 at the generation level and it includes transmission losses of about 2.5% (515 MW).  
18 Ontario Demand also includes load transmitted to other transmitters in Ontario averaging  
19 about 554 MW over 12 months measured at the monthly coincident peak time. Hydro  
20 One 12-month average coincident peak forecast at the delivery point level is 19,526 MW  
21 (20,595 MW - 515 MW - 554 MW). Hydro One Network Connection charge is  
22 measured as the higher of the coincident peak during a month and 85% of the non-  
23 coincident peak between 7 a.m. and 7 p.m. during weekdays excluding holidays as  
24 defined by the IESO and it is greater than Hydro One 12-month coincident peak at the  
25 delivery point level by about 931 MW. The forecast of the 12-month average Hydro One  
26 Network Connection charge is 20,457 MW (19,526 MW+ 931 MW).

27

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #3**

2  
3 **Interrogatory**

4  
5 **Ref: A-15-2 Section 4.1.2**

6  
7 Preamble: The text of the first few paragraphs of this section appears to attempt  
8 justification of Hydro One's weather correction methodology by comparing with other  
9 utility practices. This may be useful for illustrative purposes, but does not address the  
10 statistical validity of traditional practices in an era of changing climate.

11  
12 Is Hydro One aware of any studies by other utilities or research organizations in the  
13 recent past that have validated the 31 year average for weather correction or suggested  
14 any alternative adjustment for climate change effects? If so, please provide such study(s).

15  
16 **Response**

17  
18 Hydro One is not aware of any recent studies publicly released by other utilities or  
19 research organizations.

20  
21 Hydro One conducted a load forecasting methodology survey of North American utilities  
22 in September of 2013 and received 31 responses. The results of the 3 questions  
23 pertaining to weather normalization are presented below.

- 24  
25 1. Have you recently made changes to your methodology for weather normalization?

| <b>Response (N=24)</b>               | <b>Percentage</b> |
|--------------------------------------|-------------------|
| Yes (increased number of years used) | 0%                |
| Yes (decreased number of years used) | 4%                |
| No                                   | 96%               |
| Total                                | 100%              |

- 26  
27  
28 2. How many years of historical weather data are used in your weather  
29 normalization?

| <b>Response (N=30)</b> | <b>Percentage</b> |
|------------------------|-------------------|
| Less than 20 years     | 27%               |
| 20 years               | 23%               |
| 21 to 29 years         | 3%                |
| 30 years or more       | 47%               |
| Total                  | 100%              |

- 1           3. Do you consider the impacts of changing climate and/or extreme weather in your  
2           weather normalization?

| <b>Response (N=30)</b> | <b>Percentage</b> |
|------------------------|-------------------|
| No                     | 83%               |
| Yes                    | 17%               |
| Total                  | 100%              |

3

**Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #4**

**Interrogatory**

**Ref: EB-2012-0031Ex I/Tab 3/Sch 13.02 AMPCO 2**

The reference is to an AMPCO interrogatory for Hydro One's previous transmission application. Please provide an updated version of Hydro One's response, for the year's 2012 and 2013.

**Response**

The requested information is provide below.

**Comparison of Average Monthly Transmission Peak Demand Forecast with Actual  
 (Variance of forecast as percentage of actual)**

|                              | 1999   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   | 2012   | 2013   | Actual | Variance for<br>Plan Year | Variance for<br>Second Year | Variance for<br>Third Year |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------------------|-----------------------------|----------------------------|
| 1999                         | 20,776 |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 21,060 | -1.35                     | -3.11                       | -2.76                      |
| 2000                         | 20,896 | 21,407 |        |        |        |        |        |        |        |        |        |        |        |        |        | 21,566 | -0.74                     | -0.21                       | -3.87                      |
| 2001                         | 21,060 | 21,612 | 21,526 |        |        |        |        |        |        |        |        |        |        |        |        | 21,658 | -0.61                     | -4.36                       | -1.27                      |
| 2002                         |        | 21,857 | 21,747 | 21,842 |        |        |        |        |        |        |        |        |        |        |        | 22,737 | -3.94                     | -1.32                       | -1.08                      |
| 2003                         |        |        | 22,035 | 22,023 | 21,999 |        |        |        |        |        |        |        |        |        |        | 22,317 | -1.42                     | -0.85                       | -2.79                      |
| 2004                         |        |        |        | 22,133 | 22,185 | 22,183 |        |        |        |        |        |        |        |        |        | 22,375 | -0.86                     | -3.02                       | -2.55                      |
| 2005                         |        |        |        |        | 22,431 | 22,377 | 22,285 |        |        |        |        |        |        |        |        | 23,074 | -3.42                     | -3.06                       | -5.67                      |
| 2006                         |        |        |        |        |        | 22,073 | 21,958 | 21,727 |        |        |        |        |        |        |        | 22,650 | -4.08                     | -6.20                       | -0.98                      |
| 2007                         |        |        |        |        |        |        | 21,684 | 21,563 | 21,677 |        |        |        |        |        |        | 22,988 | -5.71                     | -0.95                       | 3.32                       |
| 2008                         |        |        |        |        |        |        |        | 21,606 | 21,613 | 21,492 |        |        |        |        |        | 21,820 | -1.50                     | 2.85                        | -3.88                      |
| 2009                         |        |        |        |        |        |        |        |        | 21,489 | 21,391 | 21,290 |        |        |        |        | 20,798 | 2.37                      | -4.96                       | -3.74                      |
| 2010                         |        |        |        |        |        |        |        |        |        | 20,734 | 20,503 | 20,891 |        |        |        | 21,572 | -3.15                     | -2.62                       | -3.97                      |
| 2011                         |        |        |        |        |        |        |        |        |        |        | 20,376 | 20,613 | 20,465 |        |        | 21,168 | -3.32                     | -5.01                       | -7.72                      |
| 2012                         |        |        |        |        |        |        |        |        |        |        |        | 20,292 | 20,073 | 20,339 |        | 21,132 | -3.75                     | -5.47                       | n.a.                       |
| 2013                         |        |        |        |        |        |        |        |        |        |        |        |        | 19,834 | 20,319 | 20,316 | 21,494 | -5.48                     | n.a.                        | n.a.                       |
| Mean                         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | -2.46                     | -2.73                       | -2.84                      |
| One standard deviation (+/-) |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        | 2.61                      | 3.44                        | 3.61                       |

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #5**

2  
3 **Interrogatory**

4  
5 **Ref: A-15-Sch 1 Page 6**

6  
7 **Ref: C1/3/3/para 2.3.4**

8  
9 The first reference states that all incentive plans have been discontinued. The second  
10 reference states that part of the Compensation and Benefits function is to manage the  
11 short term management incentive plan. Please address this apparent discrepancy.

12  
13 **Response**

14  
15 a) Exhibit A, Tab 15, Schedule 1, page 6 states “All incentive plans have been  
16 discontinued, with the exception of the MCP Short Term Incentive Plan”. Exhibit  
17 C1, Tab 3, Schedule 3, paragraph 2.3.4 states “The same group also manages the  
18 Short Term Incentive for management’s compensation”. Both references refer to the  
19 same Short Term Incentive Plan for management (MCP) staff.

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #6**

2

3 **Interrogatory**

4

5 **Ref:** No documentation provided

6

7 Please provide a table or chart illustrating the proportion of total compensation paid out  
8 as premium/overtime pay for those employee groups entitled to premium pay when  
9 working overtime or outside of regular working hours.

10

11 **Response**

12

13 Please see Exhibit I-04 EP-3, Attachment 1.

14

15 Note: MCP (non represented staff) do not receive overtime pay. Any dollar amount  
16 shown for MCP staff reflects overtime for employees earned while working in a  
17 represented position during the year.

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #7**

2  
3 **Interrogatory**

4  
5 **Ref:** Slide 21 of Transmission Information Presentation

6  
7 Has the purchase of 34% of the Bruce-Milton line been reflected in the rate base  
8 projections for 2015 and 2016 shown on slide 10 in this information package? If not and  
9 if possible, please provide rate base projections post-transaction.

10  
11 **Response**

12  
13 The proposed Bruce to Milton partnership has not yet been completed. Therefore, the  
14 Hydro One Transmission Rate Base projections for 2015 and 2016 included in the  
15 package sent on June 27 continue to include the project assets contemplated in the Bruce  
16 to Milton partnership. Due to the uncertainty of the timing of execution and potential  
17 closing adjustments, an exact rate base estimate is not available. However, the Rate Base  
18 amount is expected to be in the range of \$520 million to \$535 million.



1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #8**

2

3 **Interrogatory**

4

5 **Ref:** Page 31 of 500 : Capital Development Projects

6

7 Supply to Essex County Transmission Reinforcement. Has the OPA or Hydro One  
8 reviewed this project justification with respect to timing in light of current data?

9

10 **Response**

11

12 Please refer to Hydro One's Section 92 Application for this project, EB-2013-0421 -  
13 Supply to Essex County Transmission Reinforcement Project which provides details of  
14 the Hydro One and OPA studies showing the need and justification for the project.

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #9**

2

3 **Interrogatory**

4

5 **Ref: Ex H1-5-1 Attachment 1 (ETS rate Study)**

6

7 Please provide the Terms of Reference given by Hydro One to Elenchus for the  
8 performance of this study.

9

10 **Response**

11

12 The Terms of Reference has been included as Attachment 1 to this interrogatory.

## **REQUEST to ELENCHUS – ETS Rate Study**

### **1.0 Introduction**

In its Decision with Reasons on 2013 Export Transmission Service Rates (EB-2012-0031, Decision and Order, page 10), the Ontario Energy Board (“OEB”) directed Hydro One to prepare a cost allocation study involving the network assets utilized by export transmission customers. The OEB directed Hydro One to include a proposal of the appropriate cost based ETS rate, with supporting rationale, to the Board at its next transmission rates application.

Hydro One plans to use the Outline Agreement that is currently in place with Elenchus to engage Elenchus to complete this study.

### **2.0 Background**

In 1999, when Ontario’s electricity market opened, the OEB set an ETS rate of \$1.00/MWh as a “placeholder” with the acknowledgment that the rate was “not the product of an objective, principled or pragmatic study.”

The OEB next considered changes to the ETS rate in 2010 as part of its decision concerning Hydro One’s 2011 and 2012 Transmission Rates (EB-2010-0002) and increased the rate to \$2.00/MWh. However, the OEB concluded that, “...the most pressing requirement is that a genuinely comprehensive study be undertaken to identify a range of proposed rates and the pros and cons associated with each proposed rate in time for the next transmission rate application.” The Board directed the IESO to undertake this comprehensive study.

The OEB considered the following alternatives:

- Setting the ETS rate to the equivalent average network charge.
- Eliminating the ETS rate.
- Setting a two-tiered ETS rate.
- Retaining the \$2.00 ETS rate.

The OEB found that absent an analysis of cost causality (through a cost allocation study), there is insufficient basis for the OEB to conclude that any change to the ETS rate is just and reasonable. The OEB concluded, therefore, that the rate should remain unchanged.

The OEB requires that Hydro One perform a cost allocation study to establish a cost basis for the ETS rate. Some parties to the EB-2012-0031 proceeding suggested that such a study would be prohibitively costly. However, the OEB accepted the Elenchus testimony that a study could be properly scaled to address the magnitude of the issue and could be completed for a reasonable cost.

The OEB expects that this study will be completed in time for Hydro One's next cost of service transmission rate application. The OEB stated that while Hydro One has the responsibility for completing this study, the Board expects that the IESO will assist Hydro One as required to fully address the ETS rate issue.

### **3.0 Scope of Work**

The work will be divided into two distinct phases: Phase 1: Develop the Study Methodology and Model and Complete the Study, and Phase 2: Regulatory Support of Study. It is expected that Elenchus will provide a preliminary study methodology as part of their response to this request including an estimate of the time and type of support required by Hydro One staff and the IESO to complete this study.

It is expected that Elenchus will provide a fixed price for Phase 1 work. It is expected that any required Phase 2 work will be priced on a time and material basis.

#### **3.1 Phase 1: Develop the Study Methodology and Model and Complete the Study**

Phase 1 will include the following key activities:

- Prepare a detailed model to perform a cost allocation study to establish a cost basis for the ETS rate.
- Review detailed model with Hydro One staff.
- Review model with IESO and solicit any comments they may have.
- Elenchus and Hydro One staff work together to gather the information required to populate Elenchus' model.
- Elenchus populates model and completes the study.
- Elenchus prepares a final report that will be filed with the OEB at Hydro One's next Transmission Cost of Service proceeding documenting the work undertaken and conclusions with supporting rationale.

#### **3.2 Phase 2: Regulatory Support of Study**

- As required, prepare and deliver presentations at stakeholder sessions for Hydro One Transmission's next Cost of Service Application summarizing the work completed and results of the study.
- As required, defend the study methodology, findings and conclusions within a regulatory proceeding. This could include work associated with all phases of a full hearing, such as: responding to written interrogatories, participating in other discovery processes defined by the OEB (e.g. technical conference), testifying at oral hearing and preparing undertaking responses.

### **4.0 Deliverables**

- A well-documented and populated cost allocation model to establish a cost basis for the ETS rate.

- Make presentations to external stakeholders and refine study methodology as appropriate.
- Prepare a final report documenting the work undertaken and conclusions with supporting rationale.
- Present the study findings to external stakeholders and provide regulatory support to Hydro One's next Transmission Cost-of-Service application.

### **5.0 Proposed Schedule**

- Hydro One issues request to Elenchus: *September 2013*
- Elenchus provides a preliminary study methodology including a fixed price commitment for completing Phase 1 of this engagement: *September 2013*
- Develop detailed study methodology and model: *October to November 2013*
- Gather Data and Populate Model: *November to December 2013*
- Final report: *December 2013*
- Present and defend study: *Hydro One's next Transmission Cost-of-Service Rate Application*

## Appendix A: Selected Reference Material

- EB-2012-0031 Hearing Information:  
[http://www.rds.ontarioenergyboard.ca/webdrawer/webdrawer.dll/webdrawer/search/rcc?sm\\_udf10=EB-2012-0031&sortd1=rs\\_dateregistered&rows=200](http://www.rds.ontarioenergyboard.ca/webdrawer/webdrawer.dll/webdrawer/search/rcc?sm_udf10=EB-2012-0031&sortd1=rs_dateregistered&rows=200)
- Hydro One's 2011 and 2012 Transmission Rates (EB-2010-0002) Hearing Information:  
[http://www.rds.ontarioenergyboard.ca/webdrawer/webdrawer.dll/webdrawer/search/rcc?sm\\_udf10=EB-2010-0002&sortd1=rs\\_dateregistered&rows=200](http://www.rds.ontarioenergyboard.ca/webdrawer/webdrawer.dll/webdrawer/search/rcc?sm_udf10=EB-2010-0002&sortd1=rs_dateregistered&rows=200)

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #10**

2  
3 **Interrogatory**

4  
5 In the Executive Summary, it is stated that only dedicated assets should be used to  
6 allocate costs to the Export Customer Class.

- 7  
8 a) Is it Elenchus' view that the export customer class use of the transmission system  
9 drives no costs whatsoever when using non-dedicated transmission assets, such as  
10 control room costs, energy losses, transformer ageing, etc.?  
11 b) Are there other customer classes that Elenchus believes should be allocated only costs  
12 based on their use of dedicated assets, either in distribution or transmission cost  
13 allocation?  
14 c) Did Elenchus review methodologies used for establishing ETS rates in other  
15 jurisdictions to determine if it was following commonly applied cost allocation  
16 principles for this customer class?

17 **Response**

- 18  
19 a) Elenchus is of the view that the assets that are shared or are used exclusively by  
20 domestic customers should not be allocated to interconnections. That is, the  
21 associated depreciation, return, etc. costs in Rate Base associated with these assets  
22 should not be allocated to export customers.

23  
24 The depreciation, return, etc. in Rate Base associated with assets dedicated to  
25 interconnections are included in the Elenchus' proposed methodology.

26  
27 In the Elenchus' proposed methodology, interconnections are allocated the expenses  
28 (OM&A costs included in the revenue requirement) associated with all shared assets  
29 in addition to the OM&A expenses associated with the assets dedicated to  
30 interconnections.

- 31  
32 b) Elenchus did not review how assets are allocated to other customer classes either in  
33 distribution or transmission cost allocation. Elenchus is aware that the OEB's Cost  
34 Allocation Methodology used by distributors in Ontario includes Sheet 9 "Direct  
35 Allocation", that allows distributors to directly allocate assets and/or expenses to  
36 customer classes if there are circumstances that meet the criteria of assets and/or  
37 expenses being associated with only one customer class and not shared with other  
38 customer classes.

1 c) No.



1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #11**

2  
3 **Interrogatory**

4  
5 Previous ETS studies have revealed that neighbouring jurisdictions such as Quebec or  
6 New York appear to apply substantially higher ETS rates than are being proposed for  
7 Ontario in this report. Please comment on whether the differences are  
8 methodological/policy based in nature, or whether the differences are due to significantly  
9 different cost drivers in Ontario relative to the other jurisdictions.

10  
11 **Response**

12  
13 Elenchus did not review how ETS rates are established in other jurisdictions.

14  
15 Elenchus was retained by Hydro One to respond to the OEB's direction in Proceeding  
16 EB-2012-0031 of developing: "... a cost allocation study to establish a cost basis for the  
17 ETS rate."