

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

2
3 **Interrogatory**

4
5 **Reference: Exhibit 1/Tab 2/Schedule 1/p.4**
6 **EB-2012-0031, Exhibit 1/Tab 2/Schedule 1/p.3**

7
8 The rationale given in the current materials for the decline in external revenues from
9 Station Maintenance (i.e., “primarily due to the expected shift in resources to Hydro One
10 Transmission’s growing work programs”) is the same as that in EB-2012-0031 for the
11 then 2013 test year. However, actual revenues for 2013 remained at historic levels.
12 What is different about the test years 2015 and 2016 that the decline will now actually
13 occur?

14
15 **Response**

16
17 Hydro One has given clear direction to Station Services that we will not be continuing at
18 the level of involvement with our external customers for Electrical Maintenance
19 Department (EMD) work going forward. External companies have been advised that
20 Hydro One will not be bidding on any transformer maintenance, Planning & Control
21 (P&C) work or other potential planned EMD work for 2015.

Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #2

Interrogatory

**Reference: Exhibit G1/Tab 1/Schedule 1/p. 2-3
EB-2012-0031, Exhibit G2/Tab 5/Schedule 1/p.1-2**

- a) Please provide schedules similar to that set out in EB-2012-0031, G2/T5/S1, page 1-2 that detail the proposed revenue requirement by rate pool for 2015 and 2016. Please also include in the schedules gross book value and net book value for each rate pool.

Response

- a) The requested information regarding revenue requirement is provided in the tables below. Please refer to response to VECC IR 10 at Exhibit I, Tab 6, Schedule 10, part (b) for gross book and net book values.

2015 DETAILED REVENUE REQUIREMENT BY RATE POOL

	Rate Pool Revenue Requirement (\$ Million)				
	Network	Line Connection	Transformation Connection	Wholesale Meter	Total
OM&A	234.8	45.6	105.0	0.17	385.7
Taxes Other Than Income Taxes	41.8	9.2	15.3	0.01	66.3
Depreciation of Fixed Assets	213.3	43.9	98.8	0.03	356.0
Capitalized Depreciation	-4.0	-0.9	-1.5	0.00	-6.4
Asset Removal Costs	23.8	5.2	9.1	0.00	38.1
Other Amortization	4.1	0.9	1.5	0.00	6.5
Return on Debt	191.6	42.2	70.2	0.03	304.0
Return on Equity	249.2	54.8	91.2	0.04	395.3
Capital & Income Taxes	45.2	10.0	16.6	0.01	71.8
SUB-TOTAL	999.8	210.8	406.2	0.29	1,617.1
Less Non-Rate Revenue	-17.6	-3.7	-7.1	-0.01	-28.4
Less Regulatory Asset Credit	-3.8	-0.8	-1.5	0.00	-6.2
Less Export Revenue Variance	-11.5	0.0	0.0	0.00	-11.5
Less Export Revenues	-33.4	0.0	0.0	0.00	-33.4
Plus LVSG Credit	0.0	0.0	13.2	0.00	13.2

	Rate Pool Revenue Requirement (\$ Million)				
	Network	Line Connection	Transformation Connection	Wholesale Meter	Total
TOTAL	933.6	206.3	410.8	0.28	1,550.9
Gross Book Value	9,783.1	2,135.8	3,745.2	1.4	15,665.5
Net Book Value	6,398.9	1,408.0	2,342.1	0.9	10,149.9

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2016 DETAILED REVENUE REQUIREMENT BY RATE POOL

	Rate Pool Revenue Requirement (\$ Million)				
	Network	Line Connection	Transformation Connection	Wholesale Meter	Total
OM&A	237.5	46.1	106.6	0.12	390.4
Taxes Other Than Income Taxes	42.0	9.4	15.7	0.00	67.0
Depreciation of Fixed Assets	220.9	46.7	103.3	0.02	370.9
Capitalized Depreciation	-4.2	-0.9	-1.6	0.00	-6.7
Asset Removal Costs	20.9	4.7	8.1	0.00	33.7
Other Amortization	3.8	0.9	1.4	0.00	6.1
Return on Debt	203.1	45.4	75.8	0.02	324.3
Return on Equity	263.4	58.9	98.4	0.03	420.6
Capital & Income Taxes	51.9	11.6	19.4	0.01	82.8
SUB-TOTAL	1,039.3	222.6	427.1	0.2	1,689.2
Less Non-Rate Revenue	-17.7	-3.8	-7.3	0.0	-28.8
Less Regulatory Asset Credit	-3.8	-0.8	-1.6	0.0	-6.2
Less Export Revenue Variance	-11.5	0.0	0.0	0.0	-11.5
Less Export Revenues	-34.3	0.0	0.0	0.0	-34.3
Plus LVSG Credit	0.0	0.0	13.9	0.0	13.9
TOTAL	972.0	218.0	432.1	0.20	1,622.3
Gross Book Value	10,151.4	2,255.0	3,945.6	1.0	16,353.0
Net Book Value	6,595.8	1,474.5	2,462.8	0.7	10,533.7

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

2
3 **Interrogatory**

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5 **Reference A/T15/S2, pg. 1**

- 6
7 a) Are the values reported in Table 1 based “measured” as of the point of generation or
8 the point of delivery?
9 b) Please provide the equivalent weather normalized values for the years 2011-2013.

10
11 **Response**

- 12
13 a) The values reported in Table 1 are measured at the delivery point level.
14
15 b) The equivalent weather-normalized values for the years 2011 to 2013 are provided in
16 the following table.

17

	Ontario Demand	Hydro One Rate Categories (Charge Determinants)		
		Network Connection	Line Connection	Transformation Connection
2011	20,547	19,882	19,039	16,296
2012	20,348	19,747	18,941	16,191
2013	20,360	20,220	19,322	16,606

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

2
3 **Interrogatory**

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5 Reference A/T15/S2, pg. 14-15

6
7 a) Please provide a schedule that for 2015 and 2016 sets out the total transmission
8 system load forecast based on each of the three models discussed.

9
10 **Response**

11
12 a) The requested information is provided below. Monthly econometric model is good
13 for short-term forecasting for up to 2 years and as such was not used to produce a
14 forecast for the year 2016.

15

Year	Annual Econometric Forecast	Monthly Econometric Forecast	Annual End-Use Forecast	Final Forecast
2015	20,464	20,523	20,184	20,595
2016	20,551	n.a.	20,292	20,814

16

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

2
3 **Interrogatory**

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5 **Reference A/T15/S2, pg. 20**
6 **2013 LTEP, Module 1 (Demand Forecast), pg. 49**

- 7
8 a) Are the values reported in Table 3 for 2013 forecast or actuals?
9
10 b) The housing forecast used in the 2013 LTEP shows higher levels of housing additions
11 for each of the years 2014-2016 than the Hydro One Networks' forecast. Please
12 reconcile and explain why Hydro One Networks' forecast is appropriate.

13
14 **Response**

- 15
16 a) In Table 3, Load Forecast after Deducting Embedded Generation and CDM as well as
17 Embedded Generation values are actuals for 2013. The remaining values, CDM and
18 Load Forecast before Deducting Impacts of Embedded Generation and CDM, for
19 2013 are estimates only.
20
21 b) The household forecast referenced in Page 49 in Module 1 of 2013 LTEP pertains to
22 the number of households in Ontario. Hydro One uses the number of housing starts
23 (not households) in its econometric models. This explains why the OPA has higher
24 number of households forecast as compared to number of housing starts used by
25 Hydro One. As explained in Exhibit A, Tab 15, Schedule 2, page 5, Hydro One uses
26 the consensus forecast approach to estimate the forecast for housing starts. Based on
27 our experience in load forecasting, this approach works well.

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

2 **Interrogatory**

3 **Reference** A/T15/S2, pg. 20
4 **2013 LTEP, Module 1 (Demand Forecast), pg. 6**

5
6 Preamble: The 2013 LTEP included the following forecast for Ontario peak demand
7 (taken back to the generator) prior to adjustments for CDM.
8

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Energy, TWh	143.6	145.0	144.1	143.9	144.6	146.9	146.9	149.1	152.4	155.0	157.1
Peak, MW	23,837	24,028	24,042	24,097	24,275	24,579	24,665	25,024	25,511	25,805	26,174

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Energy, TWh	158.2	159.7	162.0	163.8	166.0	168.7	171.3	173.5	176.1	178.7	181.3
Peak, MW	26,368	26,607	26,907	27,259	27,596	28,041	28,367	28,766	29,167	29,539	29,944

9

10

- 11 a) Are the values reported in Table 3 for 2013 forecast or actuals?
- 12 b) The OPA's forecast for Ontario demand (before deducting CDM) is materially
13 higher than Hydro One Networks' forecast. Please explain the difference and
14 why Hydro One Networks' forecast is the more appropriate one to use.
- 15 c) To the extent the difference is based on point of measurement (e.g. at generation
16 vs. point of delivery), please restate the Hydro One Networks' forecast so it is
17 reflective of the same point of measurement as the OPA's and indicate the loss
18 factors used.
- 19 d) How are the forecasts for the various Charge Determinants derived from the
20 forecast of Ontario Demand – per Table 3? For example, are they based on the
21 historical relationship or is the post 2013 growth rate forecast for Ontario Demand
22 applied to each of the actual 2013 value for each of the charge determinants?

23 **Response**

- 24 a) Please see the response to Exhibit I-06 VECC-05, Part (a).
- 25
- 26 b) The peak demand forecast presented in Module 1, page 6, 2013 LTEP, pertains to
27 the maximum (summer) peak for use in capacity planning in the province. The
28 load forecast presented in Table 3 in Exhibit A, Tab 15, Schedule 2, page 20,
29 pertains to the 12-month average peak and, as such, the average peak values are
30 lower compared to the maximum peak. The 12-month average peak is more

1 appropriate for Hydro One to use in estimating the charge determinants in this
2 rate application which are based on the twelve month average peak..

3 To make an apple-to-apple comparison, the weather-normal summer peak
4 forecast of Hydro One before CDM and embedded generation deductions should
5 be used, as presented in the following table (all peak numbers are presented in
6 MW).

7

Forecast	2013	2014	2015	2016
LTEP	24,042	24,097	24,275	24,579
Hydro One	25,127	25,434	25,782	26,260

8

9 c) The difference is not due to point of measurement as explained (b) above.

10

11 d) The forecast for each charge determinant, before deducting CDM and embedded
12 generation, is arrived at by applying the post 2013 growth rates of the Ontario
13 Demand before deductions to the 2013 base-year forecast value of that charge
14 determinant. Then for each charge determinant, the associated CDM and
15 embedded generation is deducted to estimate the charge determinant forecast after
16 deductions.

17

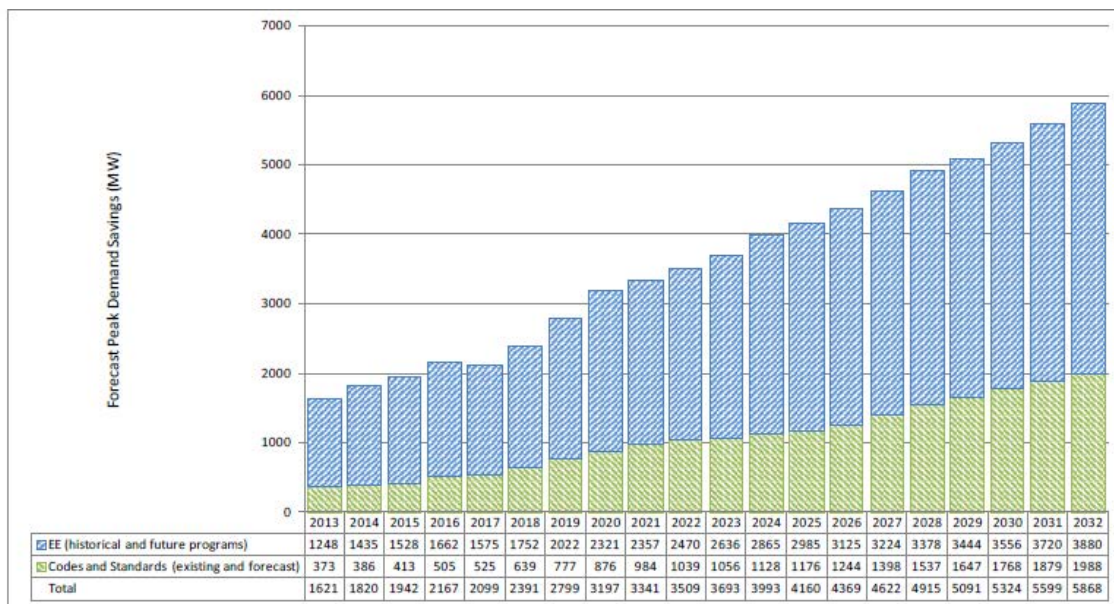
Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #7

Interrogatory

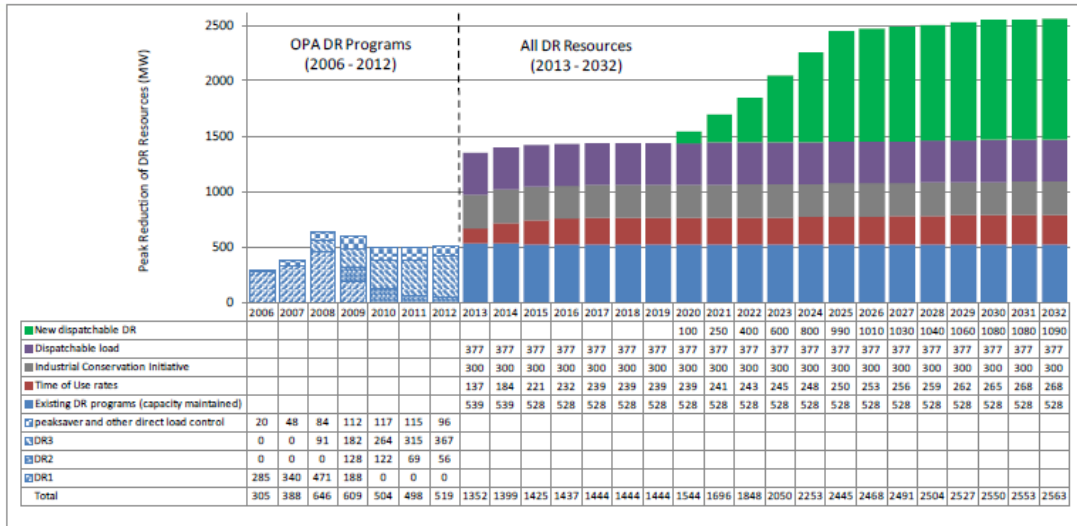
**Reference A/T15/S2, pg. 7 and 20
 2013 LTEP, Module 2 (Conservation), pg. 11 and 21**

Preamble: The 2013 LTEP included the following forecasts for future demand reductions due to CDM.

Module 2, Page 11



Module 2, Page 21



- a) Please reconcile Hydro One Networks' CDM adjustments to Ontario peak demand for 2013-2016 (per Table 2) with those forecast in the 2013 LTEP.
- b) Please explain how the CDM impact on the 12 month average Peak Demand is derived from the forecast impact on the Ontario Peak Demand.

Response

- a) The table below provides the reconciliation of peak saving assumptions for 2013-2016.

Category	Year	2013 LTEP in MW	Hydro One's Assumptions in MW	Notes
EE (historical and future programs)	2013	1248	1248	Hydro One's peak reduction due to EE is consistent with the OPA's 2013 LTEP
	2014	1435	1435	
	2015	1528	1528	
	2016	1662	1662	
Codes and Standards (existing and forecast)	2013	373	373	Hydro One's peak reduction due to C&S is consistent with the OPA's 2013 LTEP
	2014	386	386	
	2015	413	413	
	2016	505	505	
Dispatchable Load	2013	377	50	Hydro One analyzed the historical actual monthly peak
	2014	377	50	

Category	Year	2013 LTEP in MW	Hydro One's Assumptions in MW	Notes
Dispatchable Load (cont.)	2015	377	50	reduction due to dispatchable load for 2003-2013 to derive the peak saving for the forecast period.
	2016	377	50	
Industrial Conservation Initiative	2013	300	300	Hydro One's peak reduction due to Industrial Conservation Initiative is consistent with the OPA's 2013 LTEP
	2014	300	300	
	2015	300	300	
	2016	300	300	
Time-of-Use Rates	2013	137	137	Hydro One's peak reduction due to TOU is consistent with the OPA's 2013 LTEP
	2014	184	184	
	2015	221	221	
	2016	232	232	
Existing DR Programs (assume capacity maintained)	2013	539	511	Hydro One analyzed the actual peak reduction of DR1, DR2, DR3 and peaksaver programs for 2006-2012 and used the same ratio to derive the peak saving forecast for 2013-2016
	2014	539	511	
	2015	528	501	
	2016	528	500	
Total	2013	2974	2619	
	2014	3221	2865	
	2015	3367	3014	
	2016	3604	3250	

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b) Hydro One derives the monthly peak savings by CDM categories including EE, C&S, dispatchable load, Industrial Conservation Initiative, TOU and DR programs (DR2, DR3, PeakSaver). The table below provides the detailed assumptions used for each CDM category.

Category	Method used to derive monthly saving
EE (historical and future programs)	Use monthly saving profile provided by the OPA
Codes and Standards (existing and forecast)	Use monthly saving profile provided by the OPA
Dispatchable Load	Use monthly saving profile provided by the IESO
Industrial Conservation Initiative	Assume the impact only for June and July
Time-of-Use Rates	Use monthly saving profile provided by the OPA

Category	Method used to derive monthly saving
Existing DR Programs (assume capacity maintained)	DR2: monthly saving profile based on 2009-2012 actual saving information from the OPA
	DR3: assume the impact only for June and July
	PeakSaver: assume the impact only for June and July

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

2
3 **Interrogatory**

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5 **Reference: H1/T5/S1, Attachment 1, pg. 10**

6
7 a) Did Elenchus undertake any further investigation as to the interruptible nature of
8 exports (i.e., as to under what conditions they are interruptible)? If so, what were
9 its findings?

10
11 **Response**

12
13 a) No. Elenchus did not undertake any further investigation as to the interruptible nature
14 of exports.

Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #9

Interrogatory

Reference: H1/T5/S1, Attachment 1, pg. 12-14

- a)
- b) Please provide a schedule that sets out the actual export sales (MWh) for 2010-2013 and the forecast values for 2014-2016. In the same schedule please include the forecast export sales for 2012-2014 per EB-2012-0031.
- c) Please provide a schedule that sets out actual 2011-2013 export and domestic customer MWh volumes and the forecast domestic customer MWh volumes for 2015-2016.

Response

- a)
- b) The requested information is provided in the table below.

Year	Actual Exports (MWh)	Forecast Exports (MWh)*	Forecast Export per EB-2012-0031 (MWh)*
2010	15,165,494	N/A	N/A
2011	12,848,505	N/A	N/A
2012	14,627,403	N/A	15,800,000
2013	18,309,407	N/A	15,500,000
2014	N/A	16,000,000	15,000,000
2015	N/A	16,700,000	N/A
2016	N/A	17,200,000	N/A

*Forecast is for Hydro One only (excludes other transmitters).

- c) The requested information is provided in the table below.

Year	Actual Exports (MWh)	Actual Domestic (MWh)	Forecast Domestic (MWh)
2011	12,848,505	141,473,805	N/A
2012	14,627,403	141,287,009	N/A
2013	18,309,407	140,736,784	N/A
2014	N/A	N/A	N/A
2015	N/A	N/A	139,922,990
2016	N/A	N/A	141,204,442

Note: All values provided in this table are for the Province (including other transmitters).

Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #10

Interrogatory

**Reference H1/T5/S1, Attachment 1, pg. 10-11
 E1/T1/S1, pg. 1**

- a) Please provide schedules that breakdown the proposed revenue requirements for 2015 and 2016 by functional category, per EB-2012-0031, G1/T2/S1, pg. 2-8 (i.e. the totals should reconcile with the proposed revenue requirement for each year). In each schedule please identify the contribution of OM&A, Depreciation, Income Taxes, Property Taxes and Cost of Capital to the cost for each functional category. The totals should reconcile with the values shown in E1/T1/S1, pg. 1.
- b) Please also include in the response to part a) the net book value and gross book value for each functional category.

Response

- a) The requested information is provided in the tables below.

2015						
Functional Category	OM&A	Property Taxes and Rights Payments	Depreciation	Income Taxes	Cost of Capital	Total Revenue Requirement
Network	113.1	31.5	144.7	34.0	331.5	654.7
Line Connection	22.9	7.3	31.5	7.9	76.8	146.3
Transformation Connection	60.4	13.6	75.4	14.7	143.0	307.1
Wholesale Revenue Meter	0.2	0.0	0.0	0.0	0.1	0.3
Network Dual Function Line	15.4	3.9	14.0	4.3	41.5	79.1
Line Connection Dual Function Line	3.4	0.9	3.1	0.9	9.1	17.3
Generation Line Connection	4.5	1.4	6.5	1.5	15.1	29.0
Generation Transformation connection	2.0	0.2	1.4	0.3	2.5	6.4
Common	154.3	6.6	114.1	7.2	70.3	352.5
Other	9.5	0.9	3.6	1.0	9.4	24.4
Total	385.7	66.3	394.2	71.8	699.3	1,617.1

2016						
Functional Category	OM&A	Property Taxes and Rights Payments	Depreciation	Income Taxes	Cost of Capital	Total Revenue Requirement
Network	114.3	31.6	148.0	39.0	350.5	683.3
Line Connection	23.1	7.5	33.1	9.2	82.8	155.6
Transformation Connection	61.3	13.9	78.2	17.1	154.1	324.6
Wholesale Revenue Meter	0.1	0.0	0.0	0.0	0.0	0.2
Network Dual Function Line	15.6	3.9	14.1	4.8	43.2	81.6
Line Connection Dual Function Line	3.4	0.9	3.1	1.1	9.4	17.8
Generation Line Connection	4.5	1.4	6.7	1.8	16.1	30.5
Generation Transformation connection	2.1	0.3	1.5	0.3	2.8	7.0
Common	156.2	6.8	115.7	8.5	76.1	363.2
Other	9.7	0.9	3.7	1.1	9.9	25.3
Total	390.4	67.0	404.0	82.8	744.9	1,689.2

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b) The requested information is provided in the table below.

Asset Value by Functional Category

Functional Category	Gross Book Value (\$ Million)		Net Book Value (\$Million)	
	2015	2016	2015	2016
Network	7,169.8	7,412.8	4,816.2	4,960.1
Line Connection	1,648.4	1,739.0	1,116.6	1,171.6
Transformation Connection	3,223.7	3,382.2	2,076.9	2,180.1
Wholesale Meter	1.4	1.0	0.9	0.7
Network - Dual Function Line	869.5	887.5	603.2	611.1
Line Connection - Dual Function Line	190.0	194.0	132.0	133.7
Generator Line Connection	325.0	339.1	218.9	227.8
Generator Station Connection	56.7	62.4	36.2	39.8
Common	1,980.0	2,126.8	1,013.0	1,068.8
Other	201.1	208.2	136.0	140.0
TOTAL	15,665.5	16,353.0	10,149.9	10,533.7

6

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

2
3 **Interrogatory**

4
5 **Reference: H1/T5/S1, Attachment 1, pg. 12**

- 6
7 a) Does Hydro One Networks take into consideration transmission capacity needed for
8 imports when planning the Network transmission system?
9 b) Has Hydro One Networks ever constructed facilities that would facilitate the import
10 or export of electricity? If so, what facilities, were they just inter-jurisdiction interties
11 or also intra-provincial network facilities and what was the basis for this activity (i.e.,
12 was it the result of an internal planning process, direction from the OPA/government
13 or direction from the IESO)?
14 c) Does Hydro One Networks plan and construct network facilities so as to
15 reduce/eliminate congestion on the transmission system? If so, is congestion assessed
16 based just on domestic load?

17
18 **Response**

- 19
20 a) Yes, Hydro One considers the transmission capacity needed for imports where it's
21 relevant to investments being planned or under consideration. For example, where
22 firm purchases have been established, Hydro One will reflect the network capacity
23 needed to support the purchases in its planning studies.
24
25 b) The following facilities were constructed by Hydro One to facilitate the exchange of
26 power with other jurisdictions:
27
28 1. Ontario-Michigan Phase Shifters. This project involved adding phase shifters and
29 additional autotransformation capability on the interties with Michigan at
30 Lambton TS and Scott TS.
31
32 2. Ontario-Quebec High Capacity Intertie. This project involved building two new
33 230kV circuits from Hawthorne TS to the provincial border to connect with the
34 TransEnergie 230kV circuits that connect to the Outaouais station in Quebec.
35
36 3. Niagara Reinforcement Project. This project involved building two new intra-
37 provincial 230kV circuits from Allanburg TS to Middleport TS. This project has
38 been partially completed but is on hold pending the resolution of the First Nation
39 issues in the Caledonia area.

40
41 These three projects were initiated in response to Hydro One's transmission
42 license requirement to "use its best efforts to expand inter-tie capacity to
43 neighbouring jurisdictions by approximately 2000 MW by May 1, 2005". These

- 1 projects also provide other key reliability benefits including mitigation of loop
2 flows through Ontario, strengthening the transmission systems in eastern Ontario
3 and the Niagara area, and greater access to renewable resources.
4
- 5 c) Yes, where appropriate Hydro One plans and constructs facilities to address
6 congestion on the network. A recent example is the upgrade of the Lambton to
7 Longwood circuits to address congestion of resources in the area west of London. As
8 well as load levels and loading profiles, congestion is based on many other factors
9 and assumptions including generation levels, operating characteristics and outage
10 rates, network configuration and characteristics, system transfers and import/export
11 transactions.

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

2
3 **Interrogatory**

4
5 **Reference H1/T5/S1, Attachment 1, pg. 12-16**
6 **H1/T2/S1, pg. 2**

- 7
8 a) Why does Elenchus propose using 12-CP as the allocator when Hydro One Networks
9 effectively allocates Network Costs to domestic customers (per EB-1999-0044) based
10 on the higher of a) the monthly Coincident Peak and b) 85% of the monthly Non-
11 Coincident Peak – averaged over 12 months?
12 b) Please explain more fully the basis for the “Net Shared Assets” allocator and provide
13 the derivation of the values set out in Tables 6 and 7.

14
15 **Response**

- 16
17 a) Elenchus is of the view that in order to develop a simple cost allocation methodology
18 to determine a cost-based export tariff, the allocators to be used should be commonly
19 used allocators in cost allocation methodologies. Coincident peak (“CP”) and non-
20 coincident peak (“NCP”) are the commonly used allocators used for demand related
21 costs. It is Elenchus’ understanding that using 85% of the monthly Non-Coincident
22 Peak is not a commonly used allocator in cost allocation methodologies and
23 introduces a level of complexity into the proposed methodology.
24
25 b) “Net Shared Assets” are the assets that are left over after deducting the assets
26 exclusively dedicated to domestic customers and exclusively dedicated to
27 interconnections.

28
29 On Tables 5, 6, and 7, the data shown as composite allocator for Net Shared Assets
30 reflects the allocation of all assets, dedicated and shared to domestic and
31 interconnections.

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

2
3 **Interrogatory**

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5 **Reference: H1/T5/S1, Attachment 1, pg. 20**

- 6
7 a) Please provide a schedule that, starting with Hydro One Networks' allocation of the
8 various components (e.g. OM&A, Depreciation, Cost of Capital, etc.) of 2015
9 proposed revenue requirement to functional categories sets out the allocation of each
10 cost component of each functional category as between export and domestic
11 customers including the allocator used, the allocator's values and the resulting
12 allocation of costs per the Base Case methodology.
13
14 b) Using the resulting export customer revenue requirement from part (a), please show
15 the derivation of the \$1.63/MWh ETS rate for 2015.

16
17 **Response**

- 18
19 a) The requested information is provided in the tables below.

Breakdown of Revenue Requirement by functional category (Dedicated to Interconnect/Dedicated to Domestic/Shared)

Revenue requirement	2015 Rates Revenue Req (\$M)	Network			Line Connection	Transformation Connection	Wholesale Revenue Meter	Network Dual Function Line	Line Connection Dual Function Line	Generation Line Connection	Generation Transformation connection
		Total	Dedicated to Interconnect	Shared	Dedicated to Domestic	Dedicated to Domestic	Dedicated to Domestic	Shared	Dedicated to Domestic	Shared	Shared
OM&A	385.7	196.69	2.40	194.29	39.76	105.04	0.17	26.78	5.86	7.79	3.56
Other Taxes (Grants in Lieu)	66.3	35.476	0.43	35.04	8.225	15.299	0.006	4.443	0.972	1.613	0.266
Depreciation on fixed assets	356.0	185.843	2.26	183.58	40.079	98.829	0.030	17.321	3.782	8.336	1.792
Capitalized depreciation	(6.4)	(3.408)	(0.04)	(3.37)	(0.784)	(1.532)	(0.001)	(0.413)	(0.090)	(0.154)	(0.027)
Asset removal costs	38.1	20.253	0.25	20.01	4.656	9.106	0.004	2.456	0.537	0.918	0.160
OPEB amortization	-	-	-	-	-	-	-	-	-	-	-
Other amortization	6.5	3.458	0.04	3.42	0.802	1.491	0.001	0.433	0.095	0.157	0.026
Return on debt	299.0	159.993	1.95	158.04	37.087	69.023	0.028	20.042	4.384	7.271	1.204
Return on equity	395.3	211.476	2.58	208.90	49.021	91.233	0.037	26.491	5.795	9.611	1.591
Income tax	71.8	38.394	0.47	37.93	8.900	16.564	0.007	4.809	1.052	1.745	0.289
Capital tax	-	-	-	-	-	-	-	-	-	-	-
AFUDC	5.0	2.661	0.03	2.63	0.617	1.148	0.000	0.333	0.073	0.121	0.020
Revenue requirement	1,617.1	\$ 850.84	10.37	840.47	\$ 188.36	\$ 406.20	\$ 0.29	\$ 102.70	\$ 22.46	\$ 37.41	\$ 8.88

Group Revenue Requirement by Rate Pool

Rate Pool	Dedicated to Interconnect	Dedicated to Domestic	Shared	Total
Network	10.4		989.5	999.8
Line		210.8		210.8
Transformation		406.2		406.2
Meter		0.3		0.3

1 Revenue requirement for the Network Rate Pool is broken down between dedicated to
2 interconnections, dedicated to domestic and shared based on 2013 actual GBV.

3
4 Expenses dedicated to interconnections were allocated 100% to interconnections. Expenses
5 dedicated to domestic were allocated 100% to domestic. The allocator used for OM&A
6 expenses associated with net shared assets was gross assets. Shared assets are allocated based
7 on 12 CP 2013 data shown on Table 4 of Elenchus report.

8
9 Out of the \$1.617B revenue requirement for 2015, \$1.590B was allocated to domestic and
10 \$0.027B was allocated to interconnections.

11
12 b) \$27,232,324 million divided by the forecast export volumes for 2015 of 16,700,000 MWh
13 results in an ETS rate of \$1.63/MWh.

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

2
3 **Interrogatory**

4
5 Reference A/T18/S1, pg. 4

6
7 a) Please provide the actual and budget amounts for each of the categories shown in
8 Table 2 (Total Annual Savings – Transmission)

9
10 **Response**

11
12 a) The productivity categories provide information on the types of savings that are
13 occurring at Hydro One. Individual initiatives often have an impact on many different
14 programs or divisions and as a result it is not possible to apply the productivity
15 category approach to the business plan budgets or align these budgets to the
16 categories without creating overlap and duplication.

Vulnerable Energy Consumers Coalition (VECC) INTERROGATORY #16

Interrogatory

Reference D1/T2/S1/pg. 47

a) For figures 8, 13, 19, 25, 31, 37 and 43 please revise to show the actual replacement levels for 2009 through 2014.

Response

Please see table below for the actual replacement levels for 2009 through 2013 and the forecast replacement level for 2014 for each key transmission asset outlined in Exhibit D1, Tab 2, Schedule 1.

Asset Replacements		Years					
		2009	2010	2011	2012	2013	2014
Transformer Replacements	# units	4	10	16	12	15	26
Circuit Breaker Replacements	# units	33	81	100	55	57	125
Protection System Replacements	# units	259	283	389	350	340	350
Conductor Replacements	# kms	30	30	37	22	75	113
Wood Pole Replacements	# units	811	880	862	763	830	850
Steel Structure Replacements/Refurbishments	# units	71	33	0	226	235	354
Underground Cable Replacements	# kms	0	0	0	0	5	5

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

2
3 **Interrogatory**

4
5 **Reference D1/T2/S1/pg. 47**

6
7 a) The Historical Replacement level for this chart is not shown. Please provide so as to
8 be consistent with Figures 8, 13, 19, and 25.

9
10 **Response**

11
12 The historic and proposed replacement rate are the same, and as such can not be
13 separately distinguished on Figure 31 of the reference.

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

2
3 **Interrogatory**

4
5 Reference D1/T3/S2, pg. 3 Table 1

- 6
7 a) Please provide the sustaining capital as shown in Table 1 for the years 2008 through
8 2010.
9 b) Explain why 2011-2013 capital spending was significantly lower than that proposed
10 for 2014 through 2016.

11
12 **Response**

- 13
14 a) Please see table below for the sustaining capital for the years 2008 through 2010.
15

Description	Historic Year (\$M)		
	2008	2009	2010
Stations	211.0	216.6	271.2
Lines	56.5	76.0	71.6
Total	267.4	292.3	342.8

- 16
17 b) The proposed spending for Sustaining Capital over the 2014 to 2016 period is
18 directionally focused on maintaining equipment reliability and overall system
19 reliability, through continued Sustaining Capital expenditures, while containing the
20 test year Sustaining OM&A expenditures increases to less than inflation as outlined in
21 Exhibit D1, Tab 2, Schedule 1, page 2 lines 4 to 7.

22
23 The primary driver for the Stations capital expenditures being higher when compared
24 to historic years is due to the on-going focus within Station Re-investment on
25 replacing air blast circuit breakers at critical system stations and executing integrated
26 station rebuilds at load delivery stations as outlined in Exhibit D1, Tab 3, Schedule 2,
27 page 7 lines 12 to 15.

28
29 And similarly, the increasing Lines Sustaining capital expenditures reflect the need
30 for an increase in the line refurbishment and underground cable replacements to
31 address the number of these assets that are approaching end of life. A significant
32 increase is also required in the refurbishment of steel towers in order to extend the life
33 of these assets as outlined in Exhibit D1, Tab 3, Schedule 2, page 42 lines 12 to 16.