

Energy Probe INTERROGATORY #1 List 1

Interrogatory

Issue 1.2

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

Ref: Exhibit A, Tab 12, Schedule 1 – Appendix A – Business Plan Assumptions

Page 1 shows Ontario CPI forecasts of 1% in 2009 and 2% thereafter. Labour escalation on Pages 2 and 3 show forecasts of about 3% for the bridge and test years.

Why are HONI labour agreements so much higher than CPI forecasts?

Response

HONI labour agreements are higher than the CPI forecasts because it is not only the CPI that influences wage levels. Other factors to be considered are discussed in Exhibit C1, Tab 3, Schedule 2 and Exhibit I, Tab 5, Schedule 6, Part 5.

Energy Probe INTERROGATORY #2 List 1

Interrogatory

Issue 1.2

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

Ref: Exhibit A, Tab 12, Schedule 1 – Appendix A – Business Plan Assumptions

Section 5.0 of the appendix shows benefit costs rates forecasts. In the footnotes under ** reference is made to “retirement bonus”.

- a) How does an employee qualify for the retirement bonus?
- b) What percentage of retiring employees receive the bonus?
- c) Does the bonus apply to all employee groups?
- d) How is the bonus calculated?
- e) How much does the average bonus amount to?

Response

- a) An employee who has completed 10 years of continuous employment qualifies for the retirement bonus. The employee must directly retire from Hydro One. Society- and PWU-represented employees must be eligible to either retire or terminate and be eligible to draw an immediate vested pension.
- b) For the period of August 1, 2009 to August 1, 2010, approximately 81 percent received the retirement bonus.
- c) The retirement bonus applies to all regular PWU- and Society-represented employees, as well as regular MCP employees hired prior to 2004. The retirement bonus does not apply to casual trades staff or to MCP employees hired after 2004
- d) The bonus is equal to one month's base pay.
- e) The average retirement bonus for the period of August 2009 to August 2010 was \$8,014.99.

Energy Probe INTERROGATORY #3 List 1

Interrogatory

Issue 1.2

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

Ref: Exhibit A, Tab 12, Schedule 1 – Appendix A – Business Plan Assumptions

Section 5.0 of the appendix shows benefit costs rates forecasts. In the footnotes under ** reference is made to OPRB (to INERGI where applicable).

- a) Please explain the relationship of INERGI to HONI.
- b) What work does INERGI perform?
- c) If INERGI is a private contractor to HONI, why are OPRB benefits payable by HONI?
- d) When will HONI's obligation to pay OPRB benefits to INERGI end?

Response

- a) Inergi, a wholly owned subsidiary of Capgemini and a separate legal entity, provides outsource services to HONI. Inergi is the outsource service provider and HONI is the customer. The MSA (Master Service Agreement) stipulates the commercials, scope of services, service levels and pricing of this outsource service contract.
- b) Inergi performs outsource services in the areas of Customer Care, Information Technology, Human Resources / Payroll, Finance & Accounting, Supply Chain, and Settlements.
- c) In the original agreement, HONI paid OPRB expenses because those were costs that were incurred prior to the outsourcing arrangement and were factored into pricing of the original contract in 2001 when the employees transferred from HONI to Inergi.
- d) In the extended contract as of May 2010, OPRB costs have been eliminated as a separate fee.

Energy Probe INTERROGATORY #4 List 1

Interrogatory

Issue 1.2

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

Ref: Exhibit A, Tab 12, Schedule 1 – Appendix A – Business Plan Assumptions

Section 5.0 of the appendix shows benefit costs rates forecasts. In the footnotes, reference is made to "Powerflex benefits for MCP employees".

- a) Please describe what comprises Powerflex benefits.
- b) How does this benefit package differ from that provided to non-MCP employees?
- c) Does the Powerflex package extend to retired MCP employees?

Response

- a) Powerflex benefits are comprised of a core benefits package and annual flex credits. The core benefits are:

- 3 weeks vacation
- Life Insurance at 1x base annual earnings
- Extended Health Benefits
- Out-of-Country Medical Emergencies
- Dental Plan
- Accident Insurance

The flex credits are :

- A percentage of base annual earnings equal to earned vacation values
- Premium value for life insurance equal to 1x base annual earnings
- Fixed amount for parking for employees who work at 483 Bay Street
- Fixed amount for a general benefit

- b) The key difference is the flex credits are a cash allowance where the MCP employee can choose which benefits to purchase. Non-MCP employees have negotiated health and dental benefits.

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Exhibit I

Tab 2

Schedule 4

Page 2 of 2

- 1 c) No. Upon retirement, MCP employees covered by Powerflex will only be eligible for
- 2 health and dental benefits. MCP employees hired after January 1, 2004 who have a
- 3 minimum of 10 years of service are eligible for a catastrophic benefit plan.
- 4

Energy Probe INTERROGATORY #5 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 4, Schedule 1 – Costing of Work

Table 1 on Page 2 of the exhibit shows the standard labour rate derivation for the Regional Maintainer – Electrical classification.

- a) Please explain why payroll obligations declined from 2007 levels in 2009 and 2010.
- b) Field supervision and technical support varies widely across the years shown. Please explain the reasons for this variability.
- c) Support activities also vary significantly between years. Please explain the reasons for this variability.

Response

- a) There was a decrease in payroll obligations due to a decrease in the Hydro One payroll burdens that were applied on base pensionable earnings. The discount rate used to derive Other Post Employment Benefits (OPEB) costs in 2010 is higher than the discount rate applied in 2007. This higher discount rate, driven by external accounting assumptions, decreases costs as OPEB is measured on a present value basis. In addition, the Base Pensionable Earnings increased at a higher rate than pension cost, thus decreasing the pension rate for 2009-2010.
- b) The primary increase between 2007- 2008 is due to the switching of the Scheduling Technicians from variable time reporting to fixed distribution due to the multi functional scheduling activities. The primary decrease between 2009- 2010 is due to the switching of the Engineering/IT Grad from fixed distribution time to variable time reporting due to activities directly benefiting distinct projects and programs.
- c) The primary increase in support activities in 2008 is related to the increase in costs in the Health & Safety organization. This is due to a larger work program and an increase in the labour workforce, there were additional requirements for safety training.

Energy Probe INTERROGATORY #6 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 4, Schedule 1 – Costing of Work

Page 5 of the exhibit presents the derivation of the fleet rate. Utilization hours is mentioned as one factor affecting the fleet rate.

- a) Does HONI track utilization percentages for each class of equipment in the fleet? If yes, please provide the information. If no, why would tracking fleet utilization not be important for fleet management?
- b) Does HONI compare its fleet costs and utilization factors against other distribution and transmission utilities? If yes, please provide the comparison information. If no, why does HONI believe that this would not be a useful comparison to make to improve fleet management?

Response

- a) Yes, HONI tracks utilization percentages on our core utility maintenance units on an ongoing basis. Please find attached a copy of the June 2010 report.
- b) No, HONI does not compare its fleet costs and utilization factors against other transmission and distribution utilities because the comparison factors are not “like for like”. For example, other utilities do not include all the same operating costs or have the same fleet structure based on our work practices or geographical area. Nevertheless, each year HONI Fleet Services does attend a Utility and Rail Workshop that includes both private and public Utility and Rail companies across Canada and some Eastern States. Participants include but are not limited to BC Hydro, Nova Scotia Power, NB Power, Newfoundland Power, Quebec Hydro, Fortis BC, Fortis Alberta, CP Rail. The working group meets to discuss best practices, benchmarking, preventive maintenance and standards, etc. In addition, we review, discuss and pass on information regarding utilization numbers and costs but could not agree to formal and documented benchmarks because it divulges proprietary information in common areas such as fuel discounts, manufacturer’s equipment costs and many vendor discounts and price structures which we are not able to release based on contractual obligations.

HYDRO ONE FLEET UTILIZATION REPORT YTD JUNE 2010

Equipment Class	YTD June 2010 % Utilization
Light Transport	75%
Line Maintenance Trucks	82%
Off Road Utility Maintenance Equipment	45%
Service Trucks	81%
Station Maintenance Equipment	79%
Work Platforms	41%

Energy Probe INTERROGATORY #7 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 2, Schedule 3 – Sustaining OM&A

At lines 21-25 on Page 10 the following statement is made:

“Environmental Management focuses on mitigation and remediation of contamination located both inside and outside the station fence. This program covers station waste management (PCB and regulated waste), transformer oil leak reduction, corrective maintenance that addresses spill containment and piping deficiencies and provides funding for demand activities and to manage environmental compliance.”

How many sites will be selected for remediation for each of the test years 2011 and 2012?

Response

Within the Environmental Management program remediation work is carried out at specific locations within a transformer station, e.g., clean-up of oil as a result of leaking equipment, removal of piping no longer required but still contains some oil and demand response to spills. In addition to routine inspections at all of Hydro One’s transmission stations, planned work will take place at 10 stations during each of 2011 and 2012.

The Land Assessment and Remediation program, Exhibit C1, Tab 2, Schedule 3, starting on page 7, addresses monitoring and remediation of soil contamination on a site specific basis.

Energy Probe INTERROGATORY #8 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 2, Schedule 3 – Sustaining OM&A

Page 5 of the exhibit presents a summary table of sustaining OM&A expenditures. Environment Management actual costs for 2009 are listed as \$3.5M. In the previous transmission rates application when 2009 was a test year, forecasted expenditure in the Environment Management category was \$9.1M. (Exhibit C2-2-1 Page 1 of EB-2008-0272).

Please explain the reasons for this large under expenditure.

Response

The primary reasons, that the 2009 actual spend was less than the EB-2008-0272 test year amount of \$9.1 million were:

- Upon review of the business risks, Hydro One chose to place an increased focus on 500kV autotransformer refurbishments. The same limited resources and equipment are used for the 500kV autotransformer refurbishments as the transformer leak reduction program, as such the leak reduction program was under spent to that planned. It should be noted that planned expenditures for transformer oil leak reduction in the test years are in-line with historic accomplishment levels.
- Credit of \$2.2 million for an insurance settlement regarding a fire at Pinard TS, December 2006. The insurance settlement for 2008 associated with the Pinard event was \$8.7 million as noted in EB-2008-0272, Exhibit C1, Tab2, Schedule 2, page 12, line 3.

Energy Probe INTERROGATORY #9 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 2, Schedule 3 – Sustaining OM&A

On Page 12 of the exhibit, 3-6 transformers per year undergo leak reduction work at a cost of about \$3 M. This would translate into between \$0.5M and \$1.0M per transformer.

Please describe the work involved in leak reduction that would cost such a significant amount.

Response

Transformers addressed under the leak reduction program have a history of leaks which pose both environmental risks and equipment reliability risks. The refurbishments are designed to defer capital replacement due to repairable issues and allow the transformer to reach or exceed the typical service life.

The refurbishments usually take about 4-6 weeks to complete and involve the following steps:

- re-gasketing of the transformer tank and bushing pockets; weld if possible
- replacement of the CT through-blocks
- conversion of the gas relay piping to socket welded fittings (from threaded union joints or Victaulic couplings).
- Repack or regasket valves and flanges on the transformer's cooler assembly (radiators, oil pumps, conservator)
- Repair any leaks on radiators (generally caused by corrosion or mechanical wear / vibration
- The transformer's oil has to be removed to complete the above work, and the insulation system kept dry during the overhaul.
- Replacement or reconditioning of the oil if required
- At the completion of the job, the transformer is vacuum filled using a series of pumps, heaters, oil tankers in accordance with industry accepted principles.

1
2 In addition to activities specifically intended to reduce the oil leaks, the following
3 refurbishment activities are also generally completed while the transformer is out of
4 service:

- 5
- 6 • Complete any necessary modifications to bring transformer to modern-day standards
7 (i.e. replace single-use glass explosion vent with new standard vents, physically
8 remove original climbing ladders for public safety, install self-dehydrating breathers,
9 replace gauges, etc.)
 - 10 • If required, overhaul or replace major accessories to allow the transformer to reach or
11 exceed its expected service life (bushings, oil pumps, cooling fans, tap changer
12 filtration systems, etc.)

Energy Probe INTERROGATORY #10 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 2, Schedule 3 – Sustaining OM&A

Page 14 of the exhibit presents a summary of expenditures for Environmental Management and attributes increased costs in 2011 and 2012 to “the PCB retirement program required to comply with Federal Regulations as well as an increase in transformer oil leak reduction”.

- a) How many transformers, circuit breakers and other ancillary equipment still need to be tested for PCB content? How many will be completed in each of 2011 and 2012?
- b) When does HONI expect to complete the PCB program?

Response

- a) The table below summarizes what is planned to be tested for PCB content in 2011 and 2012 and provides context in relation to the overall in-service fleet. In determining what equipment required testing, Hydro One established an in-service cut-off date of year end 1984. Equipment with test reports from a certified laboratory is excluded from the below population of equipment to be tested.

It should be noted that the PCB and waste management program includes costs associated with testing, retrofill of equipment, and the disposal of waste in accordance with applicable regulations.

Testing of oil in the main tanks of transformers and breakers is essentially complete and any follow-up testing will be carried out as part of regular maintenance.

1

	Total In-Service Fleet		To be Tested	
	# of Units	# of Units Older than 1985	# of Units Without Test Data	# to Test 2011-2012
Bushings	24,336	19,387	13,300 *	3,640
<i>Transformer Bushings</i>	<i>12,330</i>	<i>9,709</i>	<i>6,931</i>	<i>2,370</i>
<i>HV Breaker Bushings</i>	<i>3,516</i>	<i>2,724</i>	<i>1,384</i>	<i>140</i>
<i>LV Breaker Bushings</i>	<i>8,490</i>	<i>6,954</i>	<i>4,935</i>	<i>1,130</i>
Oil-Filled HV Instrument Transformers	4,253	2,180	476	360
<i>HVITs - PTs and CTs</i>	<i>2,147</i>	<i>1,361</i>	<i>476</i>	<i>360</i>
<i>HVITs – CVTs (cannot be sampled and will be replaced as part of capital programs)</i>	<i>2,106</i>	<i>820</i>	<i>0</i>	<i>0</i>
Oil-Filled LV Instrument Transformers	2053	1579	1184	120
<i>LVITs - can be sampled</i>	<i>1,540</i>	<i>1,184</i>	<i>1,184</i>	<i>120</i>
<i>LVITs – (cannot be sampled and will be replaced as part of capital programs)</i>	<i>513</i>	<i>395</i>	<i>0</i>	<i>0</i>

2 * Includes estimation that 25% of transformer bushings cannot be physically sampled without
3 destroying the equipment

4

5 It should be noted that testing is planned to leverage existing planned outage
6 opportunities on transformers, breakers, and instrument transformers.

7

8 The higher level of testing for transformers relative to circuit breakers is a function of
9 two issues:

10

- 11 • There are more planned outages on transformers than circuit breakers, which
- 12 results in more sampling opportunities
- 13 • Hydro One is working to get more of the transformer sampling completed early
- 14 on in the event EC does not provide the expected regulatory relief. Because of the
- 15 longer time-lines and higher costs associated with ordering equipment, planning
- 16 and executing the transformer PCB mitigation work, Hydro One decided to focus
- 17 on sampling of transformer bushings.

18

- 19 b) Hydro One is planning to have test results for all affected bushings by 2020 and
- 20 affected instrument transformers by 2023. With the expected extension to the end-of-
- 21 use (EUO) dates outlined in Exhibit C1, Tab 2, Schedule 3, Line 5, Hydro One will
- 22 obtain test results in conjunction with outages already planned for other maintenance
- 23 work, and will not take specific outages for PCB testing alone.

1
2 The retrofit and replacement of equipment to comply with the regulated EUO dates
3 will begin in 2011 and will carry through until 2025.
4
5 A portion of the costs is associated with disposal of regulated waste, and is an on-
6 going need.

Energy Probe INTERROGATORY #11 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 2, Schedule 3 – Sustaining OM&A

Page 19 of the exhibit discusses refurbishment of 115 kV and 230 kV transformers. The evidence notes that “Spending is based on the number and type of transformers scheduled for refurbishment during the specific calendar year”.

Please provide details of the number and type of transformers scheduled for refurbishment in the test years.

Response

The type and number of transformer refurbishment activities planned in the test years are as follows:

Type of Transformer Refurbishment		# of units	
		2011	2012
Power Transformer Mid-Life Refurbishment	115kV	4	7
	230 kV	7	4
Power Transformer Oil Dehydration and Reconditioning	115 kV	9	10
	230 kV	7	6
Tap Changer Modification & Upgrades	Tap changers on 230kV and 115kV transformers	25	25

Energy Probe INTERROGATORY #12 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 2, Schedule 3 – Sustaining OM&A

Page 19 - 20 of the exhibit discusses refurbishment of circuit breakers. The evidence notes that “Spending is based on the number and type of breakers scheduled for refurbishment during the specific calendar year”.

Please provide details of the number and type of breakers scheduled for refurbishment in the test years.

Response

The type and number of circuit breaker refurbishment activities planned in the test years are as follows:

Type of Breaker Refurbishment	# of units	
	2011	2012
HV SF6 Circuit Breaker - ABB AHMA Mechanism Rebuild	4	4
HV SF6 Circuit Breaker - Areva FX32/42 Mechanism Rebuild	3	3
Air Blast Circuit Breaker - Auxiliary Components Refurbishment	32	32
Oil Circuit Breaker - Bushing Refurbishment	17	18

Energy Probe INTERROGATORY #13 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 2, Schedule 3 – Sustaining OM&A

The forecasted expenditures for 2009 and 2010 in the previous transmission rates application were \$74.7 M and \$82.0 M respectively (Exhibit C2-2-1 of EB-2008-0272). Actual expenditures for 2009 according to the evidence were \$67.9 M and forecasted expenditures for 2010 are \$67.4 M.

Please explain why the 2009 and 2010 expenditures in this application differ so significantly from those in the previous application.

Response

Please note that forecasted expenditures for Power Equipment OM&A in 2010 are \$67.0M, not \$67.4M as identified above.

Following the Board's Decision on EB-2008-0272, which reduced Sustaining program OM&A by \$15M in each of 2009 and 2010, Hydro One implemented a reduced Sustaining OM&A program in 2009 and 2010 to meet the priority needs of the assets, within the budgetary constraints imposed by the Decision.

Within Power Equipment OM&A, there was a \$6.8M reduction in 2009 and a \$15.0M reduction in 2010 between the implemented plan and the plan filed under EB-2008-0272. The 2009 alterations were made mid-year based on in-year circumstances following the issuance of the OEB decision on May 28, 2009.

The 2010 EB-2008-0272 submission for Power Equipment OM&A included a provision to enhance reliability with added emphasis on preventative and corrective maintenance recognizing that Hydro One was faced with an aging asset base, or assets that were nearing end of life. A shift was made in 2010 to reduce work to a level that would maintain reliability in the short term and in the process provide time to re-evaluate the need for the higher levels of investment as part of the planning for this rate submission.

1 These reductions were made to respect the OEB Decision. Hydro One has reviewed the
2 maintenance requirements and has presented a plan for 2011 and 2012 that is based
3 maintaining the reliability over the test years. This has been accomplished through the
4 more granular maintenance planning using the recently implemented SAP work
5 management system, part of Cornerstone Phase 1 and 2 implementation. It must be
6 recognized that the 2011 and 2012 investment levels are based on a short term view and
7 that investments for power equipment are expected to increase in the future recognizing
8 that maintenance must keep abreast with deterioration rates.

9
10 For further information on reliability management, please refer to Exhibit I, Tab 1,
11 Schedule 11.
12

Energy Probe INTERROGATORY #14 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 2, Schedule 3 – Sustaining OM&A

Pages 25-26 of the exhibit discuss Ancillary System Maintenance. Expenditures for this category in the previous transmission rates application were \$18.2 M for 2009 and \$21.0 M for 2010 (Exhibit C2-2-1 of EB-2008-0272). Expenditures in the current application for 2009 are \$12.4 M and for 2010 are \$14.9 M.

Please explain why the expenditures for these years differ so significantly from those in the previous application.

Response

Following the Board's Decision on EB-2008-0272, Hydro One implemented a Sustaining OM&A program in 2009 and 2010 to meet the priority needs of the assets, within the budgetary constraints imposed by the Decision.

Hydro One implemented an Ancillary Systems Maintenance program for 2009 and 2010 that was \$5.8M and \$6.1M respectively below the plan filed under EB-2008-0272. The 2009 alterations were made mid-year based on in-year circumstances following the issuance of the OEB decision on May 28, 2009.

Following the Decision, reductions in 2009 and 2010 were made in the following areas:

- Preventive Maintenance: some AC station service and high-pressure air system maintenance was deferred into future years.
- Planned and Demand Corrective Maintenance: planned corrective maintenance programs targeted at improving reliability of AC station service and high-pressure air were deferred into future years.

Due to the reductions in 2009 and 2010, the 2011 test year requirement for Ancillary Systems Maintenance has increased 6.0% from the bridge year forecast, and the 2012 test year requirement has increased 5.0% over the 2011 test year. If the deferred work is not addressed during the test years, it is projected that there will be a need for increased repairs and in all likelihood an increase in equipment failures. As well, further deferrals will add to a program that will see cost pressures due to a fleet of aging assets.

Energy Probe INTERROGATORY #15 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 2, Schedule 5 – Operations OM&A

Lines 22-24 on Page 4 of the exhibit attribute increased costs in the Operations program to “an increase in staff to meet increasing work loads as a result of larger Sustaining and Development capital work programs and the Green Energy related work”.

- a) Please provide a table showing actual and forecast staff increases in the Operations program from 2007 to 2012.
- b) Please identify how many of the staff in each year are apprentices.

Response

a) and b)

Year	All Staff		Apprentices Staff ONLY	
	Forecast	Actual	Forecast	Actual
2007	215	216	37	35
2008	225	224	48	45
2009	242	243	46	46
2010	256		51	
2011	267		41	
2012	269		46	

Energy Probe INTERROGATORY #16 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 2, Schedule 5 – Operations OM&A

Table 1 on Page 3 of the exhibit presents a summary of Operations OM&A. The categories in this table are not the same as those in Exhibit C2-2-1 Page 2.

Please confirm that the categories of “Operations” and “Operations Support” in Exhibit C1-2-5 Page 3 are the same as “Operators” and “Operations Contracts” respectively in C2-2-1 Page 2.

Response

Yes, these categories are the same.

Energy Probe INTERROGATORY #17 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 2, Schedule 5 – Operations OM&A

According to Table 1 on Page 3 of the exhibit, Operations costs are forecast to increase by about 8% in the test years compared to the 2009 historical year. Operations support over the same time period is increasing by about 50%.

Please explain why operations support costs should increase at a much more rapid pace than the operating group that is supported.

Response

Please refer to Exhibit I, Tab 1, Schedule 44.

Energy Probe INTERROGATORY #18 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 2, Schedule 5 – Operations OM&A

The explanation on Page 3 for the increase in Operations Support costs identifies increased costs for NMS and Scada Hub support as the primary reasons.

- a) Please identify how much of the increased costs are attributed to each of these systems.
- b) How much of the increase is attributable to increased software licensing?
- c) When did these increased licensing fees start?
- d) How many additional staff are required for the additional work of NMS and Scada Hub support?

Response

- a) The costs associated with the NMS have grown primarily as a result of increases in software and operating system license costs, vendor support costs and additional resources to support the increased installed base of computing equipment and facilities.

The increase between 2009 and 2012 is composed of the following:

- \$2.8M for licensing and vendor support
 - \$1.6M for in-house support for NMS and associated tools
 - \$0.5M for Scada Hub Support.
- b) Increased software licensing fees account for \$1.2M of the \$2.8M increase for licensing and vendor support costs over 2009 levels.

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EB-2010-0002

Exhibit I

Tab 2

Schedule 18

Page 2 of 2

- 1 c) The licensing fees began to be charged to OM&A in 2010. In prior years, these fees
- 2 were part of the capital upgrade project.
- 3
- 4 d) In- house support staff increased by 7 in 2010. This staff increase is comprised of:
- 5
- 6
 - 2 staff for SCADA Hub site support;
 - 7 • 5 staff for support of the NMS, associated tools and facilities and added data
 - 8 modeling due to work program increases

Energy Probe INTERROGATORY #19 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 2, Schedule 5 – Operations OM&A

Pages 9-10 of the exhibit contain a summary of increased expenditures for Environment, Health and Safety. The increased cost is listed as 54% compared to the bridge year.

- a) How much of the increase is due to new programs to enhance safety?
- b) How much of the increase is due to increased training due to the influx of new staff?

Response

- a) 86% or \$1.2M of the projected increase was due to programs to enhance health and safety.
- b) 14% or \$0.2M of the projected increase was due to increased training costs.

Energy Probe INTERROGATORY #20 List 1

Interrogatory

Issue 3.2

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

Ref: Exhibit C1, Tab 2, Schedule 6 – Summary of Shared Services

Table 1 on Page 3 of the exhibit shows “Allocated Transmission Shared Services and other OM&A Costs.” The comparable table in EB-2008-0272 is shown on Page 3 of Exhibit C1-2-5 and contains different historic, bridge and test year numbers.

Please confirm that this is due entirely to the inclusion in the present application of Real Estate and Facilities Costs.

Response

The difference in 2007 and 2008 between the referenced tables is not due to Real Estate & Facilities Costs. The difference between the referenced tables for 2007 and 2008 are related to a change in presentation wherein Customer Care costs were moved from the Shared Services portion of the evidence to its own category and Large Customers & Generator Relations costs were moved from Asset Management to Operations. In addition to presentation change noted above, the changes in 2009 and 2010 are due to updates for actuals and planning assumptions.

\$M	2007	2008	
Total Shared Services & Other OM&A Costs	86.4	64.7	As presented in EB-2008-0272 (Ref: Exhibit C1, Tab 2, Schedule 5, page 3, Table 1)
<i>Customer Care</i>	-1.2	-1.2	Moved from Shared to be shown as its own category Customer Care
<i>Large Customers & Generator Relations</i>	-4.3	-4.1	Moved from Asset Management to Operations
Total Shared Services & Other OM&A Costs	80.9	59.4	As presented in EB-2010-0002 (Ref: Exhibit C1, Tab 2, Schedule 6, page 3, Table 1)

Energy Probe INTERROGATORY #21 List 1

Interrogatory

Issue 3.2

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

Ref: Exhibit C1, Tab 2, Schedule 7 – Shared Services CCFS and other OM&A

Page 9-10 of the exhibit discusses the reasons for increased Human Resources costs over the bridge and test periods. HR involvement in what is termed “dramatic demographic transition that will be occurring in the Hydro One workforce over the next few years” is cited as a reason for increasing costs in the test years.

- a) Does HONI have a forecast of how many employees will retire in the test period? If yes, please provide it. If no, what is the expansion in HR resources based on?
- b) Lines 4-5 on Page 10 refer to “extra training which will be provided by HR staff dedicated to this function”. Please describe the training provided by HR staff. How many HR staff will be dedicated to this training in the test period?
- c) Please explain what the “SDO work programs” are in line 13. How much of the increased HR cost is attributable to these programs?
- d) Please explain what the “enhanced graduate training and coaching programs” referred to in line 13 consist of. How much of the increased HR cost is attributable to these programs?
- e) Please explain what “advertising” by HR consists of. How much of the increased costs are attributable to advertising?

Response

- a) During the test period, approximately 1600 employees will be eligible for undiscounted pension. Of those eligible, approximately 310 employees are expected to retire.
- b) This training ranges from orientation to Hydro One and the Energy Sector to personal development in basic business skills. HR staff involved in this work have more than

one area of accountability. On average, approximately two HR staff will work on procurement or coordination of training in the test period.

c) SDO refers to Sustainment, Development and Operations. HONI does not break down costs by SDO, as many HR services contribute to more than one category.

d) The New Grad training program is a 2-year program that includes the opportunity for grads to rotate to different parts of the company in order to gain a broader perspective of the organization and its operations. The program also includes a series of courses that help build their knowledge of the industry as well as their business and communication skills (for example, Project Management and Introduction to Power Systems).

Since this program is run over the course of two years there would naturally be increases in costs, as we hire between 70-80 New Grads each year. At its peak, we would have had three classes of New Grads involved in aspects of the New Grad training program.

With increased hiring levels due to retirements and expanded work programs, Hydro One has many new employees – and many existing employees who are in new roles - who require training and coaching. In the non-technical areas this training is provided, procured and administered by HR. The training covers a broad range from orientation to business skill development to management and supervisory skill development; some previously provided programs have been increased in frequency to accommodate increased numbers of participants, while others have been introduced in response to a newly identified need (e.g. the *Craft of Management* program for New Managers in Hydro One). Altogether this enhanced level of graduate training and coaching and development accounts for approximately 13 percent of the increase in HR costs.

e) Advertising is primarily focused on on-campus recruitment. Given the competitive labour market it is necessary to draw student attention to our Co-op and New Grad programs as well as encourage applications from a diverse range of candidates (for example, women, visible minorities, and Aboriginals). Advertising accounts for 3 percent of the increase in HR costs.

Energy Probe INTERROGATORY #22 List 1

Interrogatory

Issue 3.2

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

Ref: Exhibit C1, Tab 2, Schedule 7 – Shared Services CCFS and other OM&A

Page 12 of the exhibit refers to “24 collective agreements plus midterm agreements and letters of understanding that bind the company”.

Please identify the 24 collective agreements.

Response

HONI has collective agreements with the Power Workers’ Union and the Society of Energy Professionals. HONI also has two agreements with the Canadian Union of Skilled Workers, one for the Electrical Power Systems Sector and another for the Industrial, Commercial and Institutional (ICI) sector in Board Area 8. HONI is covered by two other ICI agreements, with the Labourers and the Plumbers and Pipefitters (UA). Through the employer association, Electrical Power Systems Construction Association, HONI also negotiates agreements with 18 construction unions: Boilermakers, Bricklayers, Carpenters, Cement Masons, IBEW, Insulators, Iron Workers, Labourers, Millwrights, Operating Engineers, Painters, Pipefitters and Plumbers (United Association), Plasterers, Rodmen, Roofers, Sheet Metal Workers, Tile and Terrazzo, and the Teamsters.

Energy Probe INTERROGATORY #23 List 1

Interrogatory

Issue 3.2

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

Ref: Exhibit C1, Tab 2, Schedule 7 – Shared Services CCFS and other OM&A

Lines 14-15 on Page 13 of the exhibit refer to “preparation of risk assessments related to project development phases of Green Energy projects”.

Please explain what the risk assessments are related to and why corporate communications is the appropriate group to conduct these assessments.

Response

Organizationally, the Corporate and Regulatory Affairs business unit includes the following functions: First Nations and Métis, Supply Chain Services, Corporate Communications, Regulatory Affairs, Major Projects and External Affairs and Facilities and Real Estate. Regulatory Affairs and Facilities and Real Estate costs are presented separately in the referenced exhibit, while the remaining functions of the business unit are rolled up under the Corporate Communications group for presentation purposes.

The provision of risk assessments related to project development phases of Green Energy project is the responsibility of the Major Projects Coordination and External Relations Group within Corporate Communications.

Risk assessments identify the degree of complexity that is expected to be associated with various aspects of a project (e.g. environmental assessments and approvals, land acquisition, construction, etc.). In general, complexities vary depending on a line's general location (e.g. Northwestern Ontario versus Southern Ontario). These assessments assist in the development of plans related to projects' development and construction.

Energy Probe INTERROGATORY #24 List 1

Interrogatory

Issue 3.2

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

Ref: Exhibit C1, Tab 2, Schedule 7 – Shared Services CCFS and other OM&A

Lines 15-16 on Page 13 of the exhibit refer to “provision of strategic direction regarding the scope and timing of project development work”.

Please explain what this strategic direction relates to and why corporate communications is the appropriate group to provide the direction.

Response

Organizationally, the Corporate and Regulatory Affairs business unit includes the following functions: First Nations and Métis, Supply Chain Services, Corporate Communications, Regulatory Affairs, Major Projects and External Affairs and Facilities and Real Estate. Regulatory Affairs and Facilities and Real Estate costs are presented separately in the referenced exhibit, while the remaining functions of the business unit are rolled up under the Corporate Communications group for presentation purposes.

The provision of strategic direction regarding the scope and timing of project development work related to project development phases of Green Energy project is the responsibility of the Major Projects Coordination and External Relations Group within Corporate Communications.

Strategic direction refers to the management and guidance that is provided through the course of project development work. Management ensures activities are initiated/concluded at the appropriate time, related actions are scheduled and coordinated, progress is tracked and reported, responses to new developments are established, and issues are resolved and escalated where necessary.

Energy Probe INTERROGATORY #25 List 1

Interrogatory

Issue 3.2

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

Ref: Exhibit C1, Tab 2, Schedule 7 – Shared Services CCFS and other OM&A

Page 23 of the exhibit discusses Real Estate and Facilities costs.

- a) Please breakdown the increased costs for the Real Estate function in the bridge and test years between Real Estate and Facilities.
- b) Please describe additional facilities required in the bridge and test years.

Response

a) Please refer to Exhibit I, Tab 1, Schedule 49.

b) The additional facilities required in bridge and test years include the following locations:

- GTA Operations Centre
- Picton Operation Centre
- London Operation Centre
- Barrie Office (230 Bayview)
- Campbellford Maintenance Facility
- Bolton Operation Centre
- Navan Operation Centre
- Dryden Operation Centre

Energy Probe INTERROGATORY #26 List 1

Interrogatory

Issue 3.2

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

Ref: Exhibit C1, Tab 5, Schedule 1, Attachment 1 – Review of Shared Services
Cost Methodology

Page 2 of this attachment contains the following statement:

“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.”

Please provide a copy of BP-2010-2014 referenced in this statement.

Response

Please refer to Exhibit I, Tab 3, Schedule 1.

Energy Probe INTERROGATORY #27 List 1

Interrogatory

Issue 3.2

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

Ref: Exhibit C1, Tab 2, Schedule 8 – Shared Services OM&A-Asset Management

On Page 14 of the exhibit reference is made at lines 9-10 to “special studies in such areas as productivity and cost savings management” and at lines 21-22 to “detailed performance benchmarking and productivity studies in support of corporate objectives and regulatory filings” performed by the Business Integration group.

- a) Have there been any “productivity or cost savings” studies or “performance benchmarking and productivity studies” conducted by this or any other group in Hydro One since the Mercer study submitted with the previous Transmission rates case EB-2008-0272?
- b) If yes, please provide copies of any studies.
- c) If no, what studies does Hydro One anticipate undertaking in the test years to measure productivity or promote cost savings?

Response

- a) No
- b) Not Applicable
- c) Hydro One has not planned to undertake these studies at this time, however we continue to participate in benchmarking studies such as Canadian Electricity Association and First Quartile Consulting to establish current levels of comparative performance for performance improvement opportunities.

Energy Probe INTERROGATORY #28 List 1

Interrogatory

Issue 3.2

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

Ref: Exhibit C1, Tab 2, Schedule 9 – Shared Services OMA – IT

On Page 5 of the exhibit discussing Hardware Maintenance/Software Licensing costs the following statement appears:

“Over time many of these contracts have migrated back to Hydro One, and are now administered (managed) by Hydro One. Contract costs which are now being managed by Hydro One, and administered by Inergi, are reflected in Other Incremental Sustainment costs.”

- a) The words administered and managed appear to be interchangeable in the first line. In the second line it appears that management and administration mean different things because Hydro One is managing and Inergi is administering. Please clarify what functions are included in managing and what functions are in administering.
- b) Why have contracts migrated back to Hydro One from Inergi?

Response

- a) The words are used interchangeably. Ultimately, Hydro One is accountable for the governance, budgeting and funding which includes the initial negotiation and setup of licensing and maintenance contracts with new vendors or for establishing new arrangements with existing vendors. Inergi tracks and performs the license/maintenance renewal process and acts as Hydro One’s agent when dealing with an existing vendor.
- b) Contracts were migrated back to Hydro One due to the old model causing additional administrative steps for both parties for no perceived value to Hydro One. The migration has resulted in a streamlined process by eliminating the extra administrative steps.

Energy Probe INTERROGATORY #29 List 1

Interrogatory

Issue 3.2

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

Ref: Exhibit C1, Tab 2, Schedule 9 – Shared Services OMA – IT

Table 2 on Page 4 of the exhibit shows total sustainment of information technology costs for 2010 as \$90.0 M. The comparable table in the previous transmission rates application forecast costs for 2010 in this category of only \$81.3 M.

Please explain why costs increased so much over forecast for 2010.

Response

There is an increase of \$8.7M in sustainment cost from the previous transmission rates application forecast for 2010 and it is primarily categorized within Other Incremental Sustainment. The reasons for the increase are due to higher than anticipated SAP hardware and software sustainment costs and higher third-party license and maintenance contract costs.

The SAP forecast for 2010 in the previous filing was based on initial knowledge of ongoing SAP sustainment costs prior to the commissioning of Cornerstone Phase 1. The current costs have been updated based on SAP actual sustainment costs post go-live of both Cornerstone Phases 1 and 2.

Third-party license and maintenance contract costs are higher than was anticipated for 2010 in EB-2008-0272 primarily due to increased costs for: a) Microsoft licenses (both volume and cost of licenses); b) software and hardware maintenance costs related to the now more complex computing environment (eg. Hewlett Packard server hardware, Oracle database and middleware, SAP Business Objects software, IBM Tivoli security software).

Energy Probe INTERROGATORY #30 List 1

Interrogatory

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?

Ref: Exhibit A, Tab 14, Schedule 1 – Cost Efficiencies/Productivity

Page 2, lines 21-24, discuss using helicopters for transmission line patrols and for delivering manpower and materials to tower sites.

- a) When did Hydro One start using helicopters for these purposes?
- b) How many helicopters and what types of helicopters does Hydro One own?
- c) What is the cost per operating hour of using helicopters?

Response

- a) Helicopters have been used since 1949 for line patrols and delivering manpower and material and in recent years this program has increased in relationship to the high demand to minimize environmental impacts, while also eliminating the time consuming and high cost of road and pathway development and ground access issues.
- b) There are 7 Eurocopter AS350 A-Stars and 2 Bell Long Ranger helicopters in the fleet.
- c) \$1,800 per hour for the A-Star, \$1,600 for the Long Ranger

Energy Probe INTERROGATORY #31 List 1

Interrogatory

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?

Ref: Exhibit A, Tab 14, Schedule 1 – Cost Efficiencies/Productivity

Page 2, lines 25-26, refer to “AirStair”.

- a) Please explain what AirStair is and how it is used in transmission work.
- b) How long has AirStair been used by Hydro One in transmission work?

Response

- a) The AirStair is a platform that is mounted to the helicopter which enables personnel access and egress from the helicopter to a transmission structure or enables personnel to work on a structure from the hovering helicopter. It increases productivity by transporting personnel and tools directly from structure to structure which eliminates the time required to climb and descend each structure. This is especially true for remote, hard to access lines.
- b) Since 2002.

Energy Probe INTERROGATORY #32 List 1

Interrogatory

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?

Ref: Exhibit A, Tab 14, Schedule 1 – Cost Efficiencies/Productivity

Page 3, lines 4-6, discuss improved trades training programs.

Please explain how these improved programs differ from previous training programs.

Response

Efficiencies are realized from implementation of Computer Based Training (CBT) products as opposed to Instructor led training. Hydro One has increased the use of technology in training via the use of Smart Board, Network Management System (NMS) Simulator, Mobile Learning computer training, and E-Learning CBT.

- **Smart Board** – used in Provincial Lines training to simulate connecting power equipment (transformers). Field training time is reduced and equipment damage is minimized from learner mistakes.
- **NMS Simulator** – Used to train staff in operation of the power system. It is an exact replica of the Hydro One transmission system and tools. Increases training opportunities in a safe environment.
- **Mobile Learning (new media)** - Provides an accessible learning product available on demand and on-site for learning and trouble shooting equipment problems. Minimizes the need for subject matter experts to travel to locals.
- **E-Learning** –Work Management & Training currently offers 19 e-Learning courses for corporate wide distribution.

Energy Probe INTERROGATORY #33 List 1

Interrogatory

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?

Ref: Exhibit A, Tab 14, Schedule 1 – Cost Efficiencies/Productivity

Page 3, lines 7-15, discusses new tools and technologies. The following statement appears at lines 13-14:

“This application will result in reductions in support requirements, improvements in operator decision-making, and improvements in efficiency and work flow.”

- a) Please describe the kind of support that will no longer be needed by operators as a result of implementing the network management system.
- b) Please quantify the savings in terms of manpower and dollars that will result from reductions in support requirements.

Response

The new NMS Enhancements will take advantage of new standard vendor offerings and will improve upon and replace existing custom applications.

- a) The following enhancements are examples of improved NMS system capabilities resulting in improved operator decision making, efficiency and work flow:
 - The NHood function will provide a multi-station, graphical representation of a segment of the power system compared to the existing single station schematic representation. This improvement is primarily of benefit to support staff during application trouble shooting.
 - The I-grid application will provide tools to assist transmission operators in calculating power flows, including the capability to display on demand, replacing the currently manual calculations.

- 1 • The E-terra Vision application will provide enhanced situational awareness to
2 transmission operators by providing an improved “wide area” view of the power
3 system.
4
- 5 b) We have not as yet attempted to specifically quantify manpower dollar savings. These
6 applications are designed to improve operator situational awareness and decision
7 making which primarily results in an operator being able to more quickly and
8 accurately process and manage duties associated with executing planned equipment
9 outages required to complete work programs. Currently, backlogs routinely occur
10 which result in delays both in releasing equipment and returning equipment to
11 service. While an exact number is not available efficiencies/productivity gained will
12 typically result in less overtime both in the control room and in the field with the
13 actual crews performing the work.

Energy Probe INTERROGATORY #34 List 1

Interrogatory

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?

Ref: Exhibit A, Tab 14, Schedule 1 – Cost Efficiencies/Productivity

Lines 25-28 on Page 3 and line 1 on Page 4 describe improvements in fleet management:

- a) Please explain in more detail the Warranty Claims Management initiative. How does this new system differ from previous warranty claims management? What are the expected cost savings?
- b) How will fuel discounts be improved?
- c) Please explain in more detail what the tire re-cap program is and how it will improve efficiency.
- d) Please explain in more detail what the vehicle standardization program will consist of and what the expected cost savings will be.

Response

- a) Fleet Services has established a Warranty Coordinator position which is dedicated to logging, documenting and following up on all possible warranty claims and goodwill initiatives which have been identified by our field locations. This position contracts our external vendors directly to ensure these claims are honoured and processed. Our expected warranty cost savings for 2010 is a minimum of \$200,000.
- b) Fuel discounts are reviewed on an annual basis between ARI (Automotive Resources International) and our major fuel vendors. The discounts will be maintained at current levels for 2010 based on the negotiated contract between Hydro One and ARI. Our expected fuel cost savings for 2010 is \$300,000.

1 c) The Tire Recap Program addresses the following initiatives:

- 2
- 3 • Environmental impact by recycling the tire casings
 - 4 • The cost savings of using a refurbished tire rather than purchasing a new one
 - 5 • Efficiency gains by having recapped tires readily available
 - 6 • Based on data collected the recapped tires have a longer service life than the
 - 7 original tires due to the improved tread design and matching the tread to the
 - 8 application.
- 9

10 d) The Vehicle Standardization Program involves the pre-order of vehicles based on the

11 same design. The savings realized from this initiative is reflected in the purchase

12 price as the manufacturers are able to produce large quantities of the same vehicle,

13 without having to customize each individual order. Our last discussion with our

14 manufacturers indicated a cost savings of 5% per vehicle.

Energy Probe INTERROGATORY #35 List 1

Interrogatory

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?

Ref: Exhibit A, Tab 14, Schedule 1 – Cost Efficiencies/Productivity

Page 5, lines 4-10, describe the Telecom Wide Area Network initiative. Line 9 refers to “studies” that predict a five year payback on the network installation cost.

Please provide a copy of the studies referred to.

Response

Please refer to Exhibit I, Tab 1, Schedule 87, part (a).

Energy Probe INTERROGATORY #36 List 1

Interrogatory

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?

Ref: Exhibit C1-3-1 Corporate Staffing

Please provide a schedule showing total actual and forecast staff numbers for PWU, Society and MCP groups by year from 2007 to 2012.

Response

Please refer to Exhibit I, Tab 4, Schedule 35.

Energy Probe INTERROGATORY #37 List 1

Interrogatory

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?

Ref: Exhibit C1-3-1 Corporate Staffing

Starting at line 7 on Page 2 of the exhibit is a discussion of “additional human resource challenges” faced by Hydro One. Among those listed is the shutdown of two coal fired units at Lambton GS and a delay in the in-service date of new nuclear generation.

Please explain how these events impact human resources at Hydro One.

Response

Hydro One is faced with the human resource challenges associated with increased workloads to plan, obtain approvals, engineer and construct new facilities (including where necessary, upgrades to transmission stations and networks) needed to connect new generation, procured through the OPA programs, to replace coal fired generation or forestall new nuclear generation.

Energy Probe INTERROGATORY #38 List 1

Interrogatory

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?

Ref: Exhibit C1-3-1 Corporate Staffing

The other two additional challenges noted on Page 2 of the exhibit relate to the *Green Energy and Green Economy Act, 2009* and to the Minister's directive to expand and renew the transmission system.

- a) Is the work related to these two challenges different than the traditional work associated with expansion or rebuilding of transmission lines?
- b) If yes, please describe how the work differs.

Response

a) Yes.

b) The planning, environmental, consultation and approval requirements required to expand/re-build transmission lines are more demanding or complex than in the past. Construction is subject to more challenging environmental legislation and the expectations of affected land owners.

In some situations, Hydro One is using solutions to expand transmission capability (eg. Series compensation and Static Var Compensators) that have not been used previously in Ontario. These facilities require new skills and competencies be developed.

Two examples of new skills and disciplines required are First Nations & Métis consultations and technical knowledge on the impacts of connecting distributed generation on transmission assets. Since the recent Supreme Court rulings on the duty to consult, Hydro One is required to consult with First Nations & Métis communities to fulfill the Crown's delegated duty to consult. With respect to distributed generation, Hydro One requires knowledge and understanding of the technical impacts of connecting distributed generation on transmission assets and the measures required to manage these effects.

Energy Probe INTERROGATORY #39 List 1

Interrogatory

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?

Ref: Exhibit C1-3-1 Corporate Staffing

Line 1 on Page 3 of the exhibit refers to the need for “new skills sets and disciplines” to meet the challenges discussed on Page 2.

Please explain what new skills sets and new disciplines will be needed and why they are needed.

Response

Please see Exhibit I, Tab 2, Schedule 38.

Energy Probe INTERROGATORY #40 List 1

Interrogatory

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?

Ref: Exhibit C1-3-1 Corporate Staffing

On Page 4 of the exhibit the following statement appears:

“Progress has been made in attaining the optimal number and mix of staff required to complete the Company's increasing work programs”

- a) Does HONI have targets by employee classification that it is working toward meeting to address its human resource needs? If yes, please provide a synopsis of those targets.
- b) How does HONI measure progress in achieving its targets for the optimal number and mix of staff?

Response

a) There are no specific targets by employee classification. The reference to ‘attaining the optimal mix’ is in reference to finding the best mix of regular staff vs non regular staff. For instance, since the PWU Hiring Hall has been established, through experience we have found the hiring hall is most effective with an utilization rate of 30% for trades work.

b) N/A

Energy Probe INTERROGATORY #41 List 1

Interrogatory

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?

Ref: Exhibit C1-3-1 Corporate Staffing

On Page 6 reference is made to HONI's Trades and Technical Training programs.

- a) How many trades apprentices can be accommodated at any one time in these training programs?
- b) How many trades apprentices are currently in these training programs?
- c) How many more trades apprentices will HONI be hiring over the bridge and test years?
- d) How many trades persons are expected to retire over the bridge and test years?

Response

- a) The number of apprentices that can be accommodated is dictated by the number of journeypersons employed. The ratio of apprentices to journeypersons cannot exceed 1:3.
- b) Currently, there are 691 trades apprentices.
- c) For 2010, 194 apprentices have been hired. For 2011 and 2012, the numbers for each year are expected to be between 110 and 130.
- d) By the end of 2010, 400 trades employees will be eligible to retire. By the end of 2012, 504 trades employees are eligible to retire. Based on past retirement levels for trades staff, we might expect to see approximately 30 trades staff retire in 2010, and 40 retirements in each of 2011 and 2012. Caution should be used when relying on historical trends since within the trades classifications, more staff are reaching 35 years each progressive year. Based on past experience, trades staff tend to retire upon reaching the 35 year threshold.

Energy Probe INTERROGATORY #42 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 3, Schedule 2 – Compensation Wages and Benefits

Page 6 presents a table showing changes to collective agreements with the PWU over the years. In the March 2008 – March 2011 agreement reference is made to a “Pre hire assessment tool for apprentices”

- a) What percentage of apprentices are recruited from existing employees?
- b) Does the pre hire assessment tool apply to new hires as well as existing employees seeking an apprenticeship?
- c) Why is it necessary to negotiate hiring practices with the union for new employees?

Response

- a) Approximately 4% of apprentices are recruited from existing staff, mostly casual employees hired under Appendix “A” of the Power Workers’ Union collective agreement.
- b) Yes, the pre-hire assessment tool will apply to every individual seeking an apprenticeship.
- c) Apprentices are hired through the PWU hiring hall. The PWU hiring hall is managed by the PWU. The collective agreement establishes that apprentices are hired from a pool of qualified candidates established by the Joint Apprenticeship Council (JAC).

Energy Probe INTERROGATORY #43 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 3, Schedule 2 – Compensation Wages and Benefits

Page 6 presents a table showing changes to collective agreements with the PWU over the years. In the March 2008 – March 2011 agreement reference is made to “Increased threshold for employees to qualify for post-retirement benefits.”

- a) Please provide a comparison of the old and new thresholds.
- b) What cost savings are expected from the new provision?

Response

- a) Prior to the March 2008 – March 2011 agreement, there was no threshold for employees to qualify for post-retirement benefits. Under the March 2008 – March 2011 agreement, employees who retire must have 5 years of continuous service with Hydro One to qualify for post-retirement benefits.
- b) Due to a number of undetermined factors, a specific dollar saving has not been calculated.

Energy Probe INTERROGATORY #44 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 3, Schedule 2 – Compensation Wages and Benefits

Table 2 on Page 7 of the exhibit presents changes to the Society collective agreements over the years. In the April 2008 to March 2013 a note appears below the dates reading “(early negotiations)”.

Please explain what this refers to.

Response

“Early negotiations” refers to the fact that the current collective agreement was negotiated in the summer of 2007, prior to the expiry of the April 2005 to March 2008 agreement.

Energy Probe INTERROGATORY #45 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 3, Schedule 2 – Compensation Wages and Benefits

Table 2 on Page 7 of the exhibit presents changes to the Society collective agreements over the years. In the April 2008 to March 2013 entry reference is made to the upper end of salary schedules being reduced and new lower hiring rates. Please provide copies of the old and new salary schedules showing the reductions.

Response

Please see Attachment 1. The reductions are shown by comparing the Min and Max from the old schedule with Step 1 and Step 9, respectively, of the corresponding new schedule. Please also see Exhibit I, Tab 7, Schedule 14 part g.

Old

50

SALARY SCHEDULE 01

07

**STANDARD SCHEDULE FOR
 MANAGEMENT AND PROFESSIONAL STAFF
 Dollars Per Week - Salary Grade**

PERCENTAGE OF REF PT		<u>MP1</u>	<u>MP2</u>	<u>MP3</u>	<u>MP4</u>	<u>MP5</u>	<u>MP6</u>
→ Max	115	1,767	1,884	2,009	2,142	2,283	2,435
	114	1,751	1,867	1,991	2,123	2,264	2,414
	113	1,736	1,851	1,974	2,104	2,244	2,392
	112	1,721	1,835	1,956	2,086	2,224	2,371
	111	1,705	1,818	1,939	2,067	2,204	2,350
	110	1,690	1,802	1,921	2,048	2,184	2,329
	109	1,674	1,785	1,904	2,030	2,164	2,308
	108	1,659	1,769	1,886	2,011	2,144	2,287
	107	1,644	1,753	1,869	1,993	2,125	2,265
	106	1,628	1,736	1,851	1,974	2,105	2,244
	105	1,613	1,720	1,834	1,955	2,085	2,223
	104	1,598	1,704	1,816	1,937	2,065	2,202
	103	1,582	1,687	1,799	1,918	2,045	2,181
	102	1,567	1,671	1,781	1,899	2,025	2,159
	101	1,552	1,654	1,764	1,881	2,005	2,138
Ref Pt	100	1,536	1,638	1,747	1,862	1,986	2,117
	99	1,521	1,622	1,729	1,844	1,966	2,096
	98	1,506	1,605	1,712	1,825	1,946	2,075
	97	1,490	1,589	1,694	1,806	1,926	2,054
	96	1,475	1,572	1,677	1,788	1,906	2,032
	95	1,459	1,556	1,659	1,769	1,886	2,011
	94	1,444	1,540	1,642	1,750	1,866	1,990
	93	1,429	1,523	1,624	1,732	1,847	1,969
	92	1,413	1,507	1,607	1,713	1,827	1,948
	91	1,398	1,491	1,589	1,695	1,807	1,927
	90	1,383	1,474	1,572	1,676	1,787	1,905
	89	1,367	1,458	1,554	1,657	1,767	1,884
	88	1,352	1,441	1,537	1,639	1,747	1,863
	87	1,337	1,425	1,519	1,620	1,727	1,842
	86	1,321	1,409	1,502	1,602	1,708	1,821
	85	1,306	1,392	1,485	1,583	1,688	1,800
	84	1,290	1,376	1,467	1,564	1,668	1,778
	83	1,275	1,360	1,450	1,546	1,648	1,757
	82	1,260	1,343	1,432	1,527	1,628	1,736
	81	1,244	1,327	1,415	1,508	1,608	1,715
→ Min	80	1,229	1,310	1,397	1,490	1,588	1,694

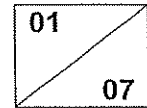
UNROUNDED REFERENCE POINTS

<u>MP1</u>	<u>MP2</u>	<u>MP3</u>	<u>MP4</u>	<u>MP5</u>	<u>MP6</u>
1536.2325	1638.0079	1746.5259	1862.2332	1985.6061	2117.1525

Note: This schedule covers a 35-hour workweek.

Labour Relations
 April 1, 2007

New



Hydro One

SALARY SCHEDULE 01

35 – HOUR SALARY SCHEDULE

Dollars Per Week

	<u>STEP</u>	<u>MP2</u>	<u>MP3</u>	<u>MP4</u>	<u>MP5</u>	<u>MP6</u>
→	9	1,638	1,747	1,862	1,986	2,117
	8	1,589	1,694	1,806	1,926	2,054
	7	1,540	1,642	1,750	1,866	1,990
	6	1,491	1,589	1,695	1,807	1,927
	5	1,441	1,537	1,639	1,747	1,863
	4	1,376	1,467	1,564	1,668	1,778
	3	1,310	1,397	1,490	1,588	1,694
	2	1,229	1,310	1,397	1,490	1,588
→	1	1,147	1,223	1,303	1,390	1,482

HYDRO ONE
SALARY SCHEDULE 02
CONSTRUCTION

02

07

FIELD MANAGEMENT AND PROFESSIONAL STAFF
DOLLARS PER WEEK - SALARY GRADE

PERCENTAGE OF REF PT		FMP09	FMP10	FMP11	FMP12	FMP13	FMP14	FMP15	FMP16
→ Max	115	1,554	1,657	1,767	1,884	2,009	2,142	2,283	2,435
	114	1,540	1,642	1,751	1,867	1,991	2,123	2,264	2,414
	113	1,527	1,628	1,736	1,851	1,974	2,104	2,244	2,392
	112	1,513	1,614	1,721	1,835	1,956	2,086	2,224	2,371
	111	1,500	1,599	1,705	1,818	1,939	2,067	2,204	2,350
	110	1,486	1,585	1,690	1,802	1,921	2,048	2,184	2,329
	109	1,473	1,570	1,674	1,785	1,904	2,030	2,164	2,308
	108	1,459	1,556	1,659	1,769	1,886	2,011	2,144	2,287
	107	1,446	1,542	1,644	1,753	1,869	1,993	2,125	2,265
	106	1,432	1,527	1,628	1,736	1,851	1,974	2,105	2,244
	105	1,419	1,513	1,613	1,720	1,834	1,955	2,085	2,223
	104	1,405	1,498	1,598	1,704	1,816	1,937	2,065	2,202
	103	1,392	1,484	1,582	1,687	1,799	1,918	2,045	2,181
	102	1,378	1,470	1,567	1,671	1,781	1,899	2,025	2,159
	101	1,365	1,455	1,552	1,654	1,764	1,881	2,005	2,138
Ref Pt	100	1,351	1,441	1,536	1,638	1,747	1,862	1,986	2,117
	99	1,338	1,426	1,521	1,622	1,729	1,844	1,966	2,096
	98	1,324	1,412	1,506	1,605	1,712	1,825	1,946	2,075
	97	1,311	1,398	1,490	1,589	1,694	1,806	1,926	2,054
	96	1,297	1,383	1,475	1,572	1,677	1,788	1,906	2,032
	95	1,284	1,369	1,459	1,556	1,659	1,769	1,886	2,011
	94	1,270	1,354	1,444	1,540	1,642	1,750	1,866	1,990
	93	1,257	1,340	1,429	1,523	1,624	1,732	1,847	1,969
	92	1,243	1,326	1,413	1,507	1,607	1,713	1,827	1,948
	91	1,230	1,311	1,398	1,491	1,589	1,695	1,807	1,927
	90	1,216	1,297	1,383	1,474	1,572	1,676	1,787	1,905
	89	1,203	1,282	1,367	1,458	1,554	1,657	1,767	1,884
	88	1,189	1,268	1,352	1,441	1,537	1,639	1,747	1,863
	87	1,176	1,253	1,337	1,425	1,519	1,620	1,727	1,842
	86	1,162	1,239	1,321	1,409	1,502	1,602	1,708	1,821
	85	1,149	1,225	1,306	1,392	1,485	1,583	1,688	1,800
	84	1,135	1,210	1,290	1,376	1,467	1,564	1,668	1,778
	83	1,122	1,196	1,275	1,360	1,450	1,546	1,648	1,757
	82	1,108	1,181	1,260	1,343	1,432	1,527	1,628	1,736
	81	1,095	1,167	1,244	1,327	1,415	1,508	1,608	1,715
→ Min	80	1,081	1,153	1,229	1,310	1,397	1,490	1,588	1,694

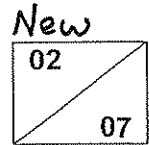
UNROUNDED REFERENCE POINTS

FMP09	FMP10	FMP11	FMP12	FMP13	FMP14	FMP15	FMP16
1351.2598	1440.7808	1536.2325	1638.0079	1746.5259	1862.2332	1985.6061	2117.1525

Note 1. While all grades apply to Management staff, only the top six grades will be used for positions requiring Professional staff.

2. This schedule covers a 35-hour workweek.

Labour Relations
April 1, 2007



Hydro One

SALARY SCHEDULE 02

37.5 - HOUR SALARY SCHEDULE

Dollars Per Week

	<u>STEP</u>	<u>FMP09</u>	<u>FMP10</u>	<u>FMP11</u>	<u>FMP12</u>	<u>FMP13</u>	<u>FMP14</u>	<u>FMP15</u>	<u>FMP16</u>
→	9	1,448	1,544	1,646	1,755	1,872	1,995	2,128	2,268
	8	1,404	1,498	1,596	1,702	1,816	1,935	2,064	2,200
	7	1,361	1,451	1,547	1,650	1,759	1,875	2,000	2,132
	6	1,317	1,405	1,498	1,597	1,703	1,815	1,936	2,064
	5	1,274	1,359	1,448	1,544	1,647	1,756	1,873	1,996
	4	1,216	1,297	1,382	1,474	1,572	1,676	1,787	1,905
	3	1,158	1,235	1,317	1,404	1,497	1,596	1,702	1,815
	2	1,086	1,158	1,234	1,316	1,404	1,496	1,596	1,701
→	1	1,013	1,081	1,152	1,229	1,310	1,397	1,490	1,588

HYDRO ONE

SALARY SCHEDULE 08

Old

08

07

TRADES MANAGEMENT SUPERVISORS
DOLLARS PER WEEK - SALARY GRADE

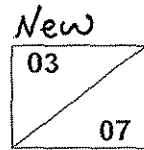
OF REF PT	TMS01	TMS02	TMS03	TMS04	TMS05	
Max	115	1,657	1,767	1,884	2,009	2,142
	114	1,642	1,751	1,867	1,991	2,123
	113	1,628	1,736	1,851	1,974	2,104
	112	1,614	1,721	1,835	1,956	2,086
	111	1,599	1,705	1,818	1,939	2,067
	110	1,585	1,690	1,802	1,921	2,048
	109	1,570	1,674	1,785	1,904	2,030
	108	1,556	1,659	1,769	1,886	2,011
	107	1,542	1,644	1,753	1,869	1,993
	106	1,527	1,628	1,736	1,851	1,974
	105	1,513	1,613	1,720	1,834	1,955
	104	1,498	1,598	1,704	1,816	1,937
	103	1,484	1,582	1,687	1,799	1,918
	102	1,470	1,567	1,671	1,781	1,899
	101	1,455	1,552	1,654	1,764	1,881
Ref Pt	100	1,441	1,536	1,638	1,747	1,862
	99	1,426	1,521	1,622	1,729	1,844
	98	1,412	1,506	1,605	1,712	1,825
	97	1,398	1,490	1,589	1,694	1,806
	96	1,383	1,475	1,572	1,677	1,788
	95	1,369	1,459	1,556	1,659	1,769
	94	1,354	1,444	1,540	1,642	1,750
	93	1,340	1,429	1,523	1,624	1,732
	92	1,326	1,413	1,507	1,607	1,713
	91	1,311	1,398	1,491	1,589	1,695
	90	1,297	1,383	1,474	1,572	1,676
	89	1,282	1,367	1,458	1,554	1,657
	88	1,268	1,352	1,441	1,537	1,639
	87	1,253	1,337	1,425	1,519	1,620
	86	1,239	1,321	1,409	1,502	1,602
	85	1,225	1,306	1,392	1,485	1,583
	84	1,210	1,290	1,376	1,467	1,564
	83	1,196	1,275	1,360	1,450	1,546
	82	1,181	1,260	1,343	1,432	1,527
	81	1,167	1,244	1,327	1,415	1,508
Min	80	1,153	1,229	1,310	1,397	1,490

UNROUNDED REFERENCE POINTS

<u>TMS 01</u>	<u>TMS 02</u>	<u>TMS 03</u>	<u>TMS 04</u>	<u>TMS 05</u>
1440.7808	1536.2325	1638.0079	1746.5259	1862.2332

Note: This schedule covers a 40 hour workweek.

Labour Relations
April 1, 2007



Hydro One

SALARY SCHEDULE 03

40 – HOUR SALARY SCHEDULE

Dollars Per Week

<u>STEP</u>	<u>TMS01</u>	<u>TMS02</u>	<u>TMS03</u>	<u>TMS04</u>	<u>TMS05</u>
→ 9	1,441	1,536	1,638	1,747	1,862
8	1,398	1,490	1,589	1,694	1,806
7	1,354	1,444	1,540	1,642	1,750
6	1,311	1,398	1,491	1,589	1,695
5	1,268	1,352	1,441	1,537	1,639
4	1,210	1,290	1,376	1,467	1,564
3	1,153	1,229	1,310	1,397	1,490
2	1,081	1,152	1,229	1,310	1,397
→ 1	1,009	1,075	1,147	1,223	1,303

Energy Probe INTERROGATORY #46 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 3, Schedule 2 – Compensation Wages and Benefits

On Page 8 of the exhibit reference is made to the base hours of work for MCP staff from 35 to 40 hours per week.

- a) How has this change affected the number of MCP staff required?
- b) What cost savings are expected from this change?

Response

- a) The change in base hours for MCP staff has not affected the number of MCP staff required. Many MCP staff were already working a minimum of 40 hours per week.
- b) MCP staff in higher bands routinely work a minimum of 40 hours per week. Overtime is not paid to management staff regardless of the number of hours they work. MCP staff in the lower bands are now required to work 5 extra hours with no further compensation. In these situations although there are no dollar savings, there is a 14% increase in productivity.

Energy Probe INTERROGATORY #47 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 3, Schedule 2 – Compensation Wages and Benefits

Table 3 on Page 9 presents payroll data for the years 2007 to 2012. Total wages and base wages will have increased by about 65% from 2007 to 2012 but “Other” costs will have increased by about 330%.

Please explain why Other costs are rising so much faster than total wages and base wages.

Response

The figures provided in Table 3 are not a direct link to the revenue requirements for the current application. Rather, they are intended to show directionally where costs are going.

The “other” category includes costs that are actually incurred (ie. Travel time, allowances etc) but also includes a variable to reconcile the fact that data is drawn from multiple sources. In August 2009, SAP was introduced which resulted in another source of data. When this table was originally completed, the data sources from SAP to capture “other costs” were yet to be finalized.

Upon further investigation, the “other” category for 2009 – 2012 is overstated. It appears that for 2009, it is overstated by approximately \$10M. Since the “other” category is partially a balancing figure to compensate for multiple data sources, the base wage figure is accordingly understated by the same amount.

While there may be some variances in the “base” and “other” categories, the total wage figures from this table are accurate since the data is drawn from T4 slips.

Energy Probe INTERROGATORY #48 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 3, Schedule 2 – Compensation Wages and Benefits

At line 22 on Page 9 reference is made to reducing compensation and benefits for “future new hires”.

- a) Does HONI have a plan for implementing reduced compensation for new hires? If yes, please provide details of the plan.
- b) If no, does HONI have a target date by which reduced compensation and benefits for new hires will be achieved? If yes, please provide details.
- c) If no, please explain how the goal of reducing compensation and benefits for new hires will be achieved.

Response

a) Hydro One has already implemented a plan to reduce compensation and benefits for new Society and MCP staff. Effective July 2007, the Society wage structure was adjusted. For details on the plan please see Exhibit I, Tab 2, Schedule 45 and Exhibit I, Tab 7, Schedule 14, Part g. Society employees hired after November 2005 join the new pension plan. MCP employees hired after January 2004 also join new benefits and pension plans. As per Exhibit C1, Tab 3, Schedule 2, page 8, lines 9-11, the benefits and pension plan for new MCP employees is approximately 25% less costly. Prior to each round of collective bargaining Hydro One will assess areas for reduced costs and increase productivity.

b) N/A

c) N/A

Energy Probe INTERROGATORY #49 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 3, Schedule 2 – Compensation Wages and Benefits

At lines 4-5 on Page 10 reference is made to management employees leaving the company.

- a) Please provide a table showing numbers of management people who have left the company by year differentiating between those who left for retirement, those who were terminated and those who otherwise left voluntarily.
- b) Does HONI inquire why a management person is leaving the company? If yes, what are the typical reasons given for leaving?

Response

a)

MCP Retirement and Termination 2007 – 2009

	2007	2008	2009
Retirement	7	10	17
Involuntary Termination*	3	2	7
Voluntary Termination	11	13	6
Other**	1	1	1
Total	22	26	31

* Involuntary termination includes staff reductions, failure of employment condition and end of assignment

** Other reflects employee death

- b) Yes. Exit interviews are requested for all voluntary terminations. The most common reasons for management employees electing to leave are retirement, the pursuit of a new opportunity as a result of dissatisfaction with wages, and additional education for change in career direction.

Energy Probe INTERROGATORY #50 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 3, Schedule 2 – Compensation Wages and Benefits

On Page 11, at lines 18-20, the following statement appears: “Hydro One hires multi skilled employees to perform operations and maintenance work ie. Regional Maintainer – Lines, Mechanical or Electrical.”

- a) Is this classification meant to be read as “Regional Maintainer – Lines”, “Regional Maintainer – Mechanical” and “Regional Maintainer – Electrical”? If yes, please explain how three separate tradespersons constitutes a “multi skilled employee”.
- b) If no, please describe the range of work performed by the single tradesperson qualified for in line, mechanical and electrical maintenance trades.

Response

a) Yes, these are three separate classifications, each of which is multi skilled. For example, in addition to the core duties of a Powerline Maintainer (performing a range of mechanical and electrical duties), the Regional Maintainer – Lines will also perform lead hand, work protection, contract monitoring, troubleshooting, technical, environmental, customer service and chainsaw duties.

b) N/A

Energy Probe INTERROGATORY #51 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 3, Schedule 2 – Compensation Wages and Benefits

Page 11 line 17 to Page 12 line 13 contains a discussion of why Hydro One's work differs from that of other distribution utilities in the Province.

- a) Has Hydro One commissioned an independent study of the work done by other distributors and itself to confirm the claims made in this section of the exhibit? If yes, please provide the study.
- b) If not, please explain why the Board should give any weight to these claims in evaluating Hydro One's compensation levels?

Response

a) Hydro One has not commissioned an independent study. The evidence provided is based upon the opinion and expertise of internal management staff who are familiar with other LDC operations. In addition Hydro One has acquired LDC's in the past and acquired employees underwent skill assessments. These assessments have identified that LDC employees are not trained at the level of our employees and they have limited experience in our complex work environments, which require specialized training and experience.

b) See (a).

Energy Probe INTERROGATORY #52 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 3, Schedule 2 – Compensation Wages and Benefits

Page 14 presents a comparison of PWU wages at Hydro One, OPG and Bruce Power.

- a) Why does Hydro One not compare to other transmission and distribution utilities rather than nuclear generating companies?
- b) Are the classifications with more than one descriptor meant to be read as applying to different organizations? Eg. 1 Does “Mechanical Maintainer” apply to OPG and Bruce Power and “Regional Maintainer – Mechanical” apply to Hydro One? Eg. 2 Does “Shift Control Technician” apply to OPG and Bruce Power and Regional Maintainer – Electrical apply to Hydro One?
- c) Has Hydro One compared the work done by the skilled trades classifications in a nuclear power station to the work done by their comparator classifications in transmission? If yes, please provide the comparison. If no, please explain why Hydro One believes the classifications are comparable.
- d) The stockkeeper and labourer classifications for Bruce Power are assumed to fall into the Civil Maintainer II classification. Why is it necessary to make this assumption if the comparable classification at Bruce Power could be determined by inquiring?

Response

- a) In Ontario, there is no other utility similar to Hydro One. While there are large utilities such as Toronto Hydro, London Hydro or Ottawa Hydro, none of these utilities match the size and complexity of the work performed by Hydro One employees. There are large Transmission and Distribution Utilities in other provinces, and while these companies would be relevant comparators, the reality is that Hydro One competes for staff and is vulnerable to losing experienced employees more so in Ontario. As such, the compensation at the nuclear generating, Ontario Hydro successor companies is more relevant.

- 1 The positions at OPG or Bruce Power are more comparable because the field
2 positions listed in the comparison were deemed by both the Company and the PWU
3 as equal classifications when Ontario Hydro existed.
4
- 5 b) Yes.
6
- 7 c) No, the work has not been compared. Hydro One believes the classifications are
8 comparable for the reasons discussed in the second paragraph of (a) above.
9
- 10 d) For the labourer classification, it is necessary to make this assumption because Bruce
11 Power uses both the Civil Maintainer I and Civil Maintainer II classifications to
12 perform labourer-type duties. It has been determined that the Civil Maintainer II
13 classification is most comparable to the labourer classification at Hydro One. It has
14 also been confirmed that the stockkeeper function falls within the Civil Maintainer II
15 classification at Bruce Power.
16

Energy Probe INTERROGATORY #53 List 1

Interrogatory

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?

Ref: Exhibit C1, Tab 3, Schedule 2 – Compensation Wages and Benefits

At lines 6-7 the following statement appears:

“For PWU staff, Hydro One has negotiated substantially lower wage scales than OPG and Bruce Power for all seven positions with the exception of one.”

- a) What is the total number of classifications for PWU represented staff at Hydro One?
- b) What is the percentage of total PWU represented staff attributable to the seven classifications referred to?
- c) What comparison has Hydro One done for the balance of the classifications not covered in these seven classifications?

Response

- a) Hydro One has approximately 300 classifications for PWU represented staff.
- b) The seven classifications make up 15.25 percent of total PWU represented staff.
- c) No comparisons have been performed for other classifications. The classifications chosen represent a cross section of classifications common amongst the successor companies.

Energy Probe INTERROGATORY #54 List 1

Interrogatory

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?

Ref: Exhibit C1-3-2 Appendix A Pension Costs

Lines 30-31 on Page 3 of the appendix report that the pension plan has a 61st percentile ranking among Canadian pension plans.

- a) Please provide a copy of the ranking of pension plans showing Hydro One's fund at the 61st percentile.
- b) Please describe the reasons why the pension fund is below median in the ranking.
- c) What is the return on assets achieved by pension plans performing at the median ranking?
- d) What affect would a 1% increase in return on the plan assets have on pension contributions by the employer?
- e) Does Hydro One have any plans in place to improve the ranking? If yes, please describe them. If no, please explain why a plan to improve pension fund ranking would not be desirable.

Response

- a) Please see attached for a copy of the peer rankings at December 31, 2009, which shows the performance of Hydro One Pension Plan relative to other pension plans in Canada.
- b) Ideally, Hydro One would prefer to see the Fund's performance ranked median or above among similar plans in Canada over the long term. However, the percentile ranking of a pension plan is influenced more by the differences in its asset mix, which is determined by the long term strategic decision of plan specific factors, than the ability of its investment managers to outperform benchmarks. As a result, comparability of returns among plans is limited due to differences in asset mix. For example, Hydro One's real return bond allocation used to match inflation sensitive liabilities is about 15%, notably higher than the majority of pension plans, which do not have similar liabilities linked to inflation and as a result have a higher allocation to nominal bonds. In 2008, a significant factor resulting in the ranking relative to other plans was due to the real return bond allocation. Specifically, the DEX Real

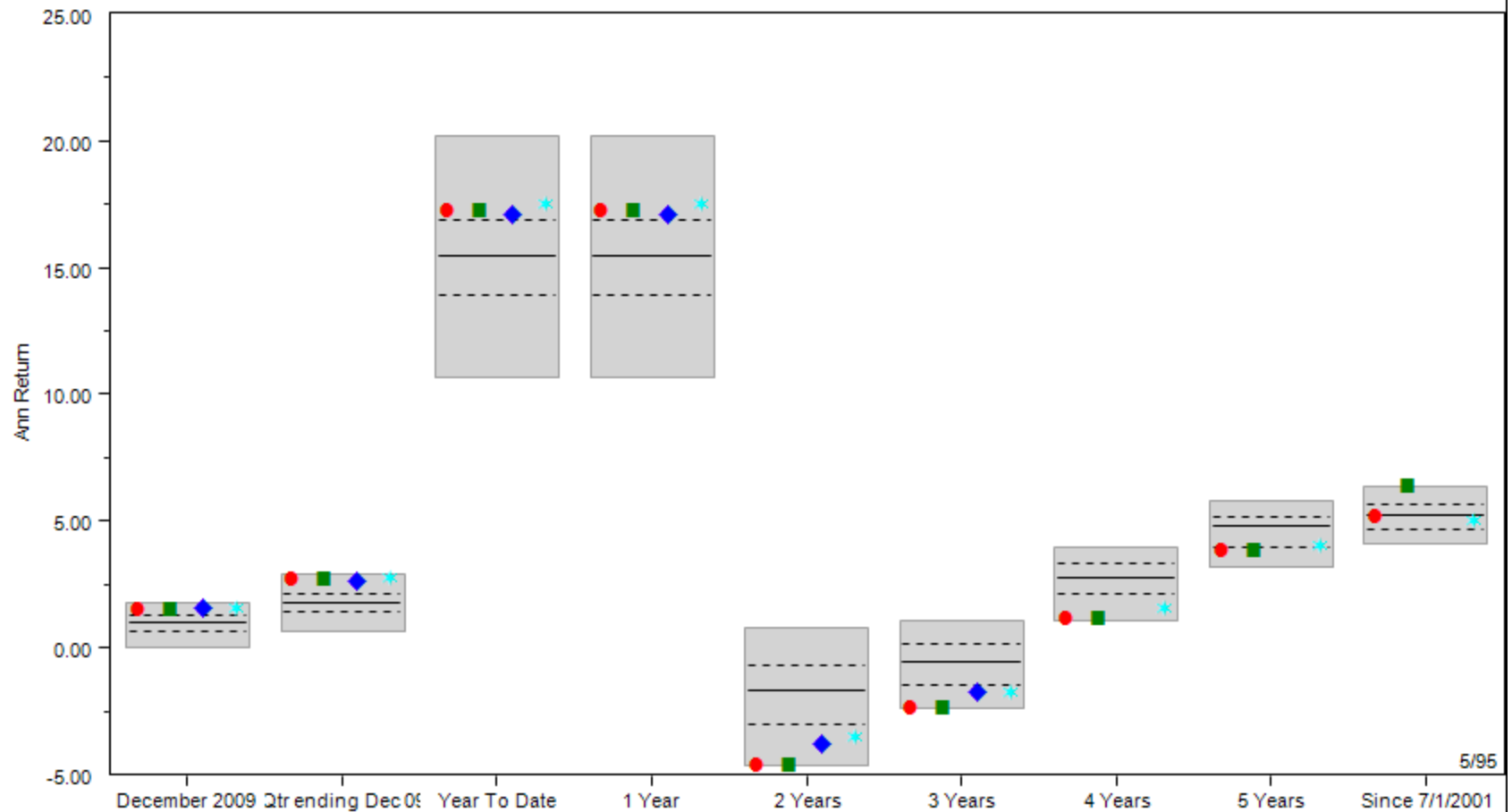
1 Return Bond index returned 0.42% and underperformed nominal bonds (DEX
2 Universe Bond index) which returned 6.41%. However in 2009, the Fund's rank
3 improved significantly (first quartile) and was mainly due to the outperformance in
4 real return bonds (DEX Real Return Bond index returned 14.50% and outperformed
5 nominal bonds which returned 5.41%). The higher allocation to real return bonds is
6 plan specific and will improve ranking amongst other funds in periods in which real
7 return bonds outperform nominal bonds, but detrimental during periods such as 2008
8 when they underperform. More importantly, the allocation to real return bonds is a
9 match to the Fund's liabilities and helps reduce overall contribution volatility.

10
11 c) Although the Hydro One Pension Plan returned 5.13% and ranked 61st percentile
12 during the period June 29, 2001 (the Fund's inception) to December 31, 2009, the
13 median plan return during the same time period was only marginally higher at 5.21%,
14 a difference of only 0.08% (or eight basis points).

15
16 d) The market value of plan assets at January 1, 2009 was approximately \$4.0 billion.
17 An increase of 1% in the rate of return earned in 2009 would have generated
18 additional investment income of about \$40 million in 2009. However, this additional
19 investment income would reduce contributions over a longer period of time, rather
20 than immediately, due to asset smoothing adopted by the Company's external
21 independent actuary to calculate the contribution requirements. Investment gains and
22 losses (such as an additional investment return) are smoothed and recognized over
23 time to help reduce overall contribution volatility. The impact of a 1% increase in the
24 rate of return for 2009 would have reduced contributions for 2010 by approximately
25 \$1 million.

26
27 e) As indicated in part (b), the ranking of a pension plan is influenced more by the
28 differences in asset mix, which is determined by the long term strategic decision of
29 plan specific factors. To the extent that Hydro One Pension Plan asset mix is different
30 from the average plan, the peer ranking will fluctuate from time to time depending on
31 market conditions. For example, in 2008, the Fund ranked in the fourth quartile due to
32 its 15% allocation to real return bonds, which underperformed nominal bonds (which
33 most plans have a higher allocation). This ranking was reversed in 2009, where the
34 Fund ranked first quartile due to the outperformance of real return bonds relative to
35 nominal bonds. In managing the assets of the Plan, one of the objectives is to invest in
36 assets, which match the Fund's liabilities, thereby reducing contribution volatility.
37 Hydro One Pension Plan is indexed to inflation, and therefore an allocation to real
38 return bonds is appropriate. Having said that, Hydro One periodically conducts asset
39 mix studies to determine whether its current asset mix continues to be appropriate to
40 meet its objectives. We plan to conduct such a study in 2010. In addition, we
41 continually monitor the performance of the investment managers and will replace any
42 manager, who is unable to meet the mandate for which they were hired. In 2009 and
43 2010, changes were made with some of the Fund's investment managers to improve
44 performance going forward.

Canadian Master Trust - Total Fund (CAD) - Monthly As of December 31, 2009 Quartile



5/95

	Value	%Tile	Value	%Tile	Value	%Tile	Value	%Tile	Value	%Tile	Value	%Tile	Value	%Tile	Value	%Tile
5th Percentile	1.77		2.87		20.19		20.19		0.81		1.09		3.99		5.77	
25th Percentile	1.31		2.14		16.89		16.89		-0.71		0.19		3.33		5.16	
Median Percentile	1.00		1.77		15.44		15.44		-1.70		-0.56		2.78		4.82	
75th Percentile	0.65		1.43		13.93		13.93		-3.02		-1.44		2.12		3.94	
95th Percentile	0.05		0.65		10.70		10.70		-4.67		-2.37		1.08		3.16	
# of Portfolios	81		80		79		79		79		77		77		77	
• Ohs - Total Fund	1.49	19	2.66	12	17.24	23	17.24	23	-4.67	95	-2.35	94	1.14	94	3.80	81
■ Ohs - Total Fund Less Holdcos	1.49	19	2.67	11	17.27	23	17.27	23	-4.68	96	-2.36	95	1.12	95	3.81	80
◆ OHS - Total Fund X-Overlay	1.55	17	2.65	12	17.12	24	17.12	24	-3.80	90	-1.72	81	---	---	---	---
* Hydro One Overlay Policy	1.54	17	2.79	8	17.54	22	17.54	22	-3.54	88	-1.74	83	1.57	88	4.03	73

Universe Source: The Bank of New York Mellon Corporation; Universe Status: Final, Calculated

Energy Probe INTERROGATORY #55 List 1

Interrogatory

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?

Ref: Exhibit D1, Tab 1, Schedule 4 – Materials and Supplies Inventory

Table 1 on Page 2 of the exhibit shows inventory levels over the period 2007-2012. The increase in annual average inventory from 2010 (\$12.7 M) to 2012 (\$21.7 M) is 71%. The mid year gross asset balance from Table 2 Exhibit D1-1-1 Page 4 shows \$11,478 M and for 2012 shows \$13,510 M an increase of only about 18%.

Please explain why inventory is expected to increase at a much greater rate than assets in service.

Response

Our sustaining and development programs are increasing substantially over the 2007-2012 periods, hence the necessary increase in materials and supplies inventory.

The percentage growth in assets over the 2007-2012 periods does not increase proportionately at the same rate as the percentage growth in the SDO work programs for the same period.

The 2011 and 2012 materials and supplies inventory noted is the required level of materials and supplies inventory to be drawn on to complete the necessary SDO work through this period.

Energy Probe INTERROGATORY #56 List 1

Interrogatory

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?

Ref: Exhibit D1, Tab 3, Schedule 2 – Sustaining Capital

Line 19 on Page 3 of the exhibit refers to the need to increase “station security to prevent unauthorized access and theft, primarily copper”.

- a) What is the annual cost of stolen copper?
- b) Why is copper stored at stations?
- c) What measures will HONI implement to increase station security to prevent future theft of copper?

Response

- a) Hydro One does not track the value of the stolen metal, but does track the cost to make repairs where copper has been removed from transformer station assets. The cost to repair locations where copper has been removed has varied over the last few years from \$0.4 million in 2007, \$1.6 million in 2008 and \$0.7 million in 2009. Projected annual costs going forward are \$0.5 million.

The above costs do not capture lost time in redirecting staff to make repairs before other work can commence, or cancellation of work due to unsafe conditions that arise when copper is removed from equipment or grounded structures. As well, when copper is removed from major equipment such as transformers, emergency action is required to prevent damage to equipment and to make safe, and in some cases the equipment has to be removed from service until adequate repairs can be made. Emergency repair costs of this type are also not included in the above.

- b) Very little copper is generally stored at stations. Most of the theft that has occurred involves the removal of copper from Hydro One facilities and equipment, e.g., station fences, transformer neutrals, structure grounding, etc. At these locations copper is used to provide an electrical ground. Copper removed from station facilities and equipment presents serious safety hazards to workers and the public and must be repaired.
- c) Measures that will be implemented are noted in Exhibit D2, Tab 2, Schedule 3, Investment Summary Document S33.

Energy Probe INTERROGATORY #57 List 1

Interrogatory

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?

Ref: Exhibit D1, Tab 3, Schedule 2 – Sustaining Capital

Page 12 of the exhibit discusses station reinvestment plan S3 for metalclad circuit breaker replacement in the GTA, specifically in Toronto for 2011 and 2012.

- a) Lines 23-24 state that “THESL and Hydro One Transmission breakers are electrically connected and function in series”. What voltage are the Hydro One breakers and the THESL breakers?
- b) Does the interconnection of the two metalclad breakers systems preclude replacement of either one individually?
- c) Are the metalclad breakers in this proposed replacement among the “thirty one (31) of the 100 Hydro One Transmission metalclad breaker arrangements in the GTA currently exceeding the manufacturer’s recommended life expectancy of 40 years” referred to in lines 25-26?
- d) Please provide a table showing the stations where the 100 metalclad breaker arrangements are in the GTA, current age of the breakers and expected replacement date.

Response

- a) 13.8 kV.
- b) Although theoretically it would be possible for THESL and HONI to replace switchgear independently, it is not preferred from both technical and economic perspectives.

Both THESL’s and HONI’s assets require replacement. THES presented this information in EB-2007-0680, and Hydro One in EB-2008-0272. The integrated nature of metalclad lineups allows the opportunity for coordinated projects to be completed between HONI and THESL. If the two replacement projects were not coordinated, the following issues would result:

- Increased cost to procure, design, and install added equipment and protection systems due to physical, electrical, and safety interlock interface issues between the legacy equipment and the new equipment. In some cases the physical space may not be available to coordinate the functionality of the new and old equipment, requiring special designs for each interface.
- Partial improvement of reliability to THESL and its customers, as their new equipment would still be supplied by HONI's up-stream end of life equipment.
- Missed opportunities to leverage volume purchases with equipment manufacturers.

c) Work in the test years is planned at Wilshire [56 – 57], Carlaw [35 years], Strachan [54 years], and Glengrove [51-54]. Five of the seven lineups which are being replaced in the test years are in excess of 40 years old, with an average age of 55 years. The two remaining lineups being replaced in the test years are each 35 years old. They are at end-of-life for the same reasons as the other lineups, as identified in Exhibit D2, Tab 2, Schedule 3, S3.

d) The stations with the 100 metal clad breaker arrangements, the current age, and planned replacement dates are summarized below.

It should be noted that planned dates below are based on current plans as coordinated between HONI and THES. Because of the integrated nature of these projects, project plans can be affected by changes by either party.

Hydro One Station	# of Metalclad Breakers	Age of Breakers as of 2010 (Years)	Planned Replacement Date
Wiltshire TS	9	56-57	2011-2014
Carlaw TS	5	35	2010-2013
Glengrove TS	4	51-54	2009-2011
Strachan TS	6	54	2011-2014
Duplex TS	6	43	2013-2015
John TS	16	25-47	2014-beyond 2020
Bridgeman TS	2	53	2014
Main TS	4	24	Beyond 2020
Dufferin TS	8	18-46	2016-Beyond 2020
Terauley TS	8	23-29	2009- Beyond 2020
Cecil TS	8	33	2017
Charles TS	8	18-43	2019 -Beyond 2020
Esplanade TS	16	23	Beyond 2020

Energy Probe INTERROGATORY #58 List 1

Interrogatory

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?

Ref: Exhibit D1, Tab 3, Schedule 2 – Sustaining Capital

Page 13 discusses station reinvestment plan S4 for equipment replacement at Beck SS#1.

- a) How old are the end of life SF6 breakers referred to at lines 10-11?
- b) Why is it necessary to replace “32 high voltage switches, two high voltage ground switches, and 12 high voltage instrument transformers” in this project?
- c) What is the “business liability” referred to in Exhibit D2-2-3 for this project?

Response

- a) The referenced SF6 breakers are 19 years old. These are type HPLs, and are prone to SF6 leaks, hot spots and overheating on bushings and interrupters, resulting in increased maintenance and reliability issues. Hydro One has on-going programs to replace these known problem breakers.
- b) Aside from the 1950s air-blast breakers and 1991 SF6 breakers, almost all of the remaining the 60Hz equipment (switches, instrument transformers, insulators, etc.) are original to the 1940s. This equipment is of questionable integrity and cannot be reused in the new configuration.
- c) The term “Business liability” in this context is intended to be analogous to Hydro One’s risk considered against the business values. Additional information on the sustainment planning process can be found in Exhibit A, Tab 12, Schedule 4, page 6, line 21, where the consequence of failure and loss of design functionality are discussed.

The primary business values which are at risk are as follows:

- Safety and Environment: cannot safely maintain the existing equipment due to inadequate clearances to other energized equipment.

Filed: August 16, 2010

EB-2010-0002

Exhibit I

Tab 2

Schedule 58

Page 2 of 2

- 1 • System Reliability: likelihood of failure if no action is taken, with consequences
2 of impacting the power system
- 3 • Customer Impact and Satisfaction: risk of hydroelectric generation curtailment at
4 Beck #1 SS, which also provides a major network path and serves several load
5 stations and large customers in the region.

6

7 Further details on these assets can be found in Exhibit C1, Tab 2, Schedule 2, Appendix
8 A, page 4 for SF6 breakers and page 20 for HV/LV Switches.

9

Energy Probe INTERROGATORY #59 List 1

Interrogatory

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?

Ref: Exhibit D1, Tab 3, Schedule 2 – Sustaining Capital

Page 13 also discusses station reinvestment plan S5 for equipment replacement at Abitibi Canyon switching station and the installation of a new breaker diameter at Pinard TS.

- a) Lines 25-27 refer to investments needed to “fully de-merge the integrated control, metering, relaying, annunciation and ancillary systems for both the 230 kV and 115 kV systems”. Please explain why the demerger is necessary.
- b) How is the new breaker diameter at Pinard TS related to the reinvestment work at Abitibi Canyon SS? Why is it required?
- c) How much of the planned expenditures in 2011 and 2012 are attributable to the Pinard TS work for a new breaker diameter?

Response

- a) Hydro One shares space with OPG at Abitibi Canyon GS. Hydro One owns the EOL Abitibi Canyon SS located on top of the dam-works of the generating station (external on the side of the dam) as well as protection, control, metering and ancillary systems located in rooms contained within the powerhouse (internal). All of the Hydro One facilities noted above are located on property owned by OPG.

Where shared facilities exist, demerger activities are undertaken to separate transmission assets from OPG owned assets when the former are declared end of life (EOL).

- b) Hydro One’s Pinard TS assets are at end of life (EOL), and as such Hydro One assessed options to meet the existing functional requirements of the 115kV ring-bus, as well as consideration to future needs of the 115kV and 230kV networks, and demerger of assets from OPG as outlined in part a).

The objectives of this investment are to:

- Replace Hydro One’s EOL assets

- Address existing operational, maintenance and safety issues, and
- Reconfigure and optimize the 115 kV circuits,

The solution involves removing the Hydro One-owned assets from OPG's property, and construction of a new 115 kV switchyard that includes protections, controls and other needed system elements that are currently in the powerhouse to be located at the existing Pinard TS site. The project also involves the reconfiguration of the existing 115 kV circuits C2H, C3H and C6T at Abitibi Canyon GS and connections from the existing 115 kV circuits to Pinard TS.

The investment in the test years is to build a four-breaker 115kV ring bus at Pinard TS to functionally replace the five breakers at Abitibi Canyon SS. The 115 kV switchyard will ultimately consist of six-breakers in a ring bus with a 230/115 kV autotransformer.

The alternative of rebuilding the 115kV switchyard at Abitibi Canyon SS on top of the dam works was considered, and found to not meet the ultimate needs of Hydro One and OPG as outlined above and earlier in part a)..

- c) Approximately 90% of the capital cost in the test years is attributed to the construction of the 115kV ring bus at Pinard TS to functionally replace the 115kV ring bus at Abitibi Canyon SS. The remainder of the cost is associated with line construction between Abitibi Canyon GS and Pinard TS, and modifications to the line terminations at Abitibi Canyon GS as a result of the 115kV reconfiguration work.

Energy Probe INTERROGATORY #60 List 1

Interrogatory

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?

Ref: Exhibit D1, Tab 3, Schedule 3 – Development Capital

Page 11-12 of the exhibit describe HONI's Capital Project Categories.

- a) Category 3 includes projects for which HONI is seeking the “guidance on the appropriateness of the need, the proposed solution, and the recoverability of the project cost”. Have costs for these projects been included in development capital proposed for inclusion in rate base in any of the Bridge or Test years?
- b) Category 4 contains a statement that “Hydro One Transmission is not seeking approvals for these projects within this application”. Have costs for these projects been included in development capital proposed for inclusion in rate base in any of the Bridge or Test years?

Response

- a) No, only projects with in-service dates in either of the test years have been included in the rate base. By definition, Category 3 projects “do not have an in-service date in any of the test years” and as such their capital expenditures were not included in the rate base for 2011 or 2012.
- b) No, the only Category 4 project with in-service date in either of the test years is Project D31 “Lower Mattagami Generation Connections”; however the Net Total Cost is zero dollars and as such there is no expenditure to be included in the rate base for 2011 or 2012.

Energy Probe INTERROGATORY #61 List 1

Interrogatory

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?

Ref: Exhibit D1, Tab 3, Schedule 3 – Development Capital

Project D8 on Page 17 of the exhibit is for the Installation of Shunt Capacitor Banks at Dryden TS. Lines 9-10 state that “This project will be committed only if the OPA recommends it”

- a) When does HONI expect OPA to make a decision on whether or not the project should proceed?
- b) If the project need is uncertain, on what basis can the Board approve it in the present proceeding?

Response

- a) Please refer to Exhibit I, Tab1, Schedule 98.
- b) Project D8 is a Category 3 project; hence Hydro One is only seeking the “guidance on the appropriateness of the need, the proposed solution, and the recoverability of the project cost”. Hydro One is not seeking approval for this project to be included in the rate base.

Energy Probe INTERROGATORY #62 List 1

Interrogatory

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?

Ref: Exhibit D1, Tab 3, Schedule 3 – Development Capital

Project D11 on Page 20 is to rebuild Hearn SS to address “aging infrastructure affecting the reliability of supply and under-rated equipment that limits new distributed generation to be connected”.

- a) Please describe the aging infrastructure that requires replacement.
- b) Can the short circuit capability of the station be increased without replacing all of the infrastructure referred to in the excerpt?
- c) If yes, what would the revised cost of the project be if just the short circuit capability was increased?

Response

- a) The work covers replacement of 115kV breakers and refurbishment of the 115kV switchyard at Hearn TS. Along with the breakers, breaker disconnects switches, high voltage instrument transformers, insulators, bus structures etc all need to be replaced. Please see Exhibit I, Tab 1, Schedule 112 Part b for further details.
- b) No, the short circuit capability cannot be increased without replacing the aging equipment.
- c) Not applicable.

Energy Probe INTERROGATORY #63 List 1

Interrogatory

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?

Ref: Exhibit D1, Tab 3, Schedule 3 – Development Capital

Project D12 and D13 on Page 20 are to “address both aging infrastructure and under-rated equipment that limits the connection of renewable generation in the City of Toronto”.

- a) Please describe the aging infrastructure that requires replacement.
- b) Can the short circuit capability of the stations be increased without replacing all of the infrastructure referred to in the excerpt?
- c) If yes, what would the revised cost of the project be if just the short circuit capability was increased?

Response

- a) The work covers replacement of 115kV breakers and refurbishment of the 115kV switchyards at Leaside TS and Manby TS. Along with the breakers, breaker disconnects switches, high voltage instrument transformers and insulators will be replaced. The main bus structures and strain buses will be retained.
- b) Yes the short circuit capability of the station can be improved by upgrading the breakers and leaving the other major infrastructure, such as the bus structures alone. However, all the other auxiliary components associated with the breakers, such as disconnect switches, instrument transformers and insulators are also aging and require replacement. Performing these replacements separately and at different times is not only inefficient but also is not practical due to the need for many more outages. The utilization at Leaside and Manby is very high and outage opportunities in both numbers and opportunity are limited. Higher number of outages would result in greater risks of load interruptions.
- c) Hydro One has not carried out an estimate for that scope of work in the past. That type of cost estimate is not available at this time.

Energy Probe INTERROGATORY #64 List 1

Interrogatory

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?

Ref: Exhibit D1, Tab 3, Schedule 3 – Development Capital

Project D15 on Page 21 is for Guelph Area Transmission Reinforcement and contains the following statement: “This project is required as the transmission system is inadequate to meet the local area’s existing demand and forecast load requirements”

- a) Is the transmission system inadequate for both existing demand and forecast demand or just for forecast demand?
- b) Please provide any studies of forecast demand on which the project need is based.

Response

- a) As stated in the Exhibit D1, Tab 3, Schedule 3, Page 21, Hydro One has determined that the transmission system capability is inadequate to meet both existing and forecast demand based on recent demand and operating conditions.
- b) Studies of forecast demand on which project need is based will be included in the application to the Ontario Energy Board for Leave to Construct, which is expected to be filed in either 2010-Q4 or 2011-Q1.

Energy Probe INTERROGATORY #65 List 1

Interrogatory

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?

Ref: Exhibit D1, Tab 3, Schedule 3, Appendix A, Table 4

Project D19 is for new Ancaster TS. The project is noted as needing an EA and potentially a Section 92 application.

- a) When will the EA be completed?
- b) What is needed to determine Section 92 status?

Response

- a) We anticipate starting the EA in 2011 Q1 for completion in 2011 Q4.
- b) Section 92 approval is needed if construction of at least 2 km of transmission line is required. A site for the new Ancaster TS has yet to be identified and hence the length of the transmission line tap to serve the new transmission station has not been determined. If the line tap is less than 2 km, no Section 92 approval will be required.

Energy Probe INTERROGATORY #66 List 1

Interrogatory

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?

Ref: Exhibit D1, Tab 3, Schedule 4 – Operations Capital

Project O2 on Page 11 is for NMS upgrades and enhancements.

- a) When did the NMS go into service?
- b) What was the total cost of implementing the NMS?
- c) What do the upgrades and enhancements consist of?

Response

a) The current version of the NMS referred to as the upgrade project went in service July, 2009.

b) The total cost for the NMS Upgrade project was \$25.7M.

c) These NMS Enhancements will take advantage of new standard vendor offerings and will improve upon and replace existing custom applications. The addition of new troubleshooting capabilities along with the replacement of the custom applications by vendor offerings will result in a small reduction in the support and maintenance effort required for these applications.

The NMS Enhancements provide the following tools and estimated operator efficiencies:

- The NHood function will provide a multi-station, graphical representation of a segment of the power system compared to the current single station schematic representation. This improvement primarily benefits support staff during application trouble shooting. For example, instead of paging through tables to determine and evaluate grid connectivity, NHood will display the network graphically, which will make it easier to identify and determine errors.
- The I-grid application will provide tools to assist transmission operators in calculating power flows, including the capability to display on demand, replacing

- 1 the current manual calculations. The capability to have an “excel” like user
2 interface will provide enhanced ability to perform calculations on telemetered
3 data and create graphs and trends to graphically display loading on circuits and
4 transformers
5
- 6 • The E-terra Vision application will provide enhanced situational awareness to
7 transmission operators by providing an improved “wide area” view of the power
8 system. This application was created in response to the 2003 blackout to provide
9 control rooms with enhanced visibility of power system information displayed in
10 a more user friendly manner. It will also use the corporate Geographic
11 Information System (GIS) to allow the controllers to view the power system
12 geographically
13
 - 14 • The Special Protection System application is currently a custom application for
15 modeling various Special Protection Systems. As part of the NMS enhancement
16 project, the vendor is working on an equivalent application which, when
17 completed, will become a standard offering. This will move Hydro One closer to
18 a complete COTS (Commercial Off The Shelf) application which will reduce the
19 internal maintenance requirements of the custom application.
20
21

Energy Probe INTERROGATORY #67 List 1

Interrogatory

Issue 4.6

Does Hydro One's Asset Condition Assessment information and Investment Planning Process adequately address the condition of the transmission system assets and support the O&MA and Capital expenditures for 2011/12?

Ref: Exhibit A-12-5 Investment Prioritization Process

Page 10 discusses the investment prioritization. Lines 9-10 of the exhibit contain the following statement:

"Particular attention and challenge is given to the proposed Minimum level of investment, given its significance."

At the other end of the scale, Level 2 investments presumably represent the highest cost to ratepayers. Please describe the level of attention and challenge accorded level 2 investments that ensures ratepayers are not unduly burdened.

Response

This statement of attention and challenge associated with the Minimum level of investment is in reference to the level of risk and sustainability of a Minimum level of investment (please see Exhibit A, Tab 12, Schedule 5, page 5, lines 8-10 to page 6, lines 1-10). All levels of investment are given comprehensive attention and challenge by senior management as part of the investment planning process. The Minimum level is of particular concern to the extent that it represents the critical tipping point in the risk based prioritization methodology. Underestimating the investment required to maintain a Minimum level drives the risk into the Red Zone of Unacceptable Risk, a level that Hydro One cannot tolerate.

In terms of ratepayer impact, all levels of investment, including level 2 investments, are accorded full attention through the prioritization process, which includes the Senior Management review that takes into consideration the impact on customer rates (please see Exhibit A, Tab 12, Schedule 4, Page 3, lines 1-7).

Energy Probe INTERROGATORY #68 List 1

Interrogatory

Issue 4.6

Does Hydro One's Asset Condition Assessment information and Investment Planning Process adequately address the condition of the transmission system assets and support the O&MA and Capital expenditures for 2011/12?

Ref: Exhibit A, Tab 13, Schedule 1 – Transmission Business Performance

Page 3 of the exhibit discusses safety performance. At lines 3-5 the following statement appears:

“The Company focuses on two leading indicators which are Serious Lost Time Incidents and Serious Incidents. Table 1 shows Hydro One's performance for these indicators since 2005.”

Table 1 shows performance for “Serious lost time injuries” and “Lost time injuries”. These categories do not appear to be the same as “Serious lost time incidents” and “Serious Incidents”. Please explain.

Response

“Serious Lost Time Incidents” is referred to as “Serious Lost time Injuries” in the table. “Lost Time Injuries” in the table is the rate of Lost Time injuries per 200,000 hours worked.

“Serious Incidents” are high risk incidents which include electrical incidents, falls to a different level, preventable motor vehicle incidents, falling objects, incidents involving work equipment and asset equipment failure.

Energy Probe INTERROGATORY #69 List 1

Interrogatory

Issue 4.6

Does Hydro One's Asset Condition Assessment information and Investment Planning Process adequately address the condition of the transmission system assets and support the O&MA and Capital expenditures for 2011/12?

Ref: Exhibit A, Tab 13, Schedule 1 – Transmission Business Performance

Lines 19-21 of Page 3 explain the distinction between "Serious lost time injuries" and "Lost time injuries" as follows:

"Lost Time Injuries are the number of injuries that resulted in a Hydro One staff member having to take time off. Serious Lost Time Injuries refers to incidents resulting from the following six targeted areas that represent the highest potential risk of injury:"

- a) In the table lost time injuries range from 0.5 in 2005 to 0.3 in 2009 whereas serious lost time injuries range from 4 in 2005 to 3 in 2009. Please explain why lost time injuries are less than serious lost time injuries when both appear to result in an employee taking time off ie. shouldn't the lost time injury number be at least as high as the serious lost time injury number?
- b) Please explain why lost time injuries are fractional numbers rather than whole numbers.

Response

- a) Lost time injuries shown in the table are less than serious lost time injuries because the lost time injury number which includes serious and non-serious injuries is a ratio of the number of lost time injuries per 200,000 hours worked, whereas the serious lost time injuries number represents the actual number of serious lost time injuries that occurred in a particular calendar year. Refer to Exhibit I, Tab 5, Schedule 4, question two for additional information.
- b) Lost time injuries numbers are fractional since the measure is a ratio of the Number of Lost Time Injuries per 200,000 hours worked. For example, in 2009:

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Tab 2

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1 Number of lost time injuries = 22

2 Number of hours worked = 16,463,660

3 Number of lost time injuries per 200,000 hours worked = $\frac{22}{(16,463,660 / 200,000)}$

4 = 0.3 lost time injuries per 200,000 hours worked.

Energy Probe INTERROGATORY #70 List 1

Interrogatory

Issue 4.6

Does Hydro One's Asset Condition Assessment information and Investment Planning Process adequately address the condition of the transmission system assets and support the O&MA and Capital expenditures for 2011/12?

Ref: Exhibit A, Tab 13, Schedule 1 – Transmission Business Performance

Page 5 of the exhibit discusses customer satisfaction measurement. Figure 2 shows major customer and generator satisfaction over the period 2002 to 2009. At lines 16-19 the statement is made that:

“Hydro One staff are following up with those customers that indicated that they were either neutral or dissatisfied in order to gain specific feedback that will lead to ways of improving performance.”

- a) Is this the first time that HONI staff have followed up with neutral or dissatisfied customers?
- b) If yes, why was this not undertaken each year the survey was conducted?
- c) If no, please provide a synopsis of the reasons offered by customers in previous survey follow-ups for their dissatisfaction.
- d) Generators appear to be less satisfied with HONI performance than other major customers. Please explain the reasons why.

Response

- a) After HONI received results from the first surveys, a decision was made to have each Account Executive follow up with dissatisfied and neutral customers to ascertain the reasons and work with each customer to resolve any issues that are identified. This process continues to be performed after each survey is completed.
- b) No
- c) Earlier surveys identified customer dissatisfaction with reliability, power quality and access to information from Hydro One. More recent surveys reflect the economics of the time and issues include cost of power, better planning of outages, financial management, and bureaucracy.

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Tab 2

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- 1 d) Generators specifically are most concerned with planned outages as any interruption
- 2 of service is a potential loss of revenue, whereas other major customers have some
- 3 flexibility with their work programs to accommodate planned interruptions.
- 4 Generators wish to be offline on a very limited basis and HONI works closely with
- 5 generators to ensure we minimize the number of and length of the outages to make
- 6 the transmission system available to them as much as possible.

Energy Probe INTERROGATORY #71 List 1

Interrogatory

Issue 4.6

Does Hydro One's Asset Condition Assessment information and Investment Planning Process adequately address the condition of the transmission system assets and support the O&MA and Capital expenditures for 2011/12?

Ref: Exhibit A, Tab 13, Schedule 1 – Transmission Business Performance

Page 12 of the exhibit provides a summary of delivery point analysis comparing HONI performance to USA transmission utilities per the SGS 2009 study. Comparing to the SGS 2008 study filed in evidence in EB-2008-0272 as Exhibit A-15-1 Page 13, HONI performance has declined in many categories, particularly in the 230 kV system.

- a) Please provide an analysis of the reasons for the decline in performance of the 230 kV system
- b) Performance of the 115 kV system also declined from the 2008 study. Please provide an analysis of the reasons for that decline in performance.

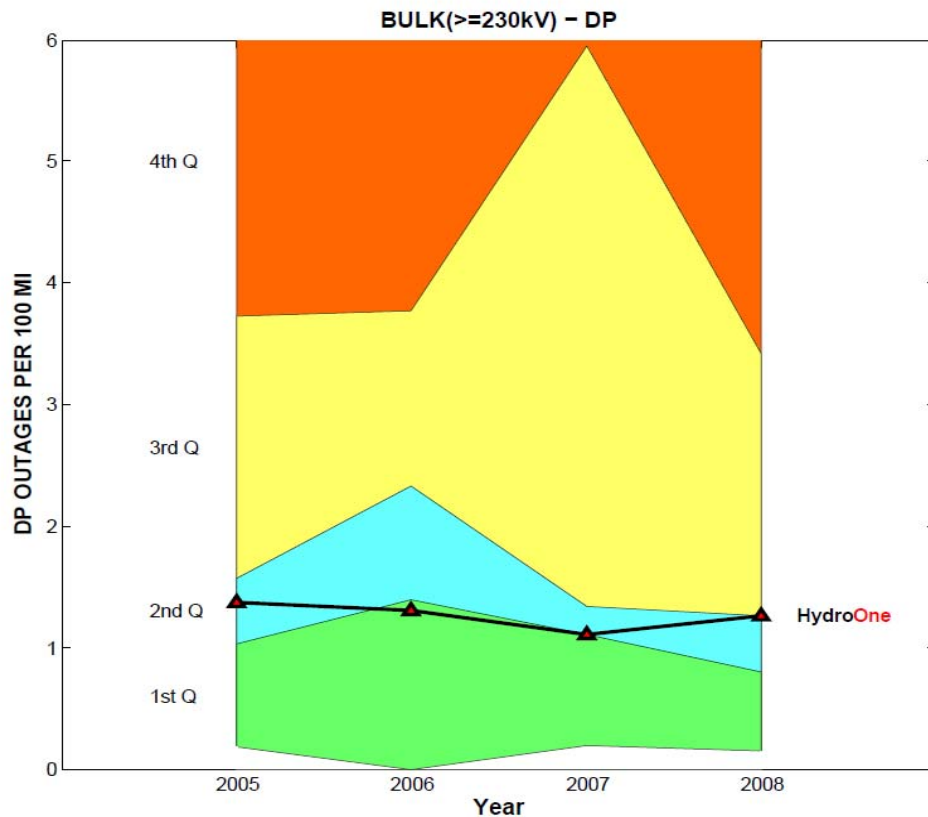
Response

The results provided in Table 3 of the referenced exhibit are relative comparisons with other transmission utility participants in the study for that particular study year. The study is conducted independently each year. The participating utilities in this part of the study are also subject to change. Therefore, the results as presented in Table 3 cannot be compared directly from one study year to another to imply a trend. An analysis was conducted for the measure DP Outages per 100 mi to illustrate this point.

- a) The 230kV system experienced a slightly higher number of delivery point interruptions in 2008 than in 2007 with foreign interference type events and equipment failure events. However, the relative shift of this performance measure referenced in the question (shift from Q1 to Q2/Q3 position) appears to be greater than Hydro One's absolute performance. This quartile performance shift has more to do with the change in relative performance within the study. An analysis was conducted for the measure DP Outages per 100 mi to illustrate this point in Figure 1 below. In Figure 1 below, the absolute performance of Hydro One shown by the triangle points and connecting line is relatively stable through years 2005-2008. However, Hydro One's position within the quartile bands has shifted from Q1 in 2006 and 2007 to Q2/Q3 threshold in 2008. The quartile bands represent composite

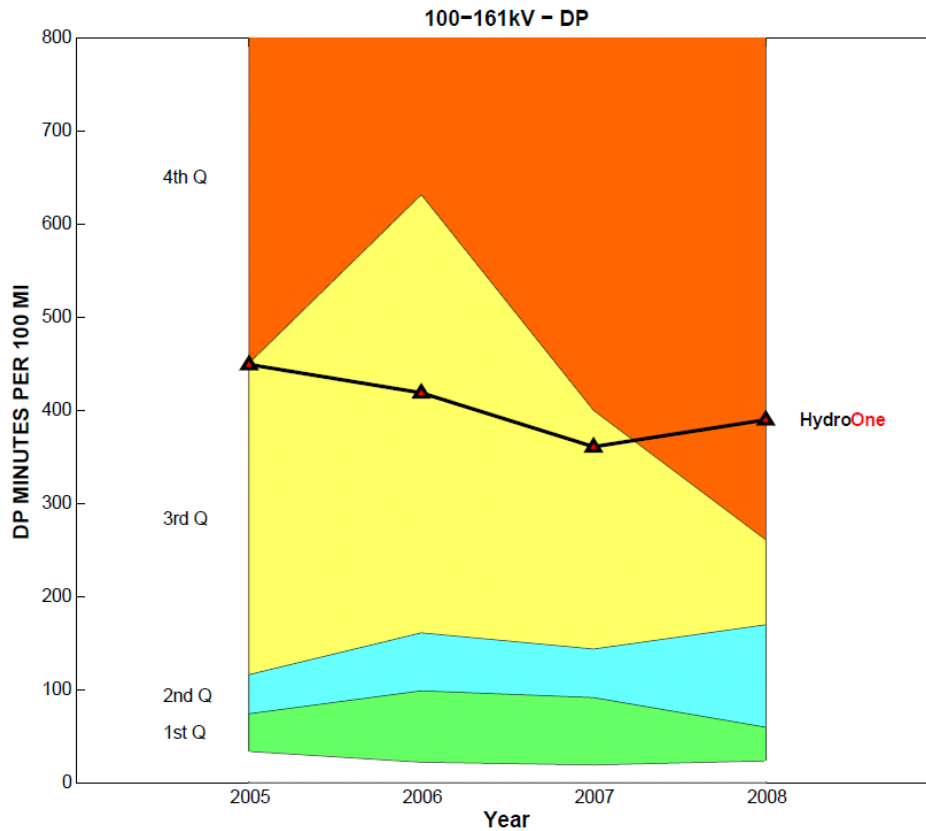
performance of the utilities within the study. Hydro One's absolute performance through this period has changed very little and is more the result of natural year to year variations.

**Figure 1 – Delivery Point Outages per 100 miles
 for Delivery Points Served by $\geq 230\text{kV}$
 (Scale of the graph selected to show the area of interest)**



b) In 2008, the 115kV system experienced slightly longer delivery point interruption durations due to equipment repairs than had occurred in 2007. The total duration of equipment typically varies from year to year since there are many factors that affect equipment repair time such as the extent of repair required, location and access to repair, delays caused by inclement weather conditions. The same principle as described above in a) also applies to the 115kV result. The quartile performance shift has more to do with the change in relative performance within the study. Note in Figure 2 below that the absolute performance of Hydro One shown by the triangle points and connecting line is relatively stable through years 2005-2008. However, Hydro One's position within the quartile bands has shifted from Q3 in 2006 and 2007 to Q4 threshold in 2008. The quartile bands represent composite performance of the utilities within the study. Hydro One's absolute performance through this period has changed very little and is more the result of natural year to year variations.

**Figure 2 – Delivery Point Outages per 100 miles
for Delivery Points Served by 100-161kV
(Scale of the graph selected to show the area of interest)**



As for Hydro One's relative position among the benchmarking study participants, it has been stated in both exhibits (EB-2008-0272 as Exhibit A, Tab 15, Schedule 1 and EB-2010-0002 Exhibit A, Tab 13, Schedule 1), "... the results for Hydro One's 115kV system are expected due to the nature of this system, which is typically through remote geographic locations, with longer radial circuits than most of its comparator transmission companies." Table 1 below provides the mean line length of transmission companies with Delivery Points served by 100-161kV to help demonstrate this point.

**Table 1 – Mean Line Length of Transmission Companies with
Delivery Points Served by 100 – 161kV**

		Mean Line Length (miles)
Company	Company #	100 -161 kV
	2	40.13
Hydro One Networks	1	30.31
	11	24.50
	19	21.05
	8	20.19
	12	16.84
	10	16.41
	13	15.90
	7	15.60
	16	15.18
	3	14.75
	17	14.19
	5	13.68
	9	13.31
	14	13.26
	4	12.22
	15	12.16
	6	11.64
	18	8.77

Hydro One is exploring ways to establish better comparisons by taking into account factors such as similar network structure and density, line length/exposure, and regional weather conditions.

Energy Probe INTERROGATORY #72 List 1

Interrogatory

Issue 9.1

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

Ref: Exhibit A, Tab 11, Schedule 4, Page 10 – East-West Tie Expansion

- a) Please provide details on the current status of the project. Is the project on schedule? If not, what is the current expected in-service date for this project?
- b) How much of the proposed budget has been spent to date? Is the project on budget?

Response

- a) Development work has commenced for this project. As explained in Exhibit I, Tab 1, Schedule 98, this development work is now suspended.
- b) As of June 30, 2010, \$268,952 has been spent on development of this project. This project is currently on hold. No capital expenditures have been made to date.

Energy Probe INTERROGATORY #73 List 1

Interrogatory

Issue 9.1

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

Ref: Exhibit A, Tab 11, Schedule 4, Page 11 – Transmission Reinforcement West of London (formerly London & Sarnia)

- a) Please provide details on the current status of the project. Is the project on schedule? If not, what is the current expected in-service date for this project?
- b) How much of the proposed budget has been spent to date? Is the project on budget?

Response

- a) Development work has commenced for this project. As explained in Exhibit I, Tab 1, Schedule 98 this development work is now suspended.
- b) As of June 30, 2010, \$495,060 has been spent on the development of this project. This project is currently on hold. No capital expenditures have been made to date.

Energy Probe INTERROGATORY #74 List 1

Interrogatory

Issue 9.1

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

Ref: Exhibit A, Tab 11, Schedule 4, Page 12 – North-South Transmission Expansion

- a) Please provide details on the current status of the project. Is the project on schedule? If not, what is the current expected in-service date for this project?
- b) How much of the proposed budget has been spent to date? Is the project on budget?

Response

- a) Development work has commenced for this project. As explained in Exhibit I, Tab 1, Schedule 98, this development work is now suspended.
- b) As of June 30, 2010, \$595,010 has been spent on the development of this project. This project is currently on hold. No capital expenditures have been made to date.

Energy Probe INTERROGATORY #75 List 1

Interrogatory

Issue 9.1

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

Ref: Exhibit A, Tab 11, Schedule 4, Page 13 – Manitoulin Island Enabler

- a) Please provide details on the current status of the project. Is the project on schedule? If not, what is the current expected in-service date for this project?
- b) How much of the proposed budget has been spent to date? Is the project on budget?

Response

- a) Development work has commenced for this project. As explained in Exhibit I, Tab 1, Schedule 98, this development work is now suspended.
- b) As of June 30, 2010, \$305,098 has been spent on the development of this project. This project is currently on hold. No capital expenditures have been made to date..

Energy Probe INTERROGATORY #76 List 1

Interrogatory

Issue 9.1

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

Ref: Exhibit A, Tab 11, Schedule 4, Page 14 – Algoma & Sudbury Transmission Expansion

- a) Please provide details on the current status of the project. Is the project on schedule? If not, what is the current expected in-service date for this project?
- b) How much of the proposed budget has been spent to date? Is the project on budget?

Response

- a) Development work has commenced for this project. As explained in Exhibit I, Tab 1, Schedule 98, this development work is now suspended.
- b) As of June 30, 2010, \$438,317 has been spent on the development of this project. This project is currently on hold. No capital expenditures have been made to date.

Energy Probe INTERROGATORY #77 List 1

Interrogatory

Issue 9.1

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

Ref: Exhibit A, Tab 11, Schedule 4, Page 15 – Goderich and Huron South Area Enablers

- a) Please provide details on the current status of the project. Is the project on schedule? If not, what is the current expected in-service date for this project?
- b) How much of the proposed budget has been spent to date? Is the project on budget?

Response

- a) Development work has commenced for this project. As explained in Exhibit I, Tab 1, Schedule 98, this development work is now suspended..
- b) As of June 30, 2010, \$152,370 has been spent on the development of this project. This project is currently on hold. No capital expenditures have been made to date.

Energy Probe INTERROGATORY #78 List 1

Interrogatory

Issue 9.1

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

Ref: Exhibit A, Tab 11, Schedule 4, Page 15 – Northwest Transmission Reinforcement

- a) Please provide details on the current status of the project. Is the project on schedule? If not, what is the current expected in-service date for this project?
- b) How much of the proposed budget has been spent to date? Is the project on budget?

Response

- a) Development work has commenced for this project. As explained in Exhibit I, Tab 1, Schedule 98, this development work is now suspended.
- b) As of June 30, 2010, \$2,235,001 has been spent on the development of this project. This project is currently on hold. No capital expenditures have been made to date..

Energy Probe INTERROGATORY #79 List 1

Interrogatory

Issue 9.2

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

Ref: Exhibit A, Tab 11, Schedule 5 – Accelerated Cost Recovery

Ref: Exhibit A, Tab 11, Schedule 5 – Accelerated Cost Recovery

Preamble

This exhibit proposes that the Bruce x Milton transmission reinforcement project be approved for accelerated cost recovery per the “*Report of the Board: The Regulatory Treatment of Infrastructure Investment in connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario*” issued January 10, 2010.

On Page 4 of the exhibit, reference is made in lines 7-10 to “300 MW’s of wind and nuclear generation” that may be connected to the new line. HONI’s leave to construct application referenced a need to accommodate 3100 MW of new generation as the driver for the line (see Board decision in EB-2007-0050 Page 10).

Is the 300 MW reference a typographical error? If not, please explain why it is so different from the forecast of 3100 MW in the leave to construct application.

Response

Yes, it was a typographical error. It should have read 3100MW.

Energy Probe INTERROGATORY #80 List 1

Interrogatory

Issue 9.2

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

Ref: Exhibit A, Tab 11, Schedule 5 – Accelerated Cost Recovery

Ref: Exhibit A, Tab 11, Schedule 5 – Accelerated Cost Recovery

Preamble

This exhibit proposes that the Bruce x Milton transmission reinforcement project be approved for accelerated cost recovery per the *“Report of the Board: The Regulatory Treatment of Infrastructure Investment in connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario”* issued January 10, 2010.

On Page 5 of the exhibit part of the project need is attributed to 1500 MW of additional nuclear generation that is forecast to become available at Bruce Power. In the *“Report of the Board: The Regulatory Treatment of Infrastructure Investment in connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario”* the Board stated on Page 13 that “The Board is of the view therefore that alternative mechanisms should be available in appropriate cases in relation to Green Energy Act related investments.”

- a) Please explain how accommodating nuclear generation on a transmission line qualifies as a Green Energy Act related investment.
- b) Why should the Board allow accelerated cost recovery for the entire CWIP for the project when about 50% of the line capacity is devoted to accommodating non Green Energy Act generation?

Response

- a) Hydro One is not stating that is the case in the exhibit.
- b) Please reference Exhibit I, Tab 1, Schedule 122 for further information on why approval for the accelerated cost recovery for CWIP should be granted, in addition to the reasons Hydro One states in the exhibit.

Energy Probe INTERROGATORY #81 List 1

Interrogatory

Issue 9.2

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

Ref: Exhibit A, Tab 11, Schedule 5 – Accelerated Cost Recovery

Ref: Exhibit A, Tab 11, Schedule 5 – Accelerated Cost Recovery

Preamble

This exhibit proposes that the Bruce x Milton transmission reinforcement project be approved for accelerated cost recovery per the “*Report of the Board: The Regulatory Treatment of Infrastructure Investment in connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario*” issued January 10, 2010.

Please provide revised table 3 on Page 4 of Exhibit E1-1-6 and revised table 5 on Page 6 of Exhibit E1-1-6 assuming the following scenarios:

- a) None of the Bruce x Milton CWIP is included in rate base on an accelerated basis.
- b) Only 50 % of the Bruce x Milton CWIP is included in rate base on an accelerated basis.

Response

- a) Provided below are revised Tables 3 and 5 of Exhibit E1, Tab 1, Schedule 1 (note reference in question to Exhibit E1, Tab 1, Schedule 6 is incorrect) assuming none of the Bruce to Milton CWIP is included in rate base on an accelerated basis:

Table 3 – 0% BxM CWIP Included
Components of Change to Rates Revenue Requirement
2010¹ vs. 2011

Description	Amount (\$M)
Impact of increased rate base	70.4
<i>Normal Rate Base Growth</i>	70.4
<i>Bruce X Milton</i>	0.0
Increased return on equity	55.9
Increased cost of debt	6.9
Change in Taxes	1.3
Change in OM&A ²	(1.1)
Impact of other changes	11.1
<i>Export Credit</i>	1.9
<i>LVSG</i>	1.0
<i>Other Cost Charges</i>	10.3
<i>Miscellaneous</i>	(2.1)
Total change	144.5

¹ 2010 Amounts as per Hydro One Transmission's 2010 Revenue Requirement and Charge Determinants for EB-2008-0272

² Net of External Revenue

Table 5 - 0% BxM CWIP Included
Components of Change to Rates Revenue Requirement:
2011 vs. 2012

Description	Amount (\$M)
Impact of increased rate base	107.7
<i>Normal Rate Base Growth</i>	79.4
<i>Bruce X Milton</i>	28.4
Increased OM&A ¹	20.0
Increased return on equity	8.8
Increased cost of debt	2.1
Impact of lower tax rates	(12.8)
Impact of other changes	13.5
<i>Export Credit</i>	(0.1)
<i>LVSG</i>	0.7
<i>Other Cost Charges</i>	12.6
<i>Miscellaneous</i>	0.2
Total change	139.3

¹ Net of External Revenue

- b) Provided below are revised tables 3 and 5 of Exhibit E1, Tab 1, Schedule assuming 50% of the Bruce to Milton CWIP is included in rate base on an accelerated basis:

Table 3 – 50% BxM CWIP Included
Components of Change to Rates Revenue Requirement
2010² vs. 2011

Description	Amount (\$M)
Impact of increased rate base	92.9
<i>Normal Rate Base Growth</i>	<i>70.1</i>
<i>Bruce X Milton</i>	<i>22.8</i>
Increased return on equity	55.9
Increased cost of debt	6.9
Change in Taxes	0.7
Change in OM&A ²	(1.1)
Impact of other changes	11.1
<i>Export Credit</i>	<i>1.9</i>
<i>LVSG</i>	<i>1.0</i>
<i>Other Cost Charges</i>	<i>10.3</i>
<i>Miscellaneous</i>	<i>(2.1)</i>
Total change	166.3

¹ 2010 Amounts as per Hydro One Transmission's 2010 Revenue Requirement and Charge Determinants for EB-2008-0272

² Net of External Revenue

Table 5 - 50% BxM CWIP Included
Components of Change to Rates Revenue Requirement:
2011 vs. 2012

Description	Amount (\$M)
Impact of increased rate base	99.6
<i>Normal Rate Base Growth</i>	<i>79.1</i>
<i>Bruce X Milton</i>	<i>20.6</i>
Increased OM&A ¹	20.0
Increased return on equity	9.0
Increased cost of debt	2.1
Impact of lower tax rates	(13.7)
Impact of other changes	13.5
<i>Export Credit</i>	<i>(0.1)</i>
<i>LVSG</i>	<i>0.7</i>
<i>Other Cost Charges</i>	<i>12.6</i>
<i>Miscellaneous</i>	<i>0.2</i>
Total change	130.5

¹ Net of External Revenue

Energy Probe INTERROGATORY #82 List 1

Interrogatory

Issue 9.2

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

Ref: Exhibit A, Tab 11, Schedule 5 – Accelerated Cost Recovery

Ref: Exhibit A, Tab 11, Schedule 5 – Accelerated Cost Recovery

Preamble

This exhibit proposes that the Bruce x Milton transmission reinforcement project be approved for accelerated cost recovery per the “*Report of the Board: The Regulatory Treatment of Infrastructure Investment in connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario*” issued January 10, 2010.

On Page 16 of the “*Report of the Board: The Regulatory Treatment of Infrastructure Investment in connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario*” the Board makes provision for monitoring of project progress in the following statement:

“To mitigate concerns that CWIP may shift the risks of plant construction to the ratepayer, the Board may monitor project progress and whether a utility is meeting its milestones. For example, the Board may require a utility to propose metrics and status reports in its application for its project/plan to measure progress”.

Does HONI propose any metrics and/or status reports for the Bruce x Milton project to allow the Board to measure progress on the project? If yes, please describe them. If no, please explain why HONI does not think they are necessary.

Response

Please see the response in Exhibit I, Tab1, Schedule 125.

Energy Probe INTERROGATORY #83 List 1

Interrogatory

Issue 9.2

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

Ref: Exhibit A, Tab 11, Schedule 5 – Accelerated Cost Recovery

Ref: Exhibit A, Tab 11, Schedule 5 – Accelerated Cost Recovery

Preamble

This exhibit proposes that the Bruce x Milton transmission reinforcement project be approved for accelerated cost recovery per the “*Report of the Board: The Regulatory Treatment of Infrastructure Investment in connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario*” issued January 10, 2010.

On Page 5 of Exhibit A-11-5, reference is made to the risks involved in the Bruce x Milton project that might meet the requirements of the Board for accelerated cost recovery. Lines 25-27 describe the risk as:

“Specifically, the primary risk is further delays in project completion. The in-service date has already been delayed one year past its original date of 2011 due to approval delays”.

- a) Please provide a copy of the original detailed project schedule.
- b) Please describe how the original in service date was arrived at.
- c) What potential delays were allowed for in the original in service date?
- d) How much time was allowed in the original project schedule for the Niagara Escarpment Commission permit referred to on line 28 of Page 5? How much of that time has been consumed to date?
- e) How much time was allowed in the original project schedule for the OEB expropriation approval referred to on line 28 of Page 5 and line 1 of Page 6 of the exhibit? How much of that time has been consumed to date.

Response

a) Please see Attachment 1.

b) Hydro One relied on experience with similar projects to produce the original schedule (provided in (a) above) and determine the original targeted in-service date. This date

1 represented the earliest achievable date by which the line could be built, taking into
2 account a number of factors, including:

- 3 1. Allowance for public consultation
- 4 2. Allowance for project planning approval processes (e.g., EA, s.92)
- 5 3. Allowance for property rights acquisition (voluntary settlements as well as
- 6 rights acquired through the expropriation process)
- 7 4. Allowance to complete detailed engineering and materials procurement
- 8 5. Allowance to construct and commission the new line

9
10 Note that the schedule contained in (a) above assumed that certain approval
11 processes, such as EA and Section 92 approval, could be run in parallel and that there
12 were no significant delays throughout the process.

13
14 c) The original project schedule included some contingency for the activities listed
15 under (b) above, based on past experience with similar projects. However, the
16 schedule did not allow for potential significant delays.

17
18 d) Please see the original project schedule provided for (a) above. Hydro One allowed
19 that same amount of time to obtain the Niagara Escarpment Commission permit as
20 was allowed to obtain EA approval. A Notice of Decision granting a permit to Hydro
21 One was issued by the NEC on October 16, 2009. There was subsequently an appeal
22 for which an oral hearing was concluded on April 6, 2010 and Hydro One is awaiting
23 a decision.

24
25 e) Please refer to the schedule provided in response to part (a). Approximately 7 months
26 was estimated in the original project schedule for the OEB process to obtain approval
27 of expropriation under section 99(1) of the *OEB Act, 1998*.

28
29 As stated in the response to Board Staff Interrogatory 121, Exhibit I, Tab 1, Schedule
30 121, part (a), Hydro One filed an application with the Board on February 26, 2010, to
31 expropriate certain interests in land required for the Bruce to Milton project.
32 Approximately five and a half months have elapsed since the application was filed.

1

2

TABLE SHOWING PROJECT SCHEDULE

1

TABLE SHOWING PROJECT SCHEDULE

TASK	START	FINISH
Submit Section 92 Leave to Construct Application to OEB		March 2007
Submit Section 98 Early Access Application to OEB		March 2007
Initiate landowner discussions		April 2007
Obtain Section 92 Approval		October 2007
Submit Section 99 Expropriation Application to OEB		December 2007
Obtain Expropriation Approval from OEB		June 2008
Obtain EA Approval		September 2008
Register Plans under Expropriation Act		September 2008
Obtain Access to Property under Expropriation Act		December 2008
STATIONS		
Detailed Engineering	November 2006	January 2011
Tender & Award Major Station Equipment	October 2008	May 2009
Receive Major Station Equipment	June 2009	January 2010
Construction (Bruce "A" and "B")	May 2009	June 2011
Construction (Milton SS)	October 2008	July 2011
Commissioning	January 2010	September 2011
LINES		
Detailed Engineering	November 2006	April 2011
Tender & Award Structural Steel	October 2007	November 2008
Receive Structural Steel	May 2009	May 2010
Construction	January 2009*	September 2011
Restoration	April 2011	May 2012
Project In-Service		December 2011

- 2 * Construction on publicly owned land to start in October 2008, after EA and OEB
3 approvals are received.

Energy Probe INTERROGATORY #84 List 1

Interrogatory

Issue 9.2

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

Ref: Exhibit A, Tab 11, Schedule 5 – Accelerated Cost Recovery

Ref: Exhibit A, Tab 11, Schedule 5 – Accelerated Cost Recovery

Preamble

This exhibit proposes that the Bruce x Milton transmission reinforcement project be approved for accelerated cost recovery per the “*Report of the Board: The Regulatory Treatment of Infrastructure Investment in connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario*” issued January 10, 2010.

On Page 6 of Exhibit A-11-5 additional risks for delay are identified at lines 4-7.

- a) What allowance was made in the original schedule for weather delays? How are weather delays measured? How much of the original weather delay allowance has been consumed to date?
- b) What allowance was made in the original schedule for 3rd party interventions? How much of the original intervention allowance has been consumed to date?
- c) What allowance for unforeseen construction delays was made in the original schedule? How much of the allowance for construction delays has been consumed to date? What were the reasons for those delays?

Response

a) Weather delays occur in five forms: rain, snow, heat, cold and wind. As part of the estimating process, these are allocated 6% additional time. For a project of 30-months duration such as this, 8-weeks of weather delays, for the two winter work seasons, are factored into the construction schedule. For building in the area of the Bruce Peninsula, this is not unreasonable. During the first 4-months the project has experienced five days of weather related delays.

b) No allowance was made for 3rd party interventions. These are considered risk items and will be addressed as the risk materializes.

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Exhibit I

Tab 2

Schedule 84

Page 2 of 2

- 1 c) As part of the construction estimating process, an 8% schedule float (10-weeks) is
- 2 added to uninterrupted construction time, assuming ideal working conditions. This
- 3 does not include contingency for weather related items. Risk elements include
- 4 unforeseen ground and sub-surface conditions. To date, foundation production on
- 5 one out of four crews is delayed approximately 15% (2-weeks) due to difficult soil
- 6 conditions during auger operations.

Energy Probe INTERROGATORY #85 List 1

Interrogatory

Issue 9.2

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

Ref: Exhibit A, Tab 11, Schedule 5 – Accelerated Cost Recovery

Ref: Exhibit A, Tab 11, Schedule 5 – Accelerated Cost Recovery

Preamble

This exhibit proposes that the Bruce x Milton transmission reinforcement project be approved for accelerated cost recovery per the “*Report of the Board: The Regulatory Treatment of Infrastructure Investment in connection with the Rate-regulated Activities of Distributors and Transmitters in Ontario*” issued January 10, 2010.

At lines 21-24 on Page 6 the following statement is made:

“And finally, with this accelerated cost recovery mechanism, the overall cost of the BxM transmission line project will decline from \$753 million to \$695 million, thus lowering the overall cost to ratepayers’ ratepayers’ over the life of the facility.”

- a) Please describe how the reduced cost of \$695 M was arrived at.
- b) How has the additional return on equity and debt that would result from including CWIP in rate base under the accelerated cost recovery mechanism been accounted for in the claim that the overall cost to ratepayers will be lower.

Response

- a) The reduced project cost is based on stopping the incurrence of AFUDC at the end of 2010, on the assumption that the CWIP in rate base treatment would then take effect going forward.
- b) Please see Exhibit I, Tab 1, Schedule 122. There is a small cost difference between the two approaches (CWIP in rate base or standard method) based on the analysis shown there. The CWIP in rate base method includes the effect of incorporating return on equity as part of the pre-in-service financing cost of the project, instead of AFUDC.