#### EB-2010-0002

### **Ontario Energy Board**

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

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

#### INTERROGATORIES OF ENERGY PROBE RESEARCH FOUNDATION ("ENERGY PROBE")

July 28, 2010

#### ONTARIO HYDRO NETWORKS INC. CHANGES TO THE UNIFORM PROVINCIAL TRANSMISSION RATES EB-2010-0002

#### ENERGY PROBE RESEARCH FOUNDATION INTERROGATORIES

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

Interrogatory #1

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?

**Interrogatory #2** 

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?

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?

**Interrogatory #4** 

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?

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** 

**Interrogatory # 5** 

Table 1 on Page 2 of the exhibit shows the standard labour rate derivation for theRegional 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.

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?

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

#### **Interrogatory #7**

#### 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?

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.

#### **Interrogatory #9**

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.

#### **Interrogatory #10**

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?

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.

#### Interrogatory #12

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.

#### Interrogatory #13

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.

#### Interrogatory #14

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.

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

Interrogatory #15

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.

**Interrogatory #16** 

Table 1 on Page 3 of the exhibit presents a summary of Operations OM&A. Thecategories 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.

Interrogatory # 17

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.

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?

Interrogatory # 19

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?

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

Interrogatory # 20

Table 1 on Page 3 of the exhibit shows "Allocated Transmission Shared Services andother OM&A Costs." The comparable table in EB-2008-0272 is shown on Page 3 ofExhibit 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.

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

Interrogatory # 21

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?

#### **Interrogatory # 22**

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.

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.

**Interrogatory #24** 

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.

Interrogatory # 25

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

#### Interrogatory # 26

#### 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.

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

#### Interrogatory # 27

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?

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

#### **Interrogatory #28**

#### 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?

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

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

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

Interrogatory # 30

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?

**Interrogatory #31** 

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?

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

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

Interrogatory # 33

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.

Interrogatory # 34

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.

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.

**Ref: Exhibit C1-3-1 Corporate Staffing** 

**Interrogatory #36** 

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

Interrogatory # 37

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.

**Interrogatory #38** 

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.

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.

#### Interrogatory # 40

#### 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?

**Interrogatory #41** 

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?

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

#### Interrogatory # 42

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?

#### **Interrogatory #43**

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?

#### Interrogatory # 44

 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.

Table 2 on Page 7 of the exhibit presents changes to the Society collectiveagreements over the years. In the April 2008 to March 2013 entry reference is madeto 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.

#### **Interrogatory #46**

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?

#### Interrogatory #47

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.

**Interrogatory #48** 

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.

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?

**Interrogatory # 50** 

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 tradepersons 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.

**Interrogatory # 51** 

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?

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?

#### Interrogatory # 53

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?

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

Interrogatory # 54

Lines 30-31 on Page 3 of the appendix report that the pension plan has a 61<sup>st</sup>

percentile ranking among Canadian pension plans.

- a) Please provide a copy of the ranking of pension plans showing Hydro One's fund at the 61<sup>st</sup> 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.

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

Interrogatory # 55

 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.

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

Interrogatory # 56

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?

**Interrogatory # 57** 

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.

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?

**Interrogatory # 59** 

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?

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

Interrogatory # 60

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?

**Interrogatory # 61** 

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?

#### Interrogatory # 62

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?

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?

**Interrogatory #64** 

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.

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

**Interrogatory #65** 

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?

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

Interrogatory # 66

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?

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** 

Interrogatory # 67

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.

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

Interrogatory # 68

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.

**Interrogatory # 69** 

#### 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.

#### Interrogatory # 70

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.

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) Perfomance of the 115 kV system also declined from the 2008 study. Please provide an analysis of the reasons for that decline in performance.

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

**Interrogatory #72** 

- 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?

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

**Interrogatory #73** 

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

Interrogatory #74

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

**Interrogatory #75** 

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

Interrogatory # 76

- 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?

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

**Interrogatory #77** 

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

Interrogatory #78

- 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?

#### 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** 

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.

#### **Interrogatory # 80**

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?

#### **Interrogatory #81**

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.

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.

Interrogatory # 83

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.

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 3<sup>rd</sup> 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?

#### **Interrogatory #85**

#### 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.