September 4, 2012

VIA EMAIL & COURIER

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge St, Suite 2701
Toronto ON M4P 1E4

Dear Ms. Walli:

Board File No. EB-2012-0031 Hydro One Networks
2013-2014 Transmission Rates Application
Energy Probe – Interrogatories to Hydro One

Pursuant to Procedural Order No. 1, Case Timetable, issued July 12, 2012, attached please find the Interrogatories of Energy Probe Research Foundation (Energy Probe) to Hydro One in the EB-2012-0031 proceeding.

Should you require additional information, please do not hesitate to contact me.

Yours truly,

David S. MacIntosh
Case Manager

cc: Anne-Marie Reilly, Hydro One Networks Inc. (By email)
Donald H. Rogers, Rogers Partners LLP (By email)
Roger Higgin, Consultant to Energy Probe (By email)
Peter T. Faye, Counsel to Energy Probe (By email)
Interested Parties (By email)

EB-2012-0031

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 filed by Hydro One Networks Inc. for an Order or Orders approving a transmission revenue requirement and rates and other charges for the transmission of electricity for 2013 and 2014.

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

September 4, 2012

ONTARIO HYDRO NETWORKS INC.
TRANSMISSION REVENUE REQUIREMENT AND RATE HEARING
2013 AND 2014
EB-2012-0031

ENERGY PROBE RESEARCH FOUNDATION
INTERROGATORIES

GENERAL

Issue 2 Is the overall increase in 2013 and 2014 revenue requirement reasonable?

2.0 Energy Probe # 1

Ref: Exhibit A, Tab13, Schedule1, Appendix A, Pages 1-4

a) Please provide a copy of each of the November 2011 and April 2012 Updated Business Plans approved by the Hydro One Board.

b) Please provide a copy of the Business Plan instructions post the Board's December 2011 Decision.

c) Please provide a variance report for 2011 actual and forecast 2012-14 Economics, Interest rates, Labour rates and Payroll Burden that shows the major changes from the Approved Business Plan underpinning Hydro One Networks' 2011/12 Transmission Rate Application.

d) In particular, please provide the details underlying the interest rate forecast (Bond rates).

e) Is Hydro One Networks aware of any more recent projections of inflation and cost escalation for 2011 and 2012? If yes, please provide these.

f) Please provide an update of the interest rate forecast for 2012 -2016 based on the latest edition of Consensus Forecasts.

g) What is the sensitivity of Hydro One Networks' proposed 2013 and 2014 revenue requirements to:

- **A 100 basis point change in forecast interest rates. (Note: Please exclude any impact on ROE or short-term interest rates used in determining the cost of capital)**
- **A 1-cent change in the forecast exchange rate (CDN$ per US$)?**

2.0 Energy Probe # 2

Ref. Exhibit A, Tab 13, Schedule 1, Appendix A – Business Plan Assumptions

Page 1 shows Ontario CPI forecasts are flat at 2%. Labour escalation forecasts on Pages 2 and 3 show forecasts for all categories of about 3% for the bridge and test years.

a) **Why are HONI labour agreements higher than CPI forecasts?**

b) **Given the forecasts, will new labour agreements be pegged to 2% (plus COLA triggers)? If not, why not?**

2.0 Energy Probe # 3

Ref. Exhibit A, Tab 13, Schedule 1, Appendix A – Business Plan Assumptions

Section 5.0 of the appendix shows Incentive Plan forecasts.

a) **Please provide details of the MCP plan.**

b) **Please summarize the agreement(s) that underpin the plan.**

c) **Show how the amount is calculated.**

d) **Please provide the annual costs 2013/2013.**

e) **Is there a similar plan for Senior Management/Executives in 2013/2014? If so please provide similar details?**

2.0 Energy Probe # 4

Ref. Exhibit A, Tab 13, Schedule 1, Appendix

Section 3 d) of the Appendix shows benefit costs rates forecasts. In the footnotes under ** reference is made to "retirement bonus".

a) **What percentage of retiring employees receive the bonus?**

b) **Does the bonus apply to all employee groups?**

c) **How much does the average bonus amount to?**

d) **Does this bonus apply to Inergi employees? If so explain why.**

2.0 Energy Probe # 5

Ref: Exhibit A, Tab 13, 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). Please provide a copy or the key parts of the Inergi MSA that cover the services and costs to be incurred in the two test years.

2.0 Energy Probe # 6

Refs. Exhibit A, Tab 13, Schedule 1, App A &
Exhibit A, Tab 15, Schedule 2, Pages 4-6 &
Exhibit A, Tab 15, Schedule 2, Appendix E

a) **Explain the date(s) and sources of forecasts for CPI, Exchange rates and economic indicators (GDP and Housing Starts).**

b) **Confirm/explain whether the forecasts in the Business Plan and Load forecast are based on the same data (date and sources) and are consistent with those used for the Load Forecast.**

c) **Please provide the latest Consensus forecasts.**

d) **Please compare in Tabular form the economic assumptions for 2012-2014 – (CPI, GDP, Industrial Output, Commercial Floor Space) used by Hydro One Networks with the most recent projections made by the various 3rd party sources Hydro One Networks has relied upon.**

2.0 Energy Probe # 7

Ref. Exhibit A, Tab 2, Schedule 1

a) **Please provide a schedule that shows the proposed bill impacts for 2013 and 2014.**

b) **Please provide a schedule that shows the impact on a typical residential LDC customer consuming 500 and 1000 kWh/month.**

LOAD FORECAST AND REVENUE FORECAST

Issue 3 Is the load forecast and methodology appropriate and have the impacts of Conservation and Demand Management initiatives been suitably reflected?

3.0 Energy Probe # 8

Ref: Exhibit A, Tab 15, Schedule 2, Page 9 &
Exhibit A, Tab15, Schedule 2, Attachment 1 A.1, Tables 4-9

a) With respect to Page 9, Table 2 please provide the load forecast as filed in EB-2010-0002 for 2011 and please provide:
- **i) 2011 actual load and**
- **ii) CDM impact for 2011-2012.YTD plus estimate.**

b) Please provide a copy of OPAs latest CDM projections for the test years.

c) Are Hydro One's projected CDM impacts consistent with the OPA's latest outlook? In responding please provide details for the OPA CDM projections for each year through to 2015, contrast/compare with Hydro One's CDM impact forecast for 2011 through 2014 and explain any differences.

d) What other variables in the econometric forecast are affected by CDM reductions? Please list and discuss if the models are rerun for these effects (loads/demand, line losses etc).

3.0 Energy Probe # 9

Ref: Exhibit A, Tab 15, Schedule 2 &
Exhibit A, Tab 15, Schedule 2, Tables ES1 and Tables A1 4-9 &
Exhibit A, Tab 15, Schedule 2, Table 15

a) Please describe in some detail the methodology used to go from the OPA 2012-2015 data (2,749; 3,292; 4,186; 4,590 MW) to the CDM impacts in ES1.

b) How does Hydro One map the OPA CDM results to its service area and delivery points? Describe the adjustments made to the historic and forecast data.

c) Please outline what historical years' data were used to test each of the CDM forecasting methods.

d) What modeling/tests of the three methods in Table 15 did Hydro One perform and what were the results of the three methods in terms of accuracy of the forecast(s)?

3.0 Energy Probe # 10

Ref: Exhibit A, Tab 15, Schedule 2, Figures 3&4

a) Please discuss how Pearson Airport data are used to derive the individual loads at the delivery points (weighting etc).

b) Are line losses modeled/corrected for in the weather normalization? If not, why not. If so, please describe how this is done.

OPERATIONS MAINTENANCE & ADMINISTRATION COSTS

Issue 5 Are the proposed spending levels for Sustaining, Development and Operations OM&A in 2013 and 2014 appropriate, including consideration of factors such as system reliability and asset condition?

5.0 Energy Probe # 11

Ref: Exhibit C1, Tab 2, Schedule 2, Page 5 - Multi Circuit Delivery Point Interruptions

Figure 2 on Page 5 shows T-SAIFI-mc Contributed by Equipment Failures

a) Please define what the vertical axis "occ./DP/year" stands for.

b) What happened in 2010 to produce the unusually high result?

c) How is the trend line developed?

5.0 Energy Probe # 12

Ref: Exhibit C1, Tab 2, Schedule 2, Page 6

Figure 3 on Page 6 shows T-SAIFI contributed by lines equipment. It is noted at line 7 that there as been a gradual increase over the past five years in the trend of lines equipment contributing to reliability.

a) **Does HONI consider the most recent 5 year trend to be more significant than the 10 year trend? If yes, please explain.**

b) **Has the data or can the data be subjected to statistical analysis to determine the significance of yearly results or longer term trends? If yes, please provide details of the results of the analysis.**

5.0 Energy Probe # 13

Ref: Exhibit C1, Tab 2, Schedule 2, Pages 8-9

Line 32 on Page 8 notes that the test year capital investment for breaker replacement is increasing by 120% of recent historic and bridge years. The chart on Page 9 shows historic average annual replacement numbers of 71 and proposed replacements of 95 which is an increase in numbers replaced of only 33%. Please explain the large increase in unit replacement cost.

5.0 Energy Probe # 14

Ref: Exhibit C1, Tab 2, Schedule 2, Pages 11-13

Line 5 on page 11 states that OCBs last longer (55 years) than other breaker types (40 years). Figure 5 on Page 13 shows OCBs having the lowest forced outage rate of all breakers. Replacement of OCBs appears to be with SF6 breakers. Please explain why, given their longevity and reliability, OCBs should not continue to be the dominant breaker used by Hydro One on its system.

5.0 Energy Probe # 15

Ref: Exhibit C1, Tab 2, Schedule 2, Page 22

Figure 7 on Page 22 shows the condition of the transformer fleet for 2006, 2009 and 2012. Summing the numbers in each year yields 729 in 2006, 718 in 2009 and 719 in 2012. Please explain why the number of transformers declined so much from 2006 levels.

5.0 Energy Probe # 16

Ref: Exhibit C1, Tab 2, Schedule 2, Page 23

Line 11-12 on Page 23 states that the increased number of transformer failures in 2011 is of concern to Hydro One. Figure 9 on Page 24 shows that the number of failures in 2011 was 6 transformers. Two other years in the chart show 5 transformers failed (2003 and 2006) and three other years had 4 failures (2002, 2007, 2008).

a) **How many transformers have failed to date in 2012?**

b) **Was 2011 an unusual year for loading, weather etc that might have contributed to the number of failures?**

c) **How much trend significance should be inferred from the 2011 experience particularly in light of the low number of transformers that failed in the previous two years. (2 in each of 2009 and 2010).**

5.0 Energy Probe # 17

Ref: Exhibit C1, Tab 2, Schedule 2, Page 44

This page describes the replacement of wood pole structures and particularly the need to replace 230 kV Gulfport structures.

a) **Line 19 states that there were 5800 structures of this type and that 2000 remain. Please confirm that this means there are still 2000 structures needing replacement.**

b) **Are these structures just receiving new spar arms or are they being completely replaced with a different structure type?**

5.0 Energy Probe # 18

Ref: Exhibit C1, Tab 2, Schedule 2, Appendix A, Page 7

This page concerns the replacement of Air Blast Breakers and mentions two protection schemes specifically: "breaker and a half" and "breaker and a third".

a) **Please explain what these schemes consist of.**

b) **Are these schemes deployed just on ABCB systems or on all breakers systems?**

5.0 Energy Probe # 19

Ref: Exhibit C1, Tab 2, Schedule 2, Appendix A, Page 13

Page 13 mentions environmental concerns with SF6 gas. Please describe the concerns and how they are managed.

5.0 Energy Probe # 20

Ref: Exhibit C1, Tab 6, Schedule 2, Page 5 and Page 12

This exhibit relates to transport and work equipment costs. Page 5 states that the total fleet comprises about 6700 vehicles and pieces of equipment. Page 12 states that 500 units have been equipped with GPS to track a variety of metrics on vehicle operation.

a) **What is the average cost to equip a vehicle in the fleet with GPS?**

b) **What kinds of vehicles have been equipped with GPS so far?**

c) **What are Hydro One's plans for equipping the rest of the rolling stock part of the fleet?**

d) **Do supervisors have access to real time GPS data for crew management? If yes, please describe the benefits experienced to date. If no, please explain why this would not be a good crew management tool for supervisors.**

5.0 Energy Probe # 21

Ref: Exhibit C1, Tab 6, Schedule 1, Page 14

Lines 1-3 describe equipment utilization factor improvement from 65% in 2001 to 80% in 2011. What criterion is used to determine if a piece of equipment or a vehicle is being utilized?

Issue 6 Are the proposed spending levels for Shared Services and Other O&M in 2013 and 2014 appropriate?

6.0 Energy Probe # 22

Ref: Exhibit C1, Tab 3, Schedule 1, Page 6

This page discusses variances between Board Approved 2012 OM&A expenditures and 2012 projected actuals. The Shared Services and other Costs category in Table 3 shows a variance of $44.6 M.

a) **Line 14 refers to an increase in Cost of Sales for a metering project planned for 2012. Please describe the metering project and specify how much of the variance of $44.6 M is attributable to it.**

b) **Line 15 refers to a lower amount of overhead cost capitalized as another reason for the variance. Please provide a breakdown showing the amount of capital and OM&A in projected actual cost for 2012 compared to Board Approved 2012. How much of the $44.6 M variance is attributable to this cause?**

6.0 Energy Probe # 23

Ref: Exhibit C1, Tab 3, Schedule 1, Page 16

Table 4 on Page 16 shows an increase in supply chain cost from 37.6 M to 45.0 M from 2009 to 2011.

a) **What was the value of material and services procured for 2009 and for 2011?**

b) **Line 6 states that the contract with INERGI was for the "same service levels at a declining price". Please reconcile that statement with the 20% increase in costs referred to in table 4.**

6.0 Energy Probe # 24

Ref. Exhibit C1, Tab 3, Schedule 1, Page 2, Tables 2 and 3

a) **Please provide more detail of the variation in the 2011 Shared Services amount.**

b) Please provide more detail on the major variance in 2012 shared services amount.

c) Explain why Hydro One seems unable to forecast this category of OM&A with similar accuracy to other categories.

d) Why is the 2013/2014 forecast reasonable?

6.0 Energy Probe # 25

Ref: Exhibit A, Tab 8, Schedule 3, Page 6, Table 2 &
Exhibit C1, Tab7, Schedule 1, Tables 1 & 2

a) Please provide a Schedule that uses the data in the first reference and lists the 2011 Board approved to forecast 2014 Shared Services and shows the pricing of the common corporate services and the allocation to affiliates.

b) Reconcile to the costs and allocation in the second reference.

c) Please provide for 2013/2014 a variance report for all material cost changes and allocations from 2012 board approved.

6.0 Energy Probe # 26

Refs. Exhibit C1, Tab 4, Schedule 2, Page 2, Table 1 &
Exhibit C1, Tab 4, Schedule 2, Page 24 - 1.9 Real Estate and Facilities

a) Please provide a version of Table 1 that shows the Board-approved 2012 amounts by category.

b) For 2012 Finance cost increase, please identify the reduction in Inergi fees and provide the net amount saved by ratepayers due to bringing the functions in-house.

c) Please provide more details of the real estate related cost increase in 2012 continuing into 2013

- **i) In house services costs**
- **ii) External contract services costs**
- **iii) Rents/leases**
- **iv) Amounts capitalized**
- **v) Other material costs**

d) Please provide annual office/workspace costs owned and leased 2009-2014.

e) Please provide office/workspace costs per employee (FTE) 2009-2014.

Issue 7 Are the 2013/14 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?

7.0 Energy Probe # 27

Ref: Exhibit A, Tab 17, Schedule 1 - Productivity Initiatives

Figure 1 on Page 2 of the exhibit shows Major Productivity Initiatives undertaken by Hydro One. Consolidation is said to account for $700 M in savings.

a) LDC consolidation is shown with a savings of greater than $100 M. Is this figure net of acquisition cost?

b) How much has Hydro One spent to refurbish and/or bring up to its standards the systems acquired from LDCs? Are the savings net of those costs?

c) How were the savings quantified?

d) Are the duplicate facilities mentioned in line 10, the facilities that were once operated by the LDC that was acquired? If not, please explain what duplicate facilities were eliminated as a result of LDC acquisition.

e) What were the respective asset base values with and without the 89 LDCs acquired?

f) How did these acquisitions assist Hydro One Transmission to reduce its wholesale settlement costs as mentioned in line 12? By how much were those costs reduced?

g) How many staff were acquired from the LDCs that were purchased?

7.0 Energy Probe # 28

Ref: Exhibit A, Tab 17, Schedule 1 - Productivity Initiatives

Figure 1 on Page 2 of the exhibit shows Major Productivity Initiatives undertaken by Hydro One. The Ontario Grid Control Centre is said to have saved over $100 M.

a) **What was the total cost to build, furnish and equip the centre?**

b) **Are the savings net of this cost? If not, please explain why the savings should not be reduced by the cost of the OGCC.**

c) **What were the total staffing numbers before and after the OGCC was opened?**

d) **What is the current approved staff complement of the OGCC?**

e) **How many FTEs did the OGCC employ in 2011?**

7.0 Energy Probe # 29

Ref: Exhibit A, Tab 17, Schedule 1 - Productivity Initiatives

Figure 1 on Page 2 of the exhibit shows Major Productivity Initiatives undertaken by Hydro One. Computer Aided Scheduling and Dispatch is said to have saved over $1 M.

a) **The savings attributed to this system are greater than $1M. How were the savings measured?**

b) **How much did the system cost to implement?**

c) **Are the savings net of the implementation cost?**

d) **Is the system still operational or has it been replaced by a newer system? If the latter, how much did the replacement system cost?**

7.0 Energy Probe # 30

Ref: Exhibit A, Tab 17, Schedule 1 - Productivity Initiatives

Figure 1 on Page 2 of the exhibit shows Major Productivity Initiatives undertaken by Hydro One. Inergi Contract. Savings are greater than $100 M according to Figure 1.

a) **How were the savings measured?**

b) **How many FTEs were saved as a result of this outsourcing?**

7.0 Energy Probe # 31

Ref: Exhibit A, Tab 17, Schedule 1 - Productivity Initiatives

Figure 1 on Page 2 of the exhibit shows Major Productivity Initiatives undertaken by Hydro One. Cornerstone is said to have saved more than $200 M for all four phases according to Figure 1.

a) **What was the total cost of implementing the Cornerstone project?**

b) **Are the savings net of this implementation cost?**

c) **What is the expected life of the cornerstone system?**

d) **What are the annual maintenance costs of the system?**

e) **How was the $400 M of expected savings referred to on page 4 line 5 calculated?**

7.0 Energy Probe # 32

Ref: Exhibit A, Tab 17, Schedule 1 - Productivity Initiatives

Figure 1 on Page 2 of the exhibit shows Major Productivity Initiatives undertaken by Hydro One. Smart Meters savings are greater than $100 M according to Figure 1.

a) **What was the total cost of implementing smart meters?**

b) **Are the savings net of the implementation cost?**

c) **How were the savings calculated and what are they attributable to?**

7.0 Energy Probe # 33

Ref: Exhibit A, Tab 17, Schedule 1 - Productivity Initiatives

Figure 1 on Page 2 of the exhibit shows Major Productivity Initiatives undertaken by Hydro One. Smart Grid savings are greater than $100 M according to Figure 1.

a) **What has been the total cost expended on smart grid initiatives to the end of 2011?**

b) **Is the savings net of those costs?**

c) **How were the savings calculated and what are they attributable to?**

7.0 Energy Probe # 34

Ref: Exhibit A, Tab 17, Schedule 1 - Productivity Initiatives

Figure 1 on Page 2 of the exhibit shows Major Productivity Initiatives undertaken by Hydro One. Lines 8-9 P 1 of the exhibit suggest that the initiatives detailed in the exhibit offset compensation increases.

a) **Is this meant to justify higher than average wages for employees as detailed in the Mercer report or is it intended to highlight overall compensation cost savings resulting from the better systems introduced?**

b) **If the former (i.e. justify higher wage rates) please explain why employees should be paid more because the company has invested in better systems for them to do their work?**

c) **If the latter (i.e. Lower overall compensation costs due to more efficient systems) please explain why customers should pay for the systems but employees should realize the benefits in "increased compensation" (per lines 8-9)**

7.0 Energy Probe # 35

Ref: Exhibit A, Tab 17, Schedule 1, Page 4 - Utility Transformation

Lines 16-18 states that Hydro One helped defray large implementation costs in connection to green energy projects by assisting in the establishment of industry standards.

a) **Please describe the implementation costs that were avoided by Hydro One efforts?**

b) **Is Hydro One suggesting that there would have been no industry standards applicable to connection of green energy projects without its efforts?**

7.0 Energy Probe # 36

Ref: Exhibit A, Tab 17, Schedule 1, Page 4 - Utility Transformation

Lines 20-28 describe the efforts made by Hydro One to implement communications for smart meters in primarily rural locations. Line 26 mentions communications systems able to aggregate over a million meters daily.

a) **Are all of Hydro One's smart meters read daily? If not, how many customers do not have daily reads and are, therefore, not on time of use rates.**

b) **Does Hydro One have a project to implement daily reads for all customers currently not on daily reads? If yes, please describe the timetable for implementing the daily read system.**

7.0 Energy Probe # 37

Ref: Exhibit A, Tab 17, Schedule 1, Page 11

Figure 2 on Page 11 shows a graph of "Incremental Tx Productivity vs Incremental Tx Compensation".

a) **Please explain what "incremental productivity" and "incremental compensation" means and how they were computed.**

b) Why do the incremental productivity and incremental compensation lines decline over the test years if productivity is supposedly improving and compensation costs are increasing?

7.0 Energy Probe # 38

Ref: Exhibit A, Tab 17, Schedule 1, Pages 11-12

Table 3 on Page 12 shows Hydro One performance in a CEA performance study.

a) Please provide a list of the seven participants in the study referred to at lines 17-18 on Page 11.

b) For each of the performance measures please provide the numbers submitted by Hydro One to the CEA for the component parts of the calculation, the source of the numbers, and an explanation of how the calculation for each performance measure was made.

7.0 Energy Probe # 39

Ref: Exhibit A, Tab 17, Schedule 2, Page 9

Table 4 on this page shows targets for a metric defined as "% of Capital and OM&A Per Gross Fixed Asset".

a) How does the Board of directors of Hydro One determine what the target for each year should be?

b) Does the Board have a long term objective for this measure? If yes, please provide it. If not, why not?

7.0 Energy Probe # 40

Ref. Exhibit C1, Tab 3, Schedule1 Corporate Staffing

Please provide a schedule showing total actual and forecast staff numbers for Executive Management, PWU, Society and MCP groups by year from 2009 to 2014.

7.0 Energy Probe # 41

Ref. Exhibit C1, Tab 5, Schedule 2, Attachment 2

a) Please provide the regulatory filing and IRRs from EB-2010-0002 showing the total Compensation for HO 2011 in a similar format as the referenced schedule.

b) Confirm that the 2011 data provided to Mercer as shown in the reference are the same as filed with the Board in the last rate case.

c) If not, please point out any significant differences for 2011- the comparison/benchmarking year- (FTE etc.)

d) What was the weighted average annual compensation cost ($million) in 2011 of HO being 13% above the peer group median?

e) Was Mercer asked to consider Cost of Living per Statistics Canada for province/cities relevant to the peer groups?

7.0 Energy Probe # 42

Ref: Exhibit C1, Tab5, Schedule 2. Attachment 2 &
EB-2010-0002 Exhibit I-4-35, Attachment 1 and 2 &
Exhibit C2, Tab 3, Schedule 1, Tables 1, 2, 3

a) Please provide an updated copy of the Tables provided in the IR response in the second reference.

b) Update the 2011 data to show an actual-Board-Approved comparison and 2012 data to show the latest projection in comparison to Board approved.

c) Please provide the projections for the test years 2013 and 2014.

d) Please provide a comparison table that shows the increases in each category from the 2011 Board- approved data.

e) Please Compare the data by category to the first reference (Mercer)

7.0 Energy Probe # 43

Ref: Exhibit C1, Tab 5, Schedule 2, Page 12

Table 1 on Page 12 shows a comparison of wages between Hydro One and other LDCs. Line 16 notes that the Powerline maintainer position has been used in the comparison although Hydro One uses a different position called Regional Maintainer. Please provide the wage rate of the Regional Maintainer for comparison in the table.

7.0 Energy Probe # 44

Ref: Exhibit C1, Tab 5, Schedule 2, Page 12

Lines 18-21 describe the additional duties of a Regional Line Maintainer that distinguish it from the Powerline Maintainer.

a) **Please describe in more detail the "additional technical, trade and customer relations skills" referred to.**

b) **How did Hydro One determine that other LDC Powerline Maintainers do not act as lead hand, contract monitor or hold work protection? Please provide any documents, studies or surveys conducted to arrive at that conclusion.**

7.0 Energy Probe # 45

Ref: Exhibit C1, Tab 5, Schedule 2, Page 13

Lines 2-6 on Page 13 state that work and skills required at Hydro One are more complex than those required at other LDCs.

a) **Please explain how a rural work setting is more complex than an urban setting.**

b) **What is the basis for the statement that proficiency on overhead, underground and submarine cable is not typical of the PLM role in other LDCs**

7.0 Energy Probe # 46

Ref: Exhibit C1, Tab 5, Schedule 2, Attachment 1 – The Mercer Study

Page 6 refers to weighting of the analysis by organization to ensure that no one organization biased the results of the comparison. Please explain what organization weighting is, how it is computed and what undesirable effects it avoids in the analysis.

7.0 Energy Probe # 47

Ref: Exhibit C1, Tab 5, Schedule 2, Attachment 1 – The Mercer Study

Page 11 refers to recent amendments to pension and benefit plans for new employees. Please compare the major features of the two plans indicating where cost savings are expected and how much on a percentage basis those savings are between the old and new plans.

7.0 Energy Probe # 48

Ref: Exhibit C1, Tab 5, Schedule 2, Attachment 1 – The Mercer Study

Table 5 on Page 13 shows compensation for non-represented staff. Footnote 5 notes that future compensation estimates in the Table assume that all employees in the group are covered by the new pension and benefits programs. The overall affect appears to be 1% (from –17% to –18% of market P50). Is this a valid conclusion to draw from the table?

7.0 Energy Probe # 49

Ref. Exhibit C1, Tab 5, Schedule 3 - Pension Costs

a) **What effect would a 1% increase in return on the plan assets have on pension contributions by the employer?**

b) **Please undertake to file copy of the 2012 Actuarial valuation when available, since this may affect the rest years**

Issue 8 Are the methodologies used to allocate Shared Services and Other O&M costs to the transmission business and to determine the transmission overhead capitalization rate for 2013/14 appropriate?

8.0 Energy Probe # 50

Ref: Exhibit C1, Tab 4, Schedule 2, Page 2, Table 1 &
Exhibit C1, Tab 7, Schedule 1, Page 3, Table 1 and Table 2 &
Exhibit C1, Tab 7, Schedule 1. Attachment 1

One of the difficulties in examining CCF&S costs is the inclusion/exclusion of Inergi costs.

a) Please provide a version of Exhibit C1/Tab 4/Schedule 2/Page 2 Table 1 that shows the total year over year % increase and the % increase in allocation to Tx.

b) Please provide a version of C1/Tab 2/Schedule 7/Page 3 Table 1 that shows the Total CCFS costs as reviewed by B&V and as allocated to the Business Units per Table 3 of the B&V Report.

c) Reconcile to C1/Tab 7/Schedule 1/Page 3 Table 1 and Table 2.

d) Please provide a copy of BP-2012-2016 (source data for B&V).

e) Reconcile the CCF&S costs for 2012 with the Schedules A&B in the Service Level Agreements (see IR above).

f) How are Inergi costs allocated to the Business Units? (direct cost driver etc).

g) Please provide a Schedule that shows by service the total 2013 costs allocated to the business units with separate costs shown for in-house and Inergi costs. Reconcile to the total shown in the B&V report Table 3.

8.0 Energy Probe # 51

Ref. Exhibit C1, Tab 7, Schedule 2, Attachment 1, Appendix

a) The formula on page 7 uses the total CAPEX as the denominator. Confirm that the CAPEX includes Capital contributions.

b) Explain why it is appropriate for the Overhead Capitalization Rate result to be affected by Capital contributions and if Rate base was the denominator whether less variability would occur.

c) Please provide versions of Appendix A that
- **i) removes capital contributions and**
- **ii) uses ratebase as the denominator.**

CAPITAL EXPENDITURES AND RATE BASE

Issue 12 Are the proposed 2013 and 2014 Sustaining and Development and Operations capital expenditures appropriate, including consideration of factors such as system reliability and asset condition?

12.0 Energy Probe # 52

Ref: Exhibit D1, Tab 3, Schedule 2, Page 4 &
Exhibit D1, Tab 3, Schedule 1, Page 4, Tables 2-3 &
Exhibit A, Tab 14, Schedule 4, page 3

a) Given Sustainment Budget under-spending in 2011 please provide the latest 2012 YTD estimate.

b) Based on Hydro One Networks' investment prioritization process, what areas of 2013-2014 Sustainment CAPEX would be reduced if HO Sustainment Budget was reduced by 10%?

c) Please explain, with reference to risks and impacts, why these areas were selected.

d) What areas of Sustainment CAPEX would be increased if the 2013-2014 Sustainment Budget was increased by 10%?

e) Please explain, with reference to risks and impacts, why these areas were selected.

12. 0 Energy Probe # 53

Ref: Exhibit D1, Tab 3, Schedule 3, Page 11, Table 1 &
Exhibit D1, Tab 3, Schedule 1, Page 4, Tables 2-3 &
Exhibit A, Tab 14, Schedule 4, Page 3

a) Given the major Development Budget under-spending in 2011 and 2012, please provide the latest 2012 YTD estimate.

b) Based on Hydro One Networks' investment prioritization process, please identify what areas of 2013-2014 Development CAPEX would be reduced if HOs Development Budget was reduced by 10-20 %?

c) Please explain, with reference to risks and impacts, why these areas were selected

12.0 Energy Probe # 54

Ref: Exhibit D1, Tab 3, Schedule 4, Page 2, Table 1 &
D2, Tab 2, Schedule 2, Page 6, O4 &
Exhibit D2, Tab 2, Schedule 3

a) Please provide an update of the Wide Area Network project, including capital expenditures to date variance from budget, cash flow and in-service dates.

b) Is HO Telecom the Project Manager and/or owner of the facilities and/or service provider? Please explain

12.0 Energy Probe # 55

Ref. Exhibit D1, Tab 4, Schedule 4, Page 1, Tables 1-3

a) **Confirm that the major driver for the real estate CAPEX increase in 2013-2014 is the Head Office/GTA facilities improvements deferred from 2011-2012.**

b) **Did the Board tell HO to defer the Head office and GTA work? If not, who made the decision to defer?**

c) **Given the major under-spend in the Sustaining and Development budgets in 2011, was this decision re Head office refurbishment reconsidered?**

d) **Given the overall increase in CAPEX in the test years, why cannot this work be phased over a longer period than currently proposed?**

Issue 15 Are the inputs used to determine the working capital component of the rate base and the methodology used appropriate?

15.0 Energy Probe # 56

Ref: Exhibit D1, Tab1, Schedule 1, Table 1 and Attachment 1 (Navigant)

a) Please provide the equivalent version of Table 1 with 2011 and 2012 WCA amounts and rates as approved by the Board.

b) Identify and discuss the drivers of the changes for 2013/2014 (Table 7 Navigant) and indicate if these changes are expected to continue into the future.

c) Estimate the impact these would have made to 2011 and 2012 WCA and net cash requirement.

COST OF CAPITAL/CAPITAL STRUCTURE

Issue 17 Is the proposed timing and methodology for determining the return on equity and short-term debt prior to the effective date of rates appropriate?

17.0 Energy Probe # 57

Ref: Exhibit B1, Tab 1, Schedule 1, Pages 1&2
Exhibit B2, Tab 1, Schedule 1, Page 2

For 2014, the return on equity calculation is based on the February 2012 Global Insight Forecast, as well as Bank of Canada data and the change in the spread of A-rated Utility Bond Yields during February. Hydro One assumes that the return on equity for each test year will be updated in accordance with the December 11, 2009 Cost of Capital Report.

a) For 2014, explain why the ROE placeholder should not be the same as 2013 rather than the Global Insight forecast.

b) Please provide a schedule that shows the 2014 cost of capital using the 2013 ROE forecast.

Issue 18 Is the forecast of long term debt for 2012-2014 appropriate?

18.0 Energy Probe # 58

Ref: Exhibit B1, Tab 2, Schedule 1, Page 3 &
Exhibit B2, Tab 1,Schedule 2, Page 4

a) For historical 2011 and bridge year 2012 debt (B2/1/2 page 4 at lines 28-29) please provide a schedule that shows for each issue, the difference between the Board Approved forecast and actual *(or* if not yet issued, current forecast):
- **i) Amount of issue per EB-2010-0002;**
- **ii) Coupon rate forecast actual and approved by the Board;**
- **iii) The premium discount and expenses;**
- **iv) The total principal amount, and**
- **v) The annual carrying cost.**

b) For material differences in the schedule please provide an explanation, including in particular:
- **i) The external forecasts relied upon;**
- **ii) Timing differences, and**
- **iii) Bond premiums.**

18.0 Energy Probe # 59

Ref: Exhibit B1, Tab 2, Schedule 1, Page 5, Table 4 &
Exhibit B2, Tab 1, Schedule 2, Pages 5 and 6

a) Please provide a schedule that sets out the basis of the proposed coupon rates, other financing costs and annual carrying costs for all proposed 2013/14 debt issues:
- **i) Sources and dates of forecasts of LC Bonds;**
- **ii) Sources and dates of forecast of Hydro One Spread and details of calculation, and**
- **iii) Sources and dates of forecast(s) of other financing costs.**

b) Reconcile the answer with Tables 3 and 4 of B1/2/1.

c) When will Hydro One please provide an update of the forecast 2013/14 debt costs?

d) Explain in detail how the 2013/14 debt issues and costs are mapped to Hydro One Networks and to Hydro One Transmission.

e) Based on the 2013 and 2014 financing plan, please provide an estimate of the revenue requirement impact to Hydro One Transmission of a 10 basis point change in the average effective coupon rate.

18.0 Energy Probe # 60

Ref. Exhibit B1, Tab 2, Schedule 1, Page 6

a) Please provide a schedule that shows Treasury OM&A costs by issue and year 2011A, 2012E and 2013-2014F.

b) What drives the cost per issue?

c) Given the Shelf Prospectus, will costs be lower in 2012-2014? If so, show how much. If not, why not?

DEFERRAL/VARIANCE ACCOUNTS

Issue 19 Are the proposed amounts, disposition and continuance of Hydro One's existing Deferral and Variance accounts appropriate?

19.0 Energy Probe # 61

Ref: Exhibit F1, Tab 1, Schedule 2, Page 5

a) Please explain in more detail how the costs for the External Revenue Partnership TPA will be recorded. For example, will it be gross revenue or net revenue after deduction of base payroll costs?

GREEN ENERGY PLAN

Issue 22 Are the OM&A and capital amounts in the Green Energy Plan appropriate and based on appropriate planning criteria?

22.0 Energy Probe # 62

Ref: Exhibit A, Tab 14, Schedule 1, Page 7 &
Exhibit D1, Tab 3, Schedule 3, s.2.2.5

The first reference mentions "administrative systems are being put in place to obtain fair recovery from the generators". The second reference details a plan to spread costs over multiple generators as they connect to the system. The main element of the plan appears to be a process to refund some of the costs charged to the first generator to cross the threshold for protection upgrades as subsequent generators attach to the circuit.

a) **Line 25 states that "these costs will be prohibitive to smaller generators". If a smaller generator triggers the need for protection upgrades what accommodation will Hydro One make to ensure that the cost allocation process does not cause a the generator to delay or cancel its project?**

b) **If subsequent generators have not been identified at the time the protection upgrades are triggered, how can the threshold crossing generator be assured that it will ever recover some of the costs allocated to it? Will this cause projects to be delayed or cancelled?**

22.0 Energy Probe # 63

Ref: Exhibit A, Tab 14, Schedule 1, Page 7 &
Exhibit D2, Tab 2, Schedule 3, Page 82

Line 25 of the first reference refers to Enhanced Transfer Trip Facilities and notes that they are not essential to allow generators to connect to the system but may be desirable to permit generators to continue operating during some kinds of outages. Project D26 describes the enhanced facilities and notes that the three different groupings of costs should be recovered from the generators benefiting from them.

a) **Is there a potential for free ridership if one generator requests the enhanced facilities and other generators do not?**

b) **How will costs be apportioned between generators benefiting from the enhanced facilities?**

22.0 Energy Probe # 64

Ref: Exhibit A, Tab 14, Schedule 1, Page 8 &
Exhibit D2, Tab 2, Schedule 3, ISD D23

These references are concerned with a project to install a sectionalizing station necessary to incorporate the proposed Armow Wind Generation Connection project in the Kincardine area. The investment summary document states that the "cost of the sectionalizing station will be pool funded consistent with Proceeding EB-2010-0002 for in-line circuit breaker projects as it is system driven and provides system benefits"

a) **In its Decision with Reasons in EB-2010-0002 the Board approved two in-line circuit breaker projects but declined to "provide any guidance to the company in respect to … four of the in-line circuit breakers". Is project D23 one of the two approved by the Board in the above referenced decision?**

b) **If not, please explain why Hydro One is assuming that the cost will be "pool funded consistent with Proceeding EB-2010-0002 for in-line circuit breaker projects".**

c) **From the D23 project document, it appears that the project is required solely to incorporate a new wind farm. Why does Hydro One conclude that it is "system driven and provides system benefits".**

d) **What are the system benefits referred to in the project document?**

e) **If the new wind farm did not proceed, would Hydro One still require the sectionalizing station?**

22.0 Energy Probe # 65

Refs: Exhibit A, Tab 14, Schedule 1, Page 11 &
Exhibit D1, Tab 3, Schedule 3, Page 30

According to the first reference at lines 5-6 on Page 11, these projects are required to address the consequences of generation already connected to the system and the second reference at line 14 concludes that the costs will be allocated to the network pool.

a) **Why should these costs be recovered from ratepayers when they appear to be a direct consequence of generators attaching to distribution and transmission systems?**

b) **Some or all of these costs appear to have been unforeseeable at the time renewable generators started connecting to the distribution and transmission systems. Now that Hydro One has experience with the consequences of these connections, why shouldn't it levy a charge against all new generators to offset the foreseeable costs of necessary protection modification in the future?**

22.0 Energy Probe # 66

Ref: Exhibit C1, Tab 3, Schedule 3, Attachment 1 - Smart Grid Development Plan

This exhibit discusses research and development projects undertaken in 2011 and 2012 to support smart grid development. Many projects were undertaken in conjunction with various Ontario Universities, governments and international standards organizations. Absent from the discussion are any results from the projects. Please provide an analysis of the projects completed in 2011 focusing on results and their application to the development of the smart grid.

Issue 24 Are the proposed modifications to the Hydro One transmission connection procedures appropriate

24.0 Energy Probe # 67

Ref: Exhibit A, Tab 12, Schedule 1, Page 12 - Security Deposit Procedure

The Evidence states:

> **"In a case where more than one customer triggers the need for a transmission upgrade, a customer may be required to provide an additional security deposit or extend the term of a security deposit after Hydro One has executed Agreements and collected initial security deposits. This would occur when a customer's proportional share of the upgrade cost increases because of other customer projects being delayed or cancelled that would have been contributors to the upgrade as originally planned and calculated in the Agreements".**

a) **Please provide an example of how the additional security deposit would be determined, given the existing security deposit amount and term**

b) **Has this proposal been stakeholdered with the renewable generation TC community?**

c) **If so, provide details of this. If not, when will that occur?**