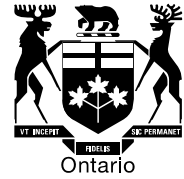


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**BY E-MAIL**

September 29, 2009

Board Secretary  
Ontario Energy Board  
2300 Yonge Street  
P. O. Box 2319  
Toronto ON M4P 1E4

Attention: Ms. Kirsten Walli, Board Secretary

Dear Ms. Walli:

**Re: Hydro One Networks Inc.  
Distribution Rates Application, 2010/2011  
Board File Number EB-2009-0096  
Board staff Interrogatories (List 1)**

Please see attached the Board staff interrogatories (List 1) for the EB-2009-0096 proceeding. Please forward to Hydro One Networks Inc. and all intervenors in this proceeding.

In addition, please be advised that Board staff intends to issue a second list of interrogatories (List 2) dealing with the September 25, 2009 evidence update, on October 1, 2009. The second list will deal mainly with the updated Green Energy Plan and the Vegetation Management Study.

Yours truly,

*Original Signed by*

Harold Thiessen  
Case Manager – EB-2009-0096

**BOARD STAFF INTERROGATORIES  
HYDRO ONE NETWORKS INC.  
2010/2011 ELECTRICITY DISTRIBUTION RATES APPLICATION  
List 1 – September 29, 2009**

**1. GENERAL**

**Issue 1.1 Has Hydro One responded appropriately to all relevant Board directions from previous proceedings?**

1. Ref: ExhG1/Tab4/Sch4/p4-5

The Board's Decision re EB-2007-0681 reads in part at p. 40:

“...the Board strongly encourages Hydro One to proceed with the sale on the basis of the principles outlined. If that fails to occur within a time period for implementation before May 1, 2010, the Board directs Hydro One as part of its 2010 IRM to bring forward evidence relating to the construction of a rate specific to address Milton's circumstances.”

Hydro One has brought forward evidence that some 30 customers would save \$6.8 million if the charge determinant were line length, while seven customers would experience the corresponding increase.

- a) Please describe actions taken by Hydro One since the 2008 Decision to effect the sale of the facilities in question to Milton Hydro.
- b) Did Hydro One consider only the alternative of the Specific ST Line rate, i.e. \$/km, or did it also consider other alternatives such as a rate per “kW times kilometers”? Please provide a brief explanation.

**Issue 1.2 Are Hydro One's economic and business planning assumptions for 2010/2011 appropriate?**

2. Ref: ExhA/Tab4/Sch1/p3

Hydro One submitted its five year vision and its associated strategic objectives for distribution activities in Table 1. These objectives relate to areas such as safety, environmental protection, customer satisfaction, reliability and productivity.

- a) Please complete Table 1 with additional columns that: 1) cover the last five years of performance with respect to the performance indicators that reflect the proposed Hydro One goals/objectives; 2) state the performance levels that are being targeted that reflect the proposed Hydro One goals/objectives; 3) detail any gaps that must be closed to meet the desired target level [for example the increments necessary to achieve top quartile reliability or 90% customer satisfaction]; and 4) state the estimated time required to close these performance gaps.
- b) Please provide the principal reasons why Hydro One believes it is not performing at the desired or end state level at the current time and what the significant differences are between Hydro One and the organizations achieving these benchmark levels.

- c) Please explain; 1) why Hydro One believes it can close these performance gaps; 2) what specifically is Hydro One proposing to change in order to close these gaps; and 3) why have these changes not already occurred?
3. Ref: ExhA/Tab13/Sch1/p4, parts (b) to (d)
- a) In each of the cases from (b) to (d), where Hydro One has requested that the Board affirm a rate treatment consistent with the current CGAAP, please indicate what the accounting treatment would be and the dollar impact on costs and revenue requirement in each of 2010 and 2011 if the Board chooses not to accept this proposal.
- b) For each of items (b) to (d) there is an implication in the paragraph on page 4 beginning at line 21 that Hydro One is requesting something from the Board, i.e., at line 24 it says “we are requesting a rate treatment for PP&E, intangible assets and depreciation consistent with current CGAAP for purposes of IFRS in 2011.” It is not clear from the submission exactly what it is that Hydro One is requesting. Please clarify and explain why Hydro One considers it necessary for the Board to grant such request(s).
- c) Given that Hydro One submitted its application prior to the IASB issuing its exposure draft on rate regulated accounting July 2009, and prior to the Board issuing its Report on Transition to IFRS on July 28, 2009, indicate what, if any, changes Hydro One would make to its submission in light of the fact that the exposure draft and the Board’s Report are now issued.
- d) Page 4, part (b) – Hydro One states that “under current IFRS, only directly attributable borrowing costs are capitalized and only upon qualifying assets.” CGAAP as expressed in the CICA Handbook Section 3061.05 states that the cost of an item of property, plant and equipment includes “all costs directly attributable to the acquisition, construction, development or betterment of the asset including installing it at the location and in the condition necessary for its intended use.” Please indicate what Hydro One considers to be the difference between these two statements and indicate what the impact of adopting IFRS would be on its capitalized carrying charges, its current period costs and revenue requirement in each of 2010 and 2011.
- e) Page 4, part (c) – Does Hydro One’s description in this section of accounting treatment pertain to gains and losses on disposal of all PP&E and intangible assets or only gains and losses on assets that are depreciated or amortized on a group basis? Please indicate how much gain and/or loss is included in the revenue requirement that pertains to disposal of assets in each of 2010 and 2011.
- f) Page 4, part (d) – Please provide a description of the key terms and conditions that are contained in a typical agreement between Hydro One and a developer (or other provider of contributed capital) for contributions received for construction work. Describe the

basis for Hydro One's choice of the accounting treatment as described in part (d) in relation to these terms and conditions. What is the proposed period of amortization? What is the method of amortization (e.g., straight line, annuity based). Does this differ from the amortization period or method currently assigned to such contributions? What is the impact of cost and the revenue requirement of any proposed change in treatment?

**Issue 1.3 Is service quality, based on the OEB specified performance indicators, acceptable?**

4. Ref: ExhA/Tab4/Sch1/p18 & 19 and ExhC1/Tab2/Sch1/p2, Table 1  
Previous Hydro One proceeding EB-2007-0681; Response to Board Staff IR #14; 2008 Vegetation Management Program Review Report, pages 14 and 18

Hydro One states that its interruption frequency (w/o Force Majeure events) has been increasing since 2005. In addition, at page 19 it is indicated that tree contacts are the greatest contributor to its interruption frequency.

- a) Given that tree contact is a significant cause of outages for Hydro One and given that its Right of Way ("ROW") clearing cycle time is among the longest for the utility industry (and this is a contributor to tree related outages), why has Hydro One taken until 2009 to start to address its ROW clearing cycle.
- b) Since it will likely take some time for the reduced ROW clearing cycle time to have an affect on interruption frequencies, is Hydro One taking other measures to reduce the frequency of interruptions on its distribution system and if so, what are these measures and what is the projected affect that they will have and if Hydro One is not planning to carry out any other measures, why is it not?
5. Ref: ExhA/Tab15/Sch1/p1,6,7  
Hydro One states that "Hydro One deems a Force Majeure to have occurred when 10 % or more of its customers have been interrupted by an event".

- a) Is this 10% - Force Majeure protocol a standard in the electric utility industry and is it in wide usage by a number of utilities and if it is in use, list the other utilities that have employed this methodology.
- b) If this protocol is not in wide usage, why is Hydro One utilizing this approach?

**Issue 1.4 Is Hydro One's proposal to change the effective date for implementation of its proposed distribution rates to January 1, 2010 rather than the conventional May 1<sup>st</sup> effective date appropriate and has Hydro One appropriately addressed the revenue consequences of proposed change?**

6. Ref: ExhA/Tab2/Sch1

What are the reasons for Hydro One's decision to change the effective date of the rate change from May 1 to January 1? Under this proposal, how will Hydro One address the

concern that ratepayers will now see three rate changes each year [January 1, May 1(RPP), and November 1, (RPP)]?

7. Ref: ExhA/Tab2/Sch1

Please provide a calculation of the revenue increase Hydro One will experience as a result of the higher rates proposed in this application becoming effective 4 months earlier and displacing the previously approved rates. Please include all relevant assumptions and explanations.

**Issue 1.5 Is the overall increase in 2010 and 2011 revenue requirement reasonable given the impact on consumers?**

8. Ref: Comment Letters received by the Board in response to the Notice of Application

The Board has received over 130 letters of comment in response to the Notice of Application. Virtually all letters protested the delivery charge bill increase of 9.5% for 2010 and 13.3% in 2011. Board staff has summarized a number of the concerns raised. Please provide Hydro One's response to the following concerns expressed in these letters:

- a) The requested increase is too high and rates should be decreased or frozen. Why is such a large increase required, when inflation is very low?
- b) Hydro One salaries are too high, there are too many Hydro One employees on the \$100,000+ salary disclosure list and salaries should be reduced.
- c) Higher electricity delivery rates are the last thing that the economy needs. Has Hydro One considered the impact on Northern communities as resource based industries shut down and workers are laid off?
- d) Has Hydro One considered the impact of this increase on pensioners, those on fixed incomes and the working poor?
- e) What steps has Hydro One taken to reduce costs?
- f) Consumers have concerns about the high fixed charge portion of their bill, as they are paying high bills with very little consumption.

9. Ref: Comment Letters received by the Board in response to the Notice of Application

As indicated above, the Board has received over 130 letters of comment from Hydro One customers regarding the impacts of this application. How many additional letters or customer contacts has Hydro One received with regard to this application? How has Hydro One responded to these customer concerns?

10. Ref: n/a

The Hydro One Networks website features a program for communities called "Powerplay" which provides grants to support and enhance children's sports and recreation facilities in Ontario communities served by Hydro One.

What were the expenditures of this program in 2008 and 2009 (projected) and how is the program funded? Are these expenditures included in Hydro One's revenue requirement?

## **2. Load and Revenue Forecast**

### **Issue 2.1 Is the load forecast and methodology appropriate and have the impacts of Conservation and Demand Management initiatives been suitably reflected?**

11. Ref: ExhA/Tab14/Sch 4/p4

The evidence indicates that the CDM related consulting study will be available by the end of September 2009. Does Hydro One have an update of the timing of this study? Will it still be filed by September 30, 2009?

12. Ref: ExhA/Tab14/Sch 4/p5

Hydro One indicates that its load forecast is based on economic information and forecasts that were available in April 2009 and some, such as CPI, are based on a December 2008 forecast. Please provide an update table that shows the main forecast inputs as they were in April and how those inputs have changed up to September 2009 for both 2010 and 2011. Please include the major economic indicators such as Ontario GDP, US exchange rate, CPI, interest rates, housing starts, commercial and industrial production, etc. Will Hydro One file an updated forecast for this proceeding? If not, why not?

13. Ref: ExhA/Tab14/Sch 4/p1

Hydro One indicates that its load forecast methodology has been reviewed and approved by the Board in many previous rate proceedings. Has Hydro One made any changes to the methodology that was reviewed in the EB-2007-0681 case or the EB-2008-0272 case? Please provide a listing of changes, why changes were made and the impact of the changes on specific aspects of the forecast.

### **Issue 2.2 Is the proposed amount for 2010/2011 external revenues, including the methodology used to cost and price these services, appropriate?**

## **3. OPERATIONS, MAINTENANCE and ADMINISTRATION COSTS**

### **Issue 3.1 Are the overall levels of the 2010/2011 Operation, Maintenance and Administration budgets appropriate?**

14. Ref: ExhC1/Tab2/Sch 1/p2

At Table 1 which summarizes the total OM&A Budget for the test years, Hydro One shows a budget of \$591 million in 2010 and \$606.2 million in 2011. For 2010, this is an increase of 27% over the Board approved 2008 level of \$466 million. Please provide a scenario of the Hydro One OM&A budget where 2010 test year levels are held to \$494 million (this assumes a 3% inflationary crease in 2009 and 2010). If held to such a budget, what

OM&A budget categories would be cut, by how much and what would the consequences be for the Hydro One OM&A work program?

15. Ref: ExhC1/Tab2/Sch1/p2
  - a) Please provide in table format, total OM&A per customer for each year from 2004 to 2011. Please calculate the year-to-year variances and identify the drivers for the increases or decreases.
  - b) Please also provide in a table format, total OM&A per circuit km of distribution lines for each year from 2004 to 2011. Please calculate the year-to-year variances and identify the drivers for the increases or decreases.
  
16. Ref: ExhC1/Tab2/Sch 2/p5

The costs for Stations Demand and Corrective Maintenance show a 20% reduction in the BridgeYear, yet the 2010 test year budget indicates a 21% increase back up to 2008 levels. Why is the cost reduction experienced in 2009 not carried forward to the test years? The evidence references fewer failures due to increases in preventative maintenance. Why does Hydro One expect a higher level of failures in the test years if preventative maintenance is showing positive results?
  
17. Ref: ExhC1/Tab2/Sch 2/p7

The costs for Planned Station Maintenance show a 29% increase in the 2010 test year budget and a further 12% increase in 2011. In relation to the previous question, why do these high increases in spending on stations not result in reductions in the Demand and Corrective Maintenance costs?
  
18. Ref: ExhC1/Tab2/Sch 2/p13

Why do the forecast costs under the trouble calls category increase from 2009 Bridge year levels for the two test years? Has the impact of the increased spending on vegetation management been reflected in these forecasts? If so, to what extent and with what impact?
  
19. Ref: ExhC1/Tab2/Sch 2/p13

The evidence provides a reference to the trouble calls responded to annually. Please provide a record of trouble call volumes from 2004 to 2009. Please delineate the trouble calls into meaningful categories such as those that cause a service disruption, those that pose a high risk to the reliability of supply of safety, etc.
  
20. Ref: ExhC1/Tab2/Sch 2/p13

The evidence references an “allowance for storm related costs that are not capitalized” and is forecast to be \$8 million in 2010 and \$8.3 million in 2011. Please provide a detailed

explanation/description of this allowance, how it is determined and what factors are used to determine the value of the allowance.

21. Ref: ExhC1/Tab2/Sch 2/p20-21

The evidence shows an increase in the number of “defects” to be addressed for the 2011 test year to 25,000, contributing to a 32% increase in Preventative and Corrective Maintenance costs in 2011. Hydro One indicates that this is due to the fact that a number of defects have been allowed to remain on the system in the past. Hydro One also states that not addressing these defects will increase future outages and increase safety risks. Please provide information that shows that the delay in addressing defects has indeed increased outages and therefore justifying the increased spending in 2011.

22. Ref: ExhC1/Tab2/Sch 2/p21

Sentinel Lights: Has Hydro One taken active steps to reduce the number of Sentinel Lights for which it provides maintenance services? Has Hydro One considered any strategy to exit the Sentinel Light business in its current form?

23. Ref: ExhC1/Tab2/Sch 2/p23

Hydro One is increasing the expenditures for PCB Lines Equipment Inspection and Waste Management significantly by 54%, 65% and 60 respectively in 2009, 2010 and 2011. This increased expenditure is justified to meet an Environment Canada regulation with a target 16 years from now (2025). Has Hydro One considered postponing or delaying the increase in inspections and waste management to later years? Will natural equipment replacement efforts, as assets wear out, not reduce the inventory of PCB contaminated equipment in any case?

24. Ref: ExhC1/Tab2/Sch 2/p25

Sustaining OM&A – Other Services: Costs are forecast to increase by 17% in 2010 to \$12.5 million after remaining steady at the \$10.7 million level for 2008 and 2009. The explanation provided cites “historic customer demands” and an increase in Health and Safety programs. Why do the Health and Safety programs require expansion in the test years? Please provide evidence that shows that these programs were inadequate and require additional expenditures.

25. Ref: ExhC1/Tab2/Sch 2/p28

Sustaining OM&A – Metering: Hydro One is installing Smart Meters to replace conventional Customer Retail Meters. In Table 8, cost increases are shown for Customer Retail Meters, Smart Meters and Telecom and Control. For instance, costs grow from \$6.6 million to \$13 million to \$14.7 million from 2009 to 2011. Why do costs not decrease for Customer Retail Meters as they are replaced by Smart Meters?



26. Ref: ExhC1/Tab2/Sch 3/p4  
The evidence references a proactive approach to load flow studies, etc. which result in significant increases in Development O&M. Did Hydro One consider reducing studies in other areas to mitigate the budgeted increases in the test years?
27. Ref: ExhC1/Tab2/Sch 4/p1-2  
Please provide a table showing the total costs of the Hydro One Ontario Grid Control Centre, and the (Rudden based) allocated costs to both the Transmission and Distribution businesses from 2004 to 2011. If significant shifts in costs between the businesses are evident from year to year, please provide the rationale for such cost shifts. Are other Operations costs also allocated between Transmission and Distribution or are all other costs stand alone distribution?
28. Ref: ExhC1/Tab2/Sch 4/p7  
Operations O&M increases by 11.5% in 2009 and a further 28% in 2010. The evidence references an increase in OGCC staff to focus on distribution elements. How many additional staff were added to the OGCC? Why are such significant resource additions required so far in advance of actual implementation of the bulk of the distributed generation and Smart Grid?

**Cost Efficiencies**

29. Ref: ExhA/Tab16/Sch1/p4  
Hydro One mentions two benchmarking studies, First Quartile and the CEA. Please provide copies of the most recent study results.
30. Ref: ExhA/Tab16/Sch1/p4  
Hydro One indicates that it uses Enhanced Distribution Network Reporting and a Balanced Scorecard Approach (Corporate and Operations Scorecards). Please provide a summary of how these methods are used and practical examples of efficiencies have been achieved.
31. Ref: ExhA/Tab16/Sch1/p5  
a) Please provide a itemize breakout of how the savings were achieved in 2009, 2010 and 2011 as shown on Table 1. Please describe the nature of the savings recorded, the location or part of the organization where the savings are or would be found, how the savings are calculated, the projected accuracy bandwidth for future savings and the risk factors for savings non achievement. Why did O&M savings spike in 2009?  
b) For the above, please provide answers for all four “savings” categories as well as for the years 2006 to 2011.

32. Ref: ExhA/Tab16/Sch1/p6  
Please provide the Distribution Unit Costs results/targets from 2006 to 2011 including comparisons to peer utilities. In addition please report on the result of the internal comparisons referenced at lines 18 to 20.

**Issue 3.2 Is the 2010/2011 vegetation management budget appropriate?**

33. Ref: ExhC1/Tab2/Sch 2/p35  
Sustaining OM&A – Vegetation Management: Hydro One indicates that it has prudently built its resource capability by continuing to hire forestry apprentices and contracting out line clearing work. Does Hydro One have an estimate of the cost saved by using new apprentices? In addition, what percentage of line clearing work is performed by contractors? Does Hydro One have an estimate of cost savings as a result of the use of contractors?
34. Ref: ExhC1/Tab2/Sch 2/p36  
Sustaining OM&A – Vegetation Management: Hydro One indicates that it forecasts 13,500 km of line clearing and brush control for 2010 and 14,300 km for 2011. Please provide similar figures from 2004 to 2009.
35. Ref: ExhC1/Tab2/Sch 2/p37  
Sustaining OM&A – Vegetation Management: Hydro One indicates that Unplanned Maintenance will increase by 1.4%, 1.4% and 2.7% respectively from 2009 to 2011. With higher levels of line and brush cleaning already in place in 2009, why are unplanned expenditures not declining?
36. Ref: ExhC1/Tab2/Sch 2/p40  
Sustaining OM&A – Vegetation Management: What the major reasons for the drop in Line Clearing to \$84 million in 2010 and subsequent boost upward in 2011 (to \$91.6 million?)

**Issue 3.3 Is the proposed level of 2010/2011 Shared Services and Other O&M spending appropriate?**

37. Ref: ExhC1/Tab2/Sch 6/p4  
Table 2 on this page shows a Total Corporate Shared Services cost of \$174.7 million in 2010, with a Dx allocation of \$123.2 million or 70.5%. Presumably the Tx allocation is approximately 29.5%. However, in the Transmission rates case, EB-2008-0272, a similar table found at Exhibit C1/Tab2/Schedule5/pg. 4 shows an amount of \$260.5 million for 2010 Total Corporate Shared Services, with a Tx allocation of \$66.4 or 25.5%. Presumably the Dx allocation is then approximately 74.5%. Please provide a detailed

explanation for the differences in these total corporate shared services numbers for 2010 and why the allocations to Dx and Tx vary.

38. Ref: ExhC1/Tab2/Sch 7/p2

Table 1 on this page shows total CCFS costs from 2006 to 2011, but only shows Dx allocations for the two test years. Please provide the Dx allocations for 2006 to 2009 for all the categories in the table.

39. Ref: ExhC1/Tab2/Sch 7/p4

Corporate Management Function: Hydro One indicates that there is a lower level of executive compensation in the years 2008 to 2011 consistent with the Agency Review Panel report. Please provide the amount of the reduction in total executive compensation reflected in the Corporate Management Function totals for each year from 2008 to 2011.

40. Ref: ExhC1/Tab2/Sch 7/p8

Insurance Program: Table 4 indicates that total Insurance costs grow to \$8.8 million and \$9.2 million in the respective test years. These are significant increases from 2008 and earlier years. Why have costs increased to such an extent? As it appears that self-insurance costs are rising faster than insurance premiums, has Hydro One made any decisions to reduce self insurance?

41. Ref: ExhC1/Tab2/Sch 7/p12

Corporate Communications: Table 6 indicates that total Corporate Communications costs more than double from 2008 to 2010. Notwithstanding Hydro One's evidence that cites the transfer of Outsourcing Services and increased First Nations and Metis Relations efforts, has Hydro One not considered that such a radical increase in costs is really essential? What are the specific drivers of this increase from 2008 to the test years?

42. Ref: ExhC1/Tab2/Sch 7/p12

General Counsel and Secretary Function: Cost increases in this category by 40% from 2008 to the test year 2010. Please provide a table of specific drivers for this increase and why Hydro One could not strive to lower costs in this area to more reasonable levels?

**Shared Services – Asset Management**

43. Ref: ExhC1/Tab2/Sch 8/p3

Table 1 on this page shows total Asset Management Function costs from 2006 to 2011, but only shows Dx allocations for the two test years. Please provide the Dx allocations for 2006 to 2009 for all the categories in the table.

44. Ref: ExhC1/Tab2/Sch 8/p3  
The total costs on Table 1 for the Bridge year do not seem to add correctly. Please correct this table or provide an explanation.
45. Ref: ExhC1/Tab2/Sch 8/p5  
Under Strategy and Business Development, Hydro One has indicated that it expects to design additional CDM programs as well as deliver OPA standard programs and that these costs are expected to be recovered from the Global Adjustment (so no funding appears in the test years). What amounts that are to be spent to develop CDM programs, are a part of the 2010/2011 strategy and business development function? Will these be recovered from Global adjustment? Will the additional CDM programs be funded by Hydro One ratepayers? If so, in what manner?

### **Shared Services – IT**

46. Ref: ExhC1/Tab2/Sch 9/p4  
Table 1 on this page shows total IT costs from 2006 to 2011, but only shows Dx allocations for the two test years. Please provide the Dx allocations for 2006 to 2009 for all the categories in the table. Please provide the same information for Table 2 (page 4), Table 4 (page 12), Table 5 (page 14), Table 6 (page 20), and for Cornerstone, Table 1 (Schedule 10 page 1).
47. Ref: ExhC1/Tab2/Sch 9/p11  
Total IT Sustainment costs increase by 28% from 2008 to 2010. A large part of this increase is found in Other Incremental Sustainment where costs increase by 117% from 2008 to 2010. The evidence references a number of new applications that will contribute to these cost increases.
- Please provide a more detailed explanation of how costs to Hydro One increase as a result of Cornerstone projects Phase 1 and Phase 2 move into “in-service” status.
  - Please provide a detailed explanation of why all of the new IT services listed on Page 11 are required in the test year 2010 and why there is such an escalation in the projects that contribute to the overall increase in IT sustainment costs.
48. Ref: ExhC1/Tab2/Sch 9/p12  
Small Projects costs quadruple from \$2.7 million in 2008 to \$10.4 million in the test year. Please provide additional rationale for the need to increase small IT projects to this extent over 2 years, including detailed reasons for the need for each project and what benefits each project is expected to deliver.

49. Ref: ExhC1/Tab2/Sch 9/p15  
Please provide a copy of the report of the Shpigler Group report on the benchmarking of the costs of services provided by Hydro One Telecom.
50. Ref: ExhC1/Tab2/Sch 9/p17  
Field Services costs grow by over 60% from 2008 to 2010. The evidence references a contract with Bell Canada which is to expire and be renewed for another 2 years. Please provide a detailed explanation of the need for additional services from Bell Canada considering the significant cost increases. Has Hydro One explored other lower cost options? If not, why not?
51. Ref: ExhC1/Tab2/Sch 9/p20  
IT Management costs appear to explode from \$4.4 million in 2008 by 172% to \$12 million in 2009 and another 51% to \$18.1 million in 2010. Please provide additional clarity to the reasons given for the expansion of this program. Please include a detailed list of additional activities or projects, the cost of each project, why the project is necessary, and the benefits of each project.
52. Ref: ExhC1/Tab2/Sch 10/p1  
How do the additional costs for Cornerstone as referenced in Schedule 9 under IT Sustainment relate to the savings presented on this table?
53. Ref: ExhC1/Tab2/Sch 11/p1  
Please provide a detailed explanation to how the estimate for Contestable Work, Lines and Distributed generation was determined at the level of \$36.2 million in 2010. What assumptions were made to arrive at this estimate?

**Shared Services - Customer Care**

54. Ref: ExhC1/Tab2/Sch 5/p1  
The evidence in the Customer Care schedules often references significant increases in costs due to the increase in activity for distributed generation and smart grid. Please provide more specific rationale, cost drivers and justification for the need for these increased resources in real terms, ie, number of distributed generation projects to be place on line, etc.
55. Ref: ExhC1/Tab2/Sch 5/p3  
Please provide in table format, total Customer Care costs per customer for each year from 2004 to 2011. Please calculate the year-to-year variances and identify the drivers for the increase/decrease.

56. Ref: ExhC1/Tab2/Sch 5/p3  
What proportion of Customer Care and other Services was/is accounted for by the Inergi contract from 2006 to 2011? Please provide a general description the Inergi contract, time frame, costs and a list of all services provided through Inergi. If significant shifts in costs between Inergi and Hydro One are evident from year to year, please provide the rationale for such cost shifts.
57. Ref: ExhC1/Tab2/Sch 5/p5  
Please provide a table detailing the cost reductions in base service fees in the Inergi contract, from 2004 to 2011 (forecast). How have these cost reductions compared to the forecast cost reductions cited in previous rates cases before the OEB (EB-2007-0681 and EB-2005-0378)?
58. Ref: ExhC1/Tab2/Sch 5/p5  
Hydro One indicates that it is moving to monthly billing for those 140,000 customers on bi-monthly billing. What are the reasons for Hydro One's move to monthly billing and not moving more to bi-monthly billing? What are the additional costs incurred when moving to monthly billing?
59. Ref: ExhC1/Tab2/Sch 5/p8  
Hydro One indicates that by 2011, all of its 1.2 million meters will be read on an automated basis but that some meters will still be read manually. How many meters will remain on manual reading? Why does Hydro One's meter reading cost not fall further than the budgeted level of \$5.3 million in 2011?
60. Ref: ExhC1/Tab2/Sch 5/p10  
Under Other Service Support costs, Hydro One shows an 18% increase in the bridge year with this level spending continuing in 2010 and a further 7% increase in the 2011 year. What are the major drivers of these cost increases? Why would costs go up for ePost billing when the presumption is that electronic billing would reduce costs?
61. Ref: ExhC1/Tab2/Sch 5/p12  
Under Service Enhancements, Hydro One shows a 113% increase in 2009 to \$3.4 million in 2010 and a reduction in these costs in 2011. Why did Hydro One not consider reducing or eliminating service enhancements in 2009 and 2010 in recognition of the cost pressures faced by customers in those years?

62. Ref: ExhC1/Tab4/Sch 1/p17  
Supply Chain Management: Table 4 on this page shows an increase of 22% in supply chain costs from 2008 to 2010. Please provide a more detailed explanation for this increase over the two years and also indicate how the Inergi contract influenced this cost escalation. Please also relate this increase to the description of productivity improvements found on page 22.
63. Ref: ExhC1/Tab5/Sch 1/p3  
Tables 1 and 2 present the allocation of CCF&S costs as allocated in 2010 and 2011. Please provide a similar table for 2008 as approved by the Board in the EB-2007-0681 rate decision and also for 2008 actual.

**Issue 3.4 Are the methodologies used to allocate Shared Services and Other O&M costs to the distribution business and determine the distribution overhead capitalization rate for 2010/2011 appropriate?**

64. Ref: ExhA/Tab13/Sch 1/p4, lines 21 to 26
- a) Hydro One is requesting a rate treatment for PP&E, intangible assets and depreciation consistent with current CGAAP for purposes of IFRS in 2011. Please indicate what the accounting treatment would be and the dollar impact on costs and revenue requirement in each of 2010 and 2011 if the Board chooses not to accept this proposal.
  - b) The July 28, 2009 Board report "Transition to International Financial Reporting Standards (Appendix 2, article 3.3) states:  
"The utility will file a copy of its capitalization policy, identifying any updates to the policy, as part of its first cost of service rate filing after IFRS adoption. Revenue requirement impacts of any change in capitalization policy must be specifically and separately quantified."
    - i) Please file a copy of Hydro One Distribution's capitalization policy, and identify any changes from current policy that are being proposed to apply beginning in 2010 and any further changes beginning in 2011.
    - ii) Indicate which components of the costs are affected by each change identified in a) above, and the impact on the costs that would be capitalized, if Hydro One Distribution were not depending on the Board's rate setting authority to authorize the pattern of inclusion of these costs in rates.

**Issue 3.5 Are the 2010/2011 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?**

65. Ref: ExhA-14-1/Appendix A/p4  
The table shows payroll burden from 2008 to 2014. Please provide similar figures for 2006 and 2007. The table also indicates that for both Regular and Non-Regular staff the payroll burden increases from 5.66% in 2008 to 6.2% in 2010. What is the impact of this change in dollars and what is the primary driver of this increase over the two years?
66. Ref: ExhA-14-1/Appendix A/p2  
The evidence indicates a 3% economic increase effective April 1, 2009 and 2010 for Society represented staff. However 589 of 1029 Society represented staff will have annual progressions, as will 15% of PWU staff. How are these annual progressions factored into the Labour Escalation?
67. Ref: ExhC1/Tab 4/Sch1/p2  
Table 1 provides an example of how the Labour Rate is built up for a Regional Line Maintainer. The rate shows a decrease from \$111 in 2008 to \$110 in 2010. How does this example reconcile with evidence in Appendix A that shows an escalation of 3% each year?
68. Ref: ExhC1/Tab3/Sch1/p1  
Hydro One indicates that 1000 networks staff will be eligible for an undiscounted retirement by December 31, 2009 which grows to 1,400 by December 31, 2011. In Hydro One's experience, what proportion of those eligible will actually take advantage of this option? Has Hydro One considered or designed any programs to encourage eligible staff to choose to continue employment rather than retire? If so, what are these programs?
69. Ref: ExhC1/Tab3/Sch1/p1  
When Hydro One replaces a long tenured employee who retires early and replaces that employee with a new hire, what is the average impact on wages? How much does Hydro One save in salary by hiring a younger less experienced worker?
70. Ref: ExhC1/Tab3/Sch1/p8  
Regarding the PWU Hiring Hall, how are Hydro One's costs reduced when using PWU hiring hall workers? Where are the savings in using a hiring hall worker rather than a full time PWU employee?
71. Ref: ExhC1/Tab3/Sch2/p9  
Please provide the annual number of employees that correspond to these payroll levels by year. Please also include the 2008 level corresponding to the Board approved rates for 2008. Can this table be meaningfully presented by separating the payroll costs and



employee numbers into transmission and distribution? If so, please provide this information, if not, why not?

72. Ref: ExhC1/Tab3/Sch2/p9

As shown in Table 3, overtime costs have increased from \$67.8 million in 2006 to a projected \$87.6 million in 2010. Why have overtime costs increased to such an extent over this two year period?

73. Ref: ExhC1/Tab3/Sch2/p9

On this page, Hydro One indicates that the total Networks work program is expected to increase by over 35% whereas the regular staff increase is expected to increase by only 16%. How does Hydro One plan address this gap and with what resources? In filing this gap with other resources, how much does Hydro One estimate it will save compared to using regular employees?

74. Ref: ExhC1/Tab3/Sch2/p10

At lines 8 and 9, Hydro One indicates that its compensation levels and structures have fallen below the market for top people. Please explain this assertion further: What is meant by the term “top people” and what evidence can Hydro One provide to back up this statement?

75. Ref: ExhC1-3-2/Appendix A/p2

The table shows annual pension cost for both the transmission and distribution businesses for 2010 and 2011. Please expand the table to show similar costs from 2006 to 2009 and include the 2008 level corresponding to the Board approved rates for 2008.

76. Ref: ExhA/Tab13/Sch 1/p 6-7 – Employee Future Benefits

Hydro One has requested “a rate treatment for pension consistent with current CGAAP for the purposes of IFRS in 2011”. It is not clear from the submission exactly what is requested. Please clarify the request and explain why Hydro One considers it necessary for the Board to grant such request(s). Please indicate what the accounting treatment would be and what the dollar impact on costs and the revenue requirement would be in each of 2010 and 2011 if the Board chooses not to accept this proposal.

**Issue 3.6 Is Hydro One’s depreciation expense appropriate?**

**Issue 3.7 Are the amounts proposed for capital and property taxes appropriate?**

**Issue 3.8 Is the amount proposed for income taxes, including the methodology, appropriate?**

77. Ref: ExhA/Tab13/Sch1/p5-6 – Payment in Lieu of Corporate Taxes

Hydro One Distribution has requested a rate treatment consistent with current CGAAP for the purposes of IFRS in 2011. It is not clear from the submission exactly what it is that Hydro One Distribution is requesting. Please clarify what is being requested and explain why Hydro One Distribution considers it necessary for the Board to grant such request(s). Please indicate what the accounting treatment would be and what the dollar impact on costs and the revenue requirement would be in each of 2010 and 2011 if the Board chooses not to accept this proposal.

**Issue 3.9 Is the proposed spending on loss reduction efforts appropriate?**

78. Ref: ExhG1/Tab 10/Sch1/p1

Hydro One indicates that losses are estimated to be higher than the values currently approved by the Board.

- a) Why are the values higher? Why have Hydro One losses increased since 2008?
- b) On the same page, Hydro One indicates that it is making ongoing efforts to reduce losses. What are these ongoing efforts? What amount of O&M dollars are being spent on line loss improvements? Please provide a list of programs and initiatives and their approximate costs.

**4. CAPITAL EXPENDITURES and RATE BASE**

**Issue 4.1 Are the amounts proposed for Rate Base appropriate?**

**Issue 4.2 Are the amounts proposed for 2010/2011 Capital Expenditures appropriate including the specific Sustaining, Development and Operations categories?**

79. Ref: ExhD2/Tab2/Sch3/Investment Summary Reference: S7

In the noted Reference, the Table covering the period from 2006 to 2011 showing poles replaced is reproduced below for clarity:

	2006	2007	2008	2009 Plan	2010	2011
Poles Replaced (units)	1,393	1,321	827	1,350	1,150	1,150

- a) Please explain the reasons for the large drop of about 37 % in the number of poles replaced in 2008 (827 poles) from the corresponding number in 2007(1,321 poles).
- b) Please provide the reasons for the large increase of about 63 % in the number of poles to be replaced in 2009 (1,350 poles) from the corresponding number in 2008 (827 poles).

- c) Please provide historical “Capital and MFA” investment amounts for the years “2006 to 2008” and for the “2009 Plan” shown in the bottom Table of the noted Reference, broken into the two categories “Poles Replaced” and “Equipment Replaced”.

80. Ref: ExhD2/Tab2/Sch3/Investment Summary Reference: S8

- a) Please provide the historical investments from 2006 to 2008 and for 2009 Plan by expanding the Table in the noted Reference, to better appreciate how the historical amounts relate to the forecasted ones.
- b) Given the nature of the non-discretionary nature of these capital investments, please describe the basis of the forecast especially during the current economic downturn.

81. Ref: ExhD2/Tab2/Sch3/Investment Summary Reference: S10

- a) Please provide the historical investments from 2006 to 2008, and the 2009 Plan by expanding the Table in the noted Reference, to better appreciate how the historical amounts relate to the forecasted ones.
- b) To have a better understanding of that program, please also provide for the revised Table in Reference a) above, the number of poles replaced for the historical years (2006 to 2008), 2009 Plan as well as for the forecast for 2010 and 2011.

82. Ref: ExhD1/Tab3/Sch2/p14

Table 3 shows that capital spending in 2010 and 2011 due to trouble calls and storm damage is projected to be \$59.3M and \$59.2M.

- a) Since damaged equipment due to storms consume a great deal of Hydro One resources, has Hydro One considered any novel ways to mitigate the damage due to these storms such as: 1) software to assist in weather analysis and to provide more rapid and accurate prediction for storm intensity, location and times; and 2) the early marshalling of repair crews at predicted storm locations so as to reduce repair duration at these locations?
- b) Since storm damages consume a great deal of Hydro One resources, has Hydro One discussed this matter with other LDCs.?
- c) If Hydro One has had discussions with other LDCs regarding storms, what has it learned from these other LDCs and if it as not carried out such investigations, why has it not?

83. Ref: ExhD1/Tab3/Sch3/p2

Table 1 provides a summary of Hydro One development capital. The table and footnotes do not provide a clear picture of planned capital spending. (ie. In 2010 generators are funding \$13.3 million in generation connection costs, and it is also noted external funding for generation connections is stated to be \$43 million, and generation connection enhancements are all externally funded at \$62.4 million. This does not add to the total of \$105.4 million quoted for external funding in the final footnote.) Please provide a clear

explanation of the total capital spending for 2010 and 2011 that is assumed to be covered with external funding and what capital funding is to be included in rate base.

84. Ref: ExhD1/Tab3/Sch3/p5

The evidence indicates that new connections for 2009 are forecast to be 15,000, increasing to 15,300 in 2010 and 2011. This is an increase of 2%. However, capital spending is set to increase from \$77.4 million in 2009 to \$84.6 million in 2010, an increase of over 9%. Please provide an explanation for the spending increase.

85. Ref: ExhD1/Tab2/Sch1/p24 & 25 and ExhD2/Tab2/Sch2/p1

It is noted in that expenditures of \$4.8M and \$5.7M are projected for 2010 and 2011 for submarine cables. As Hydro One has indicated at Exhibit D1 Tab 2, Schedule 1, pages 24 and 25 in the pre-filed evidence that the failures in submarine cables tend to be close to shore, has Hydro One considered plowing the cable deeper into the lake or river bed near the shore line or protecting it with concrete “pavers” or some other overlay and if not, why not?

86. Ref: ExhD1/Tab3/Sch3/p7

The evidence shows System Capability Reinforcement capital costs growing by 28% from 2008 actual to 2010 and then a further 9% in 2011. Please provide the specific drivers that would warrant such an increase at this time.

87. Ref: ExhD2/Tab2/Sch3/Investment Summary Reference: D1

To better understand the weight of each the three components of the investment, it is important to not only obtain the contribution of each for the forecast years of 2010 and 2011, but to also obtain these details for the historical years 2006 to 2008 and for 2009 Plan. Please provide the details described in the Preamble by completing the Table below.

Year	\$ Millions					
	2006	2007	2008	2009 Plan	2010	2011
Capital and Minor Fixed Assets					135.4	137.8
New Connections						
Service Upgrades						
Cancellations						

88. Ref: ExhD2/Tab2/Sch3/Investment Summary Reference: D12

The evidence in states in part that:

“Based on average load growth in the area of 1% per year, the stations approaching their design limits are expected to exceed those within the next 5 years. This will be compounded by

a major commercial and residential development that is being planned near the village of Minett (i.e. Red Leaves Development) which is expected to add an additional 6 to 8 MVA of load in the next 10 years over and above the base load growth.

In order to address the identified supply issues, an Area Supply Planning Study was carried out which examined various alternatives for meeting future supply needs. This study recommended a plan to build a new 44-12.8 kV Rosseau DS near the village of Rosseau. The new station will rely on a feed from the Muskoka TS M1 44 kV and will require a 14 km feeder extension. This investment will fund the recommended plan.”

Given that the load growth attributable to the “Red Leaves Development” is contributing 6 to 8 MVA of load to the area that lead to the system expansion and the related investment, did Hydro One conduct an economic evaluation as required by Chapter 3 of the Distribution System Code? If “Yes”, please provide the results of that economic evaluation including all assumptions and conclusions as well as an explanation as to why there is no “Recoverable” amount shown in the Table. If the answer is “No”, please explain the reasons for not conducting such a study.

89. Ref: ExhD2/Tab2/Sch3/Investment Summary Reference: D27

With reference to:

- i) Exhibit D2, Tab 2, Schedule 3, Investment Summary Reference: D27
- ii) The Board’s “Notice of Proposal to Amend a Code”, File Number EB-2009-0077, issued on June 5, 2009.
- iii) The Board’s “Notice of Proposal to Amend a Code”, File Number EB-2009-0077, issued on September 11, 2009.

In the Reference i) above, Hydro One stated in part that:

“This investment is required to fund line upgrades, modifications, and transfers that are driven by generation connections but that are beneficial to Hydro One Distribution customers.”

It is important to understand how the cost responsibility has been established in terms of the proposed guidelines on cost responsibility for the connection of generators to distributors outlined in Reference ii). It is also important to understand how the Board’s revised proposed cost responsibility proposals in Reference iii), issued in September 11, 2009, may affect the cost responsibility whose results are reflected in the evidence shown in Reference i).

- a) Please provide the number of generators expected to be connected under this Investment.
- b) Please provide a break down of the costs shown in the Table in Reference i) (i.e., the \$ 10.0 M for 2010 and \$ 8.8 M for 2011), to reflect the amounts that are allocated to the various categories per the Board proposed guidelines outlined in Reference ii), by completing the following Table:

**Costs**

	<b>2010 (\$M)</b>	<b>2011 (\$M)</b>
Capital and Minor Fixed Assets	9.1	8.0
Operating, Maintenance & Administration and Removals	0.9	0.8
Gross Investment Cost	<b>10.0</b>	<b>8.8</b>
Connection		
Expansion		
Renewable Enabling		
Enhancement		

- c) Please indicate whether the allocated amounts provided in responding to question b) would change assuming that the revised Board proposed guidelines on cost responsibility issued on September 11, 2009, see Reference iii) are in place for connecting generators to distributors. For clarity please reproduce the Table above, to show any changes in the four categories i.e., Connection, Expansion, Renewable Enabling, and Enhancement.

90. Ref: ExhD2/Tab2/Sch3/Investment Summary Reference: D28

With reference to:

- i) Exhibit D2, Tab 2, Schedule 3, Investment Summary Reference: D28
- ii) The Board's "Notice of Proposal to Amend a Code", File Number EB-2009-0077, issued on June 5, 2009.
- iii) The Board's "Notice of Proposal to Amend a Code", File Number EB-2009-0077, issued on September 11, 2009.

In the above Reference i), Hydro One stated in part that:

"The investment includes modifications (e.g. recloser installations, conductor renewals, new fuses) that will be beneficial to Hydro One Distribution customers and will therefore not be fully recovered from generators."

It is important to understand how the cost responsibility has been established in terms of the proposed guidelines in regard to cost responsibility for connecting generators to distributors outlined in Reference ii) which was issued on June 5, 2009. It is also important to understand how the Board's revised proposed cost responsibility proposals in Reference iii), issued in September 11, 2009, may affect the cost responsibility whose results are reflected in the evidence shown in Reference i).

- a) Please provide the number of generators expected to be connected under this Investment.
- b) Please provide a break down of the costs shown in the Table in Reference i) (i.e., the \$ 61.7 M for 2010 and \$ 124.9 M for 2011), to reflect the amounts that are

allocated to the various categories per the Board proposed guidelines outlined in Reference ii), dated June 5, 2009, by completing the following Table:

	2010 (\$M)	2011 (\$M)
Capital and Minor Fixed Assets	60.9	123.2
Operating, Maintenance & Administration and Removals	0.8	1.7
Gross Investment Cost	<b>61.7</b>	<b>124.9</b>
Connection		
Expansion		
Renewable Enabling		
Enhancement		

- c) Please indicate whether the allocated amounts provided in responding to question b) would change assuming that the revised Board proposed guidelines on cost responsibility issued on September 11, 2009, see Reference iii), are in place for connecting generators to distributors. For clarity please reproduce the Table above, to show any changes in the four categories i.e., Connection, Expansion, Renewable Enabling, and Enhancement.

91. Ref: ExhD2/Tab2/Sch3/Investment Summary Reference: D29

With reference to:

- i) Exhibit D2, Tab 2, Schedule 3, Investment Summary Reference: D29
- ii) The Board's "Notice of Proposal to Amend a Code", File Number EB-2009-0077, issued on June 5, 2009.
- iii) The Board's "Notice of Proposal to Amend a Code", File Number EB-2009-0077, issued on September 11, 2009.

In the above Reference i), Hydro One stated in part that:

"This investment is required to proactively install new breaker positions, add express feeders, and upgrade conductors and other feeder components to increase distribution system capacity to allow the connection of Distributed Generation (DG) to proceed quickly and efficiently."

It is important to understand how the cost responsibility has been established in terms of the proposed guidelines on cost responsibility for connecting generators to distributors outlined in Reference ii) which was issued on June 5, 2009. It is also important to understand how the Board's revised proposed cost responsibility proposals in Reference iii), issued in September 11, 2009, may affect the cost responsibility whose results are reflected in the evidence shown in Reference i).

- a) Please provide the number of generators expected to be connected under this Investment.
- b) Please check the amount cited for investment in 2011 as the Capital and Minor Fixed Assets of \$ 87.0 million; plus the Operating, Maintenance & Administration and Removals of 97.4; yet the total is only \$ 58.6 million.
- c) Please provide a break down of the costs shown in the Table in Reference i) [i.e., the \$ 35.4 M for 2010 and \$ 58.6 M (subject to the error check) for 2011], to reflect the amounts that are allocated to the various categories per the Board proposed guidelines outlined in Reference ii), dated June 5, 2009, by completing the following Table:

**Costs**

	<b>2010 (\$M)</b>	<b>2011 (\$M)</b>
Capital and Minor Fixed Assets	31.6	87.0 (check for error)
Operating, maintenance & Administration and Removals	3.8	97.4 (check for error)
Gross Investment Cost	<b>35.4</b>	<b>58.6(check for error)</b>
Connection		
Expansion		
Renewable Enabling		
Enhancement		

- d) Please indicate whether the allocated amounts provided in responding to question c) would change assuming that the revised Board proposed guidelines on cost responsibility issued on September 11, 2009, see Reference iii), are in place for connecting generators to distributors. For clarity please reproduce the Table above, to show any changes in the four categories i.e., Connection, Expansion, Renewable Enabling, and Enhancement.

92. Ref: ExhD2/Tab2/Sch3/Investment Summary Reference: D30

With reference to:

- i) Exhibit D2, Tab 2, Schedule 3, Investment Summary Reference: D30
- ii) The Board's "Notice of Proposal to Amend a Code", File Number EB-2009-0077, issued on June 5, 2009.
- iii) The Board's "Notice of Proposal to Amend a Code", File Number EB-2009-0077, issued on September 11, 2009.

In the above Reference i), Hydro One stated in part that:

"This investment is required to proactively install protections and controls on the distribution system to allow the connection of Distributed Generation (DG) to proceed quickly and efficiently.



Not proceeding with this investment would result in generation connections being delayed due to the sub-optimal, one-at-a time implementation of protection and control infrastructure on the distribution system as funded by individual generator proponents.

....To allow generation to connect to feeders fed from Distribution Stations without reducing load supply reliability, it is necessary to upgrade the protective devices (reclosers) in those stations. Upgrades will allow these devices to sense the direction of current feeding into faults, sense the impedance to the fault, and provide coordinating trip signals to appropriate generators to prevent islanding and fuse damage.

...It will also be necessary to provide load rejection facilities at the Distributing Stations to maintain the functionality of Special Protection Schemes and Under Frequency Load Shedding schemes required for the reliability of the Bulk Power System. These schemes must be very fast-acting and presently operate by tripping feeder breakers at Transmission Stations (TSs).”

It is important to understand how the cost responsibility has been established in terms of the proposed guidelines on cost responsibility for connecting generators to distributors outlined in Reference ii) which was issued on June 5, 2009. It is also important to understand how the Board’s revised proposed cost responsibility proposals in Reference iii), issued in September 11, 2009, may affect the cost responsibility whose results are reflected in the evidence shown in Reference i).

- a) Please provide the number of generators expected to be connected under this Investment
- b) Please provide a break down of the costs shown in the Table in Reference a) (i.e., the \$ 21.1 M for 2010 and \$ 36.8 M for 2011), to reflect the amounts that are allocated to the various categories per the Board proposed guidelines outlined in Reference ii), dated June 5, 2009, by completing the following Table:

**Costs**

	<b>2010 (\$M)</b>	<b>2011 (\$M)</b>
Capital and Minor Fixed Assets	21.1	36.8
Operating, maintenance & Administration and Removals	-	-
Gross Investment Cost	<b>21.1</b>	<b>36.8</b>
Connection		
Expansion		
Renewable Enabling		
Enhancement		

- c) Please indicate whether the allocated amounts provided in responding to question b) would change assuming that the revised Board proposed guidelines on cost responsibility issued on September 11, 2009, see Reference iii), are in place for connecting generators to distributors. For clarity please reproduce the Table above, to show any changes in the four categories i.e., Connection, Expansion, Renewable Enabling, and Enhancement.

93. Ref: ExhD2/Tab2/Sch3/Investment Summary Reference: D35

Hydro One proposes the installation of Smart Grid pilot facilities in one part of its service area. Hydro One states that it intends to establish a Smart Zone in the Owen Sound area to test the new technologies before they are launched for a wider deployment. Some of the Smart Grid projects proposed by Hydro One are; a) Energy storage pilot in the Smart Zone and/or remote areas; b) Plug-in Hybrid Vehicle (PHEV) trials; and c) Other devices like feeder ties, monitoring devices and smart switches. With these initiatives Hydro One hopes to:

- improve the reliability of the distribution system and also improve customer satisfaction;
  - provide a more proactive response to system faults;
  - provide more effective system monitoring to support system planning; and
  - increase operational efficiencies to respond to outages and to carry out service restoration.
- a) Considering that much of Hydro One's service area is very rural in nature, will lessons learned from the Owen Sound Smart Grid pilot be applicable over its entire service area with respect to fault detection and the restoration of remote rural feeders? If they are applicable, explain in detail the nature of the similarities.
- b) Considering that many PHEV applications in Ontario are expected to be in urban high-density environments, will lessons learned from the Owen Sound Smart Grid pilot concerning these vehicles be applicable in high density built up areas? If they are applicable, explain in detail the nature of the similarities.
- c) One of the main government goals for the Smart Grid is to further enable demand reduction opportunities in the home and in businesses by providing more energy usage and cost information to consumers and giving "LDC Control Rooms" more information about these potential residential and business Demand Reduction (DR) opportunities. Since no mention has been made of these potential DR opportunities, can Hydro One explain why this is the case in their Pilot project?
- d) If Hydro One does have some DR projects in its Smart Grid portfolio, please explain in detail the nature of these initiatives.
- e) Since Hydro One has indicated in its evidence that it has some projects in its Smart Grid Pilot study related to energy storage, please explain in detail the nature of these initiatives.

**Issue 4.3 Is the proposed level of 2010/2011 Shared Services and Other Capital expenditures appropriate?**

94. Ref: ExhD1/Tab3/Sch6/p1

Table 2 on this page shows total IT capital costs from 2006 to 2011, but only shows Dx allocations for the two test years. Please provide the Dx allocations for 2006 to 2009 for all the categories in the table. Please provide the same information for Table 3 (page 4), Table 4 (page 6) Table 5 (page 10) and Table 1 (Schedule 8, page 1).

95. Ref: ExhD1/Tab3/Sch6/p1

IT capital allocated to distribution grows from \$10 million in 2008 to \$20 million in 2010, an increase of 100%. The exhibit provides evidence of numerous projects that contribute to this increase. Did Hydro One consider a more phased approach to these projects to reduce the impact in the test years? Please rank the major IT projects in order of importance/impact on Hydro One operations.

96. Ref: ExhD1/Tab3/Sch8/p4

Hydro One is increasing Facilities, Real Estate and Security Infrastructure by almost 800% from 2008 to 2010. Much of the increase is attributable to new head office space and other improvements to offices and service centers. Why has Hydro One neglected accommodation investments until the test years? Please demonstrate why Hydro One needs to suddenly move on these investments in 2010 after historically neglecting this investment from 2006 onward? Did Hydro One consider the potential savings of moving the head office space outside of downtown Toronto? What were the results of that consideration?

97. Ref: ExhD1/Tab3/Sch8/p6

The Table on this page shows no capital spending on Security Infrastructure from 2006 to 2009, with a sudden spending of \$12.5 million in 2010 that continues to 2011. Why is there a sudden jump in this spending in the test year? Where was security infrastructure capital spending previously reported? Please provide the comparable spending levels from 2006 to 2009.

98. Ref: ExhD1/Tab3/Sch9/p2

The Table on this page shows a 156% increase in Transportation and Work Equipment capital expenditures from 2008 to 2010. Is Hydro One capable of efficiently executing such a massive increase in this procurement of \$133.3 million in the test year? What steps has Hydro One taken to address this issue?

99. Ref: ExhD1/Tab3/Sch7/p2

Table 1 shows the total capital cost of Cornerstone from 2007 to the test years. Total capital spending from 2007 to 2009 is \$273 million with another \$44.8 million planned for 2010 and 2011.

- a) Please provide a table that compares this capital spending and savings estimate with those presented in the EB-2007-0681 and the EB-2005-0378 rates cases. If these amounts differ significantly, please explain the reasons for the differences.

- b) In particular, the Cornerstone capital spending for 2008 approved in rates in EB-2007-0681 was \$63 million while this application shows 2008 actual spending of \$107.1 million. What are the reasons for such a large increase in capital spending in excess of applied for amounts?

100. Ref: ExhD1/Tab3/Sch7/p2 & p 5

Two different Cornerstone savings amounts for the test years (both O&M and Capital) are found at Table 1 on page 2 and at Table 2 on page 5. Different numbers for O&M Cornerstone savings are found at Exhibit C1/Tab2/Schedule10/p1. And at Exhibit A/Tab16/Schedule1/p5 another table with Cornerstone savings is presented with another set of values. Please reconcile or explain why all these estimates differ.

101. Ref: ExhD2/Tab2/Sch3/Cornerstone Phase 2 - Investment Summary Reference: IT1

Hydro One states that Cornerstone Phase 2 will bring the following business benefits to Hydro One:

- *Critical Finance & Payroll functions will be moved to a fully vendor-supported environment*
  - *Hydro one will avoid prolonged reliance on temporary financial interfaces between SAP and PeopleSoft*
  - *One integrated system of record for all asset and financial data.*
- a) Please confirm whether from the corporate perspective, the project is part of "Information Management & Information Technology".
- b) Indicate which business units (Transmission, Distribution, Remotes...etc) will benefit from the project.
- c) If more than one business unit would benefit from the project, what is the contribution of each towards the cost of Phase 2 of the Cornerstone project?
- d) Has Cornerstone Phase 2 been completed? If No, please provide an update as to when completion is expected.
- e) For the business benefits, i.e., savings, please quantify the savings in total and for each business unit (Transmission, Distribution, Remotes, ..etc).
- f) For the various savings addressed in responding to Question e), please describe how the savings are calculated, the projected accuracy bandwidth for future savings and the risk factors for savings non achievement.
- g) How does the updated Rudden allocation study affect these savings calculations?

102. Ref: ExhD2/Tab2/Sch3/Cornerstone Phase 3 - Investment Summary Reference: IT2

To understand the benefits, of project where the "Results" in the evidence states that Cornerstone Phase 3 will bring the following business benefits to Hydro One:

- *Provide SAP integration to operating, scheduling/dispatch and GIS system using mobile technology*

- *Provide specialized RCM software application to monitor/analyze preventative maintenance results, validate asset models, and facilitate strategic/scenario planning that is focused on improving asset lifecycle management decisions*
- *Consolidate and eliminate duplicative end-user databases/applications*
- *Streamline processes and improve information transparency.*

- a) For the business benefits, i.e., savings, listed in the evidence please quantify these savings in total and for each business unit (Transmission, Distribution, Remotes, ..etc).
- b) For the various savings addressed in responding to Question a) above, please describe how the savings are calculated, the projected accuracy bandwidth for future savings and the risk factors for savings non achievement.
- c) How does the updated Rudden allocation study affect these savings calculations?

103. Ref: ExhD2/Tab2/Sch3/GIS Implementation - Investment Summary Reference: IT5

To understand the benefits, of project where the “Results” in the evidence states that GIS Implementation will bring the following business benefits to Hydro One:

- *Improved Decision Quality:* Provide immediate access to more comprehensive and integrated spatial asset and connectivity data in corporate systems, contributing to consistency and timeliness in asset planning, maintenance and outage decisions.
- *Improved Safety:* Provide access to reliable, accurate and up-to-date data regarding the state of the network, which empowers work crews to work more safely.
- *Reduced Litigation:* Provide access to a single, seamless and up-to-date repository of records from which organization can avoid and defend against litigation for land usage.
- *Prevent Rework:* Provide a single, seamless repository of spatial records which are updated by appropriate LOBs to eliminate the need for each LOB to maintain its own spatial data.
- *Support Next Generation Applications:* Provide access to network properties.

- a) For the business benefits, i.e., savings, please quantify these savings in total and for each business unit (Transmission, Distribution, Remotes, ..etc).
- b) For the various savings addressed in responding to Question a) above, please describe how the savings are calculated, the projected accuracy bandwidth for future savings and the risk factors for savings non achievement.
- c) How does the updated Rudden allocation study affect these savings calculations?

104. Ref: ExhD2/Tab2/Sch3/Real Estate Field Facilities - Investment Summary Reference: C1

- a) Please provide the amount of investments in Real Estate Field Facilities, in \$ millions, for the historical years 2006 – 2008 and the 2009 Plan.
- b) Please provide quantification of the additional investments in 2010 and 2011 that is over and above what would the level have been absent the activities attributed to the Green Energy Act.

105. Ref: ExhD2/Tab2/Sch3/Real Estate Head Office and GTA Facilities - Investment Summary Reference: C2

- a) Please provide the amount of investment in Real Estate Head Office and GTA Facilities, in \$ millions, for the historical years 2006 – 2008 and the 2009 Plan.
- b) Please provide quantification of the additional work space which would be required in the future due to the anticipated increase in work activities due to the Green Energy Act that is in addition to the amount stated in the Reference as 280,000 square feet, where the evidence stated in part that:

*“A survey of the various business units in May 2008 identified a requirement for approximately 280,000 square feet of office space for Hydro One Networks Head Office.”*

106. Ref: ExhD2/Tab2/Sch3/Service Equipment - Investment Summary Reference: C3

- a) Please provide the total investment for Hydro One Networks Inc. in \$ millions for this category “Shared Services Capital-Service Equipment” for the historical years 2006 – 2008 and the 2009 Plan as well as for the 2010 and 2011.
- b) Please provide the split of the total investments established in response to a) above, between the various business units (Transmission, Distribution, Remotes, ...etc).

107. Ref: ExhD2/Tab2/Sch3/Transport and Work Equipment - Investment Summary Reference: C4

- a) Please provide the total investment for Hydro One Networks Inc. in \$ millions for this category “Shared Services Capital-Transport & Work Equipment” for the historical years 2006 – 2008 and the 2009 Plan as well as for the 2010 and 2011.
- b) Please provide the split of the total investments established in response to a) above, between the various business units (Transmission, Distribution, Remote...etc).

**Issue 4.4 Are the methodologies used to allocate Shared Services and Other Capital expenditures to the distribution business consistent with the methodologies approved by the Board in previous Hydro One rate applications?**

**Issue 4.5 Are the inputs used to determine the Working Capital component of the Rate base appropriate and is the methodology used consistent with the methodologies approved by the Board in previous Hydro One rate applications?**

**Issue 4.6 Does Hydro One’s Asset Condition Assessment information and Investment Planning Process adequately address the condition of the distribution system assets and support the O&MA and Capital expenditures for 2010/2011?**

108. Ref: ExhD1/Tab2/Sch1/p1,7,17 and EB-2007-0681; Response to Board Staff IR #14

In its Response to Board Staff IR #14 in the EB-2007-0681 proceeding, Hydro One states that the “analysis engine” that it uses to assess and categorize its assets was provided by Acres International (now Hatch Energy).

- a) What other organizations are using the Acres product for Asset Management assessments and what has been their experience with it?
- b) Has Hydro One validated this analysis model in any way and if not, why not?
- c) If this analysis model indicated (falsely) that 10% of a certain class of equipment was near end of life (categorized as very poor) rather than say 20% being in this category: 1) how would this anomaly come to the attention of Hydro One, 2) how would Hydro One deal with this situation; and 3) what would be the likely consequences of this incorrect categorization?
- d) Did the Acres asset analysis model “alert” Hydro One to the fact that there was a sub-class (red pine) of wooden distribution poles that was deteriorating at a faster than normal rate and if not, why not?

**Issue 4.7 Are the proposed capital expenditures to reduce electricity system losses appropriate?**

109. Ref: ExhG1/Tab 10/Sch1/p1

Hydro One indicates that losses are estimated to be higher than the values currently approved by the Board. Hydro One indicates that it is making ongoing efforts to reduce losses. What are these ongoing efforts? What capital amounts are being spent on line loss improvements? Please provide a list of programs and initiatives and their approximate costs.

**5. CAPITAL STRUCTURE AND COST OF CAPITAL**

**Issue 5.1 Is the proposed Capital Structure and Rate of Return on Equity for Hydro One’s distribution business appropriate?**

**Issue 5.2 Are Hydro One’s proposed costs and mix for its short and long-term debt for the 2010/2011 test years appropriate?**

**6. DEFERRAL and VARIANCE ACCOUNTS**

**Issue 6.1 Is the proposal for the amounts, disposition and continuance of Hydro One’s existing Deferral and Variance Accounts appropriate?**

110. Ref: ExhF1/Tab1/Sch1/p1

- a) Article 2.10.1 of Chapter 2 of Filing Requirements for Transmission and Distribution Applications issued on May 27, 2009 require the Applicants to provide a continuity schedule for the period January 1, 2005 to present, showing separate itemization of

opening balances, annual adjustments, accruals, interest and closing balances for deferral and variance accounts. A blank excel spreadsheet reflecting these requirements is **attached**. Please file the completed continuity schedule, as per the minimum filing requirements in Excel as well as PDF formats. Please include a breakout of the sub-accounts for account 1508.

- b) Please provide reconciliation between the continuity schedule and amounts for regulatory assets as per the company's audited financial statements as of December 31, 2008.
- c) Please list and provide a brief description of all outstanding deferral and variance accounts. Please include the deferral and variance accounts not being requested for disposition.
- d) Please provide the balances of all regulatory deferral and variance accounts, including those not being requested for disposition, for the period ending December 31<sup>st</sup>, 2008. In addition, please add the forecast amounts for both principle and interest to arrive at the totals for December 21, 2009.
- e) Hydro One states that all of the regulatory assets reported have been established consistent with the Board's requirements as set out in the APH. Please provide Hydro One's model for calculating variance account 1588, specifically the transactions related to calculating and booking losses in the variance account.
- f) Is the balance as of December 31, 2008 for Total Regulatory Assets for Approval the same as what was reported to the Board under RRR 2.1.7 for 2008? If not, please reconcile the amounts reported under RRR to the amounts requested for disposition as of December 31, 2008.
- g) Hydro One is forecasting both the principle and the interest component to December 31, 2009, for the accounts being requested for disposition? Why is it necessary to recover forecast principle balances?

111. Ref: ExhF1/Tab1/Sch1/p2

Using the information provided in the continuity schedule requested in the previous question, please provide a further schedule reconciling the continuity schedule with the amounts requested for disposition on Exhibit F1/Tab1/Schedule 1/p2.



112. Ref: ExhF1/Tab1/Sch1/p1

Usual practice in the electricity sector is to use audited numbers for the last fiscal year as the basis for balances in the deferral and variance accounts for disposition, with interest forecasted up to the start of the new rate year.

- a) Please provide the regulatory precedent for principal transactions being forecasted beyond December 31, 2008 for accounts requested for disposition.
- b) Please recalculate the appropriate rate rider schedules using the December 31, 2008 balances with only interest forecasted to December 31, 2009.

113. Ref: ExhF1/Tab1/Sch1/p1

Is Hydro One currently using accounts 1555 and 1556? Please identify any deviations from the Board's guidance with respect to these accounts.

114. Ref: ExhF1/Tab1/Sch1/p5-6

- a) Please provide a detailed calculation of Smart Meter Minimum Functionality Under-recovery up to December 31, 2008 and December 31, 2009 shown in Table 4.
- b) Please provide a detailed calculation of Smart Meter Exceeding Minimum Functionality Under-recovery up to December 31, 2008 and December 31, 2009 shown in Table 5.

**Issue 6.2 Are the proposed new Deferral and Variance Accounts appropriate?**

115. Ref: ExhF1/Tab1/Sch1/p6

Hydro One is requesting disposal of the RSVA account 1580 – Wholesale Market Services.

- a) Please provide an explanation of why the balance is forecast to drop from a credit of \$20.9 million in 2008 to a credit of \$2.9 million in 2009.
- b) Please state the amount reported to the Board for account 1580 in Hydro One's annual filing pursuant to RRR 2.1.7 for 2008.
- c) Identify the components of any difference between the amount in b) above, and shown in Table 6.
- d) Explain each component of the difference identified in c) above. Please include an explanation of which other accounts now contain any such difference by component.
- e) State which amount (the amount in b) above or the amount in ExhF1/Tab1/Sch1) has been reflected in Hydro One's 2008 audited financial statements and identify the line item in the audited financial statements.
- f) State which value should be relied upon in this proceeding, and, if different from the value reported in the 2008 audited financial statements, explain why the Board should rely on a different value.

116. Ref: ExhF1/Tab1/Sch6

Hydro One is proposing to refund the deferral and variance accounts to customers over a period of 2 years. Please provide a schedule identifying the rate riders associated with the disposition of the deferral and variance accounts over both one and two year periods. Please show all relevant calculations.

117. Ref: ExhF1/Tab3/Sch1

Hydro One is requesting a new deferral and variance account for the Pension Cost Differential. The Board's Decision with Reasons EB-2007-0681 (page 48), dated December 18, 2008 approved such an account for Hydro One.

- a) Is the account being proposed in addition to the one approved in EB-2007-0681 for recording Pension Cost Differential?
- b) What is the justification for this account?
- c) What account number does Hydro One propose to use in the USoA?
- d) What are the journal entries to be recorded?
- e) If the costs are not known, what is the basis of the approval to record these amounts in a deferral account?
- f) Is there new or additional information since the July 13, 2009 filing of this application that would assist the Board on this request?

118. Ref: ExhF1/Tab3/Sch1

Hydro One is requesting a new deferral and variance account related to the OEB Cost Differential.

- a) Is this the same account that was proposed by Hydro One in EB-2007-0681, which was subsequently rejected by the Board in its Decision with Reasons dated December 18, 2008 (page 49), stating: "The Board does not consider it reasonable in this case to exempt Hydro One from the Board's current policy not to authorize an OEB cost variance account to distributors"?
- b) If it is not the same account that was proposed in EB-2007-0681, then what is the regulatory precedent for the collection of each of the identified costs proposed to be included in this deferral account?
- c) What is the justification for this account?
- d) What account number does Hydro One propose to use in the USoA?
- e) What are the journal entries to be recorded?
- f) If the costs are not known, what is the basis of the approval to record these amounts in a deferral account?
- g) Is there new or additional information since the July 13, 2009 filing of this application that would assist the Board on this request?

119. Ref: ExhF1/Tab3/Sch1

Hydro One is requesting a new deferral and variance account related to the Impact of Change in IFRS. The Board report EB-2008-0408 dated July 28, 2009 "Transition to International Financial Reporting Standards" (Appendix 2, article 8.2) states:

"The Board will establish a deferral account for distributors for incremental one-time administrative costs related to the transition to IFRS. This account ..... is not to include ..... impacts on revenue requirements arising from changes in the timing of the recognition of expenses."

- a) Does Hydro One Distribution currently have any IFRS related costs approved in rates? If so,
  - i) Are variances between the approved costs and actual costs of transitioning to IFRS being recorded in a variance account?
  - ii) Please provide reference of when such variance account was approved.
  - iii) What is the current balance in this variance account?
  
- b) Is the proposed account expected to record any costs specifically excluded in the Board report EB-2008-0408 (i.e. ongoing compliance costs or impacts on revenue requirement arising from changes in timing of the recognition of expenses)?

120. Ref: ExhF1/Tab3/Sch1

Hydro One is requesting a new deferral and variance account related to the Fixed Charge for Micro-Generators.

- a) What is the regulatory precedent for the collection of each of the identified costs proposed to be included in this deferral account?
- b) What is the justification for this account?
- c) What account number does Hydro One propose to use in the USoA?
- d) What are the journal entries to be recorded?
- e) If the costs are not known, what is the basis of the approval to record these amounts in a deferral account?
- f) Is there new or additional information since the July 13, 2009 filing of this application that would assist the Board on this request?

121. Ref: ExhF1/Tab3/Sch1

Hydro One is requesting a new deferral and variance account for the Bill Impact Mitigation. The Board approved such an account in its December 18, 2008 Decision with Reasons EB-2007-0681 (page 50), stating:

"The Board authorizes Hydro One to establish the proposed mitigation account to record the costs of harmonization, including the incremental costs reasonably incurred for implementation".

- a) How is the new account being proposed different from the one already approved by the Board in EB-2007-0681?
- b) What account number does Hydro One propose to use in the USoA?
- c) What are the journal entries to be recorded?
- d) If the costs are not known, what is the basis of the approval to record these amounts in a deferral account?
- e) Is there new or additional information since the July 13, 2009 filing of this application that would assist the Board on this request?

## **7. COST ALLOCATION and RATE DESIGN**

### **Issue 7.1 Is Hydro One's cost allocation appropriate including the analysis of the relationship between density and cost allocation?**

122. Ref: ExhG2/Tab1/Sch1/p2

To enable a better understanding of Density Weighting Factors, please provide an example (or a small number of examples) of an actual feeder that is used to serve customers in several classes, showing how factors such as the length of the feeder, the number of customers, and the energy supplied are used to create Density Weighting Factors.

123. Ref: ExhG1-2-5/Attachment 1/p24

The report submitted by Hydro One states that "HOD currently has very limited information ..." on differences amongst a list of some seven factors in urban and rural areas. Considering this statement, how does Hydro One plan to improve its information on cost differences that would address the Board's concerns expressed in the 2008 Decision?

124. Ref: ExhG2/Tab2/Sch5/p2

The 2008 EB-2007-0681 Decision included a four-year rate harmonization plan, which corresponds to a four year period between cost of service applications. Hydro One has filed a cost of service application after two years, and with it, has filed a report that is described as "developing the principles that should be considered in establishing the relationship between Density and cost causality".

Does Hydro One plan to provide a detailed quantitative analysis of the cost of serving customers with areas with differing customer density within two years, i.e. within the four year period that is more usual between cost of service applications?

125. Ref: EB-2007-0681, Transcript 5, page 24, line 7 to page 25, line 25

Hydro One witness, Mr. Roger, testified in 2008 that a connectivity study of Hydro One's customers was ongoing at that time. (The context of the testimony was not density criteria, but rather a density review designed to assign customers to classes within the existing criteria.)

- a) If Hydro One were to use engineering analysis or analysis of sample data in its response to the Board's request for an analysis of cost differences, would the analysis be dependent on completion of the connectivity study?
- b) Has the connectivity study been completed?

126. Ref: ExhG2/Tab2/Sch5

The Board's Decision EB-2007-0681 reads, in part, at p. 30:

"The Board remains concerned that there may be factors that make it less costly to serve the Acquired Distributor territories than Legacy systems but this conclusion cannot be reached on the basis of the cost allocation information provided by Hydro One. The Board agrees with the intervenors that Hydro One has not established that there are no significant differences in serving residential customers of Acquired Distributors compared to the Legacy customers."

What is the average number of customers per km of line in Acquired distributors whose customers are classified as R1? What is the average number of customers per km of line in areas of the province where Legacy customers are predominantly classified as R1, as distinct from UR and R2?

If data required to answer the previous interrogatory are not available, will it become available with progress toward an upgraded customer connectivity database, as described for example in the EB-2007-0681 transcript (Volume 5, page 24, line 7 to page 25, line 25)?

127. Ref: ExhG1-2-5/Attachment 1

At page 22, the report submitted by Hydro One suggests as one methodology "Sample Data", i.e. analysis of a small number of typical feeders serving the classes in question. At p. 24, it lists five factors related to customer density that might cause lower density areas to have higher costs.

- a) Did Hydro One consider providing an analysis of "sample data" in response to the Board's expressed concerns – in particular did it consider using sample data to analyze the first three factors storm damage, brushing, and travel time? If not, why not?
- b) If Hydro One has done any such analysis, please provide the status of any progress in the sample data analysis.

128. Ref: ExhG1-2-5/Attachment 1

At page 23, the report lists “Engineering Analysis” as an approach that “could serve as either a cross-check on Hydro One Distribution’s existing weighting factors, or it could be used to derive new allocation factors”. At page 24, it lists five factors related to customer density that might cause lower density areas to have higher costs.

- a) Did Hydro One consider providing an engineering analysis in response to the Board’s expressed concerns – in particular did it consider using engineering analysis for the fourth and fifth factors which are standardized distribution stations and customers per unit of line? If not, why not?
- b) If Hydro One has done any such engineering analysis, please provide the status of the analysis.

129. Ref: ExhG1-2-5/Attachment 1

At page 24, the report lists two factors that could cause areas with high density to have higher costs: congestion in commercial areas, and underground facilities.

Please explain how the two factors would have relevance to customers in Hydro One’s R1 class, or alternatively please confirm that these factors have little relevance to the Board’s expressed concerns.

130. Ref: ExhG1-2-5/Attachment 1

The Board’s Decision EB-2007-0681 reads, in part, at page 31:

“the Board directs Hydro One to provide a more detailed analysis on the relationship between density and cost allocation to the Board. This should consider **whether the number of Residential and General Service customer classes in the new class structure is adequate ....**” (emphasis added)

The report submitted by Hydro One appears to make no reference to the number of classes.

- a) Please confirm that the scope of the analysis is limited to the existing approved number of classes and does not consider alternatives such as splitting one class (eg R1) into two classes, or dividing two classes (eg UR and R1) into three classes.
- b) If confirmed, does Hydro One intend to provide an analysis in the future, and if so when?

131. Ref: ExhG1-2-5/Attachment 1

The Board’s Decision EB-2007-0681 reads, in part, at page 31:

“Comparisons with the costs of distributors similar in size and location to Acquired Distributors would also be useful. ....the Board expects Hydro One to provide

**comparative analysis to allow the Board to better assess cost differences between the Legacy and Acquired customers.** “ (emphasis added)

The report submitted by Hydro One appears to contain no comparison such as described by the Board.

- a) Please provide the results of the comparison if such a comparison was made.
- b) If no comparison was made by Hydro One, please explain why not.

132. Ref: ExhG1-2-5/Attachment 1/ Executive Summary p2

The report submitted lists three issues that “are linked to the urban rural definitions”: RRRP, Service Quality Indicators, and Feasibility Test (DCF Model).

Please confirm that none of these factors would have precluded or complicated a quantitative analysis that would address the Board’s expressed concerns for cost differences between the Legacy customers and Acquired distributor customers in the existing approved classes.

133. Ref: ExhG1-2-5/Attachment 1/p2

Given that the Board’s expressed concern is with the classification of the customers of Acquired distributors, and none of these customers (except for a small number in Caledon) are eligible for RRRP, please confirm that consideration of RRRP is outside the scope of Hydro One’s analysis of density-related cost allocation, and that it should not cause a delay in such an analysis.

134. Ref: ExhG1-2-5/Attachment 1/p20

The report lists four alternative approaches for developing cost allocation proportions to customer classes. The stated purpose is to produce a more precise allocation amongst classes.

Please confirm that Hydro One was aware of all of these methodologies prior to receiving this report, and that it could have implemented any or all of them without waiting for the report that it has filed.

**Issue 7.2 Are the proposed revenue to cost ratios for each class appropriate?**

135. Ref: ExhG2/Tab1/Sch1/p6

External Revenues of \$40.6 million are reclassified from USoA 4330 to USoA 5135.

- a) Please describe these two accounts and how each is allocated to the customer classes, and explain why the transfer is desirable.
- b) Please confirm that the corresponding transfer in 2008 was \$5.85 million, and describe why External Revenue has changed to such an extent over the brief interval.

136. Ref: ExhG2/Tab1/Sch1/p7

Sub-accounts have been created to “provide a split between LV and other end-use customers”. In light of new terminology, is the referred to split between embedded distributors versus other Sub-Transmission customers, or between ST customers versus customers in other classes, or some other split?

137. Ref: ExhG2/Tab1/Sch1/Attachement1/pp. 35-36

The revenue to cost ratio for Sentinel Lighting is 0.408 if External Revenue is allocated with CWNB (the number of weighted bills) and is 0.666 if External Revenue is allocated with Hydro One’s “unique” allocation.

- a) Please confirm that Hydro One regards the unique allocation as preferable and has used it as the status quo ratio in its rebalancing proposal.
- b) Please provide a brief explanation of the Sentinel Light revenue component in the “unique” allocation of External Revenue.
- c) Distribution Revenue is \$1,626,040, and Miscellaneous Revenue allocated by CWNB is \$129,491. In EB-2007-0681, Exhibit H/Tab1/Sch1 Hydro One provided the information that the Sentinel Light revenue of approximately \$4,000,000 was included in Miscellaneous Revenue. What is the corresponding amount in this application?

138. Ref: ExhG2/Tab1/Sch1/p8-19 and EB-2007-0681Decision, p. 32

The following table shows in column 1 the revenue to cost ratios resulting from the cost allocation study submitted in EB-2007-0681 and the then-existing rates. In column 2 the table shows the ratios that were proposed and approved by the Board, based on fully harmonized rates. It shows in column 3 the revenue to cost ratios that result from, in the numerator the currently existing revenues, and in the denominator, the cost allocation study filed with this application.



<b>Revenue to Cost Ratios</b>				
	col. 1	col.2	col.3	col. 4
<b>Class</b>	<b>2008 Ratios</b>	<b>Approved Ratios</b>	<b>Status Quo Ratios</b>	<b>Target Range</b>
UR	0.87	1.0	1.09	0.85 – 1.15
R1	0.82	0.88	0.92	0.85 – 1.15
R2	1.04	1.04	1.02	0.85 – 1.15
Seasonal	0.92	1.0	1.16	
UGSe	1.29	1.2	1.21	0.8 – 1.2
UGSd	0.95	1.0	1.25	0.8 – 1.8
GSe	1.08	1.08	1.07	0.8 – 1.2
GSd	1.02	1.02	0.88	0.8 – 1.8
ST	2.35	1.15	1.01	0.85 – 1.15
DG	1.63	1.0	1.35	
Streetlights	0.60	0.7	0.68	0.7 – 1.2
Sentinel Lights	0.62	0.7	0.67	0.7 – 1.2

- a) Please confirm that the information presented in the table is correct, and if not please provide corrections.
- b) Please provide an explanation of why the ratios in column 3 differ from those in column 2. Please make particular reference to those classes whose ratios have moved from less than 1.0 to above 1.0: UR, Seasonal, and UGSd, and the class whose ratio has moved from above 1.0 to below 1.0: GSd.
- c) Does Hydro One intend to re-balance its rates in 2010 to bring any revenue to cost ratios in column 3 closer to 1.0?

**Issue 7.3 Are the fixed-variable splits for each class appropriate?**

**Issue 7.4 Are the proposed rate impact mitigation plans appropriate and are the resulting customer bill impacts reasonable?**

139. Ref: ExhG2/Tab1/Sch1/p3-4

Residential customers are classified as Urban in 11 Acquired distributors, and General Service customers in 10 Acquired distributors.

- a) Please confirm that the number of Acquired distributors was 12 Residential and 11 General Service in Hydro One's 2008 Application (same Exhibit references).
- b) Please provide a list of the Acquired distributors whose customers may be classified as Urban, and compare it to the list provided in 2008 (EB-2007-0681/ExhibitG2/Tab3/Schedule1/p3), and explain why Acquired distributor(s) have apparently been dropped from the list.
- c) Have customers been reclassified from UR to R1 in the distributor(s) listed in the response to part b? If so please provide impact calculations showing how customers of various sizes would be affected.
- d) If applicable, please repeat part c) for General Service customers.

140. Ref: ExhG1/Tab4/Sch4/p2

Sub Transmission Class: Please describe the cost basis for the rates proposed for Common ST Lines, Specific ST Lines, and Specific Primary Lines, including a brief explanation of why the former is proposed to increase considerably and the latter two to decrease from the currently approved rates.

141. Ref: ExhG1/Tab4/Sch4/p4 and ExhG2/Tab1/Sch1/Attachment 1/p37

Sub Transmission Class: Please describe the cost basis for the ST monthly service charge and meter charge, including a brief explanation of why it is proposed to increase considerably from the currently approved rate. Please indicate relevant results in the Hydro One cost allocation study, if applicable.

142. Ref: ExhG1/Tab4/Sch4/p4 and ExhG2/Tab1/Sch1/Attachment 1/p37

Sub Transmission Class: Please describe the cost basis for the ST meter charge, and in particular please provide a comparison between the proposed meter charge at \$445.81 versus the Avoided Cost per ST Customer at \$176.53 derived in the cost allocation study.

**Issue 7.5 Are the proposed Retail Transmission Service rates appropriate?**

**Issue 7.6 Is the proposal for regulatory asset rate rider #6 appropriate?**

**Issue 7.7 Are the proposed Distribution Loss Factors appropriate?**

## **8. SMART METERS**

**Issue 8.1 Is the 2010/2011 smart meter O&M and Capital budget appropriate?**

**Issue 8.2 Are the amounts for Smart Meter related variance accounts appropriate?**

**Issue 8.3 Is the treatment of stranded meter costs appropriate?**

**Issue 8.4 Is Hydro One's regulatory treatment of Smart Meter costs appropriate including the smart meter funding adders proposed for 2010/2011?**

143. Ref: ExhF1/Tab1/Sch3

Hydro One is applying for a rate adder of \$2.17 and \$4.45 per metered customer per month for the years 2010 and 2011. Hydro One is also proposing to include in rate base costs for all smart meters installed as of December 31, 2008.

- a) Please complete tables similar to the following that shows the number of smart meters installed and annual gross expenditures, both actual and estimated, by year. Include a calculation of cost per meter for each year. In addition complete similar tables providing the cumulative costs.
- I. Showing minimum functionality costs only
  - II. Showing beyond minimum functionality costs only
  - III. Showing both minimum and beyond minimum functionality combined.

		2006	2007	2008	2009	2010	2011
<b>By Year</b>							
# of Smart Meters Installed	<b>A</b>						
All Meter Installations							
AMI Infrastructure							
MDMR Integration							
WiMax							
Customer Information System							
OM&A included in COS application							
OM&A included in Rate Adder request							
Annual Total	<b>B</b>						
Total Cost Per Meter	<b>C = B / A</b>						
<b>Cummulative</b>							
Cummulative Meters Installed	<b>A</b>						
All Meter Installations							
AMI Infrastructure							
MDMR Integration							
WiMax							
Customer Information System							
OM&A included in COS application							
OM&A included in Rate Adder request							
Cummulative Total	<b>B</b>						
Cummulative Cost Per Meter	<b>C = B / A</b>						

- b) Please compare and contrast any changes occurring each year for the cost per meter where the cost per meter varies +-10%.
- c) Has Hydro One included in OM&A expenses for the test years 2010 and 2011 any smart meter related OM&A expenses? If so please identify those expenses for each year including the root source of those expenses.

- d) Please confirm that the OM&A expenses included in the applied for rate adders related to the incremental number of smart meters installed each year?

**9. GREEN ENERGY PLAN**

**Issue 9.1 Does Hydro One’s Green Energy Plan meet the Board’s filing guidelines and the objectives set out in the Green Energy and Green Economy Act, 2009?**

144. Ref: ExhA/Tab14/Sch/p1

Hydro One submitted an OM & A and Capital summary of the first five years of its proposed Distribution Green Energy Plan on this page. (Note: Definition of Technical Terms noted below are as per Definitions noted at Exhibit A, Tab 4, Schedule 1, page 5)

- a) Please expand the table on page 1 of Exhibit A, Tab 14, Schedule 2 by two additional columns with the first additional column headed as **2015-2017 OM&A and Capital** and the second additional column headed **2018-2020 OM&A and Capital**.
- b) Please provide Hydro One’s existing status regarding the following: 1) % of primary distribution feeders able to accommodate reverse power flow; 2) % of distribution switching devices capable of being switched remotely; 3) % of distribution stations under full SCADA automation; and 4) % of primary distribution feeders with full DVAR automated support and voltage monitoring.
- c) Please provide Hydro One’s five and ten year end state forecast for the following categories: 1) % of feeders able to accommodate reverse power flow; 2) % of distribution switching devices capable of being switched remotely; 3) % of distribution stations under full SCADA automation; and 4) % of distribution feeders with full DVAR automated support and voltage monitoring.

145. Ref: ExhA/Tab14/Sch2/p7 &16

The applicant states that it intends to construct a new TS along with approximately six express feeders (among other facilities) in southwestern Ontario to allow for the connection of new anticipated renewable resources.

- a) In installing these new express feeders (for supply anticipated to be 3,500 MW by 2011 and supply of an additional anticipated 3,500 MW by 2014), have studies been carried out on how this could alter load and VAR flows on Hydro One 230 kV and 500 kV transmission lines in the area?
- b) If these studies have been carried out, please advise how the magnitude and direction of these flows could be altered by the additional distributed renewable supply for the following 230 kV and 500 kV circuits.

<b>500 kV Circuits</b>	<b>230 kV Circuits</b>
Bruce to Milton/Claireville	Hanover to Orangeville
Bruce to Longwood	Bruce to Detweiller
Longwood to Nanticoke	Longwood to Lambton

	Buchanan to Sarnia Scott
	Buchanan to the Chatham Kent area

- c) If load and VAR flows could be altered for any of these transmission circuits in a material way, is Hydro One planning any mitigation as a result of these proposed renewable connections and if so what kind of mitigation is Hydro One proposing and if no mitigation is proposed, why not?
- d) In installing these new express feeders for the incorporation of additional distributed renewable generation, have studies been carried out on how this could alter base load generation “run times” in the Bruce and Windsor areas?

146. Ref: ExhA/Tab14/Sch2/p6

Hydro One indicates that it expects over 3,500 MW of renewable generation to be commenced by 2011. Please provide a table that shows which areas of the province will have what proportion of this load installed. How much of the 3,500 MW is to be completed in 2010?

147. Ref: ExhA/Tab14/Sch2/p7

Hydro One references areas of the province where connection of renewable generation is not currently feasible due to existing system constraints. Please provide an overview of the areas of the province where these constraints exist and how many of the projects representing the 3,500 MW are located in these areas of constraint.

148. Ref: ExhA/Tab14/Sch2/p9

Hydro One has indicated that has identified the regions where potential for renewable energy generation is the highest. What are these regions and what proportion of the investment in the Green Energy Plan is targeted for these areas?

149. Ref: ExhA/Tab14/Sch2/p7

Hydro One states 3,500 MW of renewable generation is projected to be connected to its distribution system by 2011 and an additional 3,500 MW is projected to be connected by 2014.

- a) Does Hydro One believe it can connect 7,000 MW of new renewable generation to its distribution system and bring it all into service by 2014? What are the major constraints that Hydro One faces in achieving this goal?
- b) With respect to the 7,000 MW of new renewable generation under consideration, can Hydro One provide a projected regional breakdown of this additional new supply and also disaggregate this supply as to the transformer stations to which the new supplies will be connected.

**Issue 9.2 Has Hydro One appropriately addressed the Green Energy Plan expenditures in the context of its overall Capital and O&M budgets?**

150. Ref: ExhC1/Tab2/Sch1/p2 and ExhD1/Tab2 Sch1  
In the OM&A and Capital Expenditure evidence Hydro One often references additional work (direct and indirect, internally funded and externally funded) required to meet the requirements of the Green Energy Act. Please provide an estimate of the total OM&A and capital budget increases for 2010 and 2011 that are a result of Green Energy Act related work. How much of each amount is planned for recovery and how much will be absorbed by Hydro One?
151. Ref: ExhC1/Tab2/Sch1/p2  
Hydro One forecasts the revenue requirement to be collected via external funding to be \$8 million in 2010 and \$30.7 million in 2011. Please provide a detailed calculation of how these amounts were determined, clearly showing all assumptions used in determining these amounts.
152. Ref: ExhA/Tab14/Sch2/p1,2,16-22  
Hydro One states on pages 1 and 2 that a great deal of the expansion and enabling investments required for the Hydro One system as a result of the Green Energy Act should be recovered through an external funding mechanism.
- a) Given that that the expansion projects include distribution line reinforcement as well as the construction of additional circuits and that the enabling investments will include additional instrumentation and control, does Hydro One not believe that these investments will reduce losses, reduce congestion and improve operational efficiency and switching flexibility of its distribution system?
  - b) If Hydro One agrees that the above noted reinforcements and enhancements have economic value to the Hydro One distribution system, please propose a methodology and approach for assessing this economic value.
  - c) If Hydro One does not agree that the above noted reinforcements and enhancements have economic value to the Hydro One distribution system, please provide reasons and explain how Hydro One reaches that conclusion.
153. Ref: ExhA/Tab14/Sch2/p1, 27-29  
Hydro One states that the total costs for Smart Grid spending are projected to be \$40 million in 2010, \$72 million in 2011 and \$295 million in 2012-2014. Hydro One further states on pages 28 and 29 that it plans to invest in Smart Grid features such as reactive support, storage devices, Wimax, outage management and mobile workforce tools and plug in electric vehicle applications.
- a) Given that at Exhibit A, Tab 14, Schedule 2, page 27 of its evidence Hydro One states that it plans to have close relationships and partnerships with a number of agencies

and that several of these other agencies are carrying out their own pilots, why has Hydro One not considered concentrating on only a few Smart Grid initiatives (related to Ontario-specific challenges) and relying on the test results and pilot study results from others for the rest?

- b) If the above more focused course of action were taken by Hydro One; 1) what three Smart Grid initiatives does Hydro One consider most important and/or most unique to its service area; and 2) if only those three initiatives were pursued, what are the cost savings compared to the more broadly – based approach favoured by Hydro One?

**Issue 9.3 Is Hydro One’s methodology for allocating Green Energy Plan O&M and Capital costs between the OPA (Global Adjustment Mechanism) and Hydro One appropriate?**

154. Ref: ExhA/Tab14/Sch2/p15 (revised)

On this page, Hydro One presents a table which shows the capital cost of connecting renewable generation, \$13 million in 2010, \$27 million in 2011 and \$40 million from 2012 to 2014. Hydro One expects that these costs will be covered by the generators themselves. Please provide a list of these projects and what region of the province these connection activities are expected to take place.

155. Ref: ExhA/Tab14/Sch2/p19 (revised)

On this page, Hydro One presents a table which shows the capital cost of the expansion of the distribution system to connect renewable generation. For 2010, 2011 and the 2012 to 2014 period, please provide a list of these projects and what region of the province these expansions are expected to take place. Please also provide the rationale for how external funding was determined for these projects on an individual, project by project, basis.

156. Ref: ExhA/Tab14/Sch2/p23 (revised)

On this page, Hydro One presents a table which shows the capital cost of the enabling improvements to the distribution system to connect renewable generation. For 2010, 2011 and the 2012 to 2014 period, please provide a list of these projects and what region of the province these expansions are expected to take place. Please also provide the rationale for how external funding was determined for these projects on an individual, project by project, basis.

**Issue 9.4 To what extent should the Board approve any projects or expenditures relating to the Green Energy Plan that are scheduled to occur beyond the test years (i.e. 2010 and 2011) in the current application?**

**Issue 9.5 What is the Board's role with regard to the approval of the Green Energy Plan? What criteria should the Board use when determining whether to approve the Green Energy Plan? If the Board approves the plan, what are the impacts of that approval?**

*-end-*