

**Board Staff Interrogatories**  
**2010 Electricity Distribution Rates**  
**Toronto Hydro-Electric System Limited**  
**EB-2009-0139**

**1. GENERAL**

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

**1) Ref: E C1/T2/S1/p1**

The following is stated with respect to the Board's direction in its EB-2007-0680 Decision directing THESL to file a complete and updated Rudden study at the Company's next complete COS application and THESL's subsequent filing of a letter with the Board dated June 15, 2009 requesting that THESL be relieved of the requirement to fulfill that directive due to subsequent organization consolidation:

"As a result of these organizational changes, THESL takes the view that the substance of any shared services study that it might now perform has been so reduced that it would no longer be of any significant value to the Board, stakeholders, or THESL, and that any costs so undertaken would be arguably imprudent."

- a) Please state whether or not THESL is planning any further organizational changes that would further reduce the level of shared services between THESL and its affiliates.
- b) Please elaborate on why THESL is of the view that any costs so undertaken would be arguably imprudent. Please include discussion of the costs of such a study relative to the magnitude of the continuing shared services and their costs.

**2) Ref: E Q1/T4/S1-1/p.2**

In response to the Board's direction to THESL in its EB-2007-0680 Decision that the Board expected that THESL "conduct a study into the capability, costs and benefits of incorporating into the Applicant system, a significant (up to 300MW) component of bi-directional distributed generation in Toronto," THESL provided a study by Navigant Consulting Inc. entitled "Distributed Generation in Central and Downtown Toronto."

It is stated that "During the course of the study, the Ontario government passed the Green Energy Act which further enhances Ontario's focus on renewable generation, DG and CDM."

Please state the extent to which the study reflects the impact of the Green Energy Act, and if it is not fully reflected, please state whether or not Navigant believes the passage of the Act would have any significant impact on the conclusions of its study.

**3) Ref: E Q1/T5/S1**

In response to the Board's direction to THESL in its EB-2007-0680 Decision that the Board expected that THESL "will develop the ability to track productivity gains throughout its operations in a programmatic manner that will appropriately inform its next rebasing

application”, THESL filed a report prepared by KeyWillow Consulting entitled “An Analysis of Productivity Improvements at Toronto Hydro-Electric System Limited.”

- a) Please state whether in undertaking its analysis, KeyWillow did any comparative assessments of THESL’s productivity relative to that of other comparable utilities. If such analysis was undertaken, please provide the results. If not, please state why not.
- b) Please state whether or not THESL has quantitative means of tracking productivity gains throughout its operations. If yes, please state how it does this, if not, please state how THESL is developing the ability to track productivity gains throughout its operations in a programmatic manner.

**Issue 1.2 Are Toronto Hydro’s economic and business planning assumptions for 2010 appropriate?**

**4) Ref: E C1/ T4/ S1, App. B, p.5**

When discussing its financial projections for its application, THESL provides a projected CPI rate for 2010 of 2.3%, which is stated as provided by the Conference Board of Canada.

- a) Please confirm that this number came from page 4 of the Conference Board of Canada report “Economic Insights Into 27 Canadian Metropolitan Economies” from Spring 2009 included as Exhibit C1, Tab 4, Schedule 2, Appendix A.
- b) Please state whether or not this is the most recent version of this report and, if not, please provide the most recent version.

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

**5) Ref: E B1/ T14/ S1**

- a) Please provide THESL’s achieved reliability performance for the period 2006 to 2008 for SAIDI, SAIFI and CAIDI, with and without Loss of Supply interruptions but including Major Event Days (MEDs), by filling out the following table.

|             | All Service Interruptions |       |       | Service Interruptions excluding Loss of Supply (Cause Code 2) |       |       |
|-------------|---------------------------|-------|-------|---|-------|-------|
|             | SAIDI                     | SAIFI | CAIDI | SAIDI   | SAIFI | CAIDI |
| <b>2006</b> |                           |       |       |   |       |       |
| <b>2007</b> |                           |       |       |   |       |       |
| <b>2008</b> |                           |       |       |   |       |       |

- b) Please provide any information THESL has about the incident of MEDs in other North American utilities comparable to THESL for the period from mid 2003 to mid 2009.

**Issue 1.4 Is the overall increase in the 2010 revenue requirement reasonable given the impact on consumers?**

**6) Ref: E J1/T1/S2, p.9, E J1/ T2/ S10, p. 2 & E M1/T2/S2**

In the first reference, it is stated that:

“THESL proposes a \$/kWh rate rider for each class. Since the RSVA Global Adjustment balances have been based on energy usage for all classes, this is the appropriate way to dispose of the balances. The treatment proposed by THESL for billing the regulatory asset recoveries is in line with the Board’s EDDVAR report.”

The second reference provides THESL’s development of the global adjustment rate rider.

- a) Please state why THESL believes that its proposed treatment for billing the regulatory asset recoveries is in line with the Board’s EDDVAR report.
- b) The second reference includes a line item “Distribution kWh for Global Adjustment Recovery.” Please state how this was calculated.
- c) The second reference includes a line item “2009 Approved Distribution Revenue (2009 Filed DRO)”. Please state how these numbers are used in the calculations.
- d) The second reference states that the allocator used is “2008 Non RPP Allocation in each Rate Class.” Please state why this allocator was used and how it was calculated.
- e) Please provide an explanation of the “Allocator Percentages” shown for “2008 of Non RPP KWH as a % of the total Rate Class kWh.”
- f) Please state why a three-year mitigation plan is incorporated.
- g) Please explain how THESL is identifying non-RPP customers
- h) Please state why THESL did not include an explanation of the applicability of the “Global Adjustment Rate Rider” on its proposed “Tariff of Rates and Charges” effective May 1, 2010.

**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?**

**Methodology**

**7) Ref: E K1/ T1/ S1, p. 6**

THESL stated that economic conditions are captured in its model by the customer, population, and time trend variables:

- a) Please provide further explanation as to how the linear trend variable is developed.
- b) The time trend variable has a negative co-efficient. This suggests that as the value of the variable increases, the resulting volume would decrease. Given this relation, how is it appropriate that as economic conditions improve, volume declines?
- c) Please provide an alternate scenario excluding the linear trend variable.
- d) Please provide an alternate scenario including other economic indicators such as Toronto area real GDP monthly index numbers.
- e) THESL states that “one of the significant drivers of these decreases is believed to be the impact of conservation...”. Please provide an explanation as to why CDM is captured by an economic variable.

**8) Ref: E K1/ T2/ S1, p. 1-3**

This exhibit provides an overview of the model input data. Purchased energy per day, kWh is allocated by customer class.

Please describe how purchased energy was allocated to each customer class.

**9) Ref: E K1/ T1/ S1, p. 6**

THESL states that the standard definition of HDD, which uses 18 degrees Celsius as the point at which loads start to be impacted by temperature, was not as effective as a measure which uses 10 degrees Celsius as the “balance point”.

- a) The acceptable standard for HDD for both electricity distributors as well as gas distributors is a balancing point of 18 degrees Celsius. Please provide further evidence supporting a change of this standard to 10 degrees Celsius.
- b) Does a reduction of the balancing point from 18 degrees Celsius to 10 degrees Celsius effectively lower THESL’s load forecast?
- c) Please re-run the load forecast using the standard HDD 18 degrees Celsius in the regression model and subsequent regression equation.

**Load Forecast**

**10) Ref: E K1/ T2/ S1, p. 1**

Table 1 Note 1 indicates that THESL has applied a loss factor to convert purchased energy to billed energy by class. Please confirm that this is what THESL has done and provide details of this conversion including the loss factor used.

**11) Ref: E K1/ T3/ S2, p. 1**

THESL has indicated that it has normalized load by class using Test Year HDD and CDD. However, it is unclear to staff if HDD is based on a balancing point of 10 degrees Celsius or 18 degrees Celsius.

- a) Please describe how THESL has weather-normalized the test year load.
- b) Please confirm that the term “normalized” means “weather-normalized”.

## **Customer Count**

### **12) Ref: E K1/ T1/ S1, p. 10**

THESL states that the forecast of customers for the residential sector in 2009 through 2010 includes an estimate for new individually-metered condominium suites, as well as the conversion of some condominiums from bulk-metered to individual suite-metering.

- a) What is the percentage of new individually-metered suite meters and what is the percentage of converted individually suite meter from bulk meters.
- b) Please provide an estimate of how many bulk meters are added each year.
- c) Please provide an estimate of how many individually-metered suite meters result from a bulk meter.
- d) Please provide a customer count forecast excluding the individual suite meters.

## **Issue 2.2 Is the proposed amount for 2010 other revenues appropriate?**

### **13) Ref: I 1/ T1/ S1, p. 3 - 5**

THESL has forecast a decline in Other Income from \$10.3 million in the 2008 historical year to zero in the 2010 test year.

On page 3 THESL states that "THESL earns revenue by providing services to customers and third parties, gains on the sale of scrap metal, and earns interest income from short-term investments of its idle cash balances".

Please break down these components of Other Income to demonstrate how the three factors referenced above have contributed to Other Income. Please provide this breakdown for the 2004 to 2008 Historical years, the 2009 Bridge and 2010 Test years. Please include:

- a) the amount of any gains on the sales of scrap metal as well its book value at the time of sale.
- b) the level of available cash for short-term investment
- c) revenue earned by providing services to customers and third parties including revenue and expenses from Merchandise and Jobbing for the past five historic years.

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

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

### **14) Ref: E D1/T3/S1, E F1/T1/S1, E F2/T1/S1, E J1/T2/S1**

In each of these Exhibits, different presentations of OM&A numbers are provided.

Exhibit D1 provides distribution expenses based on the Board's reporting categories.

Exhibit F1 provides operations and maintenance distribution expenses, while Exhibit F2 provides administration and general expenses. When these numbers are totaled, they are different from the total in Exhibit D1.

Exhibit J1 provides distribution expenses before PILs. These numbers are different from both those of Exhibits F1 and F2 and from Exhibit D1.

- a) Please provide a schedule reconciling the differences between these numbers for all years contained in the application.
- b) Please provide a breakdown of the drivers of the increases in THESL's OM&A costs in the format of Appendix 2-I of Chapter 2 of the Board's "Filing Requirements for Transmission and Distribution Applications" for the years 2008, 2009 Bridge and 2010 Test year.

**15) Ref: E F1/T1/S2/p4**

It is stated that:

"The total preventative maintenance program cost increased by \$3.4 million from 2009 to 2010 to capture costs needed for street lighting asset verification in preparation for inclusion into THESL and an increase in the units and costs for scheduled preventative maintenance work as described in Exhibit F1, Tab 1, Schedule 3."

- a) Please state why street lighting asset verification costs are included in the category of total preventative maintenance.
- b) Please state whether the reference to "street lighting asset verification in preparation for inclusion into THESL" relates to the application presently before the Board relating to the reintegration of street lighting services in THESL. If yes, please state whether these costs would need to have been incurred in the absence of this application and to what extent, if any, the verification process relates to non-THESL assets. If no, please state what this reference means.

**16) Ref: E F1/T1/S3/p4**

It is stated that:

"As is detailed in Exhibit C2, Tab 3 Schedule 3, THESL engages a number of qualified external entities to perform preventative maintenance tasks for several programs. External contractors are engaged to provide these services due to the seasonal nature of the work and the specialized expertise and equipment required. This practice of using external contracts is considered utility best practice in meeting seasonal maintenance requirements."

- a) Please identify the basis for the statement that the use of external contracts "is considered utility best practice in meeting seasonal maintenance requirements" and whether or not THESL is aware of any utilities that meet these requirements internally.
- b) Please state whether or not THESL's use of external contractors is based on a cost-benefit analysis. If so, please state the amount of annual savings, if not please identify the basis for outsourcing.

**17) Ref: E F1/T1/S4/p4**

It is stated that:

“THESL uses a ten-year inspection cycle for testing and treatment of its inventory of 159,000 wood poles.”

Please state whether the ten-year inspection cycle is an industry standard and if not, how it was determined.

**18) Ref: E F1/T1/S4/pp5-7**

It is stated on page 5 that:

“THESL has elected to employ mobile contact voltage scanning technology. Power Survey Company, which owns the rights to the technology, has been selected to perform scans of the distribution system in Toronto...”

Subsequently on pages 6 and 7 it is stated when discussing the 2010 predictive maintenance costs that:

“In the test year however, there is a significant increase in spending due to the introduction of the Contact Voltage Scan program of \$4 million as well as \$0.2 million in underground high voltage cable partial discharge testing and minor variations in other predictive maintenance programs.”

- a) Please confirm that the \$4 million in costs referenced above relates to the services performed by Power Survey Company, or, if not, what portion of the costs relates to this contract and what the remainder is for.
- b) Please provide a detailed breakdown of these costs.
- c) Please describe the process by which Power Survey Company was selected, including whether or not there was a competitive bidding process and, if not, why not.
- d) Please state whether or not the decision to hire Power Survey Company was based on any cost/benefit analyses. If so, please provide the results, if not, please explain why not.

**19) Ref: E F1/T1/S5/p3**

Table 1: Corrective Maintenance Costs shows an increase in External Contracts in the 2010 Test year to \$0.9 million from the \$0.5 million levels in the 2009 Bridge and 2008 Historical years.

Please state the reason for this increase.

**20) Ref: E F1/T1/S6/p2-3**

It is stated that:

“While spending on emergency maintenance in 2008 was impacted by the reduction in adverse weather experienced in that year as shown in Figure 1 below; overall adverse weather is trending upward. Moreover, the frequency of localized volatile weather conditions is increasing. As a result, the budget for emergency maintenance in 2009 has been increased by \$0.4 million above 2008 spending.”

- a) Please state the basis for the statements above that overall adverse weather is trending upward and the frequency of localized volatile weather conditions is increasing. If these statements were derived from a study or studies, please state which study or studies and provide a brief overview of any such studies and their key conclusions.
- b) Please provide a breakdown of emergency spending costs on an equivalent basis to that of Table 1 for the years 2004 to 2007.

**21) Ref: E F1/T2/S1/p3**

Table 1 presents Fleet and Equipment Services (“FES”) costs for 2008 Historical, 2009 Bridge and 2010 Test years. Please provide these numbers for the years 2004 to 2007.

**22) Ref: E F1/T2/S1/p5**

Table 1 presents Laboratory Service Operating Costs for 2008 Historical, 2009 Bridge and 2010 Test years. Please provide these numbers for the years 2004 to 2007.

**23) Ref: E F1/T7/S1/p6**

When discussing the increase in customer service costs, it is stated that among the items responsible for the increase in 2009 year-end costs is “\$1.90 million in the bad debt account. (In 2008, the bad debt provision was re-established, increasing \$1.90 million in the bad debt account. This required a decrease of \$1.90 million in the bad debt provision. The actual bad debt is tracking to the estimated provision.)”

When discussing the increase in the 2010 budget increase, the explanatory factors include: “\$1.00 million for bad debt due to the increase in delinquent accounts as a result of a downturn in the economy.”

Please provide a more detailed explanation as to the reasons for the establishment of this bad debt account including an explanation as to why the account was established at a level of \$1.9 million and why it is increased by \$1 million in the 2010 forecast. Please state how the \$1 million increase was quantified in the context of the stated increase in delinquent accounts resulting from the economic downturn.

**24) Ref: E F1/T7/S5/p5**

When discussing the increase of \$1.85 million in Customer Relationship Management Costs from 2009 to 2010, one of the components of this increase is stated as:



“\$0.22 million is a result of expected lower recoveries from Contact Voltage and CDM initiatives...”

- a) Please state what is meant by “lower recoveries from Contact Voltage.”
- b) Please state how lower recoveries from Contact Voltage and CDM initiatives would result in higher customer relationship management costs.

**25) Ref: E F2/T3/S1/p1**

It is stated that:

“The 2010 amount also reflects a contribution to the new OEB initiative known as the Low Income Energy Program (“LEAP”). An anticipated change for 2010 is the Low-Income Energy Assistance Program (“LEAP”) currently being proposed.”

Please state the amount that is included in the 2010 Test Year for the Low-Income Energy Assistance Program. Please provide a breakdown of the amount and identify the amounts that relate to existing and new program(s).

**26) Ref: E F2/T5/S1/p1**

Table 1 on this page provides a breakdown of THESL’s Finance A&G costs. This table shows total levels of \$4.3 million for 2008 Historical, \$4.5 million for 2009 Bridge and \$10.0 million for 2010 Test. Please break down the increases for 2009 Bridge versus 2008 Historical, and 2010 Test versus 2009 Bridge into two components: (1) component of the increase related to costs previously charged as THC Shared Services functions recorded in Governance now charged to Finance as part of the reorganization, and (2) remaining component not related to this reorganization and the factors explaining this element of the increase.

**27) Ref: E F2/T6/S1/p3**

On this page, the costs for the Treasury, Rates and Regulatory Affairs groups are shown.

- a) Please provide a breakdown of the total \$1.6 million increase in the 2010 Test year versus 2008 Historical for Treasury, Rates and Regulatory Affairs between these three groups and an explanation of the components of this increase for each of these departments.
- b) Please provide a breakdown of THESL’s regulatory costs in the format of Appendix 2-I of Chapter 2 of the Board’s “Filing Requirements for Transmission and Distribution Applications.”

**28) Ref: E F2/T9/S1/pp. 6-7**

On these pages, external and contract services are discussed. Please provide the following for Historical, Bridge and Test years:

1. Identity of each company transacting with the applicant subject to the applicable materiality threshold
2. Summary of the nature of the product or service that is the subject of the transaction
3. Annual dollar amount related to each company (by transaction)

4. A description of the specific methodology used in determining the vendor (including a summary of the tendering process/cost approach, etc.)

**29) Ref: E F2/T9/S1/pp. 6-7**

It is stated that:

“Major implementation of the new CIS system, SAP for the support of new IFRS requirements, Data Warehousing/Business Intelligence and the Identity and Access Management software, amongst others, result in net new increases to THESL operating costs beginning in 2010, totaling a \$2.4 million increment to the maintenance contracts.”

Please provide a breakdown of the referenced \$2.4 million increment between these projects and any necessary explanations.

**30) Ref: E F2/T9/S1/pp.6-7**

It is stated that:

“In order to minimize rising maintenance costs as a result of these initiatives, operational projects continue in consolidating legacy applications and servers. Other measures taken to maintain and lower costs include longer term agreements and negotiating recessionary pricing on vendor offerings.”

Please provide examples of these other measures and the types of savings that have been achieved.

**31) Ref: E F2/T10/S1/p.7**

Table 4 “HR Services Costs” shows an increase in these costs from \$1.9 million in 2008 to \$3.2 million for the 2010 Test year, or \$1.3 million.

Please provide a breakdown of the components of this increase including 2010 Test/2009 Bridge Inflation, 2009 Bridge/2008 Inflation and a breakdown of “Increase in costs for attraction and recruiting of hires into trades, technical and leadership positions” for each of these year over year comparisons, as well as an explanation as to the costs which are encompassed in this category.

**Issue 3.2 Is the proposed level of 2010 Shared Services and Other O&M spending appropriate?**

**Issue 3.3 Are the methodologies used to allocate Shared Services and Other O&M costs to the distribution business for 2010 appropriate?**

**32) Ref: E C1/T3/S1**

Please complete the following table for 2008 Historical, 2009 Bridge and 2010 Test years for each service provided or received by THESL:

**Year:** \_\_\_\_\_

| Name of Company |    | Service Offered | Pricing Methodology | Price for the Service (\$) | Cost for the Service (\$) | % Allocation |
|-----------------|----|-----------------|---------------------|----------------------------|---------------------------|--------------|
| From            | To |                 |                     |                            |                           |              |
|                 |    |                 |                     |                            |                           |              |
|                 |    |                 |                     |                            |                           |              |
|                 |    |                 |                     |                            |                           |              |
|                 |    |                 |                     |                            |                           |              |
|                 |    |                 |                     |                            |                           |              |
|                 |    |                 |                     |                            |                           |              |
|                 |    |                 |                     |                            |                           |              |
|                 |    |                 |                     |                            |                           |              |

**33) Ref: E C1/T3/S1/p.1**

It is stated that:

“On August 17, 2009, the Chair of the Board of Directors of Toronto Hydro Corporation announced that Mr. David O'Brien would retire as the Chief Executive Officer of Toronto Hydro Corporation effective September 30, 2009, and would be succeeded by Mr. Anthony Haines, who would in addition retain his role as President of THESL. Changes in 2010 governance costs may follow from this announcement. However, given the timing of the filing of this Application, it was not possible to reflect any cost changes that may arise in pre-filed evidence. To the extent that any such changes in planned costs become known prior to the end of the hearing, THESL will advise the Board, and incorporate any necessary changes during rate finalization.”

- a) Please provide an update as to whether or not THESL would anticipate any changes to 2010 governance costs following from this announcement and, if so, when such changes would be filed.

- b) Please clarify what is meant by the statement that THESL would “incorporate any necessary changes during rate finalization” including whether this statement implies that such changes would be filed during the evidentiary phase of the proceeding, or subsequently.

**34) Ref: E C1/T3/S1/p.2**

It is stated that:

“Consequently, services purchased by THESL from THC will be \$2.4 million in 2010, comprised of \$1.7 million for strategic leadership, stewardship and governance, and \$0.7 million for overall finance leadership to the organization. These services will be performed by the Board of Directors, offices of the Chief Executive Office and the Chief Financial Officer.”

Please state the headcount underlying both of these costs.

**35) Ref: E C1/T3/S1/pp.2-3 & App. B**

It is stated that:

“As a result of the divestitures of most unregulated activities discussed above, the amounts that THESL will sell to TH Energy will decrease from 2009 to 2010.”

Please state why the referenced divestitures will result in a decrease in the amounts that THESL will sell to TH Energy from 2009 to 2010 and whether this is the only factor explaining the decrease from \$1.77 million in the 2009 Bridge year to \$1.41 million in the 2010 Test year.

**Issue 3.4 Are the 2010 Human Resources related costs (wages, salaries, benefits, incentive payments, and pension costs) including employee levels, appropriate? Has Toronto Hydro demonstrated improvements in efficiency, including labour productivity, and value for dollar associated with its compensation costs?**

**36) Ref: E C2/T1/S2**

Please complete the following table:

|   | 2004A<br>vs<br>2003A | 2005A<br>vs<br>2004A | 2006A<br>vs<br>2005A | 2007A<br>vs<br>2006A | 2008A<br>vs<br>2007A | 2009B<br>vs<br>2008A | 2010T<br>vs<br>2009B |
|---|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Yearly Market Adjustment/General Increase (%) |                      |                      |                      |                      |                      |                      |                      |
| Headcount increase (%)                        |                      |                      |                      |                      |                      |                      |                      |
| Total Compensation Capitalized (%)            |                      |                      |                      |                      |                      |                      |                      |

Note: For "Total Compensation Capitalized" please provide the percentage for the year in question, not a year versus year comparison. For the other two columns, please provide the year over year change. A=Actual, B= Bridge, T=Test Year

**37) Ref: E C2/T1/S2/p.2**

It is stated that:

"As part of THESL's new five-year Collective Agreement with CUPE effective February 1, 2009, a group incentive program was introduced for unionized employees in the critical front-line roles of Crew Leader and System Response Representative. This new Gain Sharing Program is a groundbreaking achievement, linking pay to successful delivery of specific results."

- a) Please state whether the adoption of this program is expected to result in any cost savings to THESL. If yes, please state the amount. If no, please state the additional costs arising from it.
- b) Please discuss how THESL determined that it would adopt the Gain Sharing Program. In responding, please state whether the Gain Sharing Program, or a similar program has to THESL's knowledge, been adopted by any other utilities and, if so, what their experience with it has been.

**38) Ref: E C2/T1/S2/App. A/p.1**

Please provide an extended version of Table 1: Employee Compensation including 2004 to 2007 Actuals.

**39) Ref: E C2/T1/S2/App. A/p.1**

At Line 32 of Table 1, which provides a breakdown of employee compensation, a number is provided for "Total Compensation (Salary, Wages & Benefits)" which for the 2010 Test Year is \$203,588,120.

At Line 55 of the same Table, a number is provided for "Total Compensation" which for the 2010 Test Year is \$224,289,279.

Please state the reason for the difference in these two numbers.

**40) Ref: E C2/T1/S2/App. A/p.1**

"Total Compensation" at line 55 of Table 1 is shown as \$224,289,279 for the 2010 Test year and \$201,289,096 for the 2009 Bridge year. Please provide a breakdown of the \$23 million increase between the yearly market adjustment/general increases and the expected increase in headcount.

**41) Ref: E C2/T1/S3/p.2**

Table 2 provides "Post-Retirement Benefits Costs" for 2008 Actual, 2009 Bridge and 2010 Test years. Please provide an equivalent table for 2004 to 2007 Actuals.

**42) Ref: E C1/T1/S4/p.6**

Page 6 of the *Compensation Program Guide* contains 2009 weightings for various positions in THC and THESL.

- a) Please provide definitions of the columns "Individual Performance," "Affiliate Performance," and "Corporate Performance."
- b) Please explain the percentage allocations for each of the employee categories under "Affiliate Performance." (e.g. please state why managers at THESL would be assigned a 30% weighting for affiliate performance and similarly for the other percentages in this column)
- c) Please state whether THESL's reorganization is expected to impact these percentages in 2010 and, if so, to what extent.

**43) Ref: E C2/T1/S5/p.3**

Table 1 on this page provides "Forecast Retirements" for the 2009 to 2018 period totaling 694 employees.

The equivalent table in THESL's EB-2007-0680 application, contained in Exhibit C2/Tab 1/Schedule 6/page 2 provides "Forecast Retirements" for the 2007 to 2016 period totaling 567 employees.

Please provide an explanation for the 22% increase in this number in the current application.

**44) Ref: E C2/T1/S5/p.3**

It is stated that:

"In 2010, THESL continues with its ten-year plan to upgrade its distribution system infrastructure. In terms of the labour necessary for plan implementation, THESL projects a shortfall based on current staffing levels of approximately 350-400 full-time employees ("FTEs") in 2010."

In Exhibit C2 Tab 1 Schedule 2 Appendix A, THESL states that total FTEs for the 2010 Test year are 1,785.

Please state whether, the statement quoted above would imply that THESL believes that the necessary FTE level in 2010 to upgrade its distribution system infrastructure would be the 1,785 FTEs presently on the payroll, plus an additional 350-400 employees. If yes, please explain how this number was determined. If no, please clarify what is meant by this statement. Please include a statement as to what THESL believes the ongoing sustainable level of FTEs necessary to complete the ten-year plan would be.

**45) Ref: E C2/T1/S5/p.5**

It is stated that:

“To address the shortfall in labour needed to complete the 2010 Work Program, THESL has engaged 20 separate design and/or civil construction and/or electrical construction contract firms. Each attended information sessions in June 2009, wherein a high-level presentation of the Work Program was delivered and THESL’s needs identified. A Request for Proposal will be issued to these contract firms in August, and approval for the winning proposals will be provided by THESL’s Board of Directors in October.”

- a) Please provide a copy of the referenced Request for Proposal, or a summary of its key elements
- b) Please provide an update on the status of this process. If the winning proposals have been determined, please state who the winners are, what they will each be doing and the amount of the winning bid.

**Issue 3.5 Is Toronto Hydro’s depreciation expense appropriate?**

**46) Ref: E D1/T13/S1/p.1**

Please state whether there have been any changes in THESL’s depreciation policies since the filing of its 2008 cost of service application. If there have been any, please state what they are and provide their impact on the present application.

**Issue 3.6 Are the amounts proposed for capital and property taxes appropriate?**

**47) Ref: E H1/T1/S1/p.7**

It is stated that for 2010 versus 2009:

“The decrease in PILs of approximately \$7.8 million is mainly attributable to a reduction in capital taxes due to a reduction in the capital tax rate and differences between the tax and book treatment of various costs.”

Please provide a table of THESL’s capital taxes paid for 2004 to 2008 actuals, 2008 Board Approved, 2009 Bridge and 2010 Test years along with the applicable rates for each of these years.

**48) Ref: E H1/T1/S1/p.7**

Table 2, “Summary of Property Taxes by Year” provides a breakdown of property taxes for 2008 Historical, 2009 Bridge and 2010 Test years.

- a) Please expand this table to include 2004 to 2007 actuals and 2008 Board Approved.
- b) Please provide an explanation for the property tax reassessment reduction of \$0.9 million in the 2008 Historical year and any other reassessments that may have occurred in the 2004 to 2007 period.

**49) Ref: E D1/T3/S1/p.3**

It is stated that, referring to 2009 Bridge versus 2008 Historical Other Distribution Expenses:

“The decrease in other distribution expenses is primarily due to a one-time increase in capital taxes related to the settlement in 2008 of the 2001, 2002, 2003 and 2004 PILs audits.”

Please state why capital taxes were increased on a one-time basis in 2008 due to the settlement and the amount of the one-time adjustment.

**Issue 3.7 Is the amount proposed for PILs, including the methodology, appropriate?**

**50) Ref: E H1/T1/S1/p.6**

Table 1 provides a summary of PILs by year for the 2004 to 2010 period. This shows that total PILs drops from \$62.7 million in 2005 to \$23.4 million in 2010. Please state whether this drop can be largely attributed to reductions in tax rates, or if there are any other significant factors contributing to it. If so, please state what any other such factors would be.

**51) Ref: E P1/T2/S1/p.4**

On this page, THESL provides a response to question #7, which is “Has the applicant deducted regulatory assets for tax purposes in 2008 and/or in prior years? *If yes, please explain your reasons in the manager’s summary.*” Staff notes that THESL responds “Yes” to this question but does not appear to have provided an explanation.

The Board, in a number of EDR 2008 decisions denied increasing regulatory taxable income through the addition of movements, or recoveries, in regulatory assets, e.g Brantford Power, PUC. For instance in the Brantford Power Decision (EB-2007-0698) the Board stated that “The appropriate forum for the issues raised by the Company is the Board’s pending proceeding on account 1562. Until that proceeding is concluded, there is no basis for the Board to deviate from the findings it has made in other cases where the same issue has been identified.”

Please provide an explanation as to why THESL has deducted regulatory assets for tax purposes in 2008 and/or prior years and state whether such a deduction is incorporated into the 2010 PILS calculation. If it is, please provide a justification in light of the Board’s findings referenced above and please also provide revised PILs calculations excluding any such amounts.

**52) Ref: E P1/T2/S1/p.39**

On this page THESL uses a corporate income tax rate of 33%. Please state the basis for the use of this rate and whether or not it reflects the change in the Ontario income tax rate change from 14% to 12% July 1, 2010.

If the 33% rate needs to be adjusted, please also make any necessary revisions to the application related to the lower recoverable PILs amount which would arise from this change.



#### **4. CAPITAL EXPENDITURES and RATE BASE**

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

###### **53) Ref: E D1/ T1/ S1/p.3**

THESL states that it has included an allowance for borrowed funds used during construction ("AFUDC") for the capital expenditure balance after 2008 as prescribed by the Board's Accounting Procedures Handbook ("APH").

Provide a brief overview of THESL's treatment of AFUDC and Construction Work in Progress (CWIP) as incorporated in this application and state whether there are any departures from the APH and, if so, why they have been made. Please include a discussion as to how CWIP is incorporated in rate base.

###### **54) Ref: E D1/ T1/ S1**

Please provide a Fixed Asset Continuity Schedule as shown in Appendix 2-C of Chapter 2 of the Filing Requirements for Transmission and Distribution Applications, issued May 27, 2009.

##### **Issue 4.2 Are the amounts proposed for 2010 Capital Expenditures appropriate including the specific Operational and Emerging Requirements categories?**

###### **55) Ref: E D1/T7/S1/p.20 and E D1/T9/S5/p.4**

In the first of these references, THESL provides amounts for "Externally Initiated Plant Relocations" of 0 for 2008 Historical and 2009 Bridge and \$27.8 million for the 2010 Test year.

In the second of these references, THESL provides in Table 1 "Externally Initiated Plant Relocation Summary," line item amounts for "Externally Initiated Plant Relocation – Gross" of \$18.0 million in 2008 Historical, \$6.9 million in 2009 Bridge and \$27.8 million for the 2010 Test year.

Please provide an explanation for the differences in the 2008 Historical and 2009 Bridge amounts between these two references.

If Table 2 "Summary of Capital Budget" of the first reference needs to be adjusted for this differential, please provide a revised version of this table containing any other necessary adjustments.

###### **56) Ref: E D1/T7/S1/p.20 and E D1/T8/S10/p.43**

In the first of these references, THESL's "Total Capital" for the 2010 Test year is shown as \$423.6 million.

In the second of these references, the "Total Capital Plan" amount for 2010 is shown as \$366.9 million.

Please provide an explanation for the differences between these two numbers and if either one of these tables require changes, please provide revised versions of them.

**57) Ref: E D1/T7/S1**

Please provide a summary for the past five historical years, the bridge year and the test year, showing capital expenditures, treatment of contributed capital and additions and deductions from CWIP.

**58) Ref: E D1/T7/S1**

Please provide a Capital Projects Table as shown in Appendix 2-B of Chapter 2 of the Filing Requirements for Transmission and Distribution Applications, issued May 27, 2009.

**59) Ref: E C1/ T6/ S1**

THESL states that it has evolved from a reactive capital investment planning process to a more proactive planning process.

- a) Please provide a separate table that lists proactive capital expenditure projects only.
- b) Please identify what percentage of capital expenditure projects are considered reactive and what percentage are considered proactive.

***Sustaining Capital Expenditures***

**60) Ref: E D1/ T8/ S1 and E D1/ T8/ S10**

On page 9 of the 2010-2019 Electrical Distribution Capital Plan (the second reference), THESL states for proposing sustaining capital investments, "the condition of key asset classes such as direct buried underground cable is one of the strongest drivers for the forecasted size of the sustaining capital investments"

THESL further states that while in almost all cases, a "like-for-like" strategy has been adopted for the purpose of forecasting capital requirements, the principal exception to this strategy is that of underground direct buried cable that is replaced with underground cable in conduit.

On pages 13 and 14 of the first reference [D1/T8/S1], THESL discusses alternatives for extending the life of in-service cables and finding cost effective installation techniques for cable replacement. THESL states that based on its own direct experience from its pilot project (Braymore Boulevard East and West) and observations of other utilities: "the conclusion is that cable rejuvenation process is unable to remediate cable sections that have developed electrical trees and therefore pose a risk in the process of extending the useful life of the cables."

- a) Please provide the percentage of population of underground buried cable that have developed electrical trees.
- b) Please indicate the level of completion of the two pilot projects currently conducted by THESL; and provide details of the outcome of these pilot projects to date.
- c) Please state the method of silicon injection that has been used in these pilot projects.

- d) Please provide a description of THESL's ongoing efforts to find improved alternative solutions to rehabilitate its high risk cables. Please describe what steps are being taken to prevent moderate risk cables from developing electrical trees.
- e) Please provide details as to the observations of other utilities referenced on line 27 of page 13.

**61) Ref: E D1/ T8/ S1**

Please provide an itemized breakdown of network capital expenditures for the past five historical years, the bridge year and the test year.

**62) Ref: E D1/ T8/ S1**

Please provide an itemized breakdown of capital expenditures for overhead systems for the past five historical years, the bridge year and the test year.

**63) Ref: E D1/ T8/ S1**

A description of capital expenditures for Transformer Stations is found in this exhibit. On page 28, THESL proposes a \$7.4 million or 87% increase in capital investment for transformer stations over 2008 Historical:

- a) Please provide an itemized breakdown of transformer station capital investments for the past five historical years, the bridge year and the test year.
- b) Please provide a percentage of the population for each component of transformer station investment.

**General Plant**

**64) Ref: E D1/ T8/ S6-1 and E C2/ T2/ S5**

On page 2 of the first reference, THESL states that the increase to total Fleet and Equipment Services of \$2.0 million in the 2009 bridge year is attributed to the addition of 15 new vehicles to the overall fleet, which are required to support the additional hiring of Trades and Technical staff.

Exhibit C2/T1/S5, Table 4 shows a decrease of total headcount for Trades and Technical staff from 88 in 2008 to 71 in 2009.

- a) Please explain the previous statement in light of the decrease in Trades and Technical staff in the 2009 Bridge year.
- b) Please provide a list of the vehicles purchased.
- c) THESL stated on page 2 of the first reference that the fleet and equipment replacement program is based on a five-year cycle of capital investment. Please explain why THESL has chosen to purchase the 15 new vehicles ahead of the increase in headcount expected for the 2010 test year.
- d) Please explain the increase in "Total Fleet and Equipment Services" in the 2010 Test

year shown in Table 1 of the first reference.

**65) Ref: E D1/ T8/ S6-2**

Table 1 provides Facilities capital for the years 2008 Historical, 2009 Bridge and 2010 Test.

Please expand this table to include the historical years 2004 to 2007 and a breakdown of facilities capital into its key components.

**66) Ref: E C2/ T2/ S2**

Please provide an itemized breakdown for the category "other general" in each of tables 2, 3 and 4.

**67) Ref: E D1/ T7/ S1**

On page 19, Summary of Capital Budget under the category 'General Plant' THESL shows a 120% increase in the test year over the 2009 bridge year and 1366% increase over 2008 Actual.

Please provide an itemized breakdown of this category for each of these years.

**Operational Investments**

**68) Ref: E D1/ T8/ S7/p.2**

THESL stated that "The majority of the work at the wholesale metering installations is contracted to HONI because the equipment is located within HONI facilities. The fluctuations in the capital spend from 2008 to 2009 and 2010 are due to HONI's schedule to complete the installations, and the timing of requests for these installations made by THESL".

- a) Please provide further explanation as to how wholesale metering projects are planned, scheduled and executed.
- b) Please provide the percentage of wholesale metering installation that is contracted to HONI and the percentage that is conducted by THESL.
- c) Please provide a listing by project including the start and end date for each project.
- d) Please provide capital expenditures for wholesale metering for the past five historic years, the 2009 bridge year and the 2010 test year.

**69) Ref: E D1/ T8/ S7 and D1/ T7/ S1**

On page 19 [D1/ T7/ S1], Summary of Capital Budget, under the category 'Other' in the Customer services (Metering) section, THESL lists \$0.6 million for the 2010 test year.

On page 3 [D1/ T8/ S7] under the section 'Other Metering Capital' THESL states that: "Since these accounts already have interval meters, which by definition are considered to be Smart Meters, this project is not considered to be part of the Smart Meter initiative. The budgeted cost for this work is \$0.4 million."

- a) Please reconcile the \$0.6 million with the \$0.4 million.
- b) Please elaborate further on THESL's view that these meters should not be considered as part of the Smart Meter initiative.

**70) Ref: E D1/T8/Sh7/p.3**

It is stated when discussing suite metering capital expenditure amounts included for 2010 that "In consideration of anticipated requests for THESL to provide such services in both new and existing condominium buildings, the forecasted capital spend is \$2.4 million in 2010 for a total of 5,400 suite meter installations."

Please state whether the meters to be installed are smart meters and, if so, why this amount should be included in capital expenditures and not recovered through the smart meter funding adder.

**Information Technology**

**71) Ref: E D1/ T8/ S 8-1,8- 5, 8-8, 8-10 to 8-13, 8-15**

THESL stated that each of the Information Technology programs referenced above commencing in 2011 produce specified benefits. For each project:

- a) Please discuss how the costs for these projects are accounted for in the 2010 test year including what portion of the total cost has been added to CWIP.
- b) Please provide a list of projects under Information Technology that will be added to rate base in the 2010 test year as capital additions.
- c) Please state the start and end date of these projects.

**Emerging Requirements**

**72) Ref: E D1/ T9/ S1**

The above noted exhibit provides an overview of capital expenditures for equipment standardization totalling \$32.7 million in 2010, which is an increase of \$27.2 million or 495% over the 2009 bridge year and \$32.7 million over the 2008 actual year.

- a) Please elaborate on THESL's view that equipment standardization should be considered an 'emerging requirement' rather than a sustaining capital investment or reactive capital.
- b) Please provide the most recent 5 years of historical data for this category.
- c) Please provide an itemized breakdown of all proposed projects in this category.
- d) Please provide the start and end date of each project.
- e) Please confirm that THESL has the capacity to complete all these projects in the 2010 test year, and state what would be the consequences if some portion of these expenditures would be delayed until subsequent years.

**73) Ref: E D1/ T9/ S1**

THESL proposes that following its Level III contact voltage emergency response in February 2009 it needs to spend an additional \$9.2 million to develop and execute a contact voltage

remediation program. This program is stated as being meant to bridge the gap between the immediate “make safe” repairs completed during 2009 until when all locations are fully repaired.

- a) Please confirm that the costs of \$9.2 million are incremental to those for which THESL sought recovery in the ‘Application for Recover of Contact Voltage Remediation Cost’ (EB-2009-0243).
- b) Please confirm that THESL will address all 11,000 handwells referenced on page 4 in 2010.
- c) Please provide a breakdown of the \$9.2 million cost estimate.
- d) Please provide any cost-benefit analysis on which THESL based its decision to spend a further \$9.2 million for the contact voltage remediation program.

**74) Ref: E D1/ T9/ S1 and E D1/T8/S9-7/p.6**

THESL has proposed an \$8.6 million investment in SCADAMATE remote control switch installation in the second reference. On page 6-7 of the first reference, THESL states that SCADAMATE switches will also facilitate future feeder automation and support THESL’s smart grid plan.

- a) Please indicate if a portion of the SCADAMATE remote control switch investment is integrated in THESL’s smart grid plan?
- b) If so, please indicate what percentages of the cost are applied to the smart grid plan.

**75) Ref: E D1/ T9/ S5/p.4**

Table 1 on this page provides a summary of externally initiated plant relocations.

- a) Please provide a breakdown of the projects underlying the numbers in this table for each year shown. Please specify projects for both overhead plant relocations and underground plant relocations.
- b) Please provide start and end dates for each of the projects.

**76) Ref: E D1/ T9/ S6**

This exhibit describes the development of a new substation, Bremner TS, located at Bremner Boulevard and Rees Street in downtown Toronto. The proposed cost for this project in the 2010 test year is \$16.3 million. On page 4 THESL has provided a list of planned activities for the 2010 test year.

Please provide a detailed breakdown of the proposed costs for the 2010 test year that is linked to the outlined planned activities.

**77) Ref: E D1/ T8/ S 8-6/p.4**

THESL states that it is planning a capital expenditure of \$5.16 million for the Infrastructure Maintenance/Refresh Program in the 2010 test year, which is a 39.5% increase over the 2008 historical year:

- a) Please expand Table 1 “Infrastructure Maintenance/Refresh Costs” to incorporate 2004 to 2007 actuals.

- b) Please provide an explanation for the increase in the category "Radio System Enhancement" to \$1.60 million for the 2010 Test year from the \$0.34 2008 actual level.
- c) Please provide a similar explanation for 'Firewall Security & Other Infrastructure Improvements.' Please also provide an itemized break-down of this project.

**78) Ref: E D1/T8/S9-1**

In this section, THESL provides project summary sheets for underground direct buried projects. Staff notes in this context that many of the two page summary sheets appear to be for the same projects.

For instance, Project 13120, discussed on pages 25 and 26, relates to direct buried cable for the station Scarborough/Goldhawk/Agincourt in the amount of \$4,810,000. The project is given a prioritization criteria related to worst performing feeder ranking of 20 and feeder experiencing sustained interruption of 6.

Project 13122, discussed on pages 27 and 28, relates to the same feeder and is for the amount of \$620,000. This project is given a prioritization criteria related to worst performing feeder ranking of 400 and feeder experiencing sustained interruption of 20.

Project 13123, discussed on pages 29 and 30, relates to the same feeder and is for the amount of \$6,540,000. This project is given a prioritization criteria related to worst performing feeder ranking of 20 and feeder experiencing sustained interruption of 6.

Using the example discussed above:

- a) Please explain why costs related to this feeder are divided into three separate projects.
- b) Please provide an explanation as to the meaning of the prioritization criteria "Worse Performing Feeder Ranking" and "Feeder Experiencing Sustained Interruption." In this context, please discuss why projects 13120 and 13123 have the same rankings and project 13122 has different ones.

**79) Ref: E D1/ T9/ S7**

On page 1, THESL states that as a result of the contact voltage emergency work carried out in February 2009, a number of locations were identified that require follow up work related to secondary wires to bring them up to acceptable operating condition. The total estimated cost of this work in 2010 is \$6.5 million, which THESL states is incremental to the work related to standardization of handwells and secondary cables as described in D1/T9/S1.

- a) Please confirm that the costs of \$6.5 million are incremental to those for which THESL sought recovery in the 'Application for Recover of Contact Voltage Remediation Cost' (EB-2009-0243) and are incremental to the \$9.2 million requested for the development of an ongoing contact voltage remediation program.
- b) Please confirm that all these projects will be completed in the 2010 test year, and state what would be the consequence if some portion of these secondary upgrades would be postponed to subsequent years.
- c) Please provide a summary of all capital expenditures and OM&A costs proposed for recovery in 2010 related to costs arising out of follow ups to the contact voltage remediation emergency, such as those discussed in this interrogatory.

**Issue 4.3 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 Toronto Hydro rate applications?**

**80) Ref: E D1/T14/ S1 and E J1/T2/S7**

Table 1 of the first reference provides THESL's working capital allowance for the years 2008 Approved, 2008 Historical, 2009 Bridge and 2010 Test.

The second reference provides a breakdown of the working capital calculation for the 2010 Test year.

- a) Please confirm that THESL has not updated its lead-lag study that was filed in EB-2007-0680. If not confirmed, please provide the updated study
- b) Please provide a detailed explanation of the calculations in the second reference, including how the working capital factors are calculated and, what is meant by "Net Lag Days," and what the values for these days are in the 2010 Test year.
- c) Please provide supporting calculations for the years shown in table format. Please include the commodity price, wholesale market service charge, uniform transmission rates and all other rates and purchase levels used in the calculations.

**Issue 4.4 Does Toronto Hydro'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?**

**81) Ref: E D1/ T8/ S1 and E D1/ T8/ S10**

On page 22 of the first reference, THESL states that "the Capital Plan outlines the requirement for a \$182 million investment over the ten-year period for rehabilitation of overhead distribution".

On page 6 of the second reference, the Summary of Investments for the Ten Year Plan shows projected investment for the ten year period totalling \$177 million for Overhead Systems. Please reconcile these two numbers.

**82) Ref: E D1/ T8/ S10**

On pages 39 and 40 THESL describes a new risk-based analysis and provides subsequent models. THESL states that "The outputs of this model have not yet been applied to THESL planning results shown in this ten-year plan but will in the near future".

Please provide a more complete explanation of this statement, discussing in general terms, the expected impacts on the 10-year plan of the new approach.

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

**Issue 5.1 Is the proposed Capital Structure, Rate of Return on Equity, and Short-Term Debt Rate appropriate?**



## **Issue 5.2 Is the proposed Long-Term Debt Rate appropriate?**

### **83) Ref: E E1/ T1/ S1/p.3**

THESL states that:

“As the past year has seen significant turmoil in debt markets and a significant widening of corporate spreads, THESL proposes to update the anticipated new debt costs closer to the beginning of the Test Year. Since the anticipated December 2009 debt issue will occur prior to the Test Year, THESL proposes that the actual costs be included in the cost of capital determination – based on the Board guidelines – at the same time the ROE and STD costs are updated.”

- a) Please provide a copy of this note upon issuance.
- b) Please state when THESL anticipates providing the actual costs of this issue.

## **6. DEFERRAL and VARIANCE ACCOUNTS**

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

### **84) Ref: E J1/T1/S2**

On October 15, 2009, the Board's Regulatory Audit & Accounting group issued a bulletin related to regulatory accounting and reporting of Account 1588 RSVA Power and Account 1588 RSVA Power Sub-account Global Adjustment. Please state whether or not THESL would see the necessity of making any changes to its application with respect to Account 1588 as a result of this bulletin.

### **85) Ref: E J1/T2/ S8**

The balances as of December 31, 2008 on page 4 of the Continuity Schedule do not match the balances reported under RRR 2.1.7 for 2008 for the following accounts:

1508  
1525  
1555  
1556  
1588

For each account please provide the following:

- a) State the amount reported to the Board for the account in THESL's 2008 annual filing pursuant to RRR 2.1.7.
- b) Identify the components of any difference between the amount in a) and the amount reported in J1/Tab 2/ Schedule 8.

- c) Explain each component of any difference identified in b). Please include an explanation of which other accounts now contain any such differences by component.
- d) State which amount (the amount in a) above or the amount in exhibit J1/Tab 2/ Schedule 8 has been reflected in THESL's audited financial statements and identify the line item in the audited financial statements.
- e) 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 such different value.

**86) Ref: E J1/T2/ S8**

Page 4 of the Continuity Schedule shows that as of December 31, 2008, the balance in account 1590 was a credit of \$4,640,947 (total of closing principal and closing interest amounts).

Please state whether or not the rate rider associated with this account has ended and whether the balance in this account as of December 31, 2008 is reflected in the 2008 audited financial statements. If so, please state why THESL has not proposed disposition of the balance in account 1590?

**87) Ref: E J1/T1/ S2**

A prior Board decision for THESL (EB-2007-0680) found that the combined PILs proceeding to deal with matters concerning account 1562 may inform matters pertaining to account 1592, and did not permit the requested disposition of this account.

Please state why THESL is proposing the disposition of account 1592 at this time, given that the referenced PILs proceeding has not concluded?

**88) Ref: E J1/T1/ S2/ p 4, L 11 to 20**

- a) Did THESL obtain Board approval to record the referenced amounts related to intangible assets in account 1508?
- b) What is the nature of these costs?
- c) What is the basis for THESL's statement that these costs are a recoverable regulatory asset?
- d) What is the regulatory precedent for collection of these costs in a deferral account and the disposition in future years?

**89) Ref: E J1/T1/ S2/ p 7, L 22 to 25**

- a) Please provide a breakdown of the IFRS costs for which THESL is seeking recovery.
- b) Did THESL obtain Board approval to record these costs in account 1508?

**90) Ref: E J1/T1/ S2/p. 2, L 17-20 and E J1/T2/ S9**

THESL states that carrying charges have been applied to all accounts as designated in the APH. However, the rates applied shown in Exhibit J1/Tab2/Schedule 9 differ from the Board prescribed rates for Q3 and Q4, 2009.

- a) Please state whether or not this was done in error. If it was not an error, please provide an explanation for it.
- b) Please recalculate all amounts using the Board prescribed rates for Q3 and Q4, 2009, and refile the schedules that are impacted.

**Issue 6.2 Is Toronto Hydro's proposal to record variances between the approved levels of capital contributions to Hydro One and the actual contribution levels in USOA 1508 appropriate?**

**91) Ref: E D2/ T1/ S1 and E J1/ T1/ S2**

On page 4 of the first reference, THESL proposes to track all the capital contribution variances to HONI that differ from the approved 2010 amounts in a variance account.

In Exhibit J1/T1/S2, THESL explained that the basis for its proposal was the timing and amounts of capital contributions are largely out of THESL's control and are difficult to jointly forecast with reasonable accuracy

THESL further states that it has offset the shortfall in capital contributions over the years 2008 to 2009 with other capital spending, so that the variance is substantially in the mix of capital expenditures rather than their level. As such, THESL states that it does not believe it has benefitted at the expense of customers due to the capital contribution shortfall.

- a. Please provide the 2008 Board Approved level of capital contributions and the actual level for the same year.
- b. Please provide quantitative support for THESL's position, noted above, that it has offset the shortfall in capital contributions over the years 2008 to 2009 with other capital spending.

**92) Ref: E J1/T1/ S2/p 9-10**

With respect to THESL's request for a variance account for Capital Contributions to Hydro One.

- a) What is the regulatory precedent for the collection of these costs in a deferral account and the disposition in future years?
- b) What is THESL's justification for this account based on the regulatory principles governing regulatory assets (e.g. materiality, prudence, causality etc.)
- c) What are the journal entries projected for this account?
- d) When does THESL plan to ask for disposition of this account?
- e) How does THESL plan to allocate this account by rate class?

**7. COST ALLOCATION and RATE DESIGN**

**Issue 7.1 Is Toronto Hydro's cost allocation appropriate?**

**93) Ref: E L1/T1/S1**

Please explain why in THESL's cost allocation model the GS>50<999 RIMs and Non RIMs customers are treated separately in the input tables, but are combined in the output tables.

**94) Ref: E L1/T2/S1/p.3 and pp. 5-7**

Page 3 of the above reference "Summary Financial Information" shows "Total Distribution Assets" of \$4,141,256,158, "Accumulated Amortization" of \$2,255,857,193 and "Net Fixed Distribution Assets" of \$1,885,398,966.

Page 7 of above reference, which is the final page of "Sheet I4 Breakout Worksheet – First Run," shows the same "Net Fixed Assets" number of \$1,855,398,966, but a different breakdown between total assets and amortization of \$4,375,963,597 and \$2,490,564,631 respectively.

- a) Please provide an explanation for these differences.
- b) Please explain why THESL used the aggregated "Summary Financial Information" sheet rather than Sheet I3 Trial Balance, which shows each account.

**95) Ref: E L1/T2/S1/pp.18-23**

On these pages, THESL makes a number of direct allocations to specified customer groups of certain accounts.

- a) Please provide an explanation for each of the direct allocations which have been made.
- b) Please state whether or not when THESL makes a direct allocation to a class, the rest of the account is allocated 0% to the class or classes that received such a direct allocation. If THESL does not make such an adjustment, please discuss whether the class is being properly allocated a share of the account over and above the amount that is allocated directly.

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

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

**96) Ref: E L1/T1/S1/p.4 and E L1/T 2/S1/p.24**

Sheet 01 "Revenue to Cost Summary Worksheet – First Run" of the second reference above provides a line entitled "Revenue Requirement (Includes NI)" which allocates revenue requirement to each of THESL's customer classes.

Please provide an explanation for the differences in the revenues allocated by customer class on this sheet when compared to Table 3 of the first reference above. For instance Sheet 01 shows a revenue requirement for the residential class of \$257,094,597, while Table 3 shows allocations to the residential class ranging from \$202.6 to \$221.2 million.

**97) Ref: E L1/T2/S1/p.9 and E M1/T 4/S1/p.1**

THESL's total base revenue (including Transformer Ownership Allowance) is \$540,468,543 on both Sheet I6, the first reference above and the "2010 Revenue Reconciliation Summary," which is the second reference above. However, the class by class amounts are different.

Please provide an explanation for these differences.

**Issue 7.4 Are the proposed Retail Transmission Service rates appropriate?**

**98) Ref: E K1/T3/S2, E K1/T8/S2, E L1/T2/S1/p.56, and E N1/T2/S2/p.2**

The first reference, which is Table 1 of Exhibit K1, Tab 3, Schedule 2 provides "Weather-normalized Loads by Class," which are used in THESL's load forecast. For the 2010 Test year, total kWh of 24,865,322,485 and kVa of 42,949,353 are shown.

The second reference, which is Table 1 of Exhibit K1, Tab 8, Schedule 2 provides "Cost of Power Forecast Inputs." For the 2010 Test year, total purchased energy kWh of 25,755,312,099 is shown along with system network kW of 47,042,108, line connection kW of 46,349,983 and transformer connection kW of 47,615,738.

The third reference, which is Exhibit L1, Tab 2, Schedule 1, page 56 of THESL's 2010 Cost Allocation Informational Filing shows 12 NCP Distribution NCP (Total System) allocations which include 22.16% to Residential, 12.05% to GS<50 and percentage allocations of the same type for THESL's other customer classes.

The fourth reference which is Exhibit N1, Tab 2, Schedule 2, page 1, 2010 wholesale transmission allocation shows 12 NCP allocations which include 25.4% to Residential, 11.8% to GS<50 and percentage allocations of the same type for THESL's other customer classes. This reference also uses the same system network, line connection and transformer kW as the second reference.

- a. Please explain the relationship between Total kVA in the first reference and the three kW quantities in the second reference
- b. Please explain why the latter quantities are more suitable for the forecast of cost in the fourth reference "2010 Wholesale Transmission" than those from the first reference.
- c. Please explain why the allocation 12NCP used for RTSR Connection rates in the fourth reference is different than the 12NCP allocation used in the Distribution cost allocation in the third reference.

**Issue 7.5 Are the proposed Distribution Loss Factors appropriate?**

**99) Ref: E M1/T2/S2/p.6**

THESL's proposed Tariff of Rates and Charges includes a distribution loss factor for customers greater than 5,000 kW of 1.0141.

Please provide a description of the connection characteristics that would explain the level of this loss factor.

**100) Ref: E M1/T1/S1/p.8**

On this page, THESL provides reasons why it believes that the current level of loss factors should be maintained even though the most recent five-year average is below the current approved level.

In discussing the levels of the loss factors, THESL notes that:

“Some reduction in losses is expected as overall loads are reduced. Reduced losses can also be expected as more efficient equipment replaces older equipment over time.”

Please further explain why, in light of the statements made above, THESL is not convinced that the recent declines in losses indicate a sustained trend.

**8. SMART GRID PLAN**

**Issue 8.1 Does Toronto Hydro’s Smart Grid Plan meet the Board ’s filing guidelines and the objectives set out in the Green Energy and Green Economy Act, 2009?**

**Issue 8.2 Has Toronto Hydro appropriately addressed the Smart Grid Plan expenditures in the context of its overall Capital and O&M budgets?**

**Issue 8.3 Is Toronto Hydro’s approach to allocating Smart Grid Plan O&M and Capital costs to its distribution customers appropriate?**

**101) Ref: E G1/T1/S1**

a) In 2010 and 2011 will there be any impact on asset management spending which is attributable to the Green Energy and Green Economy Act (“GEGEA”), and more specifically, smart grid and renewable energy generation?

b) If yes, please describe.

**102) Ref: E G1/T1/S1**

Please provide the proportion of total distribution costs included in this application that is attributable to GEGEA related projects.

**103) Ref: E F2/T9/S1/p7/L7**

The referenced line refers to IT&S training in preparation for fulfilling a role in assisting Smart Grid goals, and that these training costs can no longer be capitalized under the IRFS rules and the new Canadian GAAP rules

a) What amount of IT&S training has been allocated to eligible Green Energy Act activities?

b) Does this relate to incremental activities as defined in the June 16, 2009 Guidelines?

**104) Ref: E F2/T9/S1/p.4**

Table 1 on this page states that IT&S costs are \$25.2 million in the 2010 Test year

Please state the portion of the IT&S payroll costs that has been allocated for eligible Green Energy Act activity and the basis for this allocation?

**105) Ref: E G1/T1/S1/p1**

The Board in its June 16, 2009 Guidelines provided for Deferral Accounts for renewable Generation Connection and Smart Grid Development Expenditures for recording incremental investments or expenses.

- a) Please confirm that the applicant is not seeking relief under the Board's June 16, 2009 Guidelines including a GEA funding adder.
- b) If the applicant is seeking relief under the Guidelines, what specific relief is the applicant seeking from the Board in this application related to eligible Green Energy and Green Economy Act ("GEA") facilities?
- c) Is THESL seeking to have any of the costs of GEA initiatives allocated to provincial ratepayers (as per Reg. 330), as opposed to merely THESL ratepayers? If yes, please indicate the applicable amount for each initiative.
- d) If yes, please describe which costs, and provide the calculation THESL proposes for such an allocation.

**106) Ref: E G1/T1/S1/p1**

Table 1 on page 1 shows THESL plans to spend \$9,770, 000 in capital costs and \$450, 000 in operating costs for a total of \$10, 220, 000 on smart grid projects. The Board's Guidelines indicate smart grid investments should currently be limited to pilot type projects.

- a) Please indicate which of the capital and OM&A costs relate to projects which are not pilot projects?
- b) Please explain to what extent each of the projects (i.e. pilot and other) have been subject to business case analysis, and provide the analysis for each.
- c) If they have not been subjected to a business analysis, please explain why.

**107) Ref: E G1/T1/S1/p1/Table 1 & p 11/Table 2 & p 12/Table 3**

Please provide clarification as to what part of the Exhibit G1 Smart Grid Plan is incremental to existing projects and what constitutes normal system expansion and development.

Please provide such clarification by providing the following separately for each project listed for which THESL is seeking rate relief in the above references:

- a) A description of how each of the initiatives fits within the Distribution System Planning guidelines of June 16, 2009 in the categories of
  - i. Renewable Generation Connection Capital
  - ii. Renewable Generation Connection OM&A
  - iii. Smart Grid Capital
  - iv. Smart Grid OM&A
- b) A statement for each of the initiatives as to whether or not there have been expenditures in the years prior to 2010 on each initiative, and if so, why the amounts for 2010 can be considered incremental, as defined in the June 16, 2009 Board guidelines
- c) The expenditure for each activity in each of the years 2010 and for subsequent years

**108) Ref: E G1/T1/S1/p4**

The paragraph titled “Long-Term Plan” refers to a detailed plan “Connecting the Smart Grid”. It indicates that the plan will be adapted for filing with the Board following receipt from the Board of the further-developed distribution system plan filing guidelines referred to in the Board’s letter to distributors dated June 16, 2009.

- a) Please provide a copy of “Connecting the Smart Grid”.
- b) Please state whether or not THESL is seeking any funding or cost recovery with regard to the long term plan in this application.

**109) Ref: E G1/T1/S1/p5 L6-12**

The referenced lines refer to distributed generation, the connection of renewable generation and the reliable connection of microgrids, community energy and virtual power plants.

- a) Please explain THESL’s concept of a “microgrid”?
- b) Please explain THESL’s concept of a “virtual power plant”?
- c) Please identify all of the projects in the application which relate to the objectives identified in the reference.
- d) Please describe how THESL will determine where on its system to prepare for connection of renewable generation, microgrids and virtual power plants.

**110) Ref: E G1/T1/S1/p 7**

In order to test various smart grid initiatives THESL selected a community in North York, consisting of 10 feeders and 2 substations.

Please explain how the lessons learned in North York will be useful in the remainder of the city given that lessons from this pilot may not be applicable elsewhere due to differing feeder and substation configurations throughout the city.

**111) Ref: E 1/T1/S1**

Please indicate if THESL has any plans for coordination amongst distributors and transmitters with regard to infrastructure to support renewable generation and with regard to Smart Grid initiatives.



**112) Ref: E G1/T1/S1/p3/line21**

Please explain what THESL means by the term “nested” outages.

**113) Ref: E G1/T1/S1/p7**

It is stated that:

“The three-year plan of the smart grid roadmap is intended to establish Toronto’s Smart Community, which is a demonstration area where prioritized initiatives can be tested, processes developed, customer acceptance understood, and operating procedures created.”

- a) Please state if this community is made up of a contiguous geographical area.
- b) Please state if this community is made up of a contiguous electrical area.
- c) Please state if the electrical configuration is representative of all areas of the distribution system.
- d) Please state how many switches are encompassed by the 10 feeders in the community.

**114) Ref: E G1/T1/S1/p11-13**

Tables 2 and 3 summarise the 2010 Smart Grid Programs. The tables indicate that an investment of \$6.7million is required in information technology to support and implement \$3 million of investment in smart grid operations projects.

- a) Does THESL have information which would provide a benchmark for such expenditure ratios in other distribution companies or in the literature or in earlier projects?
- b) How does this ratio of expenditure compare with implementation of the SCADA system itself?
- c) For each of the capital and operations amounts in Table 3 for each project please provide a more detailed breakdown as to how the number was obtained, including labour (internal and external) and type of labour and materials and equipment

**115) Ref: E G1/ T1/ S2/p3 and pp.8-9**

On page 3, THESL describes projects to allow automation of the secondary network. This is stated as the only project “not specifically piloted in the Smart Community area.”

On pages 8-9, THESL states that it plans to install monitoring equipment on submersible transformer vaults.

- a) By what criteria did THESL determine that automation of the secondary network and submersible vault monitoring are smart grid investments?
- b) Please identify separately, capital expenditures related to the GEA and that related to normal system expansion/reinforcement.
- c) If this project were to proceed as described by THESL please state the anticipated benefits including quantification of them.

**116) Ref: E G1/T1/S2/p 1**

As part of the Feeder Automation project THESL states that it plans to leverage previously installed SCADA controlled switches in order to perform 'self-healing' capabilities. Over 400 such switches are stated as having been installed.

Please describe in detail, for this leveraging of existing assets for smart grid capabilities:

- a) The incremental changes that are to be made;
- b) The incremental costs;
- c) Confirm that these components were not part of any previous application and are not already in the rate base;
- d) Please provide further detail on the software, control devices and any other ancillary devices that THESL is planning to utilize for this initiative;
- e) Please quantify the payback or benefit anticipated from this initiative;
- f) Please describe the anticipated lessons learned from this demonstration.

**117) Ref: E G1/T1/S2/p1**

Feeder Automation is discussed on this page.

- a) Please confirm that the Smart Community is made up of the ten worst performance feeders in the distribution network, and that there are no other feeders in the Smart Community. What are the current reliability statistics for the Smart Community?
- b) Please provide current reliability statistics for the Smart Community.
- c) Please state whether the current reliability statistics for the Smart Community are below the target reliability for feeders in the system.
- d) Please state what actions were contemplated to improve the reliability of the Smart Community prior to passage of the Green Energy Act.
- e) Please state why it is necessary to retrofit existing intelligent switches in the Smart Community.

**118) Ref: E G1/T1/S2/p 5**

On this page, a transformer smart metering project is described.

- a) Please state where the smart transformer meters will be located.
- b) Please state why smart meters are required, as opposed to using a standard meter and incorporating intelligence in the SCADA system.
- c) Please explain how the transformers will be chosen.
- d) Please state which functions will be required in the smart meters.
- e) Please state what actions will be prompted by these functions.

**119) Ref: E G1/T1/S2/p 7**

On this page, a Line Monitoring Project is described.

- a) Please state whether all the feeders in the Smart Community are SCADA controlled.
- b) Please describe the characteristics of an intelligent switch.
- c) Please state how many intelligent switches are in the Smart Community at the present time.
- d) Please state how many intelligent switches will be in the Smart Community when the project is implemented.
- e) Please state whether it is expected that the 30 power line monitors will be sufficient to allow intelligent switches for all consumers in the Smart Community system.
- f) Please state the ultimate number of power line monitors needed for the Smart Community.
- g) Please provide a projection of the number of intelligent feeders required for the entire THESL distribution system.
- h) Please state where the line monitors will be located.
- i) Please state how the locations will be chosen.
- j) Please state what actions will be prompted by this project and describe the kind of algorithms which might be used.

**120) Ref: E G1/T1/S2 (pp.10-13)**

THESL states that it plans to undertake a number of smart grid related pilots/studies on a variety of topics including plug-in electric vehicles, distributed generation, and home energy portals. Many of these initiatives will be carried out within the proposed North York test zone. Many other LDCs across North America are currently planning and undertaking similar studies. In the Guidelines issued June 16, 2009 the Board stated that if LDCs choose to conduct or commission smart grid pilots/studies they should not duplicate efforts elsewhere in North America and should explore cost sharing partnerships.

- a) Individually, for each project please indicate whether THESL has satisfied the requirements for Smart Grid Projects listed on pages 12 and 13 in the Guidelines. And if yes, please state how THESL has done this.
- b) Please describe in greater detail the purpose and nature of the proposed studies.
- c) Please describe in detail the anticipated benefits of each study.
- d) Please state under a scenario where a more concentrated approach were taken:
  - i) what three projects are most important and/or unique to THESL's service area; and
  - ii) if only these three initiatives were pursued, please provide the comparative cost savings.
- e) Please state whether or not THESL plans to purchase electric vehicles.
- f) Please provide the proposed geographical boundaries of the pilot area.
- g) Please provide a detailed timeline for each study including when THESL expects to be able to report on and apply the lessons learned.

**121) Ref: E G1/T1/S3**

Based on the project costs provided in Tables 1 to 6, the proposed IT work will cost nearly \$ 7 million.

- a) In respect of other green energy plans, please state whether the IT expenditures are comparable in terms of percentage of total costs? Please provide a comparison of the percentage of IT expenditure in THESL's Green Energy plan to IT expenditures in other such plans.
- b) Please provide a projection of the costs for IT for expansion to the entire distribution system.
- c) Please state whether or not there is a way to spread the costs for the Smart Community project over a longer time period.
- d) Please state why is this considered to be a "smart" application.