Ontario Energy Board
P.O. Box 2319
27th. Floor
2300 Yonge Street
Toronto ON M4P 1E4
Telephone: 416- 481-1967
Facsimile: 416- 440-7656
Toll free: 1-888-632-6273

Commission de l'Énergie de l'Ontario
C.P. 2319
27e étage
2300, rue Yonge
Toronto ON M4P 1E4
Téléphone; 416- 481-1967
Télécopieur: 416- 440-7656
Numéro sans frais: 1-888-632-6273

Ontario

BY E-MAIL

October 15, 2014

Attention: Ms. Kirsten Walli, Board Secretary

Dear Ms. Walli:

Re: Toronto Hydro-Electric System Limited
Application for Rates
Board File Number EB-2014-0116

In accordance with Procedural Order No. 1 issued on September 17, 2014, please find attached the Board staff interrogatories on the referenced application filed by Toronto Hydro-Electric System Limited.

Original Signed By

Martin Davies
Project Advisor, Electricity Rates & Accounting

Attachment

cc: Parties to EB-2014-0116 proceeding

Board Staff Interrogatories
Custom Incentive Rate-Setting Application for 2015 to 2019 Electricity Distribution Rates and Charges
Toronto Hydro-Electric System Limited ("THESL")
EB-2014-0116
October 15, 2014

1B Requests and Rationale

1-Staff-1

Ref: E 1B/T1/S1/p. 1, E1B/T1/S3 and Ontario Energy Board *Filing Requirements For Electricity Distribution Rate Applications – 2014 Edition for 2015 Rate Applications,* Chapter 3 Incentive Regulation, July 25, 2014, pp.15-16.

In the first reference, THESL states that it is applying to the Board for electricity distribution rates and other charges effective May 1, 2015 and custom Price Cap Index framework to set distribution rates for the period January 1, 2016 to December 31, 2019.

In the second reference, THESL discusses its proposed Custom Capital Factor for the years 2016 to 2019.

In the third reference, the Board discusses its ICM materiality threshold which is applied when determining incremental capital expenditures eligible for recovery in IRM years.

Please state whether or not THESL took into account any kind of materiality threshold in developing its proposed Custom Capital Factor and if not, why not.

1-Staff-2

Ref: E 1B/T1/S3/p. 6 L 3

Please provide citations or other information in the public domain that supports the claim in footnote 9 that "PEG suggests that a 10-year horizon is the minimum required for TFP indexing."

1-Staff-3

Ref: E 1B/T1/S3/p. 6 L 9-23

THESL states that, in its view, the zero productivity factor adopted by the Board for Price Cap IR contains an implicit "stretch" of 0.33 per cent since Ontario electricity distributors' TFP grew at an average rate of -0.33% over the 2002-2012 period.

a) Please state whether or not in Price Cap IR, the Board's selected inflation factor grows at the same average, annual rate as input prices for Ontario's

electricity distributors, as presented in PEG's November 2013 TFP and Benchmarking report;

b) If not, please compute the historical "input price differential" (*i.e.* the difference between average inflation in the selected inflation factor and average inflation in industry input prices) that is implicit in the rate adjustment formula in Price Cap IR;

c) Please calculate the sum of the "input price differential" and the "implicit productivity stretch factor" in the rate adjustment formula in Price Cap IR;

d) Please state whether or not the calculation in part c implies that the "implicit" input price and productivity terms reflected in the Price Cap IR formula make it more difficult, or less difficult, for utilities to recover their cost changes over the term of an IR plan. Please explain.

1-Staff-4

Ref: E 1B/T1/S3/pp. 8-13 and Ontario Energy Board, EB-2014-0219 *Report of the Board, New Policy Options for the Funding of Capital Investments: The Advanced Capital Module,* September 18, 2014

At the first reference, THESL discusses its proposal for a Custom Capital Factor stating that:

> The premise of the inclusion of a custom capital factor ("CCF" or "C-factor") is to reconcile the OEB's guidance that the CIR framework is best suited for utilities with significant, multi-year capital investment requirements as it is clear that the standard 4th Generation IR framework is not.

Subsequent to the filing of THESL's application, the Board introduced the Advanced Capital Module (ACM) as a new policy option for the funding of capital investments. At the second reference, the Board described the ACM as:

> a new funding mechanism that would enable review during a cost of service application for the need and prudence of any proposed incremental capital module funding requests for discrete projects that are part of a distributor's Distribution System Plan, and that are planned to come into service during the IRM period (the Advanced Capital Module or "ACM").

Please state whether or not THESL believes the ACM could replace its proposed Custom Capital Factor and why or why not this would be the case.

1-Staff-5

Ref: E 1B/T1/S3/p. 9 L 1-10

a) Please state whether or not the computation of C_n depends in any way on changes in billing determinants between 2015 and 2016. Please explain;

b) If not, please state whether or not the computed C_n value of 5.15% would yield the same amount of revenue for THESL in 2016 if all of its billing determinants grew by 1% in that year compared with a scenario where all of its billing determinants grew by 2% in that year. Please explain;

c) Please explain how a C factor adjustment to allowed prices will exactly recover the Company's change in capital-related revenue requirements if the C factor does not also take account of changes in billing determinants between years.

1-Staff-6

Ref: E 1B/T1/S3/p. 12 L 9 and Ontario Energy Board *Report of the Board Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach* October 18, 2012.

a) Please confirm that this line is mathematically equivalent to the following:

$$PCI = (1 - S_{cap}) * (I - X) + C_{n;}$$

b) Since $(1 - S_{cap})$ is the share of OM&A expenses in THESL's revenue requirements, please state whether or not the formula in part a) is identical to indexing of OM&A expenses only and a cost tracker for capital expenses. Please explain;

c) Since I – X indexing applies only to the recovery of OM&A costs, please state whether or not it would be more appropriate to use OM&A partial factor productivity (PFP) trends rather than TFP trends as the basis for the X factor. Please explain;

d) In its RRFE Report, the Board (p. 8) defined "targeted rate-setting" as treating OM&A and capital separately and distinguished this from "a comprehensive approach to rate-setting" (p. 9) that recognizes the interrelationship between capital expenditures and OM&A expenditures. The RRFE report also found (p. 9) "rate-setting that is comprehensive creates stronger and more balanced incentives and is more compatible with the Board's implementation of an outcome-based framework." Table

1 on page 13 of the RRFE Report also shows that the Custom IR option must have comprehensive (i.e. capital and OM&A) coverage:

i. Given the formula presented above in part a, please state whether or not THESL's Custom IR plan is more akin to what the Board describes in the RRFE Report as a targeted rather than comprehensive approach to rate-setting? Please explain;

ii. Please explain in detail how the Custom IR plan recognizes the interrelationship between capital expenditures and OM&A expenditures when the formula specifies different cost recovery mechanisms for changes in capital and OM&A costs.

1-Staff-7
Ref: E 1B/T2/S4/p. 8 L 4-9

a) Please provide all available empirical support for THESL's claim that "high-value programs such as Feeder Automation and Design Enhancement…are expected to deliver significant improvements in system performance and operational efficiency for a level of annual investment that is relatively small compared to the typical renewal program;"

b) Please identify all "typical renewal programs" that THESL is referencing in this claim;

c) Please state whether or not THESL has undertaken, or is aware of, any benchmarking analysis that examines the reliability impacts resulting from its capital expenditure programs compared with similar programs undertaken in the industry. If so, please provide copies of all such benchmarking analyses.

1-Staff-8
Ref: E 1B/T2/S5/p. 11 L 4
Please provide all evidence where "the OEB acknowledged the outlier status of Toronto Hydro in the Ontario context." Please provide specific citations to Board Reports or other official documents.

1-Staff-9
Ref: E 1B/T2/S5/p. 14 L 20-23

a) Please provide a citation to the section(s) of the PSE report that "confirmed" the amount of productivity/efficiency gains achieved by THESL in the years preceding the Custom IR application;

b) Please provide the quantitative values of THESL's productivity/efficiency gains, by year, as confirmed by PSE.

1-Staff-10
Ref: E 1B/T2/S5/App. B/p. 6
At the above reference, PSE says that it "gathered U.S. data on utilities' non-normalized reliability indexes and their sustained outage definitions from publicly-available regulatory filings."

a) Please identify the data source (*e.g.* the precise "regulatory filing" or report) for SAIFI and SAIDI data for each year, for every US utility, in PSE's US reliability benchmarking sample;

b) Please identify all SAIFI and SAIDI data in PSE's US reliability database that were interpolated, adjusted or otherwise modified compared to what was reported in the publicly-available regulatory filings. Please also explain the rationale for each such adjustment of the source data.

1-Staff-11
Ref: E 1B/T2/S5/App. B/p. 8
Footnote 9 of the above reference states regarding THESL's proposed capital spending program that "…reliability is a large portion of the rationale, and is the 'output' of the capital spending program that most readily lends itself to be benchmarked and evaluated."

a) Please state whether or not PSE has ever undertaken any analysis that benchmarks reliability as an "output of the capital spending program" of an electric utility;

b) If so, please provide a copy of all such analyses (report, dataset, computer programs, spreadsheets, and testimony) that evaluate the cost effectiveness of reliability projects that PSE has undertaken and/or

testified in support of;

c) Please state whether or not the reliability performance of THESL's capital spending plan (e.g. the expected SAIDI improvement resulting from Toronto Hydro's 2015-2019 capital spending) can be benchmarked using these models. Please explain in detail;

d) If so, please use the PSE model(s) to project:
   i. The expected change in SAIDI resulting from THESL's 2015-2019 capital spending program;
   ii. The expected change in SAIFI resulting from THESL's 2015-2019 capital spending program;

e) Given the output from part d, please provide PSE's estimate of:
   iii. The expected cost per minute of SAIDI change from THESL's 2015-2019 capital spending program;
   iv. The expected cost per change in SAIFI from THESL's 2015-2019 capital spending program.

1-Staff-12

Ref: E 1B/T2/S5/App. B/p. 16

PSE states that it included kWh as an independent variable in its benchmarking models, but it "did not come in plausibly signed and statistically significant in our models."

a) Please state whether or not kWh was statistically significant but with a negative sign in any of PSE's benchmarking models;

b) If so, please state whether or not this result raised any concerns about PSE's benchmarking approach. Please explain.

1-Staff-13

Ref: E 1B/T2/S5/App. B/pp. 16-17

a) Please state whether or not PSE expressed non-labour OM&A prices in a common currency (using PPP exchange rates) but expressed labour prices for Ontario electricity distributors in Canadian dollars and labour prices for US electricity distributors in US dollars;

b) If so, please state whether or not PSE is concerned about the asymmetric treatment of labour and non-labour OM&A prices in its study. Please

explain why or why not in detail;

c) Please provide all other calculations PSE involved, if any, to create a "price patch" linking input price levels in Ontario to input prices in the US.

1-Staff-14

Ref: E 1B/T2/S5/App. B/p. 19

For each of the variables listed on Table 2 of the PSE report, please provide in electronic form the following information:

a) The source data necessary to construct the values PSE provided for each company in the US sample. For the purpose of this request, "source data" is meant to be account level FERC Form 1 data or other data that is employed prior to any calculations or data manipulations by PSE;

b) The formulas used to calculate each variable from the source data. This can be provided in either a spreadsheet or program code;

c) Information to allow the identification of companies, variables, and mapping of companies to geographical regions where applicable;

d) If not provided above, please provide in electronic form the data (and identified data sources) and formulas used to adjust the Prices of Capital and OM&A inputs to reflect differences in US and Canadian currencies.

1-Staff-15

Ref: E 1B/T2/S5/App. B/p. 29

PSE states that it was provided with projections of non-coincident peaks at the substation level but they were adjusted based on the ratio of the coincident peak demand of the THESL system and the sum of the non-coincident substation peak demands. Please provide a spreadsheet showing all the details of this calculation, including supplementary analyses that may enter into this computation.

1-Staff-16

Ref: E 1B/T2/S5/App. B/p. 31

Table 4 of the above reference includes estimates of cost function parameters with two outputs, estimated using the US-Ontario sample. The cost elasticity for the customers output is 0.967 and the cost elasticity for the peak demand output is 0.114. The sum of the two cost elasticities is therefore 1.081.

a) Please confirm that when the sum of all output elasticities in an econometric cost model exceeds a value of 1 it indicates that there are

diseconomies of scale for the mean firm in the sample;

b) Please also confirm that, all else equal, when diseconomies of scale exist for the mean sample firm, unit costs of production for that firm would be decreased if its output decreased;

c) Please state whether or not it is reasonable to conclude that there are diseconomies of scale for a US-Ontario sample of electricity distributors. Please explain, particularly with respect to the magnitude of output for the average Ontario distributor;

d) Please state whether or not the finding of diseconomies of scale for a US-Ontario sample evidence would be an indication of deeper problems with PSE's econometric model and its ability to provide rigorous inferences on distributor efficiency. Please explain.

1-Staff-17

Ref: E 1B/T2/S5/App. B/p. 33

PSE states at the above reference that "…prior to 2007 the company was consistently near 30% below benchmark expectations. This is suggestive that the company's capital was in need of investment."

a) Please state whether or not the purpose of PSE's cost benchmarking model is to make valid inferences on the cost efficiency of THESL;

b) If so, please state why actual costs being consistently below benchmark costs are "suggestive" that THESL is not investing enough, rather than a finding that THESL is highly efficient. Please explain in detail;

c) Please state the criteria PSE would use to discriminate between the hypotheses that management has 1) under-invested; or 2) been highly cost versus efficient; when its cost benchmarking analysis finds the actual costs of a distributor are below its expected costs. Please explain in detail;

d) Please state whether or not PSE has applied those criteria in this report. Please explain with specific reference to PSE's econometric benchmarking results (*i.e.* actual versus predicted costs) for THESL in: 1) 2007; 2) 2013; and 3) 2019.

1-Staff-18

Ref: E 1B/T2/S5/App. B/p. 37

Table 7 of the above reference includes estimates of cost function parameters with two outputs, estimated using the US plus THESL sample. The cost elasticity for the customers output is 0.732 and the cost elasticity for the peak demand output is 0.220. The sum of the two cost elasticities is therefore 0.952.

a) The sum of the output elasticities (0.952) in the US plus Toronto Hydro sample is lower than the sum of output elasticities (1.081) in the US plus Ontario sample. Please state whether all else being equal, this result implies that there are greater economies of scale at the sample mean in a US plus THESL sample than in the US plus all Ontario sample. Please explain;

b) Please state whether or not the result in part a) is reasonable given that the average size of most Ontario distributors is much smaller than the average size of utilities in the US sample. Please explain.

1-Staff-19

Ref: E 1B/T2/S5/App. B/p. 37

a) Please state why the US-Toronto sample does not include customer density as an independent variable. Please explain in detail;

b) In the context of a), please discuss whether or not THESL's rationale for expanding its benchmarking sample to include US utilities depended largely on the issue of customer density, particularly the need to include more utilities (like THESL) that served very dense urban areas. Please explain;

c) If the answer to b) is yes, please state whether or not customer density is at least as important a cost driver in the US sample as in the US-Ontario sample. Please explain.

1-Staff-20

Ref: E 1B/T2/S5/App. B/p. 42

It is well-known that electric utilities often underground assets in an effort to reduce outages. PSE's cost benchmarking model also included the percentage of plant underground as an independent variable in its US-THESL sample.

a) Please state whether or not PSE investigated whether the share of electricity distribution plant underground was a statistically significant driver of measured SAIDI in its US-THESL sample. If so, please provide the relevant econometric results;

b) Please state whether or not PSE investigated whether the share of electricity distribution plant underground was a statistically significant driver of measured SAIFI in its US-THESL sample. If so, please provide the relevant econometric results;

c) If PSE did not investigate whether an undergrounding variable was statistically significant in its reliability benchmarking models, please state whether or not it would be concerned that those models are characterized by omitted variable bias, since they would not take into account one of the most important business decisions utilities make to reduce outages. Please explain in detail.

1-Staff-21

Ref: E 1B/T2/S5/App. B/p. 42

PSE's SAIDI and SAIFI benchmarking samples include 2012, which was the year Hurricane Sandy created massive, multi-day outages along much of the US east coast. PSE also used unadjusted SAIDI and SAIFI data, so the 2012 reliability data for many US utilities in its sample would have overwhelmingly reflected the impact of Hurricane Sandy.

a) Please state whether or not it is appropriate to project SAIDI and (to a lesser extent) SAIFI for the 2015-2019 period using data that reflects the impact of Hurricane Sandy. Please explain;

b) Please provide an updated SAIDI econometric model estimated with the US-Toronto sample but excluding data for the 2012 year.

1-Staff-22

Ref: E 1B/T2/S5/App. B/pp. 42-44

Please state for table 10 of the above reference whether or not the reported three year average SAIDI and SAIFI values are computed using geometric rather than arithmetic averages of reported annual SAIDI and SAIFI indices.

If the answer to a) is geometric averages, please explain the rationale for PSE's decision.

1-Staff-23

Ref: E 1B/T2/S5/App. B/p. 55

At the above reference, PSE writes “if the average efficiency embodied in the benchmark value is generated using firms that are very dissimilar than the utility being benchmarked (i.e. the benchmarked utility is an outlier), then its performance evaluation has a high chance of being inaccurate.”

a) Please state whether or not in PSE’s benchmarking model, the measure of efficiency (*not* cost) for each utility is independent of the external business conditions used in the cost model. Please explain in detail;

b) If the answer to part a is yes, please state how efficiency measures can depend in any way on whether or not the business conditions for any given utility are “dissimilar” to other utilities in the sample. Please explain in detail.

1-Staff-24

Ref: E 1B/T2/S5/App. B

Please provide the following information on a spreadsheet:

a) The account level data used in calculating the OM&A cost for THESL for the year 2012;

b) The formulas used to calculate OM&A for THESL for the year 2012.

1-Staff-25

Ref: E 1B/T2/S5/App. B

Please provide the following information on a spreadsheet:

a) All data used to calculate the capital cost of THESL. It is expected that these data will necessarily go back to the benchmark year of 1989.This information should include the relevant price indexes, gross additions, rates of return and any other data used by PSE in the calculation of capital cost;

b) If gross additions were calculated from other data sources, please provide the formulas and data from these sources.

1-Staff-26

Ref: E 1B/T2/S5/App. B

Please state whether or not the calculation of the benchmark year capital quantity for THESL included a reduction in plant due to customer contributions (CIAC) reported in account 1995.

1-Staff-27

Ref: E 1B/T2/S5/App. B

The following questions relate to the reliability data contained in the study;

a) Please explain why there are no SAIFI or SAIDI data for the following utilities in the following years:

	2002	2003	2005	2006	2009	2010	2011	2012
Florida Power and Light				X				
Gulf Power Co.				X	X		X	
Wisconsin Electric Power Co.	X		X			X	X	X
All New York Utilities	X							
Kansas City Power & Light	X					X	X	X
Cincinnati Gas & Electric/								
Duke Energy Ohio						X	X	X
Kentucky Power Co.							X	X
Louisville Gas and Electric								X
Niagara Mohawk Power Co.		X						X
Orange and Rockland Utilities								X
Portland General Electric Co.	X					X	X	X
Potomac Electric Power Co.	X						X	X
Virginia Electric Power Co.	X	X				X	X	X

b) Please explain why Florida Power Corporation has only one year of SAIDI and SAIFI data (2007);

c) Please explain why Tampa Electric Company has SAIDI and SAIFI data in only 2007 and 2011;

d) Since all the FirstEnergy companies in Ohio file their reliability reports together to the Commission, please explain why Toledo Edison was excluded from the sample;

e) Please explain why Duke Energy Kentucky was excluded from the sample;

f) Please confirm that, in the data sources used for your study:
    i. the values of Central Maine Power Company's SAIDI and SAIFI indices in 2009 are identical to their values in 2008;

ii. the values of Cincinnati Gas & Electric/Duke Energy Ohio's SAIDI and SAIFI indices in 2003 are identical to their values in 2004;

iii. the values of Green Mountain Power Company's SAIDI and SAIFI indices in 2009 are identical to their values in 2008;

g) Please provide the source table for the following:

i. Western Massachusetts Electric Company's SAIDI and SAIFI values in 2012;
ii. Portland General Electric's SAIDI and SAIFI values in 2009;
iii. Kansas City Power & Light's SAIDI and SAIFI values in 2009;
iv. Wisconsin Public Service Corporation's SAIDI and SAIFI values in 2012;
v. Southern California Edison's SAIDI and SAIFI values in 2002;

h) Please provide the table numbers for Potomac Electric and Power Company's SAIDI and SAIFI values in 2003 and 2010;

i) Please provide the table numbers where the data used to derive Commonwealth Edison's SAIDI values in 2002, 2008-2010, and 2012 and its SAIFI values in 2008-2010 and 2012 are reported, as well as the calculations used to derive them;

j) Please provide the table number for Dayton Power and Light's SAIDI value in 2009;

k) Please provide the chart numbers or source table for Connecticut Power and Light's SAIDI and SAIFI values for 2002-2012;

l) Please provide the chart numbers or source table for United Illuminating's SAIDI and SAIFI values for 2002-2012;

m) Please provide the table numbers where the data used to derive Florida Power and Light's SAIDI and SAIFI values for 2008-2012 are reported, as well as the calculations used to derive them;

n) Please provide the table numbers where the data used to derive Gulf Power Company's SAIDI and SAIFI values for 2008, 2010, and 2012 are reported, as well as the calculations used to derive them;

o) Please provide the source data as well as the calculations used to derive New York State Electric and Gas Corp's SAIDI and SAIFI values for 2008-2010;

p) Please explain why companies with fewer than three years of SAIDI and SAIFI data are included in your service reliability benchmarking sample;

q) Please explain how three year average SAIDI and SAIFI values were calculated for companies with three or fewer years of data;

r) Please provide the source data as well as the calculations used to derive Central Hudson Gas and Electric Corp's SAIDI and SAIFI values for 2007-2010.

1C Corporate Information

1-Staff-28

Ref: E 1C/T4/S2, p.22 Financial Statements 2013

With respect to the first reference in note 13, THESL discloses a liability for OPEBs as at December 31, 2013 of $238,792,000.

a) Please state how much of this liability has been recovered through rates since 2000. THESL may wish to refer to undertaking TCJ1.19 in the Hydro One proceeding EB-2013-0416 for a suggestion as to how to complete its response;

b) Please provide the actuarial valuations used in the preparation of the year-end financial statements for the years 2010 through 2012.

2A Rate Base

2-Staff-29

Ref:E 2A/T1/S2/App. 2-BA/pp.5-6

In the above reference, retirements and derecognition of gross costs are shown for 2014 and 2015 under MIFRS. Retirements are shown as $3.6 million in 2014 and $32.4 million in 2015. Derecognition is shown as $83.1 million in 2014 and $101.9 million in 2015.

a) Please explain how THESL differentiates between the two categories of retirements and derecognition;

b) Please identify and describe the capital projects that give rise to these retirements and derecognition of fixed assets which are or were presumably in service;

c) Please state where in the application the cost recovery of these amounts is shown;

d) Please state whether or not it is expected that more than $100 million of fixed assets will be stranded per year during the test period 2015-2019;

e) In these schedules, additions and transfers of gross cost are shown. Please explain what are the transfers and to whom or to what they are transferred.

2-Staff-30

Ref: EB-2009-0180,0181,0182,0183, *Decision and Order,* August 3, 2011, pp. 14-15 and E 2A/T5/S1/pp. 17-19.

The first reference is from the Board's findings in what THESL refers to as the "Valuation Decision". In that Decision, the Board found that the proposed transfer price for streetlighting assets of $28.938 million was reasonable and that the rate base, revenue requirement and rate consequences of the subject transfer should be determined in the context of THESL's next cost of service based rates application. The Board does not appear to make reference to any further revaluation of these assets in the Decision.

In the second reference, THESL explains why it believes that it is appropriate that the proposed 2014 NBV of the former streetlighting assets of $39.8 million be used rather than the original amount approved by the Board in the Valuation Decision of $28.9 million and states that:

> …it is still the case that the proxy value of $28.9 million provided at the time was the result of two simplifying assumptions that had to be made due to the lack of more precise information. .. However, the detailed analysis does not increase the value of the overall asset; rather, it changes the proportion of the unchanged total amount that is transferred to Toronto Hydro.

a) Please state whether or not and why THESL would view its detailed analysis as a revision of the asset valuation, rather than an update of the Board approved level given its comments related to the two simplifying assumptions in the second reference above;
b) If THESL views its detailed analysis as a revision of the asset valuation, please state why it believes its proposed approach would be in compliance with the Valuation Decision;
c) Please provide further explanation of the statement above that the detailed analysis does not increase the value of the overall asset.

2-Staff-31

Ref: E 2A/T5/S1/p. 22

Table 4 of the above reference "Revenue Requirement from Streetlighting Assets ($ millions)" shows a service revenue requirement for the 2015 Test year of $8.1 million, which is offset by a "Revenue Offset – Contract Revenue" amount of $8.1 million producing a base revenue requirement of zero.

THESL's explanation of this adjustment is that:

> Under existing agreements between TH Energy and the City of Toronto, TH Energy receives service fees for the maintenance and operation of the street lighting assets. Given the transfer of a portion of these assets into Toronto Hydro's rate base as distribution assets, Toronto Hydro proposes to allocate a portion of the revenue that it expects to receive to exactly offset the revenue requirement impacts arising from the transfer. Consequently, there is no overall change to the Base Revenue requirement for 2015 as a result of these assets being transferred into the utility's rate base.

a) Please state whether the existing agreements between TH Energy and the City of Toronto will be transferred over to THESL and, if so, whether they will be transferred unchanged, or if any modifications will be made. If modifications are anticipated, please state what they will be;
b) THESL states that it proposes to allocate a portion of the revenue it expects to receive. Please state what the anticipated total amount of expected revenue would be;
c) If THESL was not to make the revenue offset shown in Table 7, please state what the impact would be.

2-Staff-32

Ref: E 2A/T8

As per the Filing Requirements for Electricity Rate Applications for 2015 Rate Applications, section 2.5.2.5, relating to renewable enabling investments, provincial rate recovery, please provide a draft accounting order for the requested variance account to track IESO payment revenues against the actual spending.

2B Distribution System Plan

2-Staff-33

Ref: E 2B/S 00/p. 8 and E 2B/SA/p.4/L 28-30

In the first reference, the histograms on this page show "proposed CIRs" for 2019 as: SAIDI 1.02 and SAIFI 1.19.

The numbers provided in the above references are summarized in the table below. There is a difference in the starting year for the quoted reliability numbers in each

reference but the reference 2 numbers are not consistent with the histogram in reference 1. Furthermore, the end year for the comparison is the same but the Reference 2 numbers do not match the numbers in reference 1 histograms.

Reference		2014	2015	2019
1. Exhibit 2B, Section 00, p. 8 (histograms)	SAIDI		1.23	1.02
	SAIFI		1.55	1.19
2. Exhibit 2B Section A, p. 4, lines 28-30	SAIDI	1.21		0.97
	SAIFI	1.53		1.13

a) Please explain why there are different numbers in the two references;
b) Please provide a table showing the correct forecast SAIDI and SAIFI numbers for years 2014-2019 for the scenario for i) Run-to-fail and ii) with proposed requested renewals capital expenditures.

2-Staff-34

Ref: E 2B/S 00/p. 38/L 30-31

It is stated that “The projected budgets from 2016 to 2019 for System O&M are expected to increase in line with inflation.”

a) Please expand on the above statement, indicating relationships to construction material indices, labour rates and any other variables which THESL considers important;
b) Please discuss the expected effect of the asset renewal program on O&M as the health index of assets improves;
c) Please state the efficiencies that are expected to be implemented in O&M that are expected to reduce O&M costs. Please relate these efficiencies to the programs for the respective Asset Access, Renewal and Service, and General Plant.

2-Staff-35

Ref: E 2B/S D/App. A Kinectrics Report

At page 9 of the above reference in the first paragraph of the section entitled “Changes in Sample Size”, it is indicated that for a particular asset to be included “60% of required condition data must be available in order to be included into the sample size.”

In the fourth paragraph it states: “Generally, a minimum sample size of 10% is required to extrapolate ACA results over an entire population.”

On page 10, Table 1 provides “Summary Change in Population and Sample Size” and indicates that the minimum percentage sample size in 2014 is 32%.

a) Based on the minimum sample size of 32%, please state whether or not it would be correct to infer that one could theoretically extrapolate over an entire population with just 32%x60%=19.2% of the ACA data points;

b) Please state how THESL utilizes the extrapolations, including discussion of the questions below:
   i. If THESL has a sample size of 32% for an asset, what does the extrapolation to the whole population allow THESL to do? Is planning based on the extrapolated population distribution?
   ii. Would THESL use the extrapolated number for assets which are at or beyond end-of-life as the number of devices that need to be replaced?
   iii. If a sample size of 25% of the population shows that half is beyond end of life, would THESL assume the same holds true for the extrapolated population, and then plan to replace half the entire population?

c) Using the example in Table 1 of the Asset “7”, “SF6 CB”, please describe the selection procedure according to which the samples were selected, including answering the following:

   Please discuss how THESL would describe the process of sample data collection stating whether or not it was consciously randomized, or “convenience” or “opportunity” sampling.

   If the process was not consciously randomized, please state whether the samples were taken from breakers that had been a) routinely serviced, or b) breakers that had to be repaired.

   If the data was taken from breakers that had been serviced, please state the procedure according to which it was decided to service those breakers including whether or not servicing of breakers was done by a random selection.

Please comment on the importance of using randomized data in order to extrapolate information from a sample to an entire population.

2-Staff-36

Ref: E 2B/SD3 and E 2B/SE6.14 and E 2B/SD4/App. A

Board staff notes that in regard to the process for determining which devices are to be replaced and when they are to be optimally replaced, a key concept is the end-of-life of the particular asset. Board staff wants to understand the end-of-life concept as it is used in the application, and how critical this factor is in deciding how many units of an asset should be replaced.

a) Please provide a copy of the following documents discussed at page 1 of Reference 3:
    i) the 2006 full Asset Condition Assessment (ACA) conducted by Kinectrics, or if there is a more recent full ACA the most recent one;
    ii) the stand-alone ACAs of Network Transformers, Network Vaults and Network Protectors by Kinectrics;
    iii) the 2012 condition assessments conducted internally by THESL;
b) Please explain the step by step descriptive process of determining the end-of-life for an asset, using the System Renewal program E6.14, “Stations Power Transformer Renewals” as an illustrative numerical example. Also provide flow diagrams if this would assist in the explanation;
c) Please confirm that the “Optimal Intervention Time” (in years), as described in Reference 1, page 8, figure 3, is in fact the “end-of-life” criteria for determining when a particular asset should be replaced;
d) Please explain how, in practice, the curves of figure 3 are determined;
e) Please explain how the end-of-life for the asset is combined with the Health Index for the asset to determine that a particular asset should be replaced;
f) For the asset reference 2 it is stated at page 2 that “By 2015, an estimated 51.6% of in-service station power transformers will be beyond their expected useful lives of 45 years…” Please indicate:
    i) The depreciation life of these transformers for accounting purposes.
    ii) The population of transformers under consideration and how many transformers are represented by the 51.6%.
    iii) The sensitivity of the data, by determining what percent (and how many) of the transformers would be beyond their expected useful lives if the useful life had been calculated as 50 years.

2-Staff-37

Ref: E 2B/S D/App. A/ Kinectrics Report and THESL EB-2012-0064/T4/S B14

On page 14 of the first reference, it is stated that 87% of the Oil KSO breakers have a 2014 classification of fair or worse condition leaving only 13% in good condition, a decline from the 26% that were in good condition in 2012.

The second reference, which is THESL's evidence on these breakers from its previous IRM application, states on page 3, line 22 that there were 66 KSO breakers in 2012. On page 1 of this evidence, it is stated that 21 of these breakers were to be replaced in the 2012 to 2014 period.

a) Given the program to replace 21 of the breakers during 2012-2014, please provide an explanation for the increased percentage of "fair or worse" condition breakers and the decreased percentage of "good" condition breakers;
b) If the explanation is that THESL replaced less breakers than planned, please explain why this is the case, given the importance of these devices.

2-Staff-38

Ref: E 2B/S D/App. A/ Kinectrics Report, p.20

In the above reference, it is stated that:

> Of the 21 asset groups audited, only 4 groups showed improvements in overall health. For the remaining 17 asset categories, an overall decline in condition was observed.

Where station assets are concerned, it is particularly noted that: "Because station assets are generally substantial and have relatively higher consequences of failure, this trend in declining health is a major cause for concern."

a) Please provide THESL's general view of the audit results including:
    i) Identification of any areas of the report with which THESL does not concur, and the reasons;
    ii) THESL's view as to the extent to which the report reasonably and accurately represents the expected results of the System Renewal expenditures over the historical spending period 2010 through 2014;
b) Please comment on the statement noted above that "… this trend in declining health is a major cause of concern".

2-Staff-39

Ref: E 2B/S E/Sch 6 and THESL EB-2012-0064/T4/S A/App. 1/T1

THESL's DSP has expenditures in the asset categories of System Access, System Renewal, System Service and General Plant. Board staff seeks information that will

indicate the degree to which programs authorized in THESL's previous application have been achieved, including the impacts completion of these programs have had on OM&A expenditures, in tabular form including:

a. the objectives which were to be completed in the years 2012 to 2013 (Phase 1) and 2014 (Phase 2, projected) for which capital funding was sought from the Board in EB-2012-0064 according to Reference 2;
b. The total dollars that were sought and approved by the Board, in order to achieve the objective;
c. the capital expenditure (for assets that were actually in-service) that have been spent for the achieved objective;
d. the extent to which the objective was achieved, on a % of dollars basis i.e. "b"/"c";
e. an explanation for the differences where a) the objectives were not achieved or b) where the expenditure, on either a $ per unit or total $expenditure, varied by 10% or more;
f. The OM&A expenditures for the year and how it has been affected by the capital expenditures of earlier years.

An example of the information Board staff is seeking is provided below for category E6, System Renewal Investments (note that this example only mentions 3 segments of the E6 Assets. All segments for all categories are required):

	Asset	Objective for 2012-2014	Dollars requested	Dollars expended	Achieved	OM&A
E6.1	Underground Circuit Renewal					
	Explanation					
E6.2	PILC Piece-outs and Leakers					
	Explanation					
E6.13	Switchgear Renewal	• Replace 4 obsolete MS switchgear • Replace 4 TS switchgear	Per [Reference 2] Project Schedule B13.1 and 13.2 2012- $19.35m 2013- $18.76m 2014- $20.31m			
	Explanation					
Etc.						

Please complete the above table and provide similar tables for each of the categories (i.e. System Renewal, System Access, System Service and General Plant) and segments of assets within these categories as shown above.

2-Staff-40

Ref: E 2B/S E/Sch 6/p. 3 and E 2B/S E6.6

Board staff's questions relate to THESL's programs to replace rear lot distribution with front lot underground distribution. In the first reference, it is stated that:

> This program replaces the existing end-of-life rear lot distribution service configuration with an underground front lot access system to eliminate challenges in performing maintenance activities and to mitigate the increased risk of long duration outages inherent in the existing plant design. The conversion eliminates operational constraints and reduces the safety and reliability risks associated with this obsolete connection configuration.

a) Please clarify if the “obsolete connection configuration” implies that not only rear lot placement, but also overhead distribution is obsolete;
b) At page 1 of the second reference, the photograph appears to show a box construction pole-top as a rear lot pole. Please state: (i) whether or not this indicates that there is overlap between the two programs and (ii) how many of the rear-lot conversions are also part of the box construction conversion program;
c) Table B of the second reference states under Failure Risk that “The majority of rear lot underground assets are direct buried”, and on page 5 it is stated that most rear lot service is overhead. Please provide the proportion of rear lot distribution which is a) overhead, b) underground and direct buried, and c) underground but not direct buried and explain how this varies with locations within the city.

2-Staff-41

Ref: E 2B/S E6.7, p.21

The diagrams on this page indicate the assets which are to be removed when box construction feeders are replaced.

a) Please confirm that, for overhead switches, only 60 of the total population of 810 are at the end of life;
b) Please state whether or not box construction is only being replaced in situations where either a) voltage conversion or b) rear lot conversion is occurring;
c) Please identify the number and proportion of box construction poles being replaced if box construction conversion is in fact taking place outside of voltage conversion or rear lot conversion;
d) Please provide the justification for any replacement of box construction poles outside of the programs of voltage or rear lot conversion.

2-Staff-42

Ref: E 2B/S E6.8, p.25

Table 8 of the above reference shows significantly different Total Project Costs for different installations of apparently the same switch being replaced under project types “ICM” or “CIR”. Please provide:

a) An explanation of the differences; and
b) A detailed comparison of the costing for one of the projects shown in the table under ICM and one under CIR e.g. for ICM project number W14630 at $0.59m and for CIR E15497 at $0.87m.

2-Staff-43

Ref: E 2B/S E6.10, p.3 and pp. 19-27

At the first reference, THESL discusses Network Unit Renewal and it is stated that "The overall pace at which Network Units were replaced was about 50 units per year. Toronto Hydro will continue with this pace throughout the 2015-2019 period."

Given that the pace of Network Unit replacement is stated to have been about 50 units per year in the historical period and that this pace is expected to be continued in the 2015-2019 period, Table C on page 3, which provides historical and future spending shows a wide range of costs, ranging from $0.93 million in 2014 and $3.95 million in 2015 to levels of over $10 million for each year in the 2016 to 2019 period.

At the second reference, Table 7 provides 2015 projects.

a) Please explain why, given that the pace will continue as before, the capital expenditures for the years 2015-2019 are so much higher than those for the years 2010-2012 and 2013-2014;

b) Please explain the variation in the costs of the replacement of the Network Unit renewals as shown in Table 7. Please include specific discussion of the following two projects shown in Table 7: Project X11508 for which the cost is $14,486 for one unit and X12338, for which the costs is $641,067 for what appears to be 2 units.

2-Staff-44

Ref: E 2B/S E6.11, p.9 and p.33 and E 2B/S E6.17, p.20

In the first two references, legacy equipment renewal (ATS & RPB) is discussed where the same assets being replaced in different projects seem to have widely varying costs.

In the third reference, it is stated that "Toronto Hydro also plans to install fire barrier systems in stations with two or more transformers that do not have a fire barrier system to mitigate the risk of transformers being affected by a catastrophic failure of any neighbouring transformers."

a) With respect to Figure 4 of the first reference, please explain how a single contingency incident of a fire in one transformer is prevented from affecting the other unit. Please state whether or not the design as shown in Figure 4 is in conformity with the statement quoted in the third reference and, if so, why;

b) With respect to the second reference, please explain the variation in the costs for projects X12953 and X14520, listed as 2015 replacements.

2-Staff-45

Ref: E 2B/S E6.12, p. 36, L 10-11 and pp. 36-37

In the first reference, work is shown as beginning on this program in 2016 and it is stated that in 2015, THESL plans to do preliminary engineering work necessary for projects to take place in subsequent years.

The second reference discusses the development of new equipment.

a) Please state why there are no costs reflected for 2015 in this program and whether or not the development and design costs for this program will be capitalized;
b) Please explain why new equipment have to be developed and describe any investigations of equipment used in analogous locations such as New York, Montreal, Chicago etc. where it is likely that similar vaults are used.

2-Staff-46

Ref: E 2B/S E6.13, p. 15, L 9-12 and pp.28-30 and p.38

This section discusses a program to replace switchgear due to potential failure of breakers. There appears to be a distinction between occurrence of an arch-flash in a breaker and a subsequent explosion.

a) Please clarify the terms occurrence of an “arc-flash”, “switchgear failure” and “explosion” which are referred to at the above reference;
b) Please explain why an arc-flash would lead to a failure and a failure to an explosion;
c) Please state whether an explosion of a breaker is also classified as a failure;
d) Please state whether or not these breakers are manually operated, so that personnel are necessarily in the area;
e) For the current population of MS and TS breakers please indicate:
    i) the total number of breakers in TSs and in MSs and their nominal voltage rating;
    ii) the number of the TS and MS breakers that are “legacy” breakers;
    iii) the number of the legacy breakers are of non-arc resistant design;
    iv) Whether or not any of the other (non-legacy) breakers are of non-arc-resistant design, and if so, how many;
f) For the MS and TS breakers, for each of the most recent 5 years, please provide:

i) the record of the number of operations for those breakers to be replaced in the 2015-2019 period; If normal and protection operations can be differentiated then please provide these numbers;
ii) the average number of operations for the entire population of the different types of breakers;
iii) the record of failures of each of the type of switchgear in the entire population which is of non-arc-resistant design, including number of events and year;
iv) the record of explosions of breakers;
v) the number, age, type and Health Index of breakers that have been replaced;
vi) the capital expenditure for each replaced breaker;
vii) the operation, maintenance and administration expenditure for the entire population.

g) Regarding Table 8 of the second reference:
   i) Please confirm that this table does not represent the complete record of failures in the years 2001-2008, or if not, please explain;
   ii) Please state whether or not the busbar fault at Jane MS shown in the table was accompanied by a breaker failure or explosion;
   iii) Please state whether or not Terauley TS the only case where the breaker exploded upon fault clearing;
   iv) Please indicate the ages and the recorded Health Indices of the switches when they failed;
   v) Please confirm that all of the breakers at the stations listed in table 8 have been replaced, which is the reason they do not appear in figure 11 and 12, or if not, please explain;
   vi) Please state whether or not all of the referenced breakers are remotely switchable and whether or not all the breakers in the MSs and TSs are remotely switchable;
   vii) Please state the procedures that have been put in place given these events and whether or not manual switching under load continued to be done in view of the failure possibility.

h) Regarding Table 9 of the second reference:
   i) Please provide the references for the statement at page 30 lines 17-19 that THESL “received approval to replace four MS switchgear and four TS Switchgear, whereas the utility’s original plan was to replace ten MS Switchgear and four TS switchgear”;

ii) Please clarify and detail what are the HONI payments associated with the switchgear replacement, as referred on page 30, lines 23-26. Please state whether or not the amount paid to Hydro One is for replacing the incoming breakers for Wiltshire (p50), Strachan (page 55), Duplex (page 56) and Windsor TSs;

i) Regarding Table 11 of the third reference:
   i) Please provide the details of the components of each cost;
   ii) Please state if the cost of the customer outage is considered in the Avoided Risk Cost and, if so, what value is used.

2-Staff-47

Ref: E 2B/S E6.14

a) Please state the assumptions on which the Avoided Risk Cost estimate of $2.66 million is based (page 11, Table 1: Summary of Benefits);
b) Please state whether or not there is a primary program to install oil containment around transformers which do not have them, or whether this is only done secondary to the program of power transformer renewals. Please explain THESL's risk assessment and vulnerabilities in this regard;
c) At page 17 "Asset Failure Impacts," THESL describes the impact of subsequent failures after a first transformer failure. Please describe THESL's design policy on ability of the system to maintain supply following a first contingency;
d) At page 23, in discussing the replacement of several transformers it is mentioned that Redcliff transformer, which is 42 years old, and has a health index score of 75, is being replaced because of an overhead bus structure. In other cases it appears that the driving force of the replacement is simply the age rather than the actual condition of the transformer e.g. Centennial has a relatively high health index and is just at theoretical end-of-life:
   i) In deciding to replace a "healthy" and pre-end of life transformer, please explain the process;
   ii) Please explain whether the individual risks involved with that particular transformer is determined;
   iii) It appears that the health index is overridden by the age of transformer, rather than being a screen for examining whether a transformer should be replaced. Please comment on this statement;
e) Referring to Table 8, page 31, it appears that the Total Project Cost for station transformers replacement in the current CIR proceeding has increased significantly over that for the ICM application. Please provide:
   i) a detailed explanation; and
   ii) a breakdown of the cost of a comparable ICM and CIR project.

2-Staff-48

Ref: E 2B/S E6.15, p.23

Referring to Table 9 of the above reference, it appears that the Total Project Cost for the replacement of a KSO Oil Circuit Breaker in the CIR Project Type is more than double that of the ICM Project Type.

Please provide:

a) a detailed explanation of this cost differential;
b) the number of replacements and the unit cost of replacements; and
c) a detailed breakdown of the cost of a comparable ICM and CIR project.

2-Staff-49

Ref: E 2B/S E6.16, p. 7. L 7-13 and p.10

At the first reference, it is implied that the SCADA RTU plays a significant role in avoidance of a fire due to protection failure, by clearing the fault through use of the RTU.

At the second reference, THESL states that many of its municipal substations in Scarborough are not connected to the SCADA system and concludes that as a result it is unable to provide acceptable service to customers. With respect to the first reference:

a) Please clarify why protection, or backup protection would not clear the faults;
b) Please state how the SCADA RTU would assist in the event of an un-cleared fault;
c) Please provide the timeline in which the relay and the RTU might reasonably be expected to assist in clearing a fault.

With respect to the discussion in the second reference regarding expanding the SCADA systems to Scarborough Municipal Stations,

d) Please provide evidence of a significant difference in response times in Scarborough and elsewhere in the city;
e) Since none of the stations in Exhibit 2B, sections E16.3 or E16.5 are in Scarborough please confirm that none of the circuit breakers which will be monitored and controlled by the new RTUs require breaker upgrades which are a part of the Switchgear Renewal Program (Exhibit 2B, section E6.13) or Circuit Breaker Renewal Program (Exhibit 2B, section 6.15);

f) Please identify the specific stations and the matching breakers where the new RTUs are to be implemented.

2-Staff-50

Ref: E 2B/S E6.17, p.7

According to the above reference, 8 of the 20 breakers that use compressors to operate are not at the end of their life but require new compressors.

a) Please state whether or not THESL will be making use of the 12 compressors (for spares) that are no longer required to maintain the 8 compressors that are still required;
b) Please indicate the additional situations where the station service transformer and the associated secondary distribution panel are located in the basement (Exhibit 2B section E6.17, page 18, lines 10-13.);
c) At page 22, at line 10, THESL advises that there are no spare 125MVA 230-27.6kV transformers. Please indicate how many of these transformers exist in the THESL system or will be added in the next five years, and what arrangements there are to find a replacement if required on an emergency basis;
d) Please state whether or not there are any arrangements with other utilities to share spares.

2-Staff-51

Ref: E 2B/S E6.20, p. 3

Future Reactive Capital budgeting is shown as exceeding $30m per year. Failures which require the use of Reactive Capital would likely include older and end-of-life equipment which is the subject of another capital expenditure category e.g. a breaker might fail which is already the subject of a program for renewal at a later year. Therefore it might be expected that use of the budget for reactive capital would result in the reduction of planned expenditures in other categories.

a) Please state to what extent THESL has been able to determine whether or not for historical years the use of the budget for reactive capital resulted in reductions of planned expenditures in other categories;
b) Please state to what extent and how this is reflected in the budget for reactive capital.

2-Staff-52

Ref: E 2B/S E6.21

This section discusses planned expenditures for worst performing feeders.

Please state whether or not expenditures to correct Worst Performing Feeders is over and above other programs of replacement and renewal e.g. where a breaker or cable is replaced, would it appear in any other program as well.

2-Staff-53

Ref: E 2B/S E6.22

THESL states that it is planning to replace 117km of optical fibre because it is shared with Cogeco Data Services.

Please state whether or not THESL has considered instead negotiating with Cogeco to ensure there is no geographic duplication of alternate function communications, so that dependability can be obtained without duplicating a fibre network that exists. If not, please explain why not.

2-Staff-54

Ref: E 2B/S E7 and Ontario Energy Board *Filing Requirements for Electricity Transmission and Distribution Applications Chapter 5 Consolidated Distribution System Plan Filing Requirements* March 28, 2013, p.ii.

A number of the program descriptions in the first reference which are described as "service" category appear to be programs of "renewal", rather than service, and vice versa or alternatively appear to duplicate what is provided for under the category of system renewal.

The definitions provided in the second reference are:

> *System renewal investments* involve replacing and/or refurbishing system assets to extend the original service life of the assets and thereby maintain the ability of the distributor's distribution system to provide customers with electricity services.
>
> *System service investments* are modifications to a distributor's distribution system to ensure the distribution system continues to meet distributor operational objectives while addressing anticipated future customer electricity service requirements

The Renewal Project for the Network Reconfiguration in exhibit 2B, section 6.12 describes plans to reconfigure the "functionally obsolete network system into enhanced mini-grids".

a) At Exhibit 2B section E6.12, page 1, lines 8-11 THESL describes "plans to upgrade the secondary grid by splitting large grids into more robust spot vaults and enhanced mini-grids, each with fewer primary feeders."
    i) Please state how is this different from the Option (II) in Section E7.1 page 3, lines 11-12 described as: "Enabling feeders to be segmented into

smaller sections gives system controllers greater ability to transfer loads and minimize the number of customers impacted during power outages…';

ii) Please provide a detailed breakdown of the Total Annual Spend estimates for 2015-2019 for both E6.12 (Table 5 page 36) and for E7.1 (Table 5 page 22);

iii) Please explain how Section 6.12 and section 7.1 programs differ;

b) Board staff notes that the replacement of existing switches with autonomously operating SCADA switchers has a character of both replacement and enhancement and has been categorized as service rather than renewal. Please indicate the proportion which is ascribed to service and to renewal.

2-Staff-55

Ref: E 2B/S E7.2

At page 32 the title of the Project is "E7.2.7.2 W15493 Overhead Design Enhancement on Fairbanks TS"

At page 35 the title of the subsequent project is "E7.2.9.2 W15495 Overhead Design Enhancement on Finch TS and Jane MS":

a) Please discuss and explain the numbering of the projects since they are not consecutive and sections appear to be missing e.g. E7.2.3 through E7.2.9.1. If any corrections or additions are necessary, please provide them;
b) At page 35, the title of the project refers to Finch TS and Jane MS, but the Objective refers to Fairbanks TS. Please correct or clarify.

2-Staff-56

Ref: E 2B/S E7.3

Table 6 at page 27 shows that almost $20m has been spent between 2010 and 2014 on the Feeder Automation program.

a) Please state the date up to which the above referenced spending was current and the extent of any additional spending since that date;
b) Please provide a breakdown of the annual Capex (spent and in-service) in Table 6, including that portion which was/is for the downtown URD and for the Horseshoe area;
c) Please explain what was done and achieved in the years up to and including 2014 in the downtown and Horseshoe areas;
d) Referring to the trend of outage duration in Figure 15 for URD service, please provide any available evidence that the program of Feeder Automation will result in reduced "average minutes out" for customers;

e) Please state whether or not THESL has undertaken a demonstration project in the Horseshoe or downtown area for the proposed feeder automation which showed that improvements will likely result when the automation is applied in the URD downtown area. Please provide the evidence used to demonstrate the value of the program of $11m in the first year;
f) During 2015 THESL proposes a program of deployment in the Downtown URD system (E7.3.4 p28, line 13-21). Please state whether or not this has been preceded by a test program in the horseshoe area.

2-Staff-57

Ref: E 2B/S E7.9

At page 17, line 5 through 18, the design of the THESL system is described as N-1 design.

At page 22, in lines 2-3 it is stated that "For planning purposes, Toronto Hydro considers a bus ... to be overloaded when it reaches 95% of the rated capacity."

a) Please clarify whether or not the entire distribution system is based on this design principle;
b) Regarding the N-1 principle:
    i) Please clarify if the "N-1" design accounts for a single outage, whether it be for maintenance or due to an equipment failure;
    ii) Please state whether or not this would imply that if a single transformer is out of service, and a fault occurs in the remaining supply configuration, then the customer load would be without power;
    iii) Please state whether or not this would also mean that there would be no interruption of power if, with all elements in service, a first element goes out of service through equipment failure;
    iv) Please state whether or not the N-1 design includes taking into account the possible availability of manually doing switching interconnections between transformer stations;
c) At page 18, line 8, point (5) indicates "An adjustment factor of 70% is applied to the load requested by customers to reflect past experience of load being overstated at the application phase:
    i) Please state whether or not this past experience has been verified by any study comparing requested loading with actual loading;
    ii) Please describe how the 70% adjustment factor is applied;
    iii) Please state whether or not there are any percentage allowances introduced by THESL in the design process for equipment ratings;

d) At page 22, lines 10-11 it is stated that “As shown in the load forecast, within ten years, six of the buses supplied from Windsor TS, Copeland TS and Esplanade TS are forecasted to require capacity relief.” Given THESL’s statement quoted above that for planning purposes, it considers a bus to be overloaded when it reaches 95% of the rated capacity, please clarify how this conclusion is reached given that only one bus (Windsor, 2014) is shown at 95% loading, and none exceed the 95% level;
e) Please state whether or not similar capacity problems are also occurring elsewhere in Toronto, such as North York;
f) At page 2 THESL is proposing a new THESL owned transformer station in the Manby TS area:
    i) Please indicate why THESL would want this to be a THESL station, rather than a Transmitter owned TS;
    ii) Please state what is THESL’s inventory of transformers of this size and how many spare transformers of this size/rating are available to THESL;
    iii) Please state THESL’s strategy on spare transformers;
g) At page 29, lines 11-13, THESL is proposing to expand Copeland TS including the addition of three power transformers:
    i) Please state whether or not Copeland TS (Phase 2) will involve the same rating of transformers as the proposed new Manby TS and as any other THESL TSs;
    ii) Please explain the rationale and economics for having a backup third transformer on potential and how this is consistent with the N-1 design philosophy;
    iii) Please state whether or not this design philosophy is applicable and intended in other transformer stations;
h) In general please provide an explanation for the apparent decision to extend ownership of the major (115 or 230kV high side) power transformers. Please include in the discussion:
    i) The current inventory including sizes and voltages of the power transformers owned by THESL and Hydro One;
    ii) Discussion of the maintenance of these transformers and the economics of THESL doing this versus Hydro One doing it;
    iii) Discussion of any spares or maintenance arrangements with Hydro One or other utilities which would reduce the common cost of ownership, maintenance and operation of major power transformers.

2-Staff-58

Ref: E 2B/S E8.1

a) Table 1 on page 9 lists vehicle Assets to be replaced. Please provide the 2014 inventory for each Asset Class;
b) Table 4 at page 16 provides the 2013 Vehicle Replacement Criteria. Please clarify if Age and Km criteria must both be met, or if just one of the criteria must be met;
c) Please provide a copy of the reference at the bottom of page 16, titled “Toronto Hydro Life Cycle Cost Analysis & Peer Fleet Comparison, -Final report 23 May 2013;
d) Please explain the processes for acquisition and disposal of vehicles i.e. tendering, trading RFPs etc.

2-Staff-59

Ref: E 2B/S E8.2

a) Please describe how Asbestos Containing Materials have been secured in each of THESL’s properties and what is being done to remove the hazard. Please state whether or not THESL can confirm that the asbestos containing material is properly secured and not a threat to employee and public health and safety;
b) At page 11, line 23, it is stated that “The exits have failed to open during fire drills and …” Please provide further discussion as to why this happened and what has been done to address the problem;
c) Please state whether building management is conducted in house or contracted out;
d) Please describe the management structure responsible for the maintenance of building facilities, and the processes, principles, targets and measures according to which they are operated;
e) At page 13, in regard to building automation system and fire and security monitoring systems, it is stated that “many of the breakers, relays and switches are very difficult to source and maintain.”:
    i) Please clarify why only Original Equipment Manufacturer components should be used, if other CSA or ESA approved equipment is available;
    ii) Please state what is meant by “very difficult to source”. Please discuss factors such as price and delivery period.
f) It is stated at page 14, Civil Work, that storm water management at 14 Carlton is a problem, including causing flooding of the foyer. Please state how long this problem has existed and what is believed to be causing it;
g) At page 24, lines 5-9, the application states that the System Response Units will be dispersed to sites throughout the city:

i) Please state whether or not these sites are the property of THESL or whether they still to be acquired or rented and how many sites are involved;
ii) Please describe the sites, their price of acquisition or rental, their size, any facilities improvement and implementation costs, and their expected annual operating costs;
iii) Please confirm that all of the costs mentioned in b. above have been taken into account in Table 10 on page 25;
iv) Please state whether the Building facilities have any form of Asset Management applied, or if this is intended to be included in the Asset Management Plan that THESL is currently running, or if neither, why not.

3 Operating Revenue

3-Staff-60

Ref: E 3/T1/S1/pp. 1-2

Table 1 at page 1 of the above reference shows total load, revenues and customers for the period 2009 to 2019.

Board staff notes that in the period from the 2014 Bridge year to the 2019 Test year Total Normalized Gwh decreases by roughly 2%, while Total Customers increases by roughly 8%.

On page 2 of the second reference, it is stated that:

> Since 2007, there has been a significant decrease in total energy consumption. Essentially flat growth over the 2004-2006 period has been replaced by declining loads over the 2007-2013 period. While it is difficult to precisely attribute this decline to any particular event, Toronto Hydro believes that the effect of conservation activities – both program driven and naturally occurring - continue to have a significant impact on the overall load change. Furthermore, in late 2008 and 2009, economic conditions also contributed to the load decline.

Please state whether the forecast decline in load in the 2014 to 2019 period, in spite of an anticipated increase in the number of customers, is entirely the effect of conservation activities, or whether other factors are also involved and, if so, what they are and how significant they are relative to the conservation effects.

3-Staff-61

Ref: E 3/T1/S1/pp. 9-10

Table 3 at page 9 of the above reference shows regression variables by rate class. While other classes with the exception of those for Street lighting and Unmetered Load

show multiple regression variables, the Competitive Sector Multi-unit Residential class shows only one which is normalized average use per customer.

Page 10 of the above reference explains the use of normalized average use per customer as follows:

> The load forecast for Competitive Sector Multi-unit Residential ("CSMUR") was determined using the NAC as the most suitable model for this relatively new rate class. Historically, CSMUR customers were part of Residential rate class, however, as directed by the Ontario Energy Board in EB-2010-0142, Toronto Hydro established a separate rate class with rates implemented as of June 1, 2013.

a) Please state why NAC was determined as the most suitable model for the CSMUR class;
b) Please state whether there have been any changes to the regression variables for the other rate classes relative to those presented in the EB-2010-0142 application and, if so, why such changes were made.

3-Staff-62

Ref: E 3/T2/S1/p. 6

The above reference discusses gains from sale of utility properties in the context of revenue offsets. In its discussion, THESL notes that gains on the sales of such properties were recorded as revenue offsets in the 2011 to 2014 period.

THESL, however, states that in 2015 it expects to sell idle properties at 5800 Yonge and 28 Underwriters and given the relatively large value of these properties, these gains are not recorded as part of revenue offsets, but are proposed to be treated as regulatory liabilities to be refunded to customers over a multi-year period.

a) Please state whether THESL would have any reasons other than the potential size of these gains for its proposed treatment and, if so, what they would be. If not, please explain why THESL believes the size of the gain should be a criteria in determining its treatment and what criteria the Board should use in determining whether a gain should be treated as a revenue offset, or a regulatory liability;
b) In the event the Board was to determine that the 2015 gains were to be treated as revenue offsets, please describe any concerns THESL would have with such treatment.

4A Operating Costs: OM&A

4-Staff-63

Ref: E 4A/T1/S1/p.2 and 4, Table 1

In the first reference, THESL states that:

While Toronto Hydro submits that the manner of presentation of its 2015 OM&A activities is consistent with the OEB guidance, the utility notes that its work in developing a meaningful program/Segment OM&A presentation involved a significant amount of assumptions and complex analytic work, given that Toronto Hydro internal OM&A tracking procedures do not fully lend themselves to the approach contemplated by the OEB.

At Toronto Hydro, OM&A plans are generally presented on an operating department or "Responsibility Centre" (RC) basis, whereby each RC is tied to the operational management of broad, but discrete functional areas such as customer care, finance, regulatory, safety, IT, HR or legal. That is, on the basis of the areas of discrete responsibility and type of departmental expenditures, rather than the (often crossfunctional) activities or programs that the utility at large undertakes.

In Table 1 of the second reference, THESL lists Historical, Bridge and Test Year OM&A expenditures by program. Board staff observes that:

(1) a number of the categories in this table are the same or similar to those presented in THESL's EB-2011-0144 application (e.g. Fleet and Equipment Services, Control Centre);
(2) In addition to being the same or similar a number of the categories do not appear to represent a program/outcome type of approach (e.g Legal Services, Rates and Regulatory Affairs);
(3) Costs such as Legal Services and those of other departments might seem to be the types of costs which under a program/outcomes based approach would be allocated to the various projects rather than continuing to appear separately. Such an allocation would be reflective of the Board's focus on outcomes rather than inputs discussed in the "Operating Expenses" section of the Filing Requirements.

a) Please comment on Board staff's observations;
b) Please elaborate on the nature of the "significant amount of assumptions and complex analytic work" referenced above. Please state what the key assumptions were;
c) Please state whether or not THESL will be further evolving its approach to OM&A in the future to fully align it with the approach contemplated by the Board. If yes, please state what approximate percentage of this process was completed for the current filing and when full completion would be anticipated. If not, please explain, why not.

4-Staff-64
Ref: E 4A/T1/S1/p.5 and p.10
In the first reference, THESL states that:

> In particular, the utility approached its 2015 proposed OM&A expenditures from the perspective of savings it has achieved over the 3GIRM period together with resource requirements for 2015 and forward. Further, Toronto Hydro viewed 2016-2019 as years where its funding request would be consistent with the IRM framework – i.e., less than inflation and determined on the basis of a Price Cap Index-based formulaic adjustment.

In the second reference, THESL states that: "Absent a sufficient level of funding in the test/rebasing year, an IRM plan for the successive four years would not be sustainable":

a) Please further discuss what THESL means by the second reference and how it would define a sufficient level of funding;
b) Please confirm that THESL's 2015 Test year OM&A expenditures are intended to be representative of its OM&A expenditures anticipated in the 2015 to 2019 period, or if not please explain;
c) If THESL's 2015 OM&A expenditures are intended to be representative of its OM&A expenditures in the 2015 to 2019 period:
    (i) Please state whether or not THESL has a 2015 specific OM&A forecast and if so what it is;
    (ii) Please state which other numbers in the application are based on the 2015 to 2019 period rather than 2015 alone.

4-Staff-65

Ref: E 4A/T1/S1/p.6

THESL states that:

> For example, Toronto Hydro believes that staffing levels beyond the operating costs proposed in this application are optimal based on the utility's assessment of its operating requirements, its retirement projections for the next five to 15 years, and the significant lead time for training certified and skilled trades (four to six years). However, the utility has moderated its funding request in light of other considerations, such as rate impacts.
>
> Informed by the considerations described above, Toronto Hydro developed the OM&A plan on the basis of both a top-down and bottom-up approach as described in Exhibit 1C, Tab 3, Schedule 2. In general, Toronto Hydro's objective was to put forward a plan that largely maintained functional requirements such as safe and reliable grid operations and system performance, service levels and legal, regulatory and statutory compliance in an efficient manner.

a) Please state by how much THESL has moderated its funding request in light of other considerations, such as rate impacts;
b) Please state how THESL determined that the level of funding requested in the application is optimal and what impacts on customers it would anticipate that the moderated funding request would have and when these impacts would be felt. Please include an explanation as to what THESL means by its reference to its plan "largely" maintaining functional requirements and if this statement means

that some functional requirements would not be maintained, please state what such requirements would be.

4-Staff-66

Ref: E 4A/T1/S1/p.8

THESL states that it is putting forward in this application a 2015 rebasing plan containing a number of new or materially-expanded OM&A activities that it expects will be sustained over the period of the plan that are largely driven by functional requirements, examples of which include: (1) Disaster Preparedness Program, (2) Increased Billing, Remittance and Meter Data Management expenditures, and (3) Increased Preventative and Predictive Maintenance expenditures.

Please state the extent to which THESL's customer engagement efforts influenced the above referenced new or materially expanded OM&A activities and, if the customer engagement efforts were a significant impacting factor, how the input received was used to determine the expenditures. If the customer engagement activities were not a significant impacting factor, please explain why not.

4-Staff-67

Ref: E 4A/T1/S1/p.9

THESL states that an example of an area where it did not put forward the full possible sustained and reasonable OM&A request is its proposed staffing plan and that it constrained its compensation costs by approximately $3 million by employing contingent resources rather than full-time employees to deliver a variety of administrative and support functions.

a) Please state whether the referenced $3 million savings is per annum, or over the 2015-2019 period;
b) Please state whether THESL believes the approach it has undertaken will result in short-term cost savings at the expense of longer-term cost increases and if so when costs would start to be higher and, if not, why not.

4-Staff-68

Ref: E 4A/T1/S1/p.9-10

On page 9 of the above reference, it is stated that:

> In building its five-year OM&A plan, while Toronto Hydro endeavoured to consider foundational expenditure requirements, including potential emerging requirements (e.g., extreme weather preparedness) that can be reasonably anticipated, it did not engage in a detailed five-year financial planning exercise.

On page 10 of the above reference, it is stated that:

As discussed above, Toronto Hydro engaged in a detailed financial planning exercise, based on functional requirements, informed by the four pillars, and designed to provide the utility sufficient funding levels for the next five years.

a) Please clarify whether THESL did or did not engage in a detailed financial planning exercise in preparing the current application;
b) Please provide THESL's definition of a detailed financial planning exercise;
c) If THESL did not engage in a detailed financial planning exercise in preparing the current application, please explain what it did do and why in its view this would be considered adequate for the approvals requested.

4-Staff-69

Ref: E 4A/T1/S1/p.10 and E 1B/T1/S3/p.17

The first reference states that:

> ..a corollary of Toronto Hydro's OM&A proposal - and a consideration in how it engaged in financial planning - is its proposal regarding the Z-Factor (Exhibit 1B, Tab 2, Schedule 3). While Toronto Hydro has endeavoured to consider foundational expenditure requirements, including potential emerging requirements as can be known today, for any regulated utility that operates in a dynamic environment such as Toronto Hydro, there will inevitably be material events over a five year time horizon that are outside the known, anticipated and quantifiable scope of requirements… By proposing the Z-Factor approach to be used if and when determined to be appropriate, Toronto Hydro attempts to balance the considerations of customer impacts with the necessity of maintaining safe and efficient system operation under a variety of potential conditions.

The second reference states that:

> One of the incremental challenges inherent in a five-year rates plan is the need to contend with prudent, material unexpected costs. As part of this application, and as explained in further detail throughout this application, Toronto Hydro has proposed restrained/constrained OM&A and capital funding requests. The funding that Toronto Hydro seeks in this application is expected to enable the utility to carry out the work that it has detailed in these programs. That funding, by definition, is not sufficient to address the prudent costs of material events that are outside the control of the utility and which have not been forecasted. Accordingly, Toronto Hydro proposes to incorporate within its rate framework the availability of Z-factor relief, which Toronto Hydro understands is available to CIR filers as part of the RRFE framework.

In the above references THESL appears to be establishing a linkage between its stated approach in this application of constraining OM&A and capital funding requests and the availability of Z-factor relief.

a) Please state whether or not THESL would view its Z-factor proposals as expanding the range of events for which a Z-factor would be applicable and why or why not this would be the case;

b) Please state whether or not THESL would anticipate that any of the constrained OM&A and capital funding programs that it is not seeking relief for in the present application might ultimately need to be recovered through a Z-factor application and, if so, please state which programs and under what circumstances;
c) Given the constrained OM&A and capital funding programs in the current application, please state whether or not THESL would anticipate that catch-up would be a significant factor in the 2020-2024 period if the present application is approved as filed.

4-Staff-70

Ref: E 4A/T3/S1/pp. 6-7/Table 3

The referenced table lists THESL's non-affiliate purchased products or services over $1 million procured without a competitive process.

One such purchase is from DDP Technologies which provided THESL with "Inspection services for Pad Tx, Sub Tx, network vaults and building vaults along with "Find it – Fix it" repairs for each program." THESL states that the reason for the sole sourcing was "The need to commence the program on an urgent basis prevented the use of a competitive bid process. Informal quotes were obtained from five suppliers and the program was granted to the lowest qualified provider."

A second purchase was from Panasonic Canada for "Three years supply of Panasonic tough books and tough pads consistent with existing technology used by field staff." The justification provided is that "Negotiations with Panasonic coupled with market benchmarking indicated it was cheaper to deal direct with manufacturer instead of issuing RFP to resellers."

a) With respect to the DDP Technologies contract, please explain how THESL determines that a program is sufficiently urgent to depart from a competitive bidding process and whether THESL would anticipate similar departures for other programs and why or why not this would be the case;
b) With respect to the Panasonic Canada contract, please state why THESL used negotiations with Panasonic coupled with market benchmarking instead of going directly to an RFP and whether this is an approach that might be used to award other contracts. If this is the case, please explain what the criteria would be for adopting this approach. If this is not the case, please explain why this approach was used in awarding the Panasonic contract.

4-Staff-71

Ref: E 4A/T4/S5/App. 2-K

With respect to the first reference:

a) Please confirm that the amounts shown in Appendix 2-K are totals before capitalization to fixed assets;
b) Please provide a benefits table that shows cash benefit costs separate from OPEBs before capitalization that balances to the numbers in Appendix 2-K;
c) Please show how much of the total benefit costs in Appendix 2-K have been capitalized in fixed assets and how much has been recorded in OM&A.

4-Staff-72
Ref: E 4A/T4/S7 Towers Watson actuarial report
The above reference provides calculations in accordance with US GAAP. THESL has applied for rates under IFRS.

Please provide an analysis that compares the 2014 and 2015 projections under US GAAP with IFRS. In the event, there are any differences arising from this analysis, please state whether or not THESL would consider it necessary to update its application to reflect them. If not, please explain why not.

4B Operating Costs: Depreciation and PILs

4-Staff-73
Ref: E 4B/T2/S2/p. 20 - Schedule 8 Test Year
THESL has disclosed proceeds of disposal in Schedule 8 of $14,347,679 for Class 1, and $899,095 for Class 17:

a) Please provide a description of each of the transactions, including how much profit is forecast on the disposals and the references in the application where the other parts of the transactions can be located;

b) Please provide similar Schedule 8 formats for each year 2016, 2017, 2018 and 2019 showing the capital additions based on the proposed capital plan and any forecast disposals of assets.

4-Staff-74
Ref: E 4B/T2/S2/pgs 6, 13 & 21 - Cumulative Eligible Capital
The above references show additions of $2,489,752 in 2013, $3,370,623 in 2014 and $84,096,612 in 2015 respectively:

a) Please provide explanations for these additions;

b) Please state whether or not THESL expects material additions in the years 2016-2019. If yes, please describe the expenditures and calculate the tax impacts for each of the years 2016-2019 using the PILs model formats.

4-Staff-75
Ref: E 4B/T2/S2/p.16 - 2014 Taxable Income and E 9/T3/S1/p. 1

In the second reference, THESL has shown an IFRS derecognition amount for 2014 of $25,782,326.

In the first reference, this amount does not appear as an addition in the 2014 taxable income calculations.

Please provide an explanation for this treatment.

4-Staff-76
Ref: E 4B/T2/S2/p. 22 - Continuity of Reserves

In the above reference, an addition of $8,521,000 is shown for Other Post-Employment Benefits:

a) Please state whether or not THESL expects a similar amount to be incurred in each of the years 2016-2019;
b) Please explain the causes of these increases.

4-Staff-77
Ref: E 4B/T2/S2/pp. 24-25 - 2015 Taxable Income and E 4B/T1/S2/p.3 and E 4B/T2/S2/p. 22

On page 24 of the first reference, a placeholder amount for derecognition of tangible assets of $33,932,393 is recorded as an addition to income. On page 25, OPEBs deductions of $446,000 and $6,519,410 are recorded.

In the second reference, a variance account is requested to record the difference between the placeholder amount and the actual de-recognition amounts during the period 2016-2019.

In the third reference, an amount of $8,521,000 is shown as the change in the OPEB reserve (liability):

a) Please state whether or not the tax impact on the variances will be calculated as part of the proposed variance account true-up. If yes, please state whether the tax impact would be included in the same variance account, or whether a separate variance account would be needed;
b) Please explain what the OPEBs deductions of $446,000 and $6,519,410 are for;
c) Please state where the difference between the deductions referenced in part b above and the $8,521,000 shown as the change in the OPEB reserve (liability) are recorded and provide an explanation.

4-Staff-78
Ref: E 4B/T2/S2/p. 27

The recent Ontario government budget, which has received Royal Assent, changed the Ontario small business credit.

Please state whether or not THESL believes any changes to the calculation of PILs for 2015 are required as a result of the passage of the Ontario budget.

4-Staff-79
Ref: E 4B/T2/S2/p. 22

THESL has recovered OPEBs in rates since 2000 both on a cash basis and on an accrual accounting basis. It is Board staff's understanding that THESL has recovered OPEBs on a cash basis up to May 1, 2006 and on an accrual basis thereafter:

a) Please confirm that Board staff's understanding is correct, or if not, please correct and explain;
b) Please complete the table below in a live Excel worksheet to show how much has been recovered for the period 2000 to 2013 relative to the actual cash benefit payments and how much is anticipated to be recovered in the forecast periods of 2014 to 2019;

OPEBs	Actual			Forecast			Grand Total
	2000 to	2013	Total	2014 to	2019	Total	
Amounts included in rates							
OM&A							
Capital expenditures							
Sub-total							
Paid benefit amounts							
Net excess amount included in rates greater than amounts actually paid							

c) Please describe what has been done with the recoveries in excess of the cash benefit payments.

4-Staff-80

Ref: E 4B/T3/S1/App. A – 2013 Tax Return Schedule 13 Reserves

In the above reference, a reduction of the POEB reserve (OPEBs) of $15,098,000 is recorded:

a) Please explain the causes of this reduction;
b) Please state whether or not this reduction was determined by an actuary and, if so, please provide the actuary's valuation;
c) Please provide a full explanation of the reduction identified as "termination accrual" on the same schedule including whether or not it is related to staff reductions.

5 Cost of Capital

5-Staff-81

Ref: E 5/T1/S1/p. 4, and E 5/T1/S3

At the first reference, Table 3 Long-Term Debt shows two outstanding debt issues with significantly smaller principal amounts than the remaining debt issues. These are a $15 million promissory note maturing January 1, 2022 with a rate of 3.32% and a $45 million promissory note due on demand with a rate of 6.16%.

The second reference, which is OEB Appendix 2-OB Debt Instruments shows the lender of both of these issues as being THC and that are both expected to remain outstanding in 2015:

a) Please explain why THESL issued these debt instruments given that the principal amounts are significantly smaller than its other outstanding issues;
b) Please state why the interest rate on the $45 million promissory note is 6.16% versus 3.32% on the $15 million promissory note when both are shown as issued on January 1, 2012.

8 Rate Design

8-Staff-82

Ref: E 8/T1/S1/pp. 14-16

On page 14 of the above reference, it is stated that:

> Toronto Hydro believes that recent OEB request for comments in EB-2014-0219 specifically recognizes the problems associated with year-end ratebase not being accounted for under the IRM framework. By letter dated June 20, 2014, the OEB has sought comments related to a mechanism to "Eliminate the effect of the half year rule on test year capital additions for the intervening years between rebasing applications (i.e., during the subsequent IR plan) by adjusting for the incremental revenue requirement (depreciation expense plus return on capital and associated taxes/PILs) of the test year capital additions." This is precisely the issue for which Toronto Hydro seeks relief.
>
> Toronto Hydro relies on its analysis previously provided to the OEB (attached as Appendix A). Toronto Hydro has made an adjustment to the calculations to reflect the fact that the initial calculation was based on year-end capital expenditures, rather than in-service amounts. This adjustment has reduced the calculated lost revenue amount. The full calculation, which appeared as Appendix A to the Manager's Summary in EB-2012-0064, is updated and reproduced in Table 4 below.

Board staff notes that the referenced Table 4 is entitled "Lost Revenue due to IRM Framework – 2012-14:"

a) Please state whether the type of mechanism proposed by the Board in its June 20, 2014 letter would address THESL's concerns and why or why not this would be the case;
b) Please state the basis for THESL's conclusion that the Board's letter of June 20, 2014 envisages retroactive recoveries of the kind proposed by THESL;
c) Please state why THESL requested three years of prior period recovery rather than a greater or lesser period;
d) Please state whether or not THESL would see the granting of its requested Table 4 recovery as retroactive rate making by the Board. If THESL believes this to be the case, please state why it would be appropriate for the Board to approve it. If THESL does not believe this to be the case, please state why and provide any precedents THESL is aware of that would be supportive of its recovery request.

8-Staff-83

Ref: E 8A/T2/S1/p. 2

Table 1 at the above reference shows new and updated specific service charges for the 2015 to 2019 period.

Please add a column to Table 1 which would show for the four new proposed charges the revenue that each is projected to generate annually and for the charges which are being increased the incremental revenue expected from each of these charges.

8-Staff-84

Ref: E8/T3/S1/p. 13 and E8/T3/S2/p.22.

The two references above are the loss factor pages of THESL's currently approved Tariff of Rates and Charges and its proposed Tariff of Rates and Charges for May 1, 2015 implementation.

Board staff notes that both these pages contain a "Billing Determinant" section which is unique to THESL:

a) Please state why THESL believes that this section is necessary to include on the Tariff of Rates and Charges;
b) In the event the Board was to determine that this section should be removed in order to conform THESL's tariff to those of other distributors, please state any concerns that THESL may have about doing so.

9 Deferral and Variance Accounts

9-Staff-85

Ref: E 9/T1/S1/p. 1 Group 1 DVAs

THESL states that it is still evaluating options to measure or estimate actual line losses. THESL indicates that it will also assess the impact on affected Group 1 DVAs as per the audit report [E9A-T1-S1-Appendix A]. Please state whether or not if THESL is not able to conclude on the line loss issue by the end of this proceeding, it would intend to continue to dispose of the Group 1 DVA balances as currently shown in the application.

9-Staff-86

Ref: E 9/T1/S1/p. 2 and E9/T1/S1/pp. 20-22

The first reference shows an account 1508 – Impact For USGAAP Deferral Account balance of $38.8 million as of December 31, 2013.

The second reference states that in 2014 THESL expects differences between USGAAP and IFRS of $36.0 million. THESL has asked to continue to use this account or to create a new account to record the transition to IFRS:

a) Please provide the projected balance of the two transitions at December 31, 2014, specifically discussing whether it is $74.8 million, which represents the sum of $38.8 million plus $36.0 million, or $36 million. Please provide a complete explanation;

b) Please explain why THESL does not want disposition of the projected balance in account 1508 – Impact For USGAAP Deferral Account.

9-Staff-87

Ref: E 9/T1/S1/p. 2 and pp. 7-11- 5.4 1592 HST

THESL has calculated capital savings in the account differently than the proxy method used in the illustrative example provided in the APH FAQ December 2010, Q4. The FAQ states "any alternative method to determine and record incremental ITCs must yield similar results so that there is no material difference between results from the alternative method and the amounts that would be derived from a transactional analysis". Please explain how THESL's method of calculating capital savings would result in no material difference in the amounts that would be derived from a transactional analysis.

The $1.2 million credit requested for disposition pertains to July 2010 to December 2010. Please explain why the amount does not include savings pertaining from January 1, 2011 to April 30, 2015 as per the Filing Requirements for Electricity Rate Applications for 2015 Rate Applications, section 2.12.2. Please update the evidence as necessary.

Per APH FAQ December 2010, Q5, the Board concluded that 50% of the confirmed balances recorded in 1592 HST would be returned to rate payers. Please explain if THESL has included the 50% in its calculation of the $1.2 million credit. If not, please explain why not.

9-Staff-88

Ref: E 9/T1/S1/pp. 12-13

In the above reference, Account 1508 Named Properties are discussed. Table 5 presents capital gains related to the sale of property.

Please provide the documents and analysis that support the calculations of the pre-tax and after-tax capital gains shown in Table 5.

Please explain why there is such a large difference between the forecasted net capital gains per EB-2007-0680 and the actual net capital gains incurred.

9-Staff-89

Ref: E 9/T1/S1/pp.14-16

In the above reference, Account 1575 – IFRS USGAAP Transitional PP&E Amounts is discussed. THESL has recorded $25.8 million as a derecognition amount on the changeover date to IFRS.

Please state if this is a forecast amount or the actual amount that THESL will recognize in its 2014 audited financial statements and provide all necessary explanations. If it is a forecast amount, please state if there will be a true-up when the 2014 financial statements are finalized and provide all necessary explanations.

Please also provide a calculation that would remove the effects of derecognition from the 2015 revenue requirement including any variance account effects in the 2016 to 2019 period.

9-Staff-90

Ref: E 9/T1/S1/pp.14-16

THESL indicates that the derecognition of assets under MIFRS occurs when assets are disposed of or when they are no longer expected to offer future economic benefits [E4B-T1-S2-P1].

a) Please explain how similar assets were previously treated under USGAAP in historical and bridge years when the assets were disposed of or when they were no longer expected to provide future economic benefits;

b) Please state what portion of the $25.8 million derecognition loss relates to readily identifiable asset and what portion pertains to like assets.

9-Staff-91

Ref: E 9/T1/S1/pp.26-30

In the above reference, THESL's request for a variance account for externally driven capital is discussed.

Please explain why when a third party requests the relocation of THESL's assets, the third party does not pay for 100% of THESL's costs.

9-Staff-92

Ref: E 9/T1/S1/p.28

In the above reference, THESL's request for a variance account for derecognition is discussed.

THESL used Account 1575 to record derecognition as at January 1, 2014, the changeover date to IFRS. The amount recorded is $25.7 million. THESL has requested an additional amount of $33.9 million to be included in depreciation and a variance account to record the difference between actual and forecast for each year 2016-2019:

a) Please provide the calculation of the $33.9 million and identify the capital projects that will give rise to the amount;
b) THESL plans to strand assets each year during its five-year capital plan. Assuming the $33 million per year does arise during the test period 2015-2019, this will total $165 million. Please state why this amount was not considered to be part of the total capital plan for the five-year period;
c) Please state whether or not THESL expects to receive any proceeds from the asset stranding process. If yes, please state how THESL would treat such proceeds for regulatory purposes.

9-Staff-93

Ref: E 9/T1/S1/p.28

Account 1551 Smart Metering Entity Charge Variance Account is classified as a Group 1 account. Please explain why THESL has not requested the disposition of this account.

9-Staff-94

Ref: E 9/T2/S4/App. 2-EA

The difference in 2014 closing net book values between MIFRS and USGAAP is $19,079,572 as per Appendix 2-EA. This is different from the amount of $19,648,940 as can be calculated from Appendix 2-BA [E2A-T1-S2-Pages 5-6]. It is also noted that the opening net PP&E, net additions and closing net PP&E under USGAAP and MIFRS as shown in Appendix 2-EA do not agree to those shown in Appendix 2-BA.

a) Please explain how the figures in Appendix 2-EA were derived in relation to Appendix 2-BA;

b) For Appendix 2-BA, please explain why there is a difference between the 2014 opening gross cost under USGAAP and MIFRS for land rights;

c) Please explain why the 2014 MIFRS opening gross cost does not equal the 2013 USGAAP closing gross cost;

d) Please explain why land rights are excluded from Account 1575;

e) Though THESL is proposing to delay the true-up of its ICM, please explain why the asset transfer impact from ICM is excluded from Account 1575.

9-Staff-95

Ref: E 9/T2/S5/pp.3-7

It is noted that the savings data THESL receives from the OPA is annualized and this does not accurately reflect the actual initiation and implementation of CDM savings when compared to CDM estimates by customer class.

THESL also notes that it "has adjusted its claimed savings based on typical application rates and monthly savings realization from samples and averages":

a) Please provide further description of this approach. In particular, please state whether or not this approach differs from the "half-year" approach approved by the Board for estimating the actual impact of CDM programs in their first year of introduction;
b) Please discuss whether THESL's approach has been discussed with and endorsed by the OPA;
c) Please also state whether or not THESL's approach has been used by any other distributor when making an LRAMVA claim and, if so, state which distributor;
d) Please provide the LRAMVA amount without applying the adjustments that THESL has made and discuss the areas of the lost revenue amount for which the removal of these adjustments causes the largest variations;
e) Please provide further description of how THESL derived the incremental 2011 CDM program savings on 2011-2013 shown in E9/T2/T5/pg.5/Table 3 from the estimated savings for 2011 programs as shown in E9/T2/S5/pg. 4/Table 2;
f) With respect to E9/T2/S5/pg. 6/Table 4, please provide separate tables showing the initial year impact and the persistence in subsequent years for each of the 2011, 2012 and 2013 CDM programs, in other words, the breakdown of Table 4 by the CDM programs for each of the years 2011, 2012 and 2013;
g) THESL notes that it has provided the preliminary unaudited OPA results for 2013 CDM programs in E9/T2/S5/Appendix B. The final OPA Reports are typically released in the fall of the following year:

i. If available, please provide a copy of the final OPA results for 2013 CDM for THESL.
ii. If the final results would necessitate a material change in the LRAMVA balances for disposition, please update tables 4 and 5, and any tables requested in this interrogatory, to reflect any such updates.

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Ref: E 9/T2/S5/p.6

THESL notes that demand savings from the Demand Response ("DR") programs have been excluded from its LRAMVA request. THESL further notes that it believes that the peak demand savings from the DR program are not necessarily coincident with the customer's individual peak demand for the demand reduction occurrence:

a) Please further discuss the rationale for not including demand savings from the DR program with reference to any OPA advice or documentation which supports this position;
b) Please provide the lost revenue amount related to the demand savings from the DR programs.