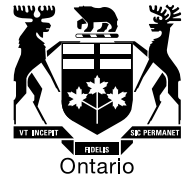


**Ontario Energy
Board**
P.O. Box 2319
27th. Floor
2300 Yonge Street
Toronto ON M4P 1E4
Telephone: 416- 481-1967
Facsimile: 416- 440-7656
Toll free: 1-888-632-6273

**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



BY E-MAIL

May 6, 2016

Attention: Ms. Kirsten Walli, Board Secretary

Dear Ms. Walli:

**Re: Toronto Hydro-Electric System Limited
Application for Rates
Board File Number EB-2015-0173**

In accordance with Procedural Order No. 1 issued on April 25, 2016, please find attached the Ontario Energy 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-2015-0173

Ontario Energy Board Staff Interrogatories
Incremental Capital Module (“ICM”) True-up Application
Toronto Hydro-Electric System Limited (“Toronto Hydro”)
EB-2015-0173
May 6, 2016

1-Staff-1

Ref: E1/T2/S1/p. 1

At the above reference, it is stated that Toronto Hydro is seeking approval “of an associated Rate Order to be made effective November 1, 2016 to December 31, 2017...”

OEB staff notes that Toronto Hydro is also expected to file later this year an application for final rates effective January 1, 2017 arising out of proceeding EB-2014-0116.

Please discuss any issues or concerns that Toronto Hydro would anticipate if the rates arising from both of the above referenced applications were made effective on the same date, e.g. January 1, 2017.

1-Staff-2

Ref: E1/T2/S2/p. 7 and EB-2012-0064 Draft Rate Order April 12, 2013, p. 5

At the first reference from the current application, Toronto Hydro stated as follows:

The OEB approved interim funding through the Initial ICM Rate Rider which was calculated using the OEB Workforms and inputting ISA expenditures as forecast for 2012 and 2013. While the calculation of forecast revenue requirement for 2012 determined that none of the ISAs in the approved ICM Segments would be above the materiality threshold, actual 2012 ISAs in the approved ICM Segments were above the materiality threshold. The revenue requirement associated with the 2012 actual ISAs above the materiality threshold forms part of the amounts to be recovered through the ICM True-up Rate Rider.

At the second reference which is Toronto Hydro’s 2013 Draft Rate Order filing in the EB-2012-0064 proceeding, Toronto Hydro stated as follows:

For 2012, as the sum of THESL approved in-service capital expenditures plus the approved pre-2012 CWIP amount are less than the 2012 threshold amount (detailed in Schedule 1 of Appendix C), no ICM expenditures are eligible for recovery through an ICM rate rider.

- a) Please reconcile the above two statements and provide a complete explanation as to why Toronto Hydro now believes it is eligible for 2012 ICM recoveries with references to any OEB policies that it believes would support its claim.

- b) Please provide a breakdown of the \$11.1 million sought for recovery between 2012, 2013 and 2014 ICM eligible ISAs.

1-Staff-3

Ref: E1/T2/S2/p. 11

At the above reference, Toronto Hydro stated as follows:

As indicated in Table 1, below, variances between the forecast ISAs and actual ISAs occurred in all ICM Segments. As detailed in Section 4 below, variances occurred for two primary reasons: (1) differences between forecast and actual ISA costs; and (2) differences between the number of jobs forecast and the number completed. Given the nature and complexity of the capital program, variances are to be expected and were contemplated by the OEB in the ICM Decisions.

- a) Please state the basis for Toronto Hydro's belief that the OEB contemplated differences in the number of jobs forecast versus completed as a variance which was to be expected, as compared to allowing spending to be moved between jobs or to replace one job with another similar job. Please include specific references from the EB-2012-0064 Partial Decision and Order supporting this belief.
- b) Please state how much of Toronto Hydro's proposed revenue requirement recovery in the present application is attributable to additional jobs that were not incorporated into the EB-2012-0064 application.

1-Staff-4

Ref: E1/T2/S2/p. 12, Footnote 33

At the above reference, Toronto Hydro stated as follows:

As part of Toronto Hydro's Phase 1 evidentiary update in October 2012, a number of jobs were deferred from the 2012-2013 period to 2014, resulting in a lower overall amount of forecast work for the 2012-2013 period. Toronto Hydro did not update the allocation of Capitalized Labour (i.e., Engineering Capital) across the re-forecasted list of jobs at that time, but instead showed the surplus Engineering Capital costs as a separate line item called "ICM Understatement of Capitalized Labour." The OEB authorized \$8.3 million in ISA funding for the ICM Understatement of Capitalized Labour and this amount has been fully-allocated across the final list of completed jobs in each year on an actuals basis.

- a) Please state why Toronto Hydro did not update the allocation of Capitalized Labour (i.e. Engineering Capital) across the re-forecasted list of jobs in 2012, but instead showed the surplus Engineering Capital costs as a separate line item called "ICM Understatement of Capitalized Labour."
- b) Please provide the breakdown of the allocation of the \$8.3 million referenced above across the final list of completed jobs in each year on an actuals basis.

- c) Please state whether there was any difference between the forecast and actual amounts of this item and, if so, what the difference was and provide an explanation for it.

1-Staff-5

Ref: E1/T2/S2/p. 15, Figure 1 and E3/T2/S1-S3

At the first reference above, Toronto Hydro provided actual ICM eligible ISAs by ICM year. This showed annual ICM materiality thresholds for 2012, 2013 and 2014 respectively of \$173.0 million, \$163.8 million and \$211.1 million.

Schedules 1 to 3 of the second reference are the ICM workforms for 2012, 2013 and 2014 respectively. These showed annual ICM materiality thresholds for 2012, 2013 and 2014 respectively of \$173.0 million for each year.

Please provide an explanation for the above noted differences and the calculations on which the 2013 and 2014 thresholds are based.

1-Staff-6

Ref: E1/T2/S2/p. 21

At the above reference, Toronto Hydro provided “Table 2: Common Drivers of Variance – Table of Variance Codes.” This table breaks down the five primary reasons why actual ISAs varied from forecast ISAs.

Please provide an order-of-magnitude percentage indicator of the total amount of the ISA variance which could be attributed to each of these five factors.

1-Staff-7

Ref: E1/T2/S2/p. 23

At the above reference, Toronto Hydro stated that “The majority of job scopes included in the preliminary EWP are created using high-level estimates.”

- a) Please state the percentage of job scopes that are created using high level estimates.
- b) Please state how Toronto Hydro would determine which job scopes would be created using more detailed estimates.

1-Staff-8

Ref: E1/T2/S2/p. 25

At the above reference, Toronto Hydro stated that its “approach to accounting for allocated costs in the ICM Application was to apply a consistent percentage-based adder to a job’s forecast costs.”

Please state the amount of this adder and an explanation as to how this amount was determined.

2-Staff-9

Ref: E2/T1/S1/p. 5

At the above reference, Toronto Hydro stated the following when discussing its B1- Underground Infrastructure Segment accomplishments:

Twelve other jobs were deferred to the 2015- 2019 period either in light of scheduling conflicts with third-parties (e.g., unforeseen road moratoriums or coordination with major transit projects) or to enable the attainment of other analogous jobs that were identified as more critical during the course of the ICM Period. As shown in Table 2, Toronto Hydro added 18 of these priority jobs, all of which were completed in the ICM Period.

Please provide the estimated total ISA amounts for the 12 jobs that were deferred and the actual ISA amounts for the 18 jobs that were added.

2-Staff-10

Ref: E2/T1/S1/p. 7

At the above reference, Toronto Hydro stated when explaining the reasons for the variances in the Underground Infrastructure segment that:

Prior to the ICM Application, Toronto Hydro's technical standard was to reuse the existing directly buried service connection from the customer lot demarcation line to the meter base. As Toronto Hydro ramped up the replacement of direct buried primary underground cables with equipment housed in concrete-encased ducts, the existing service connections, which were typically nearing or beyond end-of-life, often were disturbed and sustained damage that was an unavoidable part of working with the existing legacy direct-buried infrastructure... In light of these developments, and consistent with the 2009 revision of the standard for placing new primary underground cables into concrete encased ducts, Toronto Hydro revised its standard for the manner of construction of secondary cables and services in underground residential rebuilds, requiring that the secondary bus be placed in concrete-encased ducts up to the lot demarcation line and that service cables be placed in direct-buried ducts from the lot line to the meter base.

- a) Please state to what extent Toronto Hydro was aware of the problems identified above prior to the ICM application and why it was only when the replacement of

direct buried cable was ramped up that the extent of this problem became evident.

- b) Please state whether or not the 2009 revision of the standard for placing new primary underground cables into concrete-encased ducts dealt with the issues identified during the ramp up of the replacement of direct buried cable.

2-Staff-11

Ref: E2/T1/S1/p. 8

At the above reference, Toronto Hydro stated when explaining the reasons for the variances in the Underground Infrastructure segment that:

Given that the new design standard was not released until late in 2011, some of the earlier cost estimates presented in the Phase 1 filing, which would have been created in the years prior to and including 2011, would not have included the additional costs of labour and material associated with replacing the service connections.

- a) Please state whether the new design standard released in 2011 arose from the 2009 revision referenced in 2-Staff-10. If this is not the case, please explain.
- b) Please state whether or not the new design standard was developed internally, or whether it was externally imposed, or some combination of the two. Please discuss the key steps in its development and their timing.
- c) Please state how long it would typically take to develop a new design standard and whether the process of developing the standard for placing new primary underground cables into concrete-encased ducts was atypical in any way.
- d) Please state when the earliest cost estimates presented in the Phase 1 filing were developed.
- e) Given that the process of developing the new design standard appears to have been ongoing since at least 2009, which would suggest that Toronto Hydro would have had an awareness of the potential for increased costs in this area and the Phase 1 application was not filed until May 2012, please explain why Toronto Hydro was unable to incorporate the additional costs of labour and material associated with replacing the service connections into the Phase 1 application in light of these considerations.

2-Staff-12

Ref: E2/T1/S1/p. 12

At the above reference, Toronto Hydro stated that allocated costs were the source of some of the most significant percentage variances in the Underground Infrastructure segment and noted in this context that:

Since Toronto Hydro's approach to accounting for allocated costs in the ICM Application was to apply a consistent adder based on a percentage of the project's filed costs, the

amounts included in the filing for these activities was based only on the small amount of remaining cost included in the ICM Application. At project closeout, however, the amounts actually allocated to these jobs were based on the jobs' entire scope of work. These amounts were far more than those that had been previously included, creating a major cost variance.

- a) Please state whether or not Toronto Hydro's approach to accounting for allocated costs in the ICM application was typical of its approach to allocation of such costs, or was developed specifically for use in preparing the ICM application. If the approach was typical, please explain why Toronto Hydro uses an approach that creates major cost variances and whether or not it has any plans to change this approach. If the approach was not typical, please explain why Toronto Hydro adopted it for the ICM application.
- b) Please state the amount of the total cost variance in the underground infrastructure segment that is attributable to the approach to accounting for allocated costs used in the ICM application.
- c) For the project in this segment with the largest cost variance attributable to allocated costs, please state the project and provide the amount and calculation of the initial adder determined at the time of the ICM application and the amount and calculation of the amount actually allocated with an explanation of the variance.

2-Staff-13

Ref: E2/T4/S1/p. 4

At the above reference, Toronto Hydro stated, in explaining the variance in segment B4 "Overhead Infrastructure," that:

Higher than forecasted ISAs in this segment were a result of both job-level variances and the addition of several analogous jobs to the work program. These analogous jobs were urgent and necessary to address equipment performance, asset condition, and other considerations described below.

- a) Please state how Toronto Hydro determined that these analogous jobs were ICM work versus non-ICM work.
- b) Please state whether any other analogous jobs in this segment were categorized in the non ICM eligible 2012 to 2014 ISAs and, if so, how these jobs were distinguished from those that were included as ICM eligible ISAs.

2-Staff-14

Ref: E2/T5/S1/pp. 6-7

At the above reference, which is explaining variances in segment B5 "Box Construction" and as part of explanations in other categories, Toronto Hydro makes reference to cost variances arising from the use of contractors:

Other variances in this category were a function of the need for additional infrastructure that was discovered during the detailed design stage and the use of external contractors versus internal crews to complete the job. Unlike the internal construction cost estimates that are based on unburdened work execution rates, the contractor costs charged to the projects are fully-burdened, as they are intended to recover all costs incurred by the third party contractor, including the administrative overhead costs, costs of contractor vehicles and equipment and other related drivers, which are typically accounted for separately at Toronto Hydro (e.g., through OM&A costs).

- a) Please state whether or not Toronto Hydro assumed the use of any external contractors in preparing its cost estimates filed for the segments for which additional cost recovery is being sought in this proceeding. If yes, please state the assumptions used and the basis for them. If no, please explain why not.
- b) Please state across all segments how much of the total cost variance for which Toronto Hydro is seeking recovery in this application is attributable to the use of external contractors in place of internal resources.
- c) Please provide a breakdown by the categories listed in the above reference of this cost variance.

2-Staff-15

Ref: E2/T6/S1/p. 6

At the above reference, which is explaining variances in segment B6 "Rear Lot Construction," Toronto Hydro stated jobs that the high level plan assumed would address only the primary electrical equipment were necessarily revised to include direct-buried secondary services that were found to be in poor condition and added that:

These are not cases of cost increasing to complete the work within the original scope; rather the job was expanded to address significantly more assets in need of replacement and in accordance with the reliability driver for this segment.

Please state how Toronto Hydro determined that revisions of this kind would be expansions of existing jobs rather than new jobs.

2-Staff-16

Ref: E2/T6/S1/p. 8

At the above reference, which is explaining variances in segment B6 "Rear Lot Construction," and in a number of other segment variance explanations, Toronto Hydro makes references to the impact of errors that were discovered subsequent to the ICM filing.

Please state the approximate cumulative impact of identified errors across all the segments for which cost recovery is sought in this application on the overall recovery amount which is being requested.

2-Staff-17

Ref: E2/T7/S1/p. 2

At the above reference, which is explaining variances in segment B9 “Network Vaults and Roofs,” Toronto Hydro states as follows:

As detailed below, Toronto Hydro’s actual ISAs in this segment total about \$17.3 million, which is \$5.2 million less than the overall forecast amounts in this segment but \$3.0 million more than the amounts on which the Initial ICM Rate Rider was based.

Please state why there would be a different variance between actuals ISAs and overall forecast amounts in this segment (-\$5.2 million) and actual ISAs and the amounts on which the ICM Rate Rider was based (+\$3.0 million). Please explain why this difference would exist given that the forecast amounts in this segment would have been the basis on which the ICM Rate Rider was calculated.

2-Staff-18

Ref: E2/T14/S1/p. 6

At the above reference, which is the Background section of Power System Engineering Inc.’s (PSE) *Toronto Hydro ICM Variance Evaluation*, PSE stated that:

Torys LLP (“Torys”) retained Power System Engineering, Inc. (“PSE”) to provide an opinion on the reasonableness of variances between the OEB-approved ISAs and actual ISAs, at a segment level. This report (the “PSE Report”) represents PSE’s opinion on the segment variances from an engineering perspective.

- a) Please state whether or not while preparing its opinion, PSE reviewed the OEB’s EB-2012-0064 Partial Decision and Order of April 2, 2013 and other similar documents related to the establishment of the ICM funding. If such documents were reviewed, please state how they were used in preparing PSE’s report.
- b) Given that PSE states that its report represents PSE’s opinion on the segment variances, please state to what extent the OEB can use PSE’s report in assessing the reasonableness of variances at the completed job level.
- c) Please state whether or not PSE has been asked to produce similar reports for other US or Canadian utilities. If yes, please provide a list of such reports.

2-Staff-19

Ref: E2/T14/S1/pp. 11-12

At the above reference, PSE states:

Through the course of our research, we identified a total of five sources applicable to the electric utility industry that provided guidance in establishing and understanding the

expected variances for forecast cost estimates at different stages of a project sequence compared to final costs. These sources are shown in the following figure, and included AACE International ("AACE"), Alberta Electric System Operator ("AESO"), Vermont ElectricPower Company ("VELCO"), ISO New England ("ISO-NE"), and the U.S. Department of Energy ("US-DOE").

Please state how PSE determined the five sources referenced above and if any other sources were considered and rejected, please state what they were and why they were rejected. If no other sources were considered, please explain why.

2-Staff-20

Ref: E2/T14/S1/p. 19

At the above reference, PSE states:

Furthermore, variation in accuracy and precision occurs on a segment to segment basis. For example, segments such as Underground Infrastructure (B1) and Paper Insulated Lead Covered Cable (B2) exhibit greater variation due to the limited inspection and testing methods available for pre-assessing actual in-service conditions.

Please state whether PSE's conclusion that segments such as Underground Infrastructure exhibit greater variation than other segments is based on similar assessments which it has done for other utilities, or if not what the basis of it is.

2-Staff-21

Ref: E2/T14/S1/p. 27

At the above reference, PSE states:

If forecasted jobs are similar in number to committed jobs, then that is one measure of the work forecasted vs. actual work performed. This is an imperfect measure; however, it is a solution based on the available information and is consistent with the manner in which jobs were filed in Toronto Hydro's ICM application.

Please elaborate on PSE's reference above to this being an imperfect measure, specifically discussing what PSE believes would be a more suitable measure and to what extent the inability to make use of such a measure impacted PSE's assessment of Toronto Hydro's performance.

2-Staff-22

Ref: E2/T14/S1/p. 31

At the above reference, PSE states at the conclusion of its report that: "Overall, the reasons for variances as defined by Toronto Hydro, and discussed above, are understandable and can be found across the industry."

Please state whether or not PSE would have any views as to how Toronto Hydro's performance regarding the variances discussed would compare to the industry, e.g

would appear to be above expected industry norms, at industry norms or below industry norms.

3-Staff-23

Ref: E3/T1/S1/p. 7

Table 5 of the above reference provides proposed rates and bill impacts.

Please provide bill impacts for each customer class in the format of OEB Appendix 2-J similar to what was provided in EB-2014-0116 Exhibit 8, Tab 7, Schedule 1. For the Residential Customer Class, please include bill impacts for both 800 kilowatt hours (kWh) and the new OEB standard of 750 kWh. Please also provide these impacts assuming both a November 1, 2016 and January 1, 2017 implementation date.

3-Staff-24

Ref: E3/T2/S4 and E3/T3/S1

Please provide recalculated versions of the two schedules referenced above on the basis that no 2012 ISAs are eligible for recovery assuming both a November 1, 2016 and January 1, 2017 implementation date.