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**BY E-MAIL** 

April 2, 2015

Attention: Ms. Kirsten Walli, Board Secretary

Dear Ms. Walli:

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

Please find attached OEB staff's submission on this application.

Original Signed By

Martin Davies Project Advisor, Electricity Rates & Accounting

## 2015 ELECTRICITY DISTRIBUTION RATES Toronto Hydro-Electric System Limited

EB-2014-0116

## **ONTARIO ENERGY BOARD**

### **STAFF SUBMISSION**

April 2, 2015

### INTRODUCTION

Toronto Hydro-Electric System Limited ("Toronto Hydro" or the "Applicant") is a licensed electricity distributor serving the City of Toronto, which has approximately 730,000 customer accounts. Toronto Hydro filed a custom incentive rate-setting (Custom IR) application (the application) for the May 2015 to December 31, 2019 period on July 31, 2014.

The type of Custom IR structure proposed by Toronto Hydro can be described as a single test year cost of service followed by a custom price cap index (Custom PCI) framework. OEB staff will refer to the application as either Custom IR as a whole, or Custom PCI when discussing the outer years. Toronto Hydro requested approval of its proposed electricity distribution rates and other charges effective May 1, 2015, and its Custom PCI framework to set distribution rates effective for the period January 1, 2016 to December 31, 2019, and the rates and charges resulting from it.

This submission reflects observations and concerns which have arisen from OEB staff's review of the record of this proceeding and are intended to assist the OEB in evaluating the Application and in setting just and reasonable rates. OEB staff has not made submissions on every proposal in the application, but only those proposals where it believes that the views of OEB staff would be useful to the OEB.

### THE APPLICATION

Toronto Hydro requested a service revenue requirement of \$701.1 million for the 2015 test year (or a base revenue requirement of \$655.0 million) followed by four years of proposed price cap index adjustments, including the application of a capital factor. The 2015 forecast revenue requirement is broken down in the table below from Toronto Hydro's evidence.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> EB-2014-0116 Toronto Hydro-Electric System Limited *Custom Incentive Rate-setting Application for 2015-2019 Electricity Distribution Rates and Charges* (Application) E6/T1/S1/p. 1 Filed 2014 Jul 31 Corrected 2015 Feb 6.

OEB Staff Submission Toronto Hydro-Electric System Limited EB-2014-0116

	2015 Test Year
OM&A Expenses	265.1
Amortization/Depreciation	206.5
Property Taxes	6.5
Income Taxes (Grossed up)	22.0
Deemed Interest Expense	80.2
Return on Deemed Equity	120.8
Service Revenue Requirement	701.1
Revenue Offsets	46.1
Base Revenue Requirement	655.0

### OVERVIEW OF OEB STAFF'S SUBMISSION

OEB staff's submission is recommending a significant reduction in Toronto Hydro's proposed 2015 Test Year revenue requirement and other changes which taken in conjunction with the proposed 2015 reductions would also result in lower recoveries in the 2016 to 2019 period.

For the 2015 Test Year, OEB staff is proposing: (i) a reduction of \$22.3 million in the 2015 applied for OM&A level and (ii) a \$131 million cut in the applied for capital expenditure level. Taken together, these two proposed reductions are estimated to reduce the 2015 revenue requirement by roughly \$35 million or about 5%. OEB staff has also proposed other less significant changes in the cost of long-term debt and the load forecast which will result in further reductions in 2015 rates.

OEB staff's proposed 2015 reductions will have a carry-through effect in the 2016 to 2019 period. OEB staff is additionally proposing that the stretch factor for the 2016 to 2019 period be maintained at a minimum 0.6% level and that the OEB may wish to go as high as 1% rather than the 0.3% level proposed by Toronto Hydro. In addition, OEB staff is proposing that Toronto Hydro's request for additional recoveries related to half-year rule effects from the 2012 to 2014 period be denied. Both of these proposed changes will further reduce customer rates in the 2016 to 2019 period.

This submission is organized based on the Board approved Issues List.

- 1. General
  - 1.1 Has Toronto Hydro responded appropriately to all relevant Board directions from previous proceedings?

### Background

Toronto Hydro identified<sup>2</sup> in its evidence previous OEB directives and undertakings and how these were being addressed in the application. These directives included the following:

- 1. File a cost allocation model that will disaggregate meter reading costs appropriately into Account 5310.
- 2. Review each of the assumptions set out in the Decision and Order when its cost allocation study is refreshed for its next cost of service application.
- 3. Provide external evidence related to productivity and capital planning in the next cost of service application.
- 4. Provide seminar on Feeder Investment Model (FIM) to Intervenors before filing 2015 application.
- 5. Use best efforts to track any assets taken out of service before the end of their useful lives associated with the completion of ICM work segments approved in Phase 2 of this proceeding.
- 6. Evaluate options to measure or estimate actual line losses and the impacts on Account 1588 balances in accordance with the Accounting Procedures Handbook. File the results in its application for 2015 rates.

### Discussion and Submission

OEB staff submits that Toronto Hydro has addressed each of the above directives in the application and acknowledges that Toronto Hydro did provide a seminar on the FIM (directive 4) before filing its 2015 application.

<sup>&</sup>lt;sup>2</sup> EB-2014-0116 Application E 1A/T3/S1/p. 5.

OEB staff will discuss Toronto Hydro's responses to directives 1 and 2 in section 6.3 of this submission. Toronto Hydro's response to directive 3 will be further discussed in section 2.2 as it relates to productivity and section 3.2 as it relates to capital planning. Toronto Hydro's response to directive 5 is further discussed in section 2.4 and directive 6 in section 6.7.

### 1.2 Do any of Toronto Hydro's proposed rates require rate smoothing?

### Background

The OEB's Filing Requirements<sup>3</sup> state that "A distributor must file a mitigation plan if total bill increases for any customer class exceed 10%." Toronto Hydro has presented bill impacts in the format prescribed by the OEB.<sup>4</sup>

During the proceeding, Toronto Hydro provided a summary table of bill impacts from which OEB staff has summarized the distribution and total bill impacts.<sup>5</sup> The total bill impacts in this table exclude taxes and the Ontario Clean Energy Benefit (OCEB):

					Toronto Hydro EB-2014-0116 Rate Impacts (%)								
		2015		2016		2017		2018		2019		Average	
Class													
		Dist	Total Bill	Dist	Total Bill	Dist	Total Bill	Dist	Total Bill	Dist	Total Bill	Dist	Total Bill
Residentia	al	8.6	2.5	6.7	1.9	7.9	2.4	11.6	3.7	3.4	1.2	7.6	2.4
CSMUR		1.6	0.8	5.8	2.5	8.3	3.6	9.5	4.3	3.0	1.4	5.6	2.5
GS<50kW		9.3	2.7	4.5	1.3	2.2	0.7	10.3	3.2	4.2	1.4	6.1	1.8
GS 50 to 9	99 kW	9.5	1.4	4.6	0.7	6.8	1.0	9.5	1.5	4.5	0.8	7.0	1.1
GS 1000 to	4999 kW	6.7	0.8	5.8	0.7	6.9	0.8	8.8	1.1	4.3	0.6	6.5	0.8
Large Use		8.0	0.9	6.8	0.7	7.8	0.9	9.7	1.1	4.8	0.6	7.4	0.8
USL		14.7	6.4	5.9	2.8	8.6	4.1	10.4	5.2	5.2	2.7	8.9	4.3
Streetligh	ting	-8.6	-4.1	7.5	3.5	8.6	4.2	11.8	5.9	5.2	2.8	4.9	2.4

OEB policy requires that a mitigation plan be filed if bill impacts exceed 10%. OEB staff notes that the annual total bill impacts for all customer classes are below the 10% threshold. However, although it is not shown in this table, the impact of the discontinuation of the OCEB will result in total bill impacts in 2016 in the 13% to 14%

<sup>&</sup>lt;sup>3</sup> Ontario Energy Board Filing Requirements for Electricity Distribution Rate Applications -2014 Edition for 2015 Rate Applications, Ch 2/pp. 58-59.

<sup>&</sup>lt;sup>4</sup> EB-2014-0116 Application E8/T7/S1.

<sup>&</sup>lt;sup>5</sup> EB-2014-0116 Exh No. K7.5: One-Page Table Entitled "Bill Impacts."

range for the Residential, Competitive Sector Multi-unit Residential (CSMUR) and GS<50 kW classes.

The average total bill impacts over the five-year period of the application are well below 10% per annum for all classes.

Toronto Hydro has not proposed a mitigation plan for the rate classes exceeding the 10% threshold in 2016.

### Discussion and Submission

OEB staff submits that as all total bill impacts are below the 10% threshold, with the exception of the 2016 impacts referenced above which are transitory, there is no need for a rate mitigation plan for this application.

### 2. Custom Application

2.1 Is the proposed rate framework appropriate in light of Toronto Hydro's capital needs and operating circumstances and the Board's policies as set out in the RRFE Report?

### Background

Toronto Hydro stated in its evidence that in the OEB's October 18, 2012 *Report of the Board Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach* (the RRFE Report), the OEB noted its expectation that the form of a Custom IR application is to be that of a "Custom Index," covering Capital and OM&A expenditures, supplemented with a Productivity Factor, and a benefit-sharing mechanism in the form of a Stretch Factor or another construct determined on a case-by-case basis.

Toronto Hydro further stated that the RRFE Report also noted that a distributor's rate trend will be set on the basis of a combination of:

- A distributor's cost, inflation and productivity forecasts;
- The OEB's productivity analysis; and
- Benchmarking to assess the reasonableness of a distributor's forecasts.

Toronto Hydro submitted that its proposed rate-setting model contained in the 2015-2019 CIR application addressed each of the above noted OEB expectations as, in particular, its rate-setting model entailed use of:

- a forward test year rebasing approach to establish the 2015 Revenue Requirement and base rates; and
- a Custom Index proposal for rate adjustments over the 2016-2019 period.

Toronto Hydro noted that its proposed Custom Index incorporated the OEB's longstanding Price Cap Index (PCI) approach for the escalation of the OM&A portion of the 2015 Revenue Requirement over the 2016 to 2019 period, augmented by a recovery portion for the 2016 to 2019 capital requirements, the Custom Capital Factor (C-factor) to account for the costs of forecasting capital additions over the 2016-2019 years.

Toronto Hydro submitted that the proposed Custom PCI rate adjustment mechanism covered both OM&A and capital expenditures and provided for the sharing of benefits of efficiency and productivity improvements incented through the PCI framework with its customers.

Toronto Hydro noted that the values for the Inflation and Productivity Factor in the proposed Custom Index will be set on the basis of the OEB's analysis as contemplated under the 4<sup>th</sup> Generation IR rate adjustment framework. Toronto Hydro's proposed custom stretch factor was designed to apply the OEB's methodology, but would be set on the basis of the benchmarking evidence filed in the application in support of the reasonableness of its cost forecasts.

Toronto Hydro submitted that its proposed rate-setting framework met the OEB's expectations as to the form, function and outcomes of the Custom IR framework.

### Discussion and Submission

OEB staff submits that Toronto Hydro's proposed rate-setting model conforms in general terms with the framework outlined for Custom IR applications in the RRFE Report with one exception. When discussing the OEB's expectations for Custom IR applications, the OEB's RRFE Report states that among these expectations are "that a distributor that applies under this method will file robust evidence of its cost and revenue forecasts over a five year horizon, as well as detailed infrastructure investment plans over that same time frame."<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> RRFE Report, p.19. Ontario Energy Board *Report of the Board Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach* (RRFE Report), p.19.

OEB staff notes that Toronto Hydro did not file a five year OM&A forecast as part of the application. In staff's view, this is required by the RRFE report, regardless of the specific approvals sought by an applicant or the proposed structure of its Custom IR application.

OEB staff also notes that Toronto Hydro is not proposing to update its cost of capital components during the five year period of the Custom IR application. OEB staff does not oppose this approach and notes that it is in conformity with the nature of a Custom IR application. However, OEB staff observes that such adjustments are to be made annually as part of the rate-setting processes outlined in the OEB's recent decisions for the Custom IR applications of both Hydro One Networks Inc. (EB-2013-0416) and Enbridge Gas Distribution Inc. (EB-2012-0459).

OEB staff's concerns with the more specific aspects of Toronto Hydro's proposal are discussed under Issue 2.2.

## 2.2 Is the proposed CIR formula, including the stretch factor and custom capital factor appropriate?

### Background

Toronto Hydro proposed that distribution rates in Years 2 through 5 would be adjusted annually by a custom Price Cap Index ("PCI"):

$$\mathsf{PCI} = \mathsf{I} - \mathsf{X} + \mathsf{C}$$

Where,

- "I" is the OEB's inflation factor, determined annually
- "X" is the sum of:
  - The OEB's productivity factor.
  - Toronto Hydro's custom stretch factor.
- "C" provides funds incremental to "I X" that are necessary to reconcile Toronto Hydro's capital need within a PCI framework.

The two changes that Toronto Hydro proposed to the OEB's price cap index are (i) a custom stretch factor of -0.3%, as compared to the OEB determined factor for Toronto Hydro of -0.6% and (ii) the C-factor referenced above.

(i) Custom stretch factor of -0.3%

### Background

Toronto Hydro's stretch factor as determined based on the OEB's current methodology is -0.6%.

Toronto Hydro submitted as part of the application alternative total cost benchmarking evidence provided in the Power System Engineering's Econometric Benchmarking Report (the PSE Report). Toronto Hydro stated that the alternative total cost benchmarking model prepared by PSE is econometric in nature and therefore similar to that of the OEB's consultant Pacific Economics Group (PEG), which had prepared the OEB's benchmarking study which had determined the -0.6% stretch factor for Toronto Hydro but included an expanded data set. Toronto Hydro further stated that the results arising from the use of this model are statistically significant and relevant to the OEB's consideration of its performance and provided an appropriate basis for setting its stretch factor.

The PSE Report concluded that Toronto Hydro's forecasts of its total costs are within 10 percent of its predicted total cost. Toronto Hydro noted that utilities within this demarcation point are assigned to Group III of the OEB's benchmarking cohorts, implying a stretch factor of -0.3%. Toronto Hydro therefore submitted that the stretch factor in the proposed Custom PCI framework should be set at -0.3%.

OEB staff engaged PEG and Dr. Lawrence Kaufmann to advise on Toronto Hydro's application and more particularly to review the overall Custom IR application, to assess the design of the Custom IR plan and to analyze Toronto Hydro's proposed stretch factor and custom capital factor. PEG was also asked to evaluate the technical work of PSE and where relevant to provide alternate cost and reliability benchmarking evidence.

PEG argued that based on its review, PSE's conclusions regarding Toronto Hydro's cost and reliability performance are largely unfounded. PEG's review identified a number of areas in which the costs of Toronto Hydro and the U.S. utilities used by PEG were not comparably defined or measured. PEG noted that PSE's analysis indicated that Toronto Hydro's 2010-2012 costs were 31.1% below the costs expected for an average electric utility operating under Toronto Hydro's business conditions. PEG's review by contrast found that Toronto Hydro's costs were 9.7% above its expected costs and that its total costs are projected to be 34.7% above its expected costs in 2019, the final year of its Custom IR plan. PEG's review partially confirmed PSE's reliability benchmarking conclusions. PEG found that based on an econometric analysis of Toronto Hydro and 46 U.S. utilities, PSE had found that Toronto Hydro's SAIFI performance was 73% above its expected value while its SAIDI was 50% below its expected value. PEG expressed the concern that the data PSE had used for its reliability benchmarking were not suitable for regulatory application and so had compiled an alternative SAIFI and SAIDI dataset and used it to estimate alternate SAIFI and SAIDI benchmarking models. Nevertheless, PEG confirmed PSE's finding that Toronto Hydro's SAIFI is far above its expected level. However, PEG found that Toronto Hydro's SAIDI is not statistically different from its expected level.

Overall, PEG found that Toronto Hydro had been a sub-par performer with respect to cost and reliability and that the proposed stretch factor of 0.3% was not warranted. PEG instead recommended that a stretch factor between 0.6% and 1% to be applied to Toronto Hydro's capital and OM&A costs would be appropriate and consistent with Toronto Hydro's historical and projected cost performance.

PEG also suggested that Toronto Hydro's proposed C factor should include an adjustment for the growth in Toronto Hydro billing determinants to prevent the C factor from over-recovering capital cost. PEG stated that its recommended C factor adjustment would eliminate over-recovery of capital costs and reduce Toronto Hydro's price growth by an estimated 1.5% per annum in 2016 through 2019.

PEG also expressed the view that there may be value to Toronto Hydro's customers in extending the period of its proposed capital program. PEG suggested that doing so would be consistent with the RRFE principles of pacing and prioritization of capital spending, while at the same time managing the pace of rate increases for customers. On this basis, PEG recommended that the capital expenditures in Toronto Hydro's Custom IR plan be spread over eight years (2015-2022) rather than concentrated in five years (2015-2019). In OEB staff's view, this would have the impact of reducing the average annual capital embedded in rates from approximately \$500M to the \$300M to \$325M range per year.

Toronto Hydro submitted that the PSE study is grounded in the OEB's own benchmarking approach and methods using an econometric approach based on modelling techniques that are equivalent to the OEB's approach in the way it determines expected efficiency cost levels for a utility with Toronto Hydro's business conditions. Toronto Hydro argued that the PSE model captured the effects of operating in Ontario's economic and regulatory environment as well as other important business conditions Toronto Hydro shares with dense, large and mature urban utilities.

Toronto Hydro argued that the PSE study provided an empirical confirmation at a 99% confidence level that serving a dense urban core is a major cost driver that distinguishes Toronto Hydro from other Ontario distributors and appropriately places it in the same cohort as major North American urban centres as New York and Chicago. Furthermore, the study was based on comprehensive methodology and assumptions that reflect econometric research best practices. Toronto Hydro concluded that even if conservative cost definition adjustments as were discussed during the proceeding are made, Toronto Hydro's benchmarking results over the 2015-2019 timeframe remain within the range of the OEB's middle efficiency cohort.

### **Discussion and Submission**

Toronto Hydro stated during its Argument-in-Chief that "it's important to note at the outset there are differences between PSE and PEG, but it is also important not to overstate those...the PSE work is in fact grounded in the Board's own benchmarking approach and methods. It's really in that respect an extension of what the Board has seen before."<sup>7</sup>

OEB staff notes that the two main "extensions" Toronto Hydro identifies are the inclusion of US electric utilities in the benchmarking sample, and adding an "urban core dummy" variable to measure the costs of serving urban environments.

However, OEB staff believes this is an incomplete description of the differences between the PSE and PEG work. The PSE benchmarking report does not state that its analysis is "grounded in the Board's own benchmarking approach," but repeatedly emphasizes the difference between Toronto Hydro and the rest of the Ontario industry.

PSE states that Toronto Hydro is "an extreme outlier"<sup>8</sup> in the Province with "vast differences between Toronto Hydro and the rest of the Ontario distributors, in terms of the number of customers served."<sup>9</sup> Furthermore, these "vast differences" require new, US electric utility data and new business condition variables to benchmark THESL appropriately. OEB staff submits that these are significant changes that do not mean that the PSE analysis is grounded in the OEB's own approaches.

<sup>&</sup>lt;sup>7</sup> EB-2014-0116 Transcript Vol. 10, p. line 26 – p. line 353 L14- L21.

<sup>&</sup>lt;sup>8</sup> EB-2014-0116 Application E 1B/T2/S5, App. B (PSE Benchmarking Report,), p. 3.

<sup>&</sup>lt;sup>9</sup> PSE Benchmarking Report, p. 13.

OEB staff also notes that PEG's review of PSE's original benchmarking study found a number of material errors in the PSE study which explained its differences with the PEG study. PEG corrected these errors to allow for the development of comparable cost measures that permit more "apples to apples" cost comparisons between Toronto Hydro and the US sample.<sup>10</sup> Furthermore, PEG found these errors in PSE's analysis overstated THESL's measured efficiency relative to US electric utilities by 24.8% (with the result that Toronto Hydro's efficiency score in 2010 to 2012 falls from the -31.1% reported by PSE to -6.3%).

PEG's review of the PSE work found PSE's cost measures for US utilities were not comparable to the benchmarking-based costs PEG developed for Toronto Hydro when undertaking its 4<sup>th</sup> Generation IR benchmarking that placed Toronto Hydro in the category requiring a -0.6% stretch factor.

PSE prepared a Reply Report in response to the PEG Report, and this Reply Report did not dispute the need for any of the six necessary adjustments identified by PEG. PSE's Reply Report did implement a number of the necessary adjustments recommended by PEG, and these changes to PSE's analysis did make its Reply Report more comparable to the PEG work than was the case with PSE's original report.

However, the PSE Reply report did recommend alternatives for two of the six data adjustments identified by PEG. One of these alternatives required data that had not been originally provided to PEG (on projected uncollectible accounts expenses for the 2013-2019 period). When those data were provided by Toronto Hydro, PEG incorporated those data into its model and updated its analysis. This adjustment had a modest impact on PEG's benchmarking results, but it has been incorporated into PEG's

<sup>&</sup>lt;sup>10</sup> These six necessary changes are: 1) beginning the analysis with THESL's benchmarking-based cost measure rather than the TFP-based cost measure PSE incorrectly selected; 2) appropriately controlling for mergers that took place within the US electric utility industry during the sample period, as OEB Staff and PEG had done in the previous benchmarking work in Ontario); 3) excluding the costs of uncollectible bills for the US electric utilities, since these costs were not included in Toronto Hydro's benchmark-based cost measure; 4) eliminating customer service and information (CSI) expenses from US electric utilities' costs, since CDM accounts for the largest share of CSI costs and Toronto Hydro's benchmark-based costs measure did not include CDM expenses; 5) eliminating customer contributions in aid of construction (CIAC) from Toronto Hydro's costs, since CIAC costs were not included in the US cost measure; and 6) attempting to control for differences in the ownership of high-voltage (HV) assets, since HV-related costs were included in the US cost measure but were not included in Toronto Hydro's benchmark-based cost measure. See PEG Benchmarking Report, pp. 21-28.

final analysis.<sup>11</sup> This adjustment is therefore no longer a source of disagreement between the PEG and PSE models.

Based on its premise that the PSE work was grounded in the OEB's own benchmarking approach, Toronto Hydro's Argument-in-Chief stated that there were two areas of disagreement remaining between the PEG and PSE studies and these were: (1) CDM and (2) the issue of the urban core variable.<sup>12</sup>

Toronto Hydro then referenced a table in an undertaking response prepared by PSE<sup>13</sup> for the following stated reasons:

The reason I draw your attention to this portion of the undertaking is there is nowhere else, I believe, in the evidence, nowhere else anywhere where the distinction and the ramifications of the distinction or the differences between PSE and PEG is distilled in one place and that you can find it. You don't find that in Dr. Kaufmann's evidence anywhere or his answers to undertakings, but here you have it. And in my submission, it's a very, very useful resource to you.<sup>14</sup>

Summary of Benchmarking Results								
	2010-2012	<u>2015</u>	2019	Stretch Factor Implication				
PEG Result (after the bad debt correction, found in				Historical period = 0.3%,				
response J3.5)	8.0%	27.0%	31.7%	Custom IR period = 0.6%				
Approximate PEG Result (After making the CSI/CDM				Historical period = 0.3%,				
Adjustment suggested by PSE)	-1%	18%	23%	Custom IR period = 0.45%				
PSE Reply Result (After CSI/CDM adjustment and				Historical period = 0.15%,				
substituting urban core for high voltage variable)	-15.2%	4.1%	7.0%	Custom IR period = 0.3%				

The referenced table is reproduced below:

OEB staff notes that during his testimony before the OEB, Dr. Kaufmann expressed his disagreement with both of the adjustments in the above table<sup>15</sup> and provided his reasons

<sup>&</sup>lt;sup>11</sup> Please see the Response to Undertaking J3.5. The impact of this adjustment changed the average difference between THESL's projected 2015-2019 costs and the cost predicted by PEG's econometric model from the +31.2% reported in PEG's December 2014 benchmarking report to +29.6%.

<sup>&</sup>lt;sup>12</sup> EB-2014-0116 Transcript Vol. 10, p. 56 LL 1 – 6.

<sup>&</sup>lt;sup>13</sup> EB-2014-0116 Schedule J9.2 Filed 2015 Mar 6.

<sup>&</sup>lt;sup>14</sup> EB-2014-0116 Transcript Vol. 10 p.58 LL 4 – 12.

<sup>&</sup>lt;sup>15</sup> EB-2014-0116 Transcript Vol. 3 pp. 106 – 111.

for these disagreements. Dr. Kaufmann also discussed a further difference,<sup>16</sup> PSE's asset pricing inflation forecast which was not discussed in Toronto Hydro's Argument-in-Chief, but is addressed subsequently in this submission.

### (i) Urban Core Dummy Variable

OEB staff notes that the adjustment that has the biggest impact in the above table is the substitution of the urban core dummy variable used by PSE for the high voltage variable used by PEG. It is this adjustment that Toronto Hydro's evidence shows as being the justification for the 0.3% stretch factor that PSE is recommending in this table.

OEB staff submits that PEG and Dr. Kaufmann are correct in their view that the urban core dummy variable proposed by PSE is inappropriate for use in determining an appropriate stretch factor for Toronto Hydro.

OEB staff first notes that the problems with the use of this variable are discussed in some detail in the PEG Report.<sup>17</sup>

Toronto Hydro however argues that PSE's urban core dummy variable should be retained because it has a positive sign, is statistically significant, and leads to a slight increase in the goodness of fit of PSE's econometric model to the US sample data.

OEB staff notes that Dr. Kaufmann explained in his testimony that the only reason PSE's urban core dummy has a statistically significant, positive sign is that it applies to a small fraction of the companies in the US sample that serve large cities with downtown urban cores. PSE identifies only four of the 85 utilities in its US sample as serving "urban cores" and among the 81 utilities PSE has said do not serve urban cores are those serving the downtown areas of such large US cities as San Francisco, Washington DC, Miami, Atlanta, Las Vegas, and many more.

OEB staff is in agreement with Dr. Kaufmann that these cities all include downtown urban cores, and that no "urban core" variable can provide a credible measure of the costs of serving downtown environments unless it reflects all the large-city, urban cores in PSE's US utility sample. Examining only a small and non-representative subset of four US

<sup>&</sup>lt;sup>16</sup> EB-2014-0116 Undertaking No. J3.6.

<sup>&</sup>lt;sup>17</sup> PEG Benchmarking Report, pp. 28-31. Pacific Economics Group LLC *Toronto Hydro Electric System Limited Custom IR Application and PSE Report Econometric Benchmarking of Toronto Hydro's Historical and Projected Total Cost and Reliability Levels Assessment and Recommendations* December 2014 (PEG Benchmarking Report), pp. 28-31.

cities, rather than all the sampled utilities that serve large urban cores, would represent a misapplication of the US sample data, and yield biased estimates of any potential "urban core" cost impacts. In making this submission, OEB staff is mindful of the debate over whether or not Phoenix was appropriately included among these four cities<sup>18</sup> but submits that even if Phoenix is included, the concerns about the size of the sample remain valid.

OEB staff notes that PEG has estimated the impact of a properly-measured, comprehensive urban core dummy variable that applies to 26 different large city utilities serving urban cores and found that there is no statistically significant cost impact associated with such an urban core dummy variable.<sup>19</sup> OEB staff submits that PEG has demonstrated that an urban core variable that applies to all urban core utilities has no statistically significant, independent impact on an electric utility's expected costs. OEB staff agrees with PEG and Dr. Kaufmann that PSE obtained a biased and positive estimate because it restricted its statistical examination to a small subset of the urban core utilities.

OEB staff submits that PEG's finding is to be expected because the PEG model already contains at least four variables that control for the higher costs of serving urban environments<sup>20</sup> and the costs of serving especially large numbers of customers and peak demands.

### (ii) Adjustment for CDM Expenses

The second difference cited by Toronto Hydro in the table relates to the treatment of CDM expenses as CDM expenses are reflected in the costs of the US utility sample but not for Toronto Hydro. PEG's approach for standardizing CDM cost treatment was to eliminate customer service and information (CSI) expenses from the US utilities, since CDM expenses account for the largest share of CSI costs. PSE's proposal for standardizing CDM cost treatment was to add CSI costs back into the US cost measure, but also add Toronto Hydro's actual and projected CDM expenses to its cost measure. The table referenced by Toronto Hydro and produced by PSE indicates that if this approach to standardizing costs is employed, it will lead to an 8.7% improvement in THESL's measured cost efficiency compared with PEG's results.

<sup>&</sup>lt;sup>18</sup> EB-2014-0116 Transcript Vol. 3, p.170 L23 to p.173 L12.

<sup>&</sup>lt;sup>19</sup> EB-2014-0116 Response to Undertaking J3.2.

<sup>&</sup>lt;sup>20</sup> PEG's response to 1-THESL-33 discusses this in some detail.

OEB Staff has concerns with PSE's approach to dealing with CDM expenses. First, PSE's calculation has not been checked or verified by any party, nor has PSE provided any workpapers that show the CDM data used for this calculation. OEB staff also notes that the magnitude of the 8.7% change seems high relative to the magnitude that expenses of this kind would represent relative to the total expenses of a utility.

OEB staff is also concerned that CDM expenses will not be recovered by the rates established under the Custom IR plan, which accordingly did not include any projections of CDM costs. The use of these costs would imply that Toronto Hydro's measure of projected efficiency under the Custom IR plan is to be heavily influenced by expense forecasts that are not part of the Custom IR application itself.

OEB staff submits that this creates two areas of concern. First, it creates a mismatch between the expenses used to project Toronto Hydro's cost efficiency, and thus inform the stretch factor under the Custom IR plan, and the expenses that will actually be subject to the Custom IR plan and to which the stretch factor will be applied. Second, it could establish the precedent that utilities would be able to make cost projections under Custom IR for the purpose of impacting their efficiency scores rather than because the costs are necessary to achieve the plan's objectives.

For all these reasons, OEB staff believes PSE's proposal for standardizing CDM expenses in the benchmarking model is unwarranted and should be rejected by the Board.

### (iii) Asset Price Inflation Forecast

The asset price inflation forecast is a third outstanding difference between the assessments of PSE and PEG that was not identified by Toronto Hydro in the above table.

This difference between the PEG and PSE models relates to PSE's projection of asset price inflation over the 2015-2019 period. PSE projects that Toronto Hydro's capital asset prices over this period will grow at the average annual 40-year growth rate in Canada's electric utility construction price index (EUCPI).<sup>21</sup> Between 1973 and 2013, the EUCPI grew at an average rate of 4.55%, which is identical to what PSE projects for THESL's capital asset price inflation in 2015-2019.

<sup>&</sup>lt;sup>21</sup> PSE Benchmarking Report, p. 29.

PEG discussed its concerns with this assumption of PSE in response to an undertaking<sup>22</sup>

In that undertaking, it was noted that recent inflation in the EUCPI has been much more modest. The 10-year average growth rates in the EUCPI over the 1973-2013 period were stated as follows.

1973-83	9.6% per annum
1983-93	3.2% per annum
1993-2003	2.4% per annum
2003-2013	2.0% per annum

PSE's forecast of capital asset prices is therefore greatly affected by the inflation in capital asset prices during the high-inflation 1970s, which is built into PSE's forecast of capital asset prices. This forecast is, in turn, greatly impacting the growth rate of PSE's estimated econometric benchmarks for THESL in 2015-2019 relative to observed history.

PEG believes PSE's projection of 4.55% annual inflation in capital asset prices over the 2015-2019 period is unwarranted, since it is distorted by the anomalous capital asset price inflation from the 1973-83 period.<sup>23</sup> PSE's projection is also inconsistent with the 2% growth in the EUCPI in the 2003-2013 period. PEG therefore updated its 2015-2019 benchmarking projections for Toronto Hydro to reflect 2% annual growth in capital price inflation rather than the 4.55% assumed by PSE.

These projections from the final model indicate that Toronto Hydro's costs are projected to be 33.1% above the econometric benchmark prediction in 2015 and 45.2% above the econometric benchmark prediction by 2019.

PEG's final model therefore predicts that Toronto Hydro's costs will be over 45% above its econometric, benchmark costs by the end of its Custom IR period. In contrast, PSE projects that Toronto Hydro's costs will be 7% above its econometric benchmark costs by the end of the Custom IR period.

OEB staff submits that the results of the PEG study show that Toronto Hydro has actual costs that are 25% or more above the predicted costs and, accordingly, the existing stretch factor of 0.6% should be maintained.

<sup>&</sup>lt;sup>22</sup> EB-2014-0116 Undertaking J3.7.

<sup>&</sup>lt;sup>23</sup> EB-2014-0116 Undertaking J3.7

OEB staff also notes that the OEB has before it detailed benchmarking evidence involving both costs and reliability for a particular distributor. In the event the OEB accepts PEG's analysis that Toronto Hydro has been a high cost performer, it would not be unreasonable to apply a stretch factor with a value higher than 0.6%. OEB staff agrees with Dr. Kaufmann that the OEB should consider establishing some degree of accountability regarding past performance, and one approach to implement this accountability is to set a stretch factor for the term of this Custom IR plan that is higher than the current 0.6%.

OEB staff also accepts PEG's recommendation that this stretch factor should be applied to capital as well as OM&A costs, since the OEB has always applied stretch factors to total costs rather than just OM&A costs.

OEB staff will provide its submissions of PEG's recommendations concerning the Cfactor and the capital spending program in the sections of this submission dealing with those matters.

(ii) C-factor

### Background

Toronto Hydro stated that the premise of the inclusion of a C-factor is to reconcile the OEB's guidance that the CIR framework is best suited for utilities with significant multiyear capital investment requirements as it is clear that the standard 4<sup>th</sup> Generation IR framework is not. Toronto Hydro further stated the proposed C-factor is designed as a rate adjustment mechanism that is directly proportional to the degree of capital investment required by Toronto Hydro as detailed in its DSP and is comprised of two sub-components which are designed to: (i) reconcile Toronto Hydro's capital investment needs in a price cap framework, and (ii) return to ratepayers the funding already provided for capital through the standard "I-X" increase.

PEG reviewed the C-factor and stated that it should include an adjustment for the growth in Toronto Hydro billing determinants to prevent the C-factor from over-recovering capital cost. PEG concluded that its recommended C-factor adjustment would eliminate over-recovery of capital costs and reduce Toronto Hydro's price growth by an estimated 1.5% per annum in 2016 through 2019.

### Discussion and Submission

OEB staff notes that Toronto Hydro calculated custom PCI components for each of the years 2016 to 2019. These are shown in the evidence<sup>24</sup>. For 2016, Toronto Hydro calculated a Custom PCI factor of 4.56%. The difference between Toronto Hydro's Custom PCI factor and the OEB's standard PCI factor for 2016 is as shown in the table below:

<b>Existing OEB Approa</b>	ch:	Proposed THESL Approach:			
I	1.7	I	1.7		
X -productivity	0	X -productivity	0		
X - stretch	-0.6	X - stretch	-0.3		
		Cn	4.47		
		Scap	-0.93		
OEB PCI	1.1	THESL PCI	4.94		

OEB staff notes that subsequent to the filing of the application, on October 30, 2014, the OEB updated the Input Price Index to 1.6% to be used as the inflation adjustment for rates adjusted through the Price Cap IR and Annual Index plans for rates effective in 2015. OEB staff submits that this adjustment should be made by Toronto Hydro when preparing its Draft Rate Order.

OEB staff notes that the PCI equation proposed by Toronto Hydro and discussed earlier of PCI = I - X + C would be, taking into account the C-factor and the update discussed above, PCI = 1.6% - 0.3% - 3.54%, or a 4.84% price cap adjustment in 2016, when adjusted for the revised Input Price Index issued by the OEB subsequent to the filing of the application.

OEB Staff further notes that there are three differences between the existing OEB standard PCI and Toronto Hydro's proposal. These are: (1) the lower stretch factor of - 0.3 as compared to the OEB-determined stretch factor of -0.6 for a distributor in Toronto Hydro's category, (2) the C-factor which is determined as the present change in total revenue requirement that is attributable to changes in the capital-related revenue requirement, specifically depreciation, return on equity, interest and PILs/taxes and (3) The Scap factor which is a scaling factor designed to remove the risk of overfunding

<sup>&</sup>lt;sup>24</sup> EB-2014-0116 Application E 1B/T2/S3/p. 13 Table 5 Filed: 2014 Jul 31 Corrected: 2015 Feb 6.

relative to Toronto Hydro's capital need because a portion of the "I-X" increase could be committed to capital expenditures.

OEB staff has made its submissions on the stretch factor in the preceding section.

OEB staff is in agreement with Toronto Hydro that the Scap factor adjustment should be made and that Toronto Hydro's approach in making it is reasonable.

OEB staff notes that the C-factor is the most significant component of Toronto Hydro's PCI adjustment. While OEB staff does not oppose the C-factor per se, it does have some concerns about the significance of the approximations contained in the calculation of the C-factor.

First, OEB staff notes that Toronto Hydro's application is based on one Test year for which a full revenue requirement calculation has been provided. This is 2015. However, for the 2016-2019 period, Toronto Hydro has not provided a detailed Test year type of revenue forecast. Yet, the C-factor calculations are based on such a forecast and, as such, contains a number of approximations. This is evident from the table from Toronto Hydro's evidence reproduced below which shows the inputs for the determination of the C-factor for the 2016 to 2019 period<sup>25</sup>.

Revenue Requirement	2015	2016	2017	2018	2019
Component					
Interest	80.2	89.5	98.4	103.9	109.2
ROE	120.9	135.0	148.3	156.6	164.6
Depreciation	206.5	221.6	248.3	266.8	287.4
PILs/Taxes	24.0	14.7	22.6	40.3	46.5
Capital-related RR	431.6	460.9	517.6	567.5	607.6
OM&A	269.5	273.3	277.1	281.0	284.9
Revenue Offsets	(46.1)	(46.8)	(47.4)	(48.0)	(48.7)
Total RR	665.0	687.5	747.4	800.5	843.8

Toronto Hydro states that changes in the capital-related revenue requirement are based on forecast changes in annual average rate base, associated depreciation and taxes with

<sup>&</sup>lt;sup>25</sup> EB-2014-0116 Application E 1B/T2/S3/p. 10 Table 3 Filed: 2014 Jul 31 Corrected: 2015 Feb 6.

tax rates and the cost of capital maintained at their 2015 levels, consistent with the standard 4<sup>th</sup> Generation IR treatment. For the remaining portion, which is OM&A and Revenue Offsets, they are forecast to increase by "I-X."

OEB staff notes that the assumption that OM&A and Revenue Offsets will increase by "I-X" is a very rough approximation and since the C-factor is calculated as the increase in the capital related revenue requirement shown in the above table over the total revenue requirement, the OM&A and Revenue Offsets assumptions will impact the C-factor calculation. Furthermore, while the capital-related revenue requirement component is calculated on the basis of Toronto Hydro's five-year distribution system plan forecast, it is not clear whether or not the ROE and PILs/Taxes components of these calculations take into account the impacts of the OM&A and Revenue Offsets components. OEB staff is concerned that while ROE and PILs/Taxes should reflect these impacts, given the rough nature of the OM&A and Revenue Offset component estimates, even if they did they would only provide very broad gauge estimates of the impacts. OEB staff further notes that Toronto Hydro has provided little in the way of detail as to how the ROE and PILs amounts in the above table were calculated.

OEB staff therefore submits that while it is not opposed to the overall concept of the custom capital factor, as proposed by Toronto Hydro, it is concerned that Toronto Hydro's failure to submit five full years of cost forecasts in support of these calculations introduces a considerable element of approximation into them, especially as the outer years of the five-year plan period are reached. What's more, the calculations provided in the application appear to be deficient and OEB staff submits that if the OEB was inclined to accept the C-factor notionally, that Toronto Hydro provide thorough calculations of the level of the C-factor for each year at the draft rate order process.

OEB staff additionally submits that PEG's proposed adjustment to the C-factor to include an adjustment for the growth in Toronto Hydro billing determinants is appropriate to prevent the C-factor from over-recovering capital cost and should be required by the OEB if it determines that the C-factor adjustment is appropriate.

# 2.3 Will Toronto Hydro's Custom Application produce acceptable outcomes for existing and future customers (including, for example, cost control, system reliability, service quality, and bill impacts)?

### Background

Toronto Hydro stated that it had two levels of customer engagement. The first such level is ordinary course, day-to-day engagement with its residential, non-residential and very large customers. The second level is the various customer engagement activities Toronto Hydro has undertaken specifically in connection with the application.

### Discussion and Submission

OEB staff notes that customer engagement expectations are outlined in section 2.4.3 of Chapter 2 of the Filing Requirements and in Chapter 5 for the planning elements to be filed as part of the capital plan requirements. Chapter 2 lists the four customer engagement criteria below. OEB staff's assessment of the extent of Toronto Hydro's compliance with each of these criteria follows:

 The Board expects distributors to provide an overview of customer engagement activities that the distributor has undertaken with respect to its plans and how customer needs have been reflected in the distributor's application.

OEB staff submits that Toronto Hydro has met this requirement as it has included a section in its application which discusses its customer engagement activities in some detail.<sup>26</sup>

(ii) Distributors should specifically discuss in the application how they informed their customers on the proposals being considered for inclusion in the application and the value of those proposals to customers i.e. costs, benefits and the impact on rates.

OEB staff notes that Toronto Hydro outlined in the application a number of means by which it informed its customers of the proposals contained in the application including an online workbook, focus groups and a statistical telephone survey.

<sup>&</sup>lt;sup>26</sup> EB-2014-0116 Application E 1B/T2/S7

OEB staff submits that for the most part, Toronto Hydro has met this customer engagement requirement. OEB staff notes that it appears that Toronto Hydro failed to include the wireline carriers in its customer engagement activities. OEB staff notes that the OEB has established a separate stream for this proceeding to review the wireline matter as it pertains to the nature and level of the pole attachment rate (a specific service charge).

(iii) The application should discuss any feedback provided by customers and how this feedback shaped the final application.

OEB staff submits that Toronto Hydro did discuss the feedback received from customers and how it shaped the final application. This is discussed in more detail in the subsequent Chapter 5 compliance section.

(iv) Distributors should also reference any other communications sent to customers about the application such as bill inserts, town hall meetings held, or other forms of outreach undertaken to engage customers and explain to them how the application serves their needs and expectations and the feedback heard from customers through these engagement activities.

OEB staff notes the various means of contact with its customers undertaken by Toronto Hydro as outlined in (ii) above and considers the extent of customer communication concerning the application by Toronto Hydro to be sufficient.

Chapter 5, under "Customer Focus" describes the customer engagement activities that are expected in support of the DSP and states that a DSP must demonstrate that distribution services are provided in a manner that responds to identified customer preferences.

Toronto Hydro stated that to engage residential and non-residential customers it had asked Innovative Research Group (Innovative), a national consultancy with expertise in public opinion research with particular expertise in areas of public policy to design and carry out a consultation process that would provide it with meaningful information to be used in preparing the DSP.

Toronto Hydro stated that certain central themes emerged from the work by Innovative, a key one of which was that the preferences of its customers align with the central pillars of its DSP and, while its customers expect the utility to make prudent investment decisions, the majority accept the need for timely renewal of the distribution system, while acknowledging that this will mean an increase in their monthly bills. Toronto Hydro

provided information on expected bill increases for its proposed plan to customers who were surveyed including the average dollar amount of estimated monthly bill increases for the 2015 to 2019 period and the total increase for the five-year period.

OEB staff submits that the information provided to customers on bill increases during this exercise was inadequate as it was at too high a level and did not provide customers with a range of options in terms of a range of bill increases and related service quality improvements that these bill increases would produce. OEB staff notes that this type of information has been provided by other distributors as part of their customer engagement efforts.<sup>27</sup>

Toronto Hydro also included detailed information on its regional planning activities and how these activities impacted the DSP.<sup>28</sup>

OEB staff submits that Toronto Hydro has provided adequate information in the application on its customer engagement activities to allow the OEB to reach a determination as to whether or not it has met the customer engagement criteria outlined by the OEB in both Chapters 2 and 5 of the Filing Requirements.

OEB staff further submits that while Toronto Hydro has provided adequate information on its customer engagement activities, the activities undertaken were inadequate to meet the OEB's requirements for two reasons. The first is that customers were not provided with the range of billing increase options as discussed above. The second is that Toronto Hydro did not adequately demonstrate how what was heard from its customers was reflected in the application.

OEB staff further submits that the application as filed will not produce acceptable outcomes for existing and future customers in the areas of cost control and system reliability without the modifications to expense levels and the DSP that OEB staff suggests elsewhere in this submission. OEB staff's submissions on bill impacts are contained in section 1.2 of this submission.

<sup>&</sup>lt;sup>27</sup> See EB-2014-0073 Festival Hydro's application Exhibit 2, Tab 2, Schedule 1, Appendix 2 Customer Consultation Results

<sup>&</sup>lt;sup>28</sup> EB-2014-0116 Application E 2B/S B

## 2.4 Are Toronto Hydro's monitoring and reporting proposals adequate to track and assess the utility's performance during the 2015-2019 rate period?

### Background

Toronto Hydro's annual reporting section of its application<sup>29</sup> makes monitoring and reporting proposals which will be discussed in this section of OEB staff's submission. This section also discusses Toronto Hydro's ICM True-up – Deferral Proposal:

### (a) Annual Reporting

Toronto Hydro stated that its annual reporting activities with respect to the application would consist of three components, which are the following:

1. Meeting the OEB's Scorecard Approach for Performance Measurement

Toronto Hydro stated that it intended to comply with the OEB's scorecard.<sup>30</sup>

2. Reporting on the Proposed Performance Measures Framework as detailed in the Distribution System Plan (DSP)

Toronto Hydro stated that as part of its DSP it had developed a set of 12 metrics to monitor quality and drive continuous improvement in its distribution system planning and implementation efforts. These metrics are summarized in the table below<sup>31</sup>:

<sup>&</sup>lt;sup>29</sup> EB-2014-0116 Application E 1B/T2/S6

<sup>&</sup>lt;sup>30</sup> EB-2014-0116 Application E 1B/T2/S6/p. 2.

<sup>&</sup>lt;sup>31</sup> EB-2014-0116 Application E1B/T2/S6/p. 3

Customer-Oriented	Cost Efficiency/	Asset/System Operation
Performance	Effectiveness of Planning	Performance
	and Implementation	
1. System Average	1. Distribution System Plan	1. Outages caused by
Interruption Duration Index	Implementation Progress.	defective equipment.
"SAIDI").		
	2. Planning Efficiency:	2. Stations capacity
2. System Average	Engineering, Design and	availability.
Interruption Frequency	Support Costs.	
Index ("SAIFI").		
	3. Supply Chain Efficiency:	
3. Customer Average	Materials Handling On-	
Interruption Duration Index	Cost.	
("CAIDI").		
	4. Construction Efficiency:	
4. Feeders Experiencing	Internal vs. Contractor Cost	
Sustained Interruptions	Benchmarking.	
("FESI").		
	5. Construction Efficiency:	
5. Momentary Average	Standard Asset Assembly	
Interruption Frequency	Labour Input.	
Index ("MAIFI").		

3. Filing a rate schedule for the following year upon the OEB's update of its inflation factor

Toronto Hydro noted that its proposed framework for the Custom IR application uses a custom Price Cap Index as the annual adjustment mechanism for its base distribution rates in 2016 to 2019, which uses the OEB's inflation factor as an input to the formula. Toronto Hydro, accordingly, proposes to submit a distribution rate adjustment on an annual basis following the OEB's determination of the newest inflation factor and at a date prior to when those rates are to come into effect.

### (b) ICM True-up – Deferral Proposal

Toronto Hydro noted that the OEB had ordered through its EB-2012-0064 process a true-up of the revenue requirement which was used to derive the ICM rate rider revenues for the ICM funding at a future date on the basis of total annual revenue requirement impacts based on the actual in-service assets of OEB-approved ICM segments.<sup>32</sup>

Toronto Hydro stated that its accounting process is not expected to have a final report of actual in-service additions (ISAs) for 2014 until the second quarter of 2015. As such, Toronto Hydro proposed to defer the ICM true-up and bring forward a separate application in 2015, once the actual ICM amounts are known.

### Discussion and Submission

OEB staff submits that given the inter-relationship between the ICM True-up and the present application there would have been advantages to having the ICM true-up process taking place as part of the present application. However, OEB staff is of the view that Toronto Hydro has provided sufficient information in this proceeding on the status of the ICM true-up to allow for an assessment of the extent to which it has managed to complete the ICM work which was approved in EB-2012-0064.

OEB staff does not have any concerns with the monitoring and reporting proposals but OEB staff is of the view that they are not sufficient to track and assess its performance during the 2015-2019 period. OEB staff will make further suggestions to compliment Toronto Hydro's proposals in the sections that follow.

## 2.5 Are Toronto Hydro's proposed off-ramps, annual adjustments and annual adjustments outside the normal course of business appropriate?

### Background

### Off-ramps

Toronto Hydro proposed to apply the OEB's existing policy with respect to off-ramps and noted that the RRFE Report indicates that each rate-setting method includes a trigger mechanism with an annual return on equity dead band of plus or minus 300 basis points, at which point a regulatory review may be initiated. OEB staff notes that the dead band is applicable to the regulatory return on equity, not the actual return on equity. Major differences include the use of a deemed capital structure and adjustments for non rateregulated activities.

<sup>&</sup>lt;sup>32</sup> EB-2014-0116 Application E 2A/T9/S1.

### Annual Adjustments

Toronto Hydro's proposed annual adjustments inside the CIR model are discussed in section 2.2 of this submission.

### Annual Adjustments Outside the Normal Course of Business (Z-Factors)

Toronto Hydro stated that it proposes to incorporate within its rate framework the availability of Z-factor relief, which Toronto Hydro understood is available to Custom IR filers as part of the RRFE framework. Toronto Hydro noted that one of the incremental challenges inherent in a five-year rates plan is the need to contend with prudent, material unexpected costs and that it had proposed restrained/constrained OM&A and capital funding requests. Toronto Hydro stated that the funding that it seeks in this application is expected to enable it to carry out the work that it has detailed in these programs, but that funding, by definition, would not be sufficient to address the prudent costs of material events that are outside the control of the utility and which have not been forecasted.

Accordingly, while Toronto Hydro expressed the expectation that a request for Z-factor relief would be exceptional, it provided in its application a list of possible categories of specific events which it believes could occur, and where they occur, may necessitate additional funding during the term of the plan. Toronto Hydro stated that the criteria that would apply to the consideration of any of these events would be the standard Z-factor criteria, most recently articulated by the OEB in its Decision on Enbridge Gas Distribution Inc.'s 2014 to 2018 rate application. Toronto Hydro classified these events into two categories, which were events with a one-time impact such as extreme weather events and events with an ongoing impact such as changes to OEB codes or policies.

Toronto Hydro proposed that in the interest of regulatory efficiency any application for this treatment would compartmentalize the material impacts of the event, as opposed to undergoing a full regulatory review of the rate framework. For one-time events, Toronto Hydro proposed a targeted rate rider. For events with an ongoing impact, Toronto Hydro stated that it would propose an adjustment to the base revenue requirement if one was to occur in 2015, or else to the custom PCI.

Toronto Hydro asked that to the extent the OEB has concerns with respect to the possible availability of Z-factor treatment in relation to any of these items, Toronto Hydro asked the OEB to identify these concerns as part of this application.

### Discussion and Submission

OEB staff asked Toronto Hydro through an interrogatory for further clarification as to the meaning of the above proposals.<sup>33</sup>

In its response, Toronto Hydro expressed the belief that its Z-factor approach is consistent with the current Z-factor criteria and that the standard Z-factor criteria be applicable. Toronto Hydro also acknowledged that applications had not been brought before the OEB for all of the listed specific example events and that in addition, the OEB may find that for any given category of material, unexpected expense, an approach other than the standard Z-factor may be appropriate, particularly for events that materially affect all or a majority of distributors.

Toronto Hydro further stated that it does not presently anticipate seeking Z-factor relief for the OM&A and capital programs that it is not seeking funding for as part of this application, but that whether or not it will ultimately need to seek Z-factor relief for some of that work during the plan term depends on the extent to which such work becomes non-discretionary and whether its circumstances satisfy the Z-factor criteria in relation to that work.

SEC sought clarification of this matter during cross-examination of Toronto Hydro's witnesses:<sup>34</sup>

MR. SHEPHERD: If I take what you're saying, you're saying that the -- that any future Z factor application would be assessed -- in your mind, would be assessed solely on the basis of the Z factor criteria, and not on the basis of this list.

This list would not be relevant to that future case, would it, because you're not asking for approval of this list?

MS. KLEIN: We're not asking for pre-approval of any particular Z factor application.

What we are seeking to confirm with the Board is that -- on our analysis of the types of events that may qualify for Z factor, we have listed those types of events.

And we've asked for the Board's comments and guidance on that, if the Board feels it is appropriate to provide that guidance.

<sup>&</sup>lt;sup>33</sup> EB-2014-0116 4A-OEBStaff 69 pp. 2-3 Filed 2014 Nov 5

<sup>&</sup>lt;sup>34</sup> EB-2014-0116 Transcript Vol. 9, p. 96 L11-L26.

OEB staff submits that the OEB has established the criteria for Z-factor applications on a generic basis. The RRFE stated that the treatment of unforeseen events for electricity distributors under each of the three rate-setting methods was set out in the OEB's July 14, 2008 EB-2007-0673 *Report of the Board on 3<sup>rd</sup> Generation Incentive Regulation for Ontario's Electricity Distributors*<sup>35</sup> and should Toronto Hydro wish to make a Z-factor application during the term of the approved Custom IR plan that it should be on the basis of these existing Z-factor criteria that have already been established by the OEB. As such, OEB staff submits that the OEB should not provide the additional guidance requested by Toronto Hydro above.

### 3. Proposed Programs and Expenditures

### 3.1 Are the planned OM&A programs and expenditures appropriate?

### Background

(a) OM&A Programs and Expenditures

Toronto Hydro's OM&A Expenditures by Program are shown in the table below on a comparative basis between 2013, the most recent actual year which was provided in the application as filed and the currently proposed 2015 Test year:

<sup>&</sup>lt;sup>35</sup> RRFE Report, p.13.

Toronto Hydro - OM&A Expenditure Comparison 2013 Actual versus 2015 Test Year							
\$M	2013	2015	\$	%			
	Actual	Test	Change	Change			
Preventative & Predictive Maintenance	12.8	20.1	7.3	57.0			
Corrective Maintenance	17.0	22.2	5.2	30.6			
Emergency Response	26.3	15.3	-11.0	-41.8			
Disaster Preparedness Management	0.0	2.4	2.4				
Control Centre	8.9	8.4	-0.5	-5.6			
Customer-Driven Work	7.0	10.1	3.1	44.3			
Planning	11.5	12.9	1.4	12.2			
Work Program Execution Management & Support	5.6	6.1	0.5	8.9			
Work Program Execution	13.0	15.2	2.2	16.9			
Fleet and Equipment Services	8.7	8.9	0.2	2.3			
Facilities Management	24.2	27.5	3.3	13.6			
Supply Chain Services	9.0	9.9	0.9	10.0			
Customer Care	39.7	46.1	6.4	16.1			
Human Resources and Safety	15.3	16.1	0.8	5.2			
Finance	15.7	17.9	2.2	14.0			
Information Technology	31.0	34.9	3.9	12.6			
Rates & Regulatory Affairs	8.4	8.4	0.0	0.0			
Legal Services	4.5	5.5	1.0	22.2			
Charitable Donations (LEAP)	0.7	0.8	0.1	14.3			
Common Costs & Adjustments	0.5	1.0	0.5	100.0			
Allocations & Recoveries	-13.3	-20.2	-6.9	51.9			
Restructuring Costs	0.0	0.0	0.0				
Total OM&A	246.5	269.5	23.0	9.3			

Of the \$23 million increase over the two year period, which represents a 9.3% increase over the two-year period, the largest increases are in the following five programs:

1.	Preventative & Predictive Maintenance	\$7.3 million
2.	Customer Care	\$6.4 million
3.	Corrective Maintenance	\$5.2 million
4.	Information Technology	\$3.9 million
5.	Facilities Management	\$3.3 million

### Discussion and Submission

OEB staff has reviewed the expenses contained in each of these categories and the reasons for increases in them to determine the nature of the program-based OM&A increases that are being requested by Toronto Hydro and whether or not there is any basis to conclude that they are excessive.

Preventative & Predictive Maintenance: \$7.3 million

	2011	2012	2013	2014	2015
Preventative and Predictive Maintenance	\$13.7	\$16.0	\$12.8	\$16.1	\$20.1

Toronto Hydro stated that the Preventative and Predictive Maintenance Program is divided into ten segments. These include overhead lines, poles and insulator maintenance, vegetation management, below grade and pad-mounted equipment maintenance, customer location maintenance, metering services and station inspection and maintenance.

Toronto Hydro stated that where the increase in this program in the 2013 to 2015 period of \$7.3 million is concerned, the 2013 to 2014 portion of this increase is predominantly driven by increases of \$2.0 million in Customer Location Maintenance and \$0.3 million in Overhead Switch Maintenance, while the 2014 to 2015 increase of \$4.0 million is driven by \$1.8 million of increased expenditures for Vegetation Management and \$0.5 million increases for each of the categories of Pad-Mounted Equipment Maintenance, PCB testing, and Overhead Switch Maintenance and Insulator Washing.

Customer Care: \$6.4 million

Program	2011 Actual	2012 Actual	2013 Actual	2014 Bridge	2015 Test
Customer Care	41.9	37.5	39.7	42.2	46.1

Toronto Hydro stated that its Customer Care program entails the activities and services directed at facilitating the needs of its 730,000 customers, including customer communications and relationship management, billing, metering and collections activities.

The Customer Care program is comprised of four segments which are: (1) Billing, Remittance and Meter Data Management which covers activities such as the reading of customer meters, upkeep and upgrades of the associated infrastructure, management of data, and preparation and processing of customer bills and is where the majority of the increase is occurring; (2) Collections; (3) Customer Relationship Management; and (4) Communications and Public Affairs.

OEB staff notes that the increase in the Billing, Remittance and Meter Data Management segment is due to a variety of factors including increases in labour costs due to normal inflationary pressures and for Meter Data Management related to smart meters and meter reading infrastructure renewal, as well as increases in Canada Post rates, bill printing, paper stock and envelopes and payment processing costs.

Corrective Maintenance: \$5.2 million

	2011	2012	2013	2014	2015
Corrective Maintenance	25.8	21.5	17.0	19.0	22.2

Toronto Hydro explained that the reduction in expenditures to the level experienced in 2013 is not sustainable in the short-term as it continues to identify a large number of deficiencies in both distribution and station assets and significant proportions of these assets have surpassed their expected lives and are at an increasing risk of failure

Information Technology: \$3.9 million

Program	2011 Actual	2012 Actual	2013 Actual	2014 Bridge	2015 Test
Information Technology	30.3	28.5	31.0	33.4	34.9

Toronto Hydro's IT program costs fall into four areas which are: (1) Security & Enterprise Architecture, (2) IT Operations, (3) Project Execution and (4) IT Governance. The majority of the increase in this program area arises in the IT Operations Category which accounted for \$2.9 million of the \$3.9 million increase. This category in turn consists of Software & Service Management and Hardware & Security.

OEB staff notes that the majority of the increase is in the Software & Service Management category. While a number of factors are cited for the increase, the biggest single item appears to be increases in maintenance contract costs required for new and critical systems, which increased by \$1.5 million in 2014.

Facilities Management: \$3.3 million

	2011 Actual	2012 Actual	2013 Actual	2014 Bridge	2015 Test
Facilities Management	24.6	23.5	24.2	27.2	27.5
Program	27.0	20.0	27.2	21.2	27.0

Toronto Hydro stated that its Facilities Management program delivers workplace and property management services and centralizes functions related to custodial services, security, utilities and communications, lease and rental agreement management and other functions directed at maintaining and keeping Toronto Hydro's facilities in good working order and in compliance with applicable legislation and regulations.

Toronto Hydro explained the \$3.3 million increase as mainly driven by normal inflationary pressures and the introduction of the Facilities Management Office outsourcing arrangement which has significantly increased the scope of facilities services available at Toronto Hydro, while streamlining a number of internal processes and reducing the general administrative burden, partially offset by savings from the proposed Operational Centre Consolidation Program.

### Overall

The above discussion highlights some of the reasons for this change. OEB staff further notes that some of the larger year to year increases in this comparison arise in categories such as Preventative and Predictive Maintenance (\$7.3 million), Corrective Maintenance (\$5.2 million) and Disaster Preparedness Management (\$2.4). Emergency Response Costs are down by \$11 million from 2013 to 2015, likely due to higher costs in 2013 due to the ice storm. But for this higher cost in 2013, the increase from 2013 to 2015 would have been even larger. Some of the other costs may be related to the larger capital program proposed for 2015, though OEB staff notes that the 2015 capital program is forecasted to be \$531 million, while Toronto Hydro's capital program has averaged \$440 million in the 2012 to 2014 period as is discussed in more detail in section 3.2 of this submission.

OM&A costs were forecast at practically the same level in the 2014 Bridge year (\$246.6 million versus \$246.4 million in 2013) which means that there is roughly a 9% increase for the 2015 Test year versus the 2014 Bridge year forecast. However, Toronto Hydro's

2014 actual OM&A expenditures were \$241.2 million, or \$5.4 million lower than forecast which would make the one year increase for the test year at 11.7%. OEB staff's submission on an appropriate OM&A level for 2015 overall is discussed in the next section.

### (b) Employee Costs and Compensation

### Background

Employee costs and compensation are a very significant component of OM&A expenses across all programs comprising over 80% of the total 2015 OM&A expenses.

Toronto Hydro's employee numbers and costs are presented on a comparative basis in the table below, first comparing 2011 actuals, which was the previous year that the OEB had set rates on a cost of service basis with the 2015 test year, and secondly comparing the 2015 test year with 2012 actuals which reflect the effects of Toronto Hydro's restructuring in that year.

Toronto Hydro - OEB Appendix 2-K - Employee Costs/Compensation Table									
2011 Actual versus 2015 Test Year									
		2011		2015		\$	%		
		Actual		Test		Change	Change		
Number of Employees (FTEs including Part-Time)									
Management (including executive)		61.8		55		-6.8	-11.0		
Non-Management (union and non-union)		1757.9		1509		-248.9	-14.2		
Total		1819.7		1564		-255.7	-14.1		
Total Compensation (Salary, Wages & Benefits)									
Management (including executive)		15,204,630	\$	15,262,887	\$	58,257	0.4		
Non-Management (union and non-union)		219,373,125	\$	210,034,581	-\$	9,338,544	-4.3		
Total	\$	234,577,755	\$	225,297,468	-\$	9,280,287	-4.0		
2012 Actual versus 2015 Test Year									
		2012		2015		\$	%		
		Actual		Test		Change	Change		
Number of Employees (FTEs including Part-Time)									
Management (including executive)		53		55		2	3.8		
Non-Management (union and non-union)		1547.8		1509		-38.8	-2.5		
Total		1600.8		1564		-36.8	-2.3		
Total Compensation (Salary, Wages & Benefits)									
Management (including executive)		13,692,253	\$	15,262,887	\$	1,570,634	11.5		
Non-Management (union and non-union)		201,881,469	\$	210,034,581	\$	8,153,112	4.0		
Total	\$	215,573,723	\$	225,297,468	\$	9,723,745	4.5		
#### Discussion and Submission

OEB staff notes that a similar pattern is evident in Toronto Hydro's compensation costs to that of its OEB program costs when comparing 2015 with 2011 and then with 2012. When comparing costs in the 2015 Test year to 2011 costs, there is an overall drop of 4% on a total basis in the period, though a slight increase in management costs. A comparison to 2012 however shows total costs up 4 to 5% over the three-year period with management costs rising 11.5%.

OEB staff observes that the increase in management compensation costs was the subject of some discussion during the hearing, particularly where executive costs were concerned. However, OEB staff would note that the total increase in management costs over the three-year period from 2012 to 2015 is just over \$1.6 million, which on an annual basis is below Toronto Hydro's materiality threshold.

OEB staff has summarized Toronto Hydro's OM&A expenses for the 2011 to 2015 period along with the 2015 Test year percentage increase relative to each of the prior years.

Toronto Hydro - 2015 Test Year Increase versus Prior Years							
				\$ M			
	2011 A	2012 A	2012 R	2013 A	2014 B	2014 A	2015 T
	238.6	243.5	215.8	246.4	246.6	241.2	269.5
Inc.(%)	13.0	10.7	24.9	9.4	9.3	11.7	
A = Actual							
R = With restructing costs removed							
B= Bridge							
T = Test							

OEB staff submits that a review of the above table would indicate that while Toronto Hydro's proposed OM&A increases appear to be reasonable when assessed from the perspective of a 2011 to 2015 comparison, it is a different matter when considering the increase from 2012 levels to the 2015 test year request when restructuring costs are removed, which is around 8% per annum and in comparison to both 2013 actuals and the 2014 Bridge year. The 2013 Actual is \$246.4 million and the 2014 Bridge year amount is practically identical meaning that the increase for the two year period 2013 to 2015 and the one year period 2014 to 2015 are in both cases in the 9% range. If the 2015 Test year request is compared to 2014 actuals the total annual increase is almost 12%. OEB staff is concerned about this level of increase, especially in light of Toronto Hydro's failure to file a five-year OM&A forecast as is required by the RRFE. OEB staff submits that a reasonable OM&A level for the 2015 Test year would be \$247.2 million, a reduction of \$22.3 million, or 8.3%. This is based on an increase of 2.5% from the 2014 actual level of \$241.2 million. OEB staff submits that the proposed level of increase of 2.5% is reasonable in light of current low inflation rates as reflected in the OEB's current inflation factor of 1.6%. In addition, Toronto Hydro's evidence has noted the tie-in of its proposed OM&A expenditures to its increasing capital program.

# 3.2 Is the DSP and the planned capital programs and expenditures for the 2015-2019 period appropriate?

### Background

Toronto Hydro's historic and forecast capital spending in the 2006 to 2019 period is summarized in the figure below which is reproduced from its evidence<sup>36</sup>:



These expenditures total just under \$2.5 billion for the five-year period of the DSP.

<sup>&</sup>lt;sup>36</sup> EB-2014-0116 Application E 1B/T2/S4/p. 6 Filed 2014 Jul 31 Corrected 2015 Feb 6

Toronto Hydro's evidence on its Distribution System Plan was filed at Exhibit 2B. Toronto Hydro's DSP closely accords with Chapter 5 of the OEB's *Filing Requirements for Electricity Transmission and Distribution Applications* (Chapter 5). The DSP describes Toronto Hydro's asset management process and capital expenditure plan, and provides information pertaining to Toronto Hydro's coordination with third parties, identification of customer preferences, and proposed performance measures to be applied over the course of the plan.

Toronto Hydro has proposed a five year capital expenditure plan which it states is required to address a large and growing backlog of end-of-life and obsolete assets. Toronto Hydro has forecasted that 26% of its assets will be operating beyond end-of-life as of 2015 and that without a proactive intervention strategy, as reflected in the application, for the 2015-2019 period, approximately 32% are forecast to be operating beyond end-of-life by 2020<sup>37</sup>.

Toronto Hydro has stated its long-term asset management objective is to achieve an optimal "steady-state", in which the number of assets that are past their economic end-of-life, as explained below, is minimized. When the system is in that theoretical steady state, the total operating (or life-cycle) costs associated with the broader in-service asset population is minimized, and customer value is effectively maximized.

The concept of a steady state is developed through Toronto Hydro's risk-based optimization approach to investment planning, using its Feeder Investment Model (FIM). Using the FIM, Toronto Hydro determines the optimal asset renewal timing based on the economic end-of-life criteria for each asset. The economic end-of-life of an asset is derived from two offsetting cost curves: (i) the annualized risk cost, which increases as the asset ages; representing the quantifiable costs of asset failure (including customer interruption costs) multiplied by the probability of failure; and (ii) annualized capital cost, which decreases as the asset ages; representing the capital cost of replacement, annualized over the asset's projected life.

Toronto Hydro stated that its preference was to move forward with what it called an accelerated execution strategy which involved a capital expenditure level of over \$4 billion over the five year period, or an annual level in the \$830 to \$840 million level. For

<sup>&</sup>lt;sup>37</sup> EB-2014-0116 Application E 2B/S 00/ p. 7

issues of rate mitigation it determined that a paced execution strategy would be more appropriate and has proposed this in its application.

As has been noted above, Toronto Hydro has proposed total capital expenditures of \$2.5 billion dollars in the 2015-2019 period, which amounts to approximately \$500 million annually. Toronto Hydro stated that if it were to continue with the annual level of investment as proposed in five year capital plan beyond 2019, the system would reach steady state by approximately 2037. The projected steady state in 2037 is defined as a 15 percentage point reduction in the percentage of assets operating beyond end-of-life versus the current state of the system.

Toronto Hydro presented its capital expenditure plan by setting out, in accordance with the OEB's filing requirements, the four investment categories - system renewal, system access, system service and general plant. Toronto Hydro has stated that it has certain projects it wishes to undertake in each category and the build-up of the overall costs/spend level is primarily determined by Toronto Hydro's execution capability and system constraints.

#### Asset Condition Assessment

Toronto Hydro has stated that it employs an Asset Condition Assessment (ACA) program to monitor the condition of various key asset classes within its system and produces a health index score to support project planning. Toronto Hydro stated that the ACA program allows it to produce a numerical representation of an asset's condition, taking into account key factors that affect its operation, degradation, and lifecycle.

Kinectrics Inc. was asked by Toronto Hydro to assess the progress that Toronto Hydro has made with its ACA program since Kinectrics' most recent audit in 2012. The Kinectrics assessment indicated that there has been a decline in asset condition in 17 of the 21 asset categories that were audited<sup>38</sup>. Toronto Hydro acknowledged that there has been a decline across a number of their populations in terms of health, and submitted that that is generally reflective of the state of its asset base and the backlog of assets being at end-of-life. Toronto Hydro testified that while it has been renewing its asset

<sup>&</sup>lt;sup>38</sup> EB-2014-0116 Application E 2B S D App. A/p. 20

base to address some of those populations, given the overall demographics, the deterioration is occurring at a pace that is still somewhat faster than its renewal activities.

Toronto Hydro also stated that a big part of its consideration for what assets it needs to address is based on the age of those assets as the data it has on the condition of its assets is not comprehensive<sup>39</sup>.

The ACA is stated as depending heavily on the inspection of the various assets which is performed as part of the ACA program such that health index score can only be produced for asset classes which have sufficient inspection information.

Toronto Hydro stated that through its inspections, it collects certain data points but does not subject each asset to an extensive battery of tests due to cost and time considerations that would potentially lead to a more refined assessment of health.

Toronto Hydro provided the example of a distribution transformer where oil testing might be a better indicator of degradation in terms of the insulation of the transformer but this type of testing is not done. Therefore, the health index that is reflected for a certain population may not be a precise representation of the health of that population because of that lack of information.

Toronto Hydro has stated that where it did not have a full coverage for a population in terms of health indices, it uses a sample set of assets with health indices to extrapolate to the rest of the population. However, it is Toronto Hydro's view that in these cases, age is a good representation of the risk of failure associated with those assets, based on its experience with failures<sup>40</sup>.

### End of Life and Reliability Outcomes

Toronto Hydro has proposed a five year capital expenditure plan which it states is required to address a large and growing backlog of end-of-life and obsolete assets. Toronto Hydro also presented the consequences of allowing the backlog of aging assets to grow by comparing the forecast reliability outcomes of Toronto Hydro's proposed five

<sup>&</sup>lt;sup>39</sup> EB-2014-0116 Transcript, Vol. 6, February 25, 2015 p.43

<sup>40</sup> EB-2014-0116 Transcript, Vol. 4, February 23, 2015, p. 65

year capital plan to a run-to-failure approach over the same period. Toronto Hydro has forecasted an improvement in reliability associated with the proposed plan. In its run-to-failure approach, Toronto Hydro has stated that it would manage its assets in a reactive manner.

Toronto Hydro's evidence shows that the System Average Interruption Frequency Index (SAIFI) is projected to be reduced from 1.53 outages in 2014 to 1.13 outages in 2019 and the System Average Interruption Duration Index (SAIDI) is projected to be reduced from 1.21 hours in 2014 to 0.97 hours in 2019, respectively. Toronto Hydro has stated that should it not execute this investment approach and instead adopt a run-to-failure approach, SAIFI and SAIDI are forecasted to worsen by 30% and 24% respectively over the period from 2015 to 2019<sup>41</sup>. OEB staff notes that Toronto Hydro did not provide the capital program numbers for the run-to failure approach.

Toronto Hydro employed Navigant Consulting Ltd. to conduct an independent review of its DSP and business cases that it prepared to support the proposed capital investments from 2015 to 2019. In response to cross examination by SEC, the Navigant witness testified that no review was undertaken by Navigant of the numbers forecasted by Toronto Hydro of the percentage of assets at end-of-life, i.e. 26% as of 2015 and 32% by 2020. The witness also stated that reliability performance as measured by SAIDI and SAIFI would be less than what is forecasted in the proposed capital program, if Toronto Hydro were to spend less than the proposed capital expenditure<sup>42</sup>.

### Interrelationship between Capital Expenditures and OM&A

Toronto Hydro's evidence is that its capital and O&M programs are interrelated in that aging and deteriorated assets that are not replaced through capital work result in deterioriating conditions over time that are managed through O&M work, placing upwards pressure on expenditures within certain segments of O&M programs. The applicant has stated that the opposite also holds true, as increases in capital work can result in reductions in certain O&M work<sup>43</sup>.

<sup>&</sup>lt;sup>41</sup> EB-2014-0116 Application E 2B/S A/p. 4

<sup>&</sup>lt;sup>42</sup> EB-2014-0116 Transcript, Vol. 5, February 24, 2015,pgs 13 and 26

<sup>&</sup>lt;sup>43</sup> EB-2014-0116 Application E 2B/S 00/p. 38

Toronto Hydro has stated that in developing its capital investment programs, the interrelationships between its investment programs and corresponding maintenance programs are assessed. Toronto Hydro stated that if it plans to replace a sub-standard asset, maintenance activities on this asset type can be phased out which allows Toronto Hydro to maintain assets to utilize an asset's full life-cycle where it is prudent to do so, or replace them, which is expected to achieve maintenance cost savings by reducing maintenance activities.

Toronto Hydro confirmed that for all the programs that it is proposing to undertake, it has quantified reductions in annual maintenance savings in two programs – rear lot conversion and box construction amounting to a total reduction of \$130,000 annually or \$650,000 over the five year period<sup>44</sup>. Toronto Hydro submitted that for many of the programs in the DSP, any further expected savings would be from corrective maintenance or emergency maintenance programs and it is difficult to project out those savings<sup>45</sup>.

#### In-service Additions

In response to an undertaking, Toronto Hydro provided its total in-service additions forecast for the 2015 to 2019 period, which are reproduced below<sup>46</sup>:

	2015	2016	2017	2018	2019
In-service Additions	\$539.7M	\$671.6M	\$505.7M	\$441.0M	\$529.9M

The in-service additions total just under \$2.7 billion for the five-year period of the DSP.

#### **Discussion and Submission**

OEB staff's submission on Toronto Hydro's proposed DSP focuses on two major areas of concern. The first area is related to the DSP as proposed and the second is concerns that arise from placing the DSP in the overall context of Toronto Hydro's application.

1. Concerns specific to the DSP

<sup>&</sup>lt;sup>44</sup> EB-2014-0116 Transcript, Vol. 4, February 23, 2015, pp. 69-70

<sup>&</sup>lt;sup>45</sup> EB-2014-0116 Transcript Vol. 4 February 23, 2015 pgs 69 and 71

<sup>&</sup>lt;sup>46</sup> EB-2014-0116 Undertaking. J4.3 Filed: 2015 Feb 23

OEB staff has three major areas of concern with Toronto Hydro's proposed DSP. The first is that Toronto Hydro's approach to asset replacement appears to rely excessively on a theoretical construct, the FIM, which determines the optimal intervention time for asset renewal based on economic end-of-life criteria. The second is Toronto Hydro's inability to provide a clear explanation as to how all of the considerations it cited in preparing its forecast are linked together, e.g how the top-down and bottom-up approaches were integrated, how the 2037 steady-state was determined and other similar matters. Finally, OEB staff has concerns about Toronto Hydro's ability to complete the programs for which it has requested funding.

### (i) Practical Application of Theoretical Constructs

As discussed previously, Toronto Hydro has adopted a risk-based optimization approach to its capital investment planning which uses a key internal decision support system, the FIM, which determines asset renewal investment timing based upon the economic end-of-life criteria for each asset<sup>47</sup>. Theoretically, the economic end-of-life criterion represents the lowest point of the operating cost across the life-cycle of the asset. The premise of the FIM model is that this is the optimal intervention time for undertaking planned investment, as it is more cost effective to be replacing assets at this point as opposed to being done later when it will cost more.

Toronto Hydro's evidence is that replacing the asset after this optimal intervention time risks incurring unnecessary and avoidable costs associated with asset failure. The reactive replacement of assets is more expensive than planned investment, so the FIM determines the optimal time to intervene from a cost perspective.

Toronto Hydro has stated that once assets have reached their economic end-of-life, they will be replaced with their standardized equivalents. The economic risks within this approach reflect various direct and indirect costs associated with in-service asset failures, including the costs of customer interruptions, the costs of emergency repairs and replacement, and the indirect costs associated with asset failures.

Toronto Hydro's evidence states that by performing this risk-based optimization approach for major distribution assets across the broader population of in-service equipment, such

<sup>&</sup>lt;sup>47</sup> EB-2014-0116 Application E 2B/S D3

that the timing of asset renewal investments are collectively driven by the respective economic end-of-life results, a capital investment approach is produced that is driven by the system-level objective of achieving steady state, i.e. the condition whereby the total aggregate life-cycle costs of the distribution system is kept at a minimum.

According to the evidence, major distribution assets evaluated through the FIM include overhead and underground distribution transformers and switches, poles, underground primary cables and secondary network units.

Toronto Hydro's evidence indicates that the risk-based optimization approach that is performed via a FIM evaluation requires for the entire population of assets within a given asset class to be evaluated. Each individual asset within a given asset class must possess mandatory inputs required to produce an economic end-of-life result. According to the application, there are certain asset classes that currently cannot be evaluated in this manner, either due to (i) insufficient data; or (ii) lack of a developed FIM evaluation for that particular asset class. For those assets that Toronto Hydro did not evaluate using the FIM, asset investment timing was then determined based upon the assets' end-of-useful life criteria, also known as engineering useful life<sup>48</sup>.

Despite significant reliance by Toronto Hydro on this risk-based optimization approach to guide investment planning, Toronto Hydro has acknowledged in its evidence that an asset may fail earlier or later than the optimal intervention time prescribed by the probabilistic FIM approach. As well, Toronto Hydro indicated that there is variability in the end of asset life projections based on the sensitivity analysis that has been done. An example was provided of station power transformers where extending the useful life of a power transformer from 45 to 50 years results in 36.3% of transformers exceeding the theoretical useful life, which is equivalent to 90 power transformers. This compared to 51.6% of transformers exceeding the 45 year life or 128 transformers.

OEB staff makes the following submissions with respect to the notion of optimal intervention time, as projected by the FIM. Toronto Hydro has asserted that undertaking the replacement of assets after the optimal intervention time risks incurring avoidable

<sup>&</sup>lt;sup>48</sup> EB-2014-0116 Application E 2B/S D3

<sup>&</sup>lt;sup>49</sup> EB-2014-0116 2B-OEBStaff-36 p.4.

costs associated with asset failure<sup>50</sup>. OEB staff submits, however, that no examples of assets or asset categories were provided to demonstrate the validity of these assertions. Toronto Hydro's evidence also shows that there is variability in the end-of-life projections. OEB staff therefore submits, that the optimal intervention time, as projected by the FIM cannot be fully relied upon as indicating the optimal replacement time for assets given concerns of this kind.

Toronto Hydro has stated that its risk based model defines the ideal steady state as the scenario where, on a system level, no assets are allowed to operate beyond their optimal intervention time and all assets are replaced at exactly the optimal intervention time. Toronto Hydro does, however, acknowledge that this approach would not be feasible as it would limit Toronto Hydro's ability to group assets into geographic, feeder, or station based renewal projects. According to its evidence, project-based renewal allows Toronto Hydro to undertake capital replacement in a cost effective manner by realizing design, scheduling, procurement and construction efficiencies. Toronto Hydro has stated that it may elect to replace some assets prior to or following the optimal intervention time if doing so will allow it to realize project based efficiencies.

In OEB staff's view, there is a gap between the FIM and what occurs in practice with respect to asset replacement. OEB staff submits that Toronto Hydro has not adequately explained this gap as it is not clear how much of asset replacement is achieved through project-based asset renewal versus being based on the projections of the FIM.

OEB staff has similar concerns with Toronto Hydro's use of asset condition assessments. OEB staff submits that there is some inconsistency in the statements made by Toronto Hydro in terms of the extent to which its consideration in project planning and the subsequent intervention is influenced by the health or condition of an asset. OEB staff notes that there are several asset classes such as large transformers and circuit breakers where age is not a predominant factor in the determination of asset replacement and where the condition of a transformer is an important determinant.

OEB staff submits that there are various tests available that can provide more information on the asset condition to enable a fuller assessment of the state of an asset and which could be used to provide a trend. OEB staff submits that transformers could

<sup>&</sup>lt;sup>50</sup> EB-2014-0116 Application E 2B/ S 00/p.13.

be further assessed using dissolved gas in oil testing results, insulation system testing results, auxiliary system testing (e.g. tap changer condition). Similarly, circuit breakers can be assessed using insulation system testing results, monitoring the number of fault interruptions, and speed of operation (opening) results.

As set out earlier, Toronto Hydro has stated that asset condition is not a primary driver for asset replacement and that it looks at condition if the condition based results exceed the baseline failure probability produced from the age-based calculation<sup>51</sup>. However, in the example of transformer replacement, assessment of asset condition was done involving the replacement of the worst of these assets.

Toronto Hydro confirmed that in terms of intervention in a particular area, its assessment is informed by performance, reliability and other factors such as health so it is not simply an age trigger than would lead to intervention in a particular area<sup>52</sup>.

As noted earlier, OEB staff submits that there is some inconsistency in the statements made by Toronto Hydro in terms of the extent to which its consideration in project planning and the subsequent intervention is influenced by the health or condition of an asset and in any event, even if asset condition played only a partial role, OEB staff submit that this is not satisfactory to provide the Board with sufficient confidence with respect to Toronto Hydro's capital needs given the \$2.5 billion in spending proposed over the next five years. This gap, along with other reasons from OEB staff's analysis of the DSP noted below, would support a reduction in the proposed capital program.

### (ii) Linkages Between Forecast Elements

OEB staff has concerns with respect to the proposed end-of-life balance point in 2037 and the numbers forecasted by Toronto Hydro with respect to the percentage of assets at end-of-life, i.e. 26% as of 2015 and 32% by 2020. OEB staff submits that the evidence does not show how this has varied over the last period; it is dependent on some unknown "similar expenditure" in the future years, all the way to 2037, another 22 years,

<sup>&</sup>lt;sup>51</sup> EB-2014-0116 Transcript, Vol. 4, February 23, 2015, p. 55

<sup>&</sup>lt;sup>52</sup> EB-2014-0116 Transcript, Vol. 4, February 23, 2015, p. 132

and the relationship of the end-of-life projections for 2015 and 2020 to the year 2037 is not clear.

OEB staff further submits that Toronto Hydro's comparison of the forecast reliability outcomes of the five year capital plan to a run-to-failure approach is not realistic. OEB staff accepts that this might be used as theoretical boundaries or endpoints in assessing the problems of the system and there may be operating alternatives that may or may not be appropriate as the model is based on interruption costs. OEB staff would have expected Toronto Hydro to have undertaken sensitivity analysis, including checking various assumptions and doing back testing.

OEB staff further submits that while Toronto Hydro has forecast an improvement in the reliability indices arising from the proposed investment strategy, it is not guaranteeing such an improvement stating that the reliability numbers are outcomes of the programs to be achieved and not a goal itself. OEB staff submits that the absence of such a goal would provide justification for a lower level of approved expenditures.

With respect to the proposed total capital expenditure amount of \$2.5 billion for the 2015 to 2019 period, OEB staff submits that, based on the information provided, this need has not been clearly explained as Toronto Hydro has not provided a means for assessing how all of these factors are interlinked in determining the capital expenditure number for each year.

OEB staff is concerned about the lack of clarity provided by Toronto Hydro as to these matters during the course of the application review process. OEB staff is of the view that the evidence supporting the proposed capital expenditures has far too many potential inaccuracies to allow the OEB to be entirely comfortable with the level of capital expenditures proposed by Toronto Hydro.

OEB staff is also concerned with Toronto Hydro's failure to be able to provide much in the way of evidence of the impact that the expenditures requested in the DSP will have on its OM&A expenditures.

Toronto Hydro acknowledged that apart from the two areas in the DSP where savings were quantified, that it could not directly attribute a specific dollar amount of OM&A savings to a specific dollar of capital expenditure.

Toronto Hydro stated that it is not expecting to see significant changes that would drive material reductions in maintenance from the proposed renewal activities, given the number of assets that are past end-of-life today and does not anticipate any significant change in the reactive or emergency maintenance or corrective maintenance categories when such a backlog exists today<sup>53</sup>.

OEB staff further submits that there is insufficient information regarding the completion of previous approved projects making it challenging to examine what has occurred in the past. Toronto Hydro's evidence has been that it is not able to easily report on what objectives have been achieved which would point to challenges with its information systems. OEB staff notes in this context that Toronto Hydro has requested \$51 million for Enterprise Resource Planning (ERP) related expenditures.

OEB staff submits that the OEB needs to be able to consider the results of the impacts on corresponding maintenance due to the proposed capital investment programs.

The type of information which OEB staff suggests is required includes the following:

- Information on present failure rate;
- Specific Performance Improvements/Cost improvements sought per asset class along with projected schedule;
- Specific Improvements achieved and drawings and data base in place and to track those improvements on a six month or one year reporting basis;
- Planned and actual expenditures and O&M per asset class, broken down by planned and reactive expenditures.

OEB staff is also concerned that Toronto Hydro has failed to provide a sufficient level of clarity in the description of the planning and prioritization in its DSP for the OEB to be able to determine if the level of capital expenditure requested is needed.

When asked about prioritization, Toronto Hydro's response was that it is a complex consideration and that it would not categorize any area that it has put forward as

<sup>&</sup>lt;sup>53</sup> EB-2014-0116 Transcript, Vol. 4, February 23, 2015, pp. 73-74

unimportant and sacrificial<sup>54</sup>. Toronto Hydro stated that all programs need to be done as each program has some value to its distribution system. When asked what it would do if the OEB does not approve the capital expenditure plan, as proposed, Toronto Hydro maintained that the programs it has put forth is work that it needs to do at some point and therefore it cannot go back and cut back on one program ad hoc and that it would have to go back and reassess its entire program based on what spending is approved to decide where it is best to invest.

Toronto Hydro acknowledged that some projects involve assets to be replaced or issues to be resolved that are of the most urgent nature and that these urgent projects will be assigned to the first year of the capital expenditure plan, while projects contained in the later years of the plan will involve assets of lesser priority relative to those projects in the first year of the plan<sup>55</sup>.

OEB staff is not persuaded by Toronto Hydro's response to the manner in which they have prioritized. Toronto Hydro was asked by intervenors and OEB staff on several occasions for a project hierarchy of its programs, but this was not provided.

All of the above may infer that the later years' investment plans are secondary in terms of significance to the condition of the distribution system and would therefore undermine the need for a five year approval of any capital plan. OEB staff is not of the view that fewer than five years should be approved by the OEB, however, the above considerations are more reasons why a reduced level of capital spending is likely appropriate for this application.

### (iii) In-Service Assets

OEB staff notes that with respect to Toronto Hydro's ability to complete the work that would arise from its requested funding for proposed capital expenditure levels, on March 6, 2015, Toronto Hydro filed unredacted 2014 actual financial results. Based on this

<sup>&</sup>lt;sup>54</sup> EB-2014-0116 Transcript, Vol. 4, February 23, 2015, p. 97

<sup>&</sup>lt;sup>55</sup> EB-2014-0116 Transcript, Vol. 5, February 24, 2015, p. 133

filing, OEB staff has prepared the following summary table with respect to in-service assets<sup>56</sup>:

Schedule	Segments	Total Approved In-	Total Actual In-	Total 2012-2014 In-	%
Number		Service Additions	Service Additions	Service Additions	Variance
		(2012-2014)	(2012-2014)	Approved vs Actual	
B1	Underground Infrastructure	124.39	176.19	51.8	
B2	PILC Cable - PO & Leakers	6.92	2.92	-4	
B3	Handwell Replacement	37.53	35.98	-1.55	
B4	Overhead Infrastructure	79.73	86.05	6.32	
B5	Box Construction	29.34	22.37	-6.97	
B6	Rear Lot Construction	50.79	57.39	6.6	
B9	Network Vault & Roofs	22.5	14.73	-7.77	
B10	Fibertop Network Units	12.02	12.2	0.18	
B11	ATS & RPB	3.36	1.83	-1.53	
B12	Stations Power Transformers	3.86	2.28	-1.58	
B13.1/.2	Stations Switchgear	16.71	3.37	-13.34	
B20	Metering	16.96	18.14	1.18	
B21	Ext. Initiated Plant Reloc./Exp.	36.87	34.18	-2.69	
BXX	ICM Cap Labour Understate	8.32	0	-8.32	
Total ICM	Projects (Excluding Copeland)	449.3	467.63	18.33	4.08
B17	Copeland Transformer Station	124.1	3.54	-120.56	
B18.2	Hydro One Cap. Contributions	60	0	-60	
Total Cop	eland	184.1	3.54	-180.56	
Total ICM	Projects	633.4	471.17	-162.23	-25.61
B7	Polymer SMD-20 Switches	3.12	1.91	-1.21	
B8	SCADA-Mate R1 Switches	3.32	1.91	-1.41	
B14	Stations Circuit Breakers	2.36	1.39	-0.97	
B16	Downtown Station Load Trans.	2.82	1.36	-1.46	
B18.1	Hydro One Cap. Conts.	4.12	0.86	-3.26	
C1	Operations Portfolio Cap.	195.7	213.35	17.65	
C2	IT Capital	48.25	49.86	1.61	
C3	Fleet Capital	4.8	3.47	-1.33	
C4	Buildings & Facilities Cap.	15	14	-1	
Total Normal Capital Budget		279.49	288.11	8.62	3.08
Total		912.89	759.28	-153.61	-16.83
Total (exc	luding Copeland)	728.79	755.74	26.95	3.70
Total (exc	luding Copeland & B1 &C1)	408.7	366.2	-42.5	-10.40

<sup>&</sup>lt;sup>56</sup> EB-2014-0116 E OH/T1/S3/ Attach. 2 Filed 2015 Feb 22, p.1

Toronto Hydro stated during the hearing that the difference between forecast and actual on a total CAPEX and in-service addition basis is approximately 5 percent<sup>57</sup>. OEB staff notes that the overall difference on an in-service basis in the above table at 3.70% is within the range stated by Toronto Hydro when the Copeland project is excluded.

OEB staff notes that an examination of the above table on a segment-by-segment basis would indicate some reasons for concern regarding Toronto Hydro's ability to spend the capital amounts that have been requested from the OEB.

OEB staff acknowledges that there are unique circumstances related to the Copeland project which would support the view that it is not necessarily a typical indicator of Toronto Hydro's ability to complete the spending programs for which it has received approval from the OEB. However, OEB staff also notes that there are two significant segments with overspends: B1 Underground Infrastructure where actual 2012 to 2014 inservice additions were \$176.19 million, as compared to approved in-service additions of \$124.39 million for the same period and C1 Operations Portfolio Capital where the equivalent numbers were \$213.35 million and \$195.7 million respectively. As is shown in the above table, when Copeland is removed as an underspending outlier and when B1 and C1 are removed as overspending outliers, the underspend on the remaining projects is just above 10 percent.

OEB staff therefore concludes that Toronto Hydro is underspending on the majority of the projects that were approved in the ICM proceeding and that there also seems to be a considerable amount of variability in the spending with large underspends in some areas and significant overspends in others.

### 2. Concerns about the DSP in the overall context of the application

OEB staff believes that there are two more general issues related to the application that justify the proposed cut to the capital program that OEB staff is recommending below.

First OEB staff is concerned with Toronto Hydro's overall levels of productivity as discussed in section 2.2, particularly its ranking in the OEB's grouping of least efficient distributors in the province. As discussed in that section, OEB staff does not find

<sup>&</sup>lt;sup>57</sup> EB-2014-0116 Transcript Vol. 8, p.109, L5-L7.

persuasive Toronto Hydro's evidence that it is more productive than its existing OEB categorization. OEB staff is of the view that a lower approved capital program level will enhance Toronto Hydro's incentive to increase its efficiency over the five-year period.

OEB staff notes in this context the testimony of Dr. Kaufmann as to the arguments in favour of applying a stretch factor of higher than 0.6 to Toronto Hydro.<sup>58</sup> Dr. Kaufmann noted that Toronto Hydro is at best an average cost performer and that based on the cost forecasts this will worsen over the 5-year plan. This is in addition to being a below-average reliability performer. Dr. Kaufmann submitted that in this context there were two arguments for a higher stretch factor. The first is accountability, specifically the need to hold management accountable for past decisions not to invest when investments were needed. The second is compensation to customers for the lower reliability levels that are presently being experienced.

Second, OEB staff notes that this is Toronto Hydro's first Custom IR application and the first time the OEB will be establishing rates for Toronto Hydro for a five year period. In addition, the revenue requirement recovery for the capital program in the 2016 to 2019 period is to be determined by a new mechanism proposed by Toronto Hydro, the Custom Capital Factor, which as noted by OEB staff in its section 2.2 discussion contains some fairly broad gauge assumptions including a five-year revenue requirement forecast that is not based on a five-year OM&A forecast as is required by the RRFE.

OEB staff submits that after five years of Custom IR regulation, the OEB would be in a better position to assess the implications on a longer-term basis of the issues identified above and would at that point in time be better able to assess the need for ongoing capital expenditures of the magnitude proposed by Toronto Hydro. OEB staff would also expect that Toronto Hydro would be in a position to address the specific concerns with the DSP filing in this application identified by OEB staff at that point in time.

#### DSP – Overall Conclusion

OEB staff submits that while Toronto Hydro has provided evidence of the programs it intends to undertake over the five year period, the need and prioritization of these programs, including sufficiently forecasting any OM&A savings that may be achieved, have not been established to the point of adequately supporting a capital plan of \$2.5 billing.

<sup>&</sup>lt;sup>58</sup> EB-2014-0116 Transcript Vol. 3, p. 98 L28 to p. 101 L28.

Taking into account all of the concerns outlined above, OEB staff submits that the OEB may wish to consider a reduction in the approved capital expenditure level for Toronto Hydro to the \$400 million range per annum.

In OEB staff's submission such a range is a more realistic and appropriate amount which would be better reflective of Toronto Hydro's ability to complete projects, while also encouraging greater productivity on the part of Toronto Hydro.

OEB staff notes in this context the evidence of Dr. Kaufmann discussed in section 2.2 of this submission, which OEB staff supports. The key conclusion of Dr. Kaufmann's evidence is that Toronto Hydro's productivity is presently poor and is likely to worsen over the period of the application. OEB staff submits that Toronto Hydro requires strong incentives to improve its productivity and the approval by the OEB of a capital program level in the \$400 million range would provide an incentive for such improvement.

OEB staff further submits that there are certain deficiencies in Toronto Hydro's evidence, including those discussed in this section. Furthermore, the weaknesses in the customer engagement activities undertaken, discussed in section 2.3, should not, in OEB staff's view, provide the OEB with sufficient confidence to approve an increase in capital spending of 20% on average from current levels (approximately \$440 million). In this context, OEB staff will also discuss in section 6.1 the apparent anomaly between Toronto Hydro's load forecast which is declining and the service area growth forecasts on which the proposed DSP is based.

Finally, in support of the above recommendation, OEB staff notes that PEG in its evidence recommended that Toronto Hydro's proposed capital expenditures should be spread over eight years rather than five. This would suggest a range of \$300 million to \$325 million in each year. OEB staff's recommendation would result in a considerably smaller reduction than that proposed by Dr. Kaufmann.

#### 4. Deferral and Variance Accounts and Rate Riders

4.1 Should Toronto Hydro's existing deferral and variance accounts proposed for continuation be continued, and should those proposed for termination be terminated?

#### Background

Toronto Hydro has provided a detailed continuity of its account balances including carrying costs in the format provided by the OEB.<sup>59</sup>

Toronto Hydro has not proposed that any of its existing deferral accounts be terminated with the exception of Account 1508 – Transit City.

Toronto Hydro noted that this account was approved by the OEB as part of the EB-2009-0139 settlement agreement to capture 2010 revenue requirement consequences of any spending by Toronto Hydro for the Transit City program. However, Toronto Hydro stated that based on its records no capital spending occurred on projects related to Transit City in 2010 and Toronto Hydro accordingly has no amounts to clear in the present application or future ones.

#### Discussion and Submission

OEB staff has no issues with Toronto Hydro's evidence on the above-referenced areas and is in agreement with Toronto Hydro's proposal to close the Transit City deferral account.

# 4.2 Are the new deferral and variance accounts proposed by Toronto Hydro appropriate?

### Background

Toronto Hydro stated that it was seeking OEB approval for five new deferral and variance accounts: (1) Variance Account for Externally Driven Capital, (2) Variance Account for Derecognition, (3) Renewable Enabling Investments Provincial Rate Protection Recovery, (4) Deferral Account for the Mandatory Transition to Monthly Billing (5)

<sup>&</sup>lt;sup>59</sup> EB-2014-0116 E9/T2/S1 Filed 2014 Jul 31 Corrected 2015 Jan 15.

Variance Account for Gains on Sale of Properties related to the Company's Operating Centers Consolidation Program.

Toronto Hydro described the new proposed accounts as follows:

1. Variance Account for Externally Driven Capital

Toronto Hydro stated that the purpose of this variance account would be to track the difference between the capital embedded in base distribution rates related to third party initiated relocation and expansion capital spending and the capital related to actual relocation spending as it occurs over the 2015 to 2019 Custom IR period.

2. Variance Account for Derecognition

Toronto Hydro noted that under Modified IFRS, the gain or loss arising from the derecognition of assets is required to be recorded as a depreciation expense during the period in which the item is derecognized. Toronto Hydro stated that due to the dynamic nature of its capital program and operating environment, it is likely to experience a significant degree of ongoing volatility in year over year losses on derecognition over the 2015 to 2019 period, with the relocation work discussed above being one source of this volatility. Toronto Hydro requested this variance account to manage this volatility responsibly both for itself and its ratepayers by tracking the actual costs associated with derecognition of assets.

3. Renewable Enabling Investments Provincial Rate Protection Recovery

Toronto Hydro noted that it is seeking approval for Provincial Rate Protection Recovery of amounts related to renewable enabling investments and requested approval for the establishment of a new variance account for the purpose of tracking the variance between its revenue requirement required to support the portion of the investments that are eligible for the provincial rate protection and the actual Provincial Rate Protection amounts from the IESO 4. Deferral Account for the Mandatory Transition to Monthly Billing

Toronto Hydro indicated that this deferral account would be to recover the net new costs from the mandatory transition to monthly billing. Its current application does not include any amounts related to the mandatory transition. Toronto Hydro expects the costs of this requirement to be material, and significantly exceed any cost savings anticipated by the OEB in the consultation documentation.

5. Variance Account for Gains on Sale of Properties related to the Company's Operating Centers Consolidation Program

Toronto Hydro is also proposing a variance account to track material differences between the amounts cleared to customers through the proposed rate rider for gains on sale of properties related to the Company's Operating Centers Consolidation Program, and the actual sale amounts (which are yet to be determined).

Toronto Hydro provided Draft Accounting Orders for the requested Externally Driven Capital, Derecognition Variance accounts, Monthly Billing Costs and Benefits Deferral Account and Renewable Enabling Investments Provincial Rate Protection Recovery<sup>60</sup>.

### Discussion and Submission

OEB staff submits that Toronto Hydro's requested new deferral accounts and the accompanying draft accounting orders are appropriate, subject to the comments that follow, and should be accepted by the OEB as OEB staff believes that Toronto Hydro has appropriately justified its need for these accounts.

OEB staff submits that the Deferral Account for the Mandatory Transition to Monthly Billing should only be for OM&A expenses as any capital costs incurred will ultimately go into rate base and the revenue requirement impact of such costs is likely to be small.

OEB staff submits that Toronto Hydro should provide a draft accounting order for the variance account for sales of properties related to its Operating Centres Consolidation Program as part of the Draft Rate Order Process, or provide an explanation as to why it has not provided such a draft order.

<sup>&</sup>lt;sup>60</sup> The Draft Accounting Order for the Renewable Enabling Investments Provincial Rate Protection Recovery is contained in EB-2014-0116 2A-OEBStaff-32.

# 4.3 Are the accounts, balances and the proposed methods of disposition for deferral and variance accounts appropriate?

#### RSVAs

#### Background

Toronto Hydro requested in the application as filed to dispose of all Retail Settlement Variance Accounts (RSVAs) including Account 1550 LV Variance. However, Toronto Hydro stated that it intended to update the balances in these accounts during the course of the proceeding subject to its analysis of line loss factors to address a finding on the RSVAs from an audit of the Group 1 and 2 deferral and variance accounts conducted by the OEB.

On January 15, 2015, Toronto Hydro updated its evidence and indicated that the work to resolve the outstanding finding from the audit was still ongoing. As such, Toronto Hydro requested to defer the disposition of the RSVAs (except Account 1550 as this account was not impacted by the audit finding) and to continue to book monthly amounts to the accounts in the ordinary course. Toronto Hydro stated that it expected to update the balances in the accounts and request disposition as part of its update to 2016 distribution rates.

#### **Discussion and Submission**

OEB staff has no concerns with Toronto Hydro's proposed deferral and expects Toronto Hydro to fully explain and address how it has implemented the audit findings, in its update to its 2016 rates.

#### Accounts 1518 and 1548

#### Background

Since Toronto Hydro's Regulatory Assets Phase 2 decision (RP-2004-0117) in 2004, Toronto Hydro has included the costs of providing retail services and revenues received in the determination of its revenue requirement and has not recorded amounts in Account 1518 RCVA Retail and Account 1548 RCVA Service Transaction Request. Toronto Hydro interpreted the Regulatory Assets Phase 2 decision to indicate that the tracking of amounts in the accounts was no longer necessary. This was noted as a finding in the Group 1 and 2 DVAs audit conducted by OEB staff. Toronto Hydro indicated that from 2011 to 2013, had variances been recorded in Accounts 1518 and 1548, they would amount to approximate credits of \$272k and \$19k in total respectively.<sup>61</sup> As Toronto Hydro believes the amounts continue to be immaterial, Toronto Hydro is requesting relief from having to track and record costs and revenues in Accounts 1518 and 1548 and will include these amounts as a part of its requested revenue requirement in the current and future applications.

#### Discussion and Submission

OEB staff notes that Accounts 1518 and 1548 are generic accounts that have been established for use by all electricity distributors. As such, Toronto Hydro's request to stop tracking and recording amounts in these accounts is inconsistent with the requirements as set out by the Accounting Procedures Handbook (APH) and may hinder the determination in future of any changes to the established retail service charges.

However, OEB staff notes that the amounts that should have been recorded in the accounts are not material. OEB staff also notes that should the OEB accept Toronto Hydro's proposal not to track amounts in Accounts 1518 and 1548, ratepayers will not be harmed as the associated revenues and costs have been incorporated into Toronto Hydro's revenue requirement.

However, for consistency with other distributors, Toronto Hydro should track these variances unless the OEB determines they should be discontinued for all distributors.

### Account 1592

### Background

Toronto Hydro proposed to clear a credit of \$1.2 million in Account 1592 PILs and Tax Variances for 2006 and Subsequent Years, Sub-account HST/OVAT Input Tax Credits (ITCs). The balance pertains to the period of July 1, 2010 to December 31, 2010. In its application, Toronto Hydro provided the calculation of the amount it has recorded in the sub-account of Account 1592. Toronto Hydro used the 2009 actual PST paid for

<sup>&</sup>lt;sup>61</sup> EB-2014-0116 Application E 9/T1/S1, p. 20

operating and capital expenses as the basis for the calculation. Toronto Hydro is proposing to return 100% of the estimated savings.<sup>62</sup>

#### Discussion and Submission

The December 2010 APH FAQ #4 regarding amounts to be recorded in the sub-account of Account 1592, states that 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. FAQ #4 goes on to suggest an alternative methodology to calculate the amount to be recorded in the sub-account of Account 1592.

OEB staff reviewed Toronto Hydro's calculation<sup>63</sup> and noted that the use of 2009 actual PST paid for operating and capital expenses as a basis for the PST savings from July 1, 2010 to December 31, 2010 is consistent with the suggested alternative methodology provided in the FAQ.

However, the FAQ states that the amount of calculated PST savings related to OM&A expenses and depreciation expense on capital items should be recorded in the subaccount of Account 1592 while Toronto Hydro recorded the revenue requirement impact flowing from the PST savings in the sub-account of Account 1592.

OEB staff is of the view that although there is some difference between the methodologies to calculate the amount to be recorded in the sub-account, there is no material difference between the FAQ methodology and Toronto Hydro's methodology.

OEB staff notes that the December 2010 APH FAQ #5 also states that the OEB concluded 50% of the confirmed balances recorded in the sub-account of Account 1592 shall be returnable to ratepayers, while Toronto Hydro is proposing to return 100% of its estimated savings to ratepayers.

OEB staff submits that while the difference between 50% and 100% of the estimated savings of approximately a credit of \$600k is not material to Toronto Hydro, it is to the

<sup>&</sup>lt;sup>62</sup> EB-2014-0116 IRR 9-OEBStaff-87

<sup>&</sup>lt;sup>63</sup> EB-2014-0116 Application E 9/T1/S1/p.10

benefit of ratepayers and accordingly, Toronto Hydro's approach should be accepted by the OEB.

#### Account 1575

#### Background

Toronto Hydro is proposing to dispose of a debit of \$30.5 million (composed of an account balance of \$25.8 million and \$4.7 million return) in Account 1575 IFRS-CGAAP Transitional PP&E Amounts over a four year period. Of this amount, approximately \$25.7 million is due to derecognition losses.

In its interrogatory responses, Toronto Hydro confirmed that it included a credit of \$569 thousand pertaining to differences in construction work in progress (CWIP) between USGAAP and IFRS in the account.<sup>64</sup> The difference in CWIP relates to the differences in interest that is capitalized into CWIP. Toronto Hydro stated that its interpretation of Article 510 of the APH is that all adjustments, including capitalized interest related to PP&E would be recorded in Account 1575.

Toronto Hydro also confirmed that it excluded a \$7.2 million land lease that was not recognized as capital under USGAAP but now qualifies to be recognized as capital under IFRS from the account.<sup>65</sup>

### Discussion and Submission

OEB staff notes that the description of Account 1575 in the APH specifically references PP&E transitional differences between CGAAP and IFRS. Toronto Hydro is recording amounts in this account to reflect PP&E transitional differences between USGAAP and IFRS. OEB staff further notes that the Addendum to the *Report of the Board: Implementing International Financial Reporting Standards in an Incentive Rate Mechanism Environment* (EB-2008-0408), dated June 13, 2011 (Addendum Report), which established the basis for the PP&E deferral Account 1575, stated on page 11 that:

<sup>64</sup> EB-2014-0116 IRR 9-OEBStaff-94

<sup>65</sup> EB-2014-0116 IRR 9-OEBStaff-94

The Board will approve the proposed PP&E deferral account. The account addresses the unique circumstances of a change in accounting standards and provides for the continuity of rate base. The account allows utilities to avoid the potential for material out of period costs (or over-recovery) that might be eligible for inclusion in the current period determination of rates.

OEB staff is of the view that the nature of Account 1575 is to capture PP&E transitional differences between accounting standards, and this would apply to Toronto Hydro's situation of transitioning from USGAAP to IFRS.

OEB staff's submission on this matter concerns the inclusion of differences in CWIP and exclusion of differences in land lease in Account 1575.

#### 1. <u>CWIP</u>

OEB staff notes that the credit of \$569 thousand pertaining to differences in CWIP between USGAAP and IFRS recorded in Account 1575 does not exceed Toronto Hydro's materiality threshold. However, OEB staff submits that the inclusion of amounts relating to CWIP in this account is a departure from the Addendum Report and the subsequent guidance for Account 1575 provided in the APH.

The Addendum Report indicated that the deferral account is based on OEB staff's proposal. On page 9 of the Addendum Report, OEB staff recommended that:

Utilities should also calculate the "adjusted rate base" values for the PP&E <u>components of rate base</u> using the accounting system applicable in each year between rebasing under CGAAP and the first rebasing under MIFRS. [*Emphasis added*]

Therefore, OEB staff is of the view that the scope of Account 1575 is only to capture differences in rate base. As agreed by Toronto Hydro, rate base does not include CWIP.<sup>66</sup> OEB staff therefore submits that the differences in CWIP should not be recorded in Account 1575.

OEB staff recognizes that there is a rate impact from the difference in CWIP in Toronto Hydro's transition to IFRS. As at December 31, 2014, Toronto Hydro's CWIP would be \$569 thousand higher under IFRS than what it would have been under USGAAP. If Toronto Hydro had continued under USGAAP, the \$569 thousand would have been expensed in OM&A and not capitalized as CWIP. Toronto Hydro would have been

<sup>&</sup>lt;sup>66</sup> Transcript Vol. 8, February 27, 2015 pp. 12-13

expected to manage its OM&A expenses, including the \$569 thousand during its IRM period within the OM&A expenses as approved by the OEB in its last cost of service rate application. However, due to the transition to IFRS, instead of expensing the \$569 thousand, Toronto Hydro has recorded the \$569 thousand as CWIP, which will be added to rate base when the associated assets are in service. Therefore, should the OEB decide to approve the credit amount back to ratepayers, OEB staff submits as the balance is immaterial, the simplest and most practical approach would be to leave the amount in Account 1575 and dispose of it as a part of Account 1575, noting that this is an exception to the scope of the account.

#### 2. Land lease

OEB staff notes that under USGAAP, the \$7.2 million land lease was previously classified as an operating lease and was recorded as a prepaid asset since Toronto Hydro had paid the upfront cost for it in 1995.<sup>67</sup> The land lease was not included in rate base, but as a prepaid asset, and was amortized annually into OM&A for \$90 thousand. Upon transition to IFRS, Toronto Hydro indicated that it had reclassified the lease as a finance lease in accordance with the accounting standard.<sup>68</sup> In the current rate application, the land lease has now been included in rate base with an annual depreciation expense of \$90 thousand. OEB staff is of the view that the evidence presented by Toronto Hydro would suggest that the reclassification of the land lease from a prepaid asset under USGAAP to a capital asset under IFRS is appropriate.

Toronto Hydro has excluded the \$7.2 million difference in land lease between USGAAP and IFRS from Account 1575. The mechanism of Account 1575 is essentially to record the difference between rate base under the previous accounting standard (USGAAP) and the current accounting standard (IFRS) until the first rebasing (i.e. as at December 31, 2014). This would suggest that the land lease amount should be recorded in Account 1575 as a credit balance to be recovered from ratepayers. However, as mentioned above, the purpose of the account is to allow utilities to avoid the potential for material out of period costs (or over-recovery) that might be eligible for inclusion in the current period determination of rates. During the IRM period until this current rate application, Toronto Hydro would have recovered \$90 thousand annually from the amortization of the

<sup>&</sup>lt;sup>67</sup> EB-2014-0116 Undertaking Schedule J8.2

<sup>&</sup>lt;sup>68</sup> EB-2014-0116 Undertaking Schedule J2TCJ2.16

prepaid land lease into OM&A. In the period of the current application, Toronto Hydro is proposing to continue to recover \$90 thousand annually but as depreciation expense since the land lease is proposed to be included in rate base.

OEB staff notes that if there were any over-recovery, the amount of potential overrecovery at \$90 thousand annually would be immaterial. Assuming that the \$7.2 million is the net book value of the prepaid land lease as at December 31, 2014, there also would have been no upward or downward adjustment to the value of the asset.

As such, OEB staff does not believe that there was any out of period over-recovery of amounts during the previous IRM period and therefore, the difference in land lease should not be included in Account 1575. The only impact is that the land lease will attract a return going forward as it has been added to rate base. Toronto Hydro indicated that the inclusion of the land lease in rate base is to be in compliance with IFRS. OEB staff does not take issue with this and submits that the proposed treatment is appropriate as Toronto Hydro has prepared this rate application to be in accordance with MIFRS commencing in 2015.

### Other Post Employment Benefits (OPEB)

#### Background

Toronto Hydro is proposing to recover \$16.5 million in OPEBs, of which \$6.5 million is capitalized and \$10 million is expensed.<sup>69</sup> Toronto Hydro indicated that it has been recovering OPEBs in rates under the accrual method of accounting since 2000. The accrual method recognizes expenses when the entitlement to OPEBs is earned and not when an entity actually has to pay them out to retirees. The cash method recognizes expenses when cash payments are made. Toronto Hydro provided the table below<sup>70</sup> to show the OPEB amounts recovered in rates compared to the actual cash benefit payments made in the 2000 to 2013 period and the amounts anticipated to be recovered and paid out in the forecast period of 2014 to 2015:

<sup>&</sup>lt;sup>69</sup> EB-2014-0116 Application E 4A/ T4/S5, p.15

<sup>&</sup>lt;sup>70</sup> EB-2014-0116 IRR 4B-OEBStaff-79

	2000 to 2013	2014	2015	Total 2000 to 2015
Amounts included in rates				
OM&A	103,242	9,961	10,289	123,492
Capital Expenditures*	11,300	2,030	2,223	15,553
Sub-total	114,542	11,991	12,512	139,045
Paid benefits	85,294	8,191	8,552	102,037
Net excess amount included in				
rates greater than amounts paid	29,248	3,800	3,960	37,008

Amounts in ('\$000s)

\* Toronto Hydro indicated that the capital portion is only the depreciation amount of the total capitalized amount.

The above table shows that Toronto Hydro has recovered \$29.2 million more in rates than it has paid out for OPEBs from 2000 to 2013. Toronto Hydro indicated that this excess recovery has been spent on ongoing operations. Toronto Hydro stated that it never considered setting aside the excess recovery for the purpose of paying out OPEBs in the future.<sup>71</sup> Toronto Hydro is forecasting collecting another \$7.8 million more in rates than it will pay out for OPEBs in 2014 and 2015. Toronto Hydro indicated that at this point in time, it does not have knowledge of how it would spend the excess recoveries from 2015 or whether they would be spent.<sup>72</sup> When Toronto Hydro was asked during cross-examination by OEB staff whether or not it has a plan regarding how it will fund the OPEB liability when it needs to be paid out in the future, Toronto Hydro indicated that it believes that it has a healthy balance sheet at this point in time to address the issue.<sup>73</sup>

#### Discussion and Submission

OEB staff's submission relates to two aspects of the OPEBs issue, which are: (1) Cash versus Accrual Accounting and (2)\_Account 1508 – USGAAP Deferral Account.

#### 1. Cash vs. Accrual Accounting

OEB staff submits that the OEB may wish to consider changing its approach to OPEB costs for regulatory purposes, specifically, moving from the accrual basis to the cash basis of accounting.

<sup>&</sup>lt;sup>71</sup> EB-2014-0116 Transcript Technical Conference November 18, 2014, p.118

<sup>&</sup>lt;sup>72</sup> EB-2014-0116 Transcript Vol. 8, pp. 12-13

<sup>73</sup> EB-2014-0116 Transcript Vol. 8, p. 14

OEB staff notes that according to Toronto Hydro's 2013 audited financial statements, its post-retirement benefits other than pension (i.e. OPEBs) are \$238.8 million as at December 13, 2013. Toronto Hydro makes payments regarding OPEBs based on actuarial valuations. These actuarial valuations are the basis for the accrual accounting Toronto Hydro is using to record and recover OPEB costs. As indicated above, Toronto Hydro is forecasted to recover a total of \$36.8 million more than it will pay out for the liability from 2000 to 2015.

Although Toronto Hydro uses the accrual accounting method for the presentation and disclosure of OPEBs in its financial statements, it has not actually set aside the past recovery in rates in excess of OPEB payments for OPEBs instead using the excess to cover costs of ongoing operations. This means that the amounts collected from ratepayers for the purpose of funding OPEBs have not entirely been used to fund OPEBs. OEB staff notes that the implication of this is that Toronto Hydro will need to find a way to fund this liability in the future when it needs to be paid out, whether this is through requesting recovery from ratepayers again, obtaining funding from the shareholder, or any other means.

OEB staff takes the view that even though Toronto Hydro believes that it has a healthy balance sheet sufficient to fund the liability when it needs to be paid out in the future, Toronto Hydro's current balance sheet position may not be representative of Toronto Hydro's future cash flow at the time the liability needs to be paid. Referring to Toronto Hydro's 2013 audited financial statements, its 2013 and 2012 year end cash balances were \$15.7 million and \$68.3 million, respectively while its OPEB liabilities were \$238.8 million and \$253.9 million, respectively. In addition, OPEBs do not have plan assets associated with the liability to offset or help fund the liability when payments need to be made. Though this is a simplistic comparison, Toronto Hydro would need to be able to generate enough cash in the future to fund the entire OPEB liability while still having sufficient cash to maintain ongoing operations. As at this point in time, OEB staff is unsure how Toronto Hydro plans to fund the liability.

In addition, Toronto Hydro currently does not have a plan on how it intends to treat the excess recovery it is requesting in 2015.<sup>74</sup> Therefore, OEB staff is of the view that the

<sup>&</sup>lt;sup>74</sup> EB-2014-0116 Transcript Vol. 8, pp. 12-13

issue of the excess recovery for the test period may likely continue to perpetuate in the future.

OEB staff notes that the OEB may hold a generic proceeding on the regulatory treatment and recovery of pension and OPEB costs in the near future. Combined with the reasons specific to Toronto Hydro's situation discussed above, OEB staff submits that the OEB may wish to consider moving to the cash basis for OPEBs in this rate application. Moving to the cash basis would prevent Toronto Hydro from recovering excess amounts for 2015 when it does not have a plan as to how it intends to treat this excess amount. Also, the cash method of accounting avoids unnecessary burdens on today's ratepayers in that today's ratepayers will not be funding amounts that will not be paid out in the near future. OEB staff also notes if the cash method of accounting is used, amounts included in rates will be relatively stable as the cash payments Toronto Hydro is forecasting to pay remain relatively stable until 2023. Toronto Hydro's 2013 audited financial statements shows cash payments to be made in the 2014 to 2023 period as below:

#### Amounts in ('\$000s)

Year	2014	2015	2016	2017	2019	2019-2023
Cash Payments	8,191*	8,552*	9,090	9,541	10,112	59,394**

\*Cash payments for 2014 and 2015 are from IRR-4B-OEB-Staff 79

\*\*Equates to an average of \$11,879k per year

OEB staff submits that the OEB may wish to consider treating OPEBs in a similar fashion to the approach approved in Ontario Power Generation's (OPG) 2014 and 2015 payment amounts decision (EB-2013-0321). In the OPG decision, the OEB allowed OPG to recover its cash requirements for pension and OPEBs. The OEB also approved the establishment of a new deferral account to record the differential between accrual and cash valuations for pension and OPEB expenses, which does not attract carrying charges as it tracks non-cash items. OEB staff notes that to the extent there is a significant reduction in the accrual basis of accounting for the liability going forward, ratepayers would be protected from having moved to the cash basis by the use of this variance account. This variance account would also allow the outcome of the potential generic proceeding on the recovery of OPEBs to be applied to it, as appropriate.

#### 2. Account 1508 – USGAAP Deferral Account

OEB staff notes that the OEB approved Account 1508-USGAAP Deferral Account in an accounting order application (EB-2012-0079) to capture the post-employment benefit

difference arising from Toronto Hydro's transition from CGAAP to USGAAP. As at December 31, 2013, the account had a balance of \$38.8 million.

Toronto Hydro has indicated that as a result of its transition to IFRS, there is a transitional difference from USGAAP to IFRS and the estimated balance in the account as at December 31, 2014 is expected to be \$36 million.

Toronto Hydro is requesting approval to continue to use this deferral account to capture ongoing differences in OPEBs as a result of its transition from USGAAP to IFRS. In the current rate application, Toronto Hydro is not seeking recovery for the account. Toronto Hydro indicated that it projects interest rates are more likely to increase over the Custom IR period, which would reduce the amount recorded in the account.

Toronto Hydro expressed the belief that there is a reasonable probability that the current balance in the account will be substantially reduced without the necessity of funding from ratepayers and hence, it is not requesting disposition of the account at this time.<sup>75</sup>

OEB staff notes that should the OEB decide that the cash method of accounting is to apply to OPEBs going forward, the existing deferral account will have to be continued until the time at which the account balance is disposed. However, as Toronto Hydro expressed the belief that the balance in the account will be substantially reduced in the near future, OEB staff is not concerned that this account is not being proposed for disposition at this time.

### LRAMVA

### Background

Toronto Hydro stated that it was submitting a claim for recovery of LRAMVA amounts relating to CDM activities in 2011, 2012 and 2013. The total amount claimed was \$3,452,615, plus carrying charges of \$99,759 for which recovery was requested through a 12-month rate rider. Toronto Hydro stated that an application for the 2014 LRAMVA amount would be submitted at a later date.

<sup>75</sup>EB-2014-0116 IRR 9-OEBStaff-86

Toronto Hydro confirmed that it would not be submitting an application to recover LRAM amounts related to 2008, 2009 and 2010 consistent with the OEB's CDM Guidelines which stated that LRAM for pre-2011 CDM activities should be completed with 2012 rate applications.

Toronto Hydro noted that its load forecast for 2011 did not include an explicit amount for CDM savings as CDM was accounted for through the trend variables in the customer class regression. As such, in order to determine the amount of CDM implicitly embedded in the trend variables used in the 2011 load forecast, which is the basis for the LRAMVA calculations, Toronto Hydro estimated a relationship between the actual historical CDM savings (on a net basis) and the trend variables used in the forecast models for each rate class.

With respect to the actual CDM savings for 2011, 2012 and 2013, Toronto Hydro stated that it has relied on the most recent evaluation report from the Ontario Power Authority (OPA) – the 2013 OPA draft verified results report - in support of its LRAMVA calculations. The 2011 and 2012 net CDM savings are stated as OPA approved and verified and the 2013 net CDM savings are OPA draft verified.

Toronto Hydro noted that the 2011 load savings reflect an actual impact of 2011 CDM program activities excluding persistence from the prior years, while the 2012 load savings consist of the actual impact from 2012 CDM programs, plus the remaining realization of 2011 CDM programs and partial 2011 persistence. The 2013 load savings consist of actual impact from 2013 CDM programs, plus remaining realization of 2012 CDM programs and partial 2011 persistence.

Toronto Hydro further noted that the savings data provided by the OPA is annualized, which it stated does not accurately reflect the actual initiation and implementation of CDM savings when compared to CDM estimates by customer class and consequently Toronto Hydro had adjusted its claimed savings based on typical application rates and monthly savings realization from samples and averages. Toronto Hydro stated that it also excluded demand savings for the Demand Response (DR) programs as it believed that the peak demand savings from the DR program are not necessarily coincident with customer's individual peak demand for the demand reduction occurrence.

### Discussion and Submission

OEB staff notes that Toronto Hydro has proposed a more sophisticated approach to the calculation of actual CDM savings than simply relying on the OPA's final results as discussed above.

OEB staff asked Toronto Hydro for additional information about its approach.<sup>76</sup> Toronto Hydro expressed the view that its approach was based on a more comprehensive analysis and therefore produced a more accurate depiction of the savings generated. Toronto Hydro acknowledged that it was not aware of any other LDC using the same approach for making an LRAMVA claim.

OEB staff submits that Toronto Hydro's approach to its LRAMVA calculations is a more precise approach than the standard one but is not contradictory with the standard approach from the point of view of the overall principles behind it. Accordingly, OEB staff accepts Toronto Hydro's approach and the calculations underlying it.

## 4.4 Are Toronto Hydro's proposed rate riders appropriate?

## Background

Toronto Hydro proposed 2015 Retail Transmission Service Rates and established rate riders for the proposed clearance of deferral and variance accounts which are discussed in the deferral and variance account section of this submission. Toronto Hydro's application also sought approval to clear to customers through rate riders three additional amounts related to Gains on Sale of Property, Tax Refunds and Lost Revenue Associated with IRM Framework 2012-14. OEB staff has submissions on the four previously referenced areas:

### Discussion and Submission

a) Retail Transmission Service Rates

Toronto Hydro proposed 2015 Retail Transmission Service Rates that were calculated using the forecasted billing determinants, the recently approved Uniform Transmission Rates (UTR) and the OEB's RTSR Workform. Toronto Hydro stated that it would update

<sup>&</sup>lt;sup>76</sup> EB-2014-0116 9-OEBStaff-95 Filed: 2014 Nov 5.

these rates at the time of the Draft Rate Order as the rates in evidence do not reflect the most recent UTRs, which were issued after the application was filed. For the 2016-2019 period, Toronto Hydro proposed to update these rates for the updated UTRs at the same time it updates its distribution rates according to its Custom PCI framework.

OEB staff submits that Toronto Hydro's proposed treatment of Retail Transmission Service Rates is reasonable.

b) Gains on Sale of Property

Toronto Hydro's Operating Centres Consolidation Program includes sales of two properties 5800 Yonge and 28 Underwriters. Toronto Hydro claimed confidentiality on the estimated net gains on the sale of these properties, but proposed to return these gains to customers grossed up for PILs tax savings over a three-year period. Toronto Hydro requested that since the final amount of the sales proceeds may not be determined in time for rate finalization, material differences between the actual sale amount and the amount cleared to customers should be tracked for future disposition.

OEB staff notes that gains on sales of properties of this kind have traditionally been treated by Toronto Hydro as revenue offsets in the year which they are incurred. This is discussed by Toronto Hydro in its evidence which lists the gains incurred on sales of properties for the years 2011 to 2013 on an actual basis and 2014 and 2015 on a forecast basis<sup>77</sup>.

OEB staff further notes that Toronto Hydro's proposal to return gains on the sale of properties to its customers through a three-year rate rider rather than as a revenue offset in the test year is a departure from previous practice.

OEB staff asked Toronto Hydro to further elaborate on the reasons for this proposed change,<sup>78</sup> specifically whether Toronto Hydro would have any reasons other than the potential size of these gains for its proposed treatment and, if so, what they would be and secondly if the OEB was to determine that the 2015 gains were to be treated as revenue offsets, any concerns Toronto Hydro would have with such treatment.

In its response, Toronto Hydro stated that it had made its proposal to assist in smoothing bill impacts for customers and that providing for full clearance through a single 2015

<sup>&</sup>lt;sup>77</sup> EB-2014-0116 E 3/T2/S1, p.6 Filed 2014 Jul 31 Corrected 2014 Sep 23.

<sup>&</sup>lt;sup>78</sup> EB-2014-0116 3-OEBStaff-62 Filed 2014 Nov 5.

Revenue Offset for this sizable amount is problematic under its proposed 2015-19 framework since it would effectively set into base rates an equivalent full amount in each year which in Toronto Hydro's view would be inappropriate since the offset only occurs once. Toronto Hydro added that it would also eliminate the desired bill impact smoothing.

Toronto Hydro further stated that if the OEB was to determine that the gains were to be treated as a revenue offset, it would be concerned that a custom clearance term could not be accommodated under its proposed Custom PCI formula, and as a result, the gains could only be cleared over the full five-year rate term by including one-fifth of the total amount as a revenue offset in 2015 which would also nullify the positive impacts a three-year clearance would have on rate smoothing.

OEB staff submits that given the potential size of these gains, Toronto Hydro's proposal to return gains on the sale of properties to customers through a three year rate rider rather than as a revenue offset is appropriate. In making this submission, OEB staff notes as well the rate-smoothing effects cited by Toronto Hydro.

### c) Tax Refunds

Toronto Hydro stated that it had amended its tax returns for the years 2006 to 2010 in respect of its tax treatment of post-employment benefit plan costs, which had previously been capitalized for tax purposes and deducted as capital cost allowance. Toronto Hydro amended its position by deducting amounts paid in respect of post-employment benefits from taxable income which resulted in favourable reassessments received in the years 2011 to 2013 from the Ministry of Finance. Toronto Hydro proposes to include the refunds received in a rate rider to customers in the amount of \$23.3 million.

Toronto Hydro is proposing to return the Tax Refund in the form of a rate rider to be in place for 36 months beginning May 1, 2015. Toronto Hydro stated that this refund will serve to smooth bill impacts for customers over the 2015-19 period.

OEB staff submits that Toronto Hydro's disposition proposal is appropriate in this case as this is refunding to customers taxes that were returned to the company and in essence never paid, but were recovered in rates. This is very similar to the OEB's treatment of tax loss carry forwards. In addition, it is not likely to be an ongoing event and is not attributable to the Test year specifically.
## d) Lost Revenue Associated with IRM Framework 2012-14

Toronto Hydro stated that in EB-2012-0064 it had filed evidence with respect to 2011 rate base amounts which would not be included in distribution rates due to the operation of the IRM mechanism, which applied to rates set based on 2011 average capital in service during 2011, over the 2012-14 period. Toronto Hydro stated that, absent relief, its permanent loss arising as a result of the operation of the ICM mechanism is approximately \$33 million in revenue requirement.

Toronto Hydro noted that the OEB had stated in its EB-2012-0064 *Partial Decision and Order* that "The concept of adjusting rate base is not applicable to applications made under IRM." Toronto Hydro stated that its understanding was that the above-noted OEB decision indicated that the loss of return on this unrecognized rate base was outside the boundaries of adjustments during the IRM term, but that the relevant relief may be appropriately sought in the context of a rebasing application, and in particular a Custom IR application.

Toronto Hydro expressed the belief that the recent OEB request for comments in EB-2014-0219 specifically recognized the problems associated with year-end rate base not being accounted for under the IRM framework, noting that the OEB's letter related to this proceeding had stated that the OEB 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.

Toronto Hydro stated that the rate relief it was requesting in this regard relies on its analysis previously presented to the OEB in EB-2012-0064, which has been adjusted to reflect that the original calculation was based on year-end capital expenditures, rather than in-service amounts.

Toronto Hydro proposed to clear the \$33.3 million amount arising from this request through a 48-month rate rider beginning January 2016. Toronto Hydro stated that the delay of recovery and the longer recovery period are intended to reduce and smooth the bill impacts to customers over the 2015-19 period.

OEB staff submits that Toronto Hydro's request for the recovery of this amount should be rejected by the OEB as it represents a form of retroactive rate-making.

OEB staff asked Toronto Hydro whether or not it would see its request as retroactive ratemaking.<sup>79</sup> Toronto Hydro responded that it reasonably believed the OEB is able to grant the requested relief without engaging in retroactive ratemaking because the OEB did not rule on this issue in EB-2012-0064. In support of this conclusion, Toronto Hydro referenced the OEB findings on this matter in that Decision.<sup>80</sup> During the Technical Conference, Toronto Hydro was asked why it considered that the referenced finding was not considered a ruling by the OEB.<sup>81</sup> Toronto Hydro cited the statement in the finding that "The concept of adjusting rate base is not applicable to applications made under IRM" as the basis for this belief.

OEB staff submits that a reading of the complete OEB finding in EB-2012-0064 makes it quite clear that the OEB had in fact made a finding on Toronto Hydro's request. The complete finding is reproduced below:

It is important to recognize that this is an application under the Board's Incentive Regulation guidelines. The policies which underpin these guidelines specify the base upon which rates are to be adjusted in future years and allow for an incremental capital module, the criteria for which will be discussed elsewhere in this Decision.

The Board's policies with respect to the going in rate base and associated base rates apply to all distributors, unless a demonstrable need for deviation from the policy has been established. The Board agrees with a number of intervenors who have argued that the Board's policies with respect to the averaging of rate base and the use of the half-year rule for depreciation are clear, and have been articulated in a number of recent decisions, particularly those of Enersource and PowerStream. The Board has recently confirmed that going into incentive regulation rates are set based on a cost of service review, and that rates and costs are then decoupled for the term of the IRM. The concept of adjusting rate base is not applicable to applications made under IRM.

The Board does not accept that there is a "loss" to the distributor with the application of the half-year rule or that these policies are wrong. The Board is not convinced by THESL's arguments for a departure from policy which uses the average rate-base in the rebasing year (in this case, 2011). THESL has put forward the use of 2011 year-end rate base without justifying why this is required – not why THESL wants this policy change, but why a deviation from the Board approved policy is required by THESL. As stated by the Board in the recent decisions referred to above, departures from policy are only appropriate if the circumstances justify such a departure. Aside from increasing rate base, THESL did not substantiate why this increase is necessary from its own financial resource management perspective or how it might be of benefit to ratepayers, or provide any other reason to stray from the policy.

THESL's argument is that it will not earn a return on all rate base additions made during 2011. But a fundamental tenet of incentive regulation is that base year rates are adjusted by a simple mechanistic formula that takes into account inflation, productivity, and a stretch factor. In order to maintain, or even exceed, its allowed rate of return, a distributor is incented to implement efficiency improvements. Rate

<sup>&</sup>lt;sup>79</sup> EB-2014-0116 8-OEBStaff-82, p. 2 Filed: 2014 Nov 5

<sup>&</sup>lt;sup>80</sup> EB-2012-0064 *Partial Decision and Order* April 2, 2013, pp. 9-10.

<sup>&</sup>lt;sup>81</sup> EB-2014-0116 Technical Conference Transcript November 18, 2014, p. 138 L12 - p. 140 L4.

base is not adjusted per se, nor are the cost of capital, depreciation, PILs, or other elements of the revenue requirement. Rather, these components are subject to the application of the price cap index adjustment during the IRM plan term. This is not an unintended consequence of incentive regulation – it is at the core of providing incentives to distributors to find efficiencies, minimize costs, and generate growth while being allowed the opportunity to earn, and potentially exceed, the allowed rate of return on equity.

The Board also notes that under the IRM framework, THESL will continue to earn a return on rate base and depreciation on assets that will be retired during the IRM period. THESL provided insufficient evidence that this was taken into account and to what extent such factors would offset the relief sought for the 2011 year-end rate base. The Board is therefore not persuaded that a change in Board policy to adjust base rates is required.

In addition, OEB staff is unclear as to the basis for Toronto Hydro's belief that the absence of a finding on a particular issue would allow for retroactive recoveries of this kind.

OEB staff further submits that if it had been the OEB's intent that Toronto Hydro was to be permitted to request recovery of this amount in a future cost of service application that the OEB would have established a deferral account for the recording of these amounts. The OEB in its findings on this matter in the EB-2012-0064 Partial Decision and Order did neither of these things and besides, it has been the OEB's practice not to allow for recovery of forgone amounts related to the implementation of the half year rule when an entity rebases. The full amount of deprecation expense for the related assets is included in base rates going forward only.

#### 5. Revenue Requirement

# 5.1 Is the rate base component of the revenue requirement for 2015 appropriate?

#### Background

The table below, which is reproduced from Toronto Hydro's evidence<sup>82</sup> summarizes its proposed rate base:

<sup>&</sup>lt;sup>82</sup> EB-2014-0116 Application E2A/T1/S1/p.1 Filed: 2014 Jul 31 Corrected 2015 Feb 6.

	2011 OEB Approved	2011 Historical CGAAP	2012 Historical UGAAP	2013 Historical UGAAP	2014 Bridge UGAAP	2015 Test MIFRS
Opening PP&E NBV	1,897.8	1,895.8	2,183.5	2,251.9	2,356.0	2,436.6
ICM	-	-	-	-	-	372.6
Street Lighting	-	-	-	-	-	39.8
Opening PP&E NBV Adjusted	1,897.8	1,895.8	2,183.5	2,251.9	2,356.0	2,849.0
Closing PP&E NBV	2,105.1	2,183.5	2,251.9	2,356.0	2,456.3 <sup>1</sup>	3,161.0
Average PP&E NBV	2,001.5	2,039.7	2,217.7	2,304.0	2,406.1	3,005.0
Working Capital Allowance	296.7	318.1	316.6	354.4	369.5	241.5
Rate Base	2,298.2	2,357.7	2,534.3	2,658.4	2,775.6	3,246.5

Toronto Hydro's Working Capital Allowance (WCA) has been reduced from the 12.88% of controllable expenses plus cost of power to 7.99% for the 2015 Test year.

Toronto Hydro stated that this reduction was based on an updated Lead-Lag Study performed by Navigant Consulting which was included in the evidence.<sup>83</sup> The methodology used was stated as being generally the same as that used in the previous Lead-Lag study. Toronto Hydro attributed the proposed reduction in the WCA to two changes, which were: (1) a significant decrease in the revenue lag due to improved billing and collection activities, and (2) a change in the weightings applied to revenue lag days from customers to class revenues.

# Discussion and Submission

OEB staff submits that Toronto Hydro's rate base is reasonable subject to any specific concerns with components of it discussed in related sections of this submission.

OEB staff supports Toronto Hydro's proposed WCA and commends Toronto Hydro for significantly reducing its WCA.

<sup>&</sup>lt;sup>83</sup> EB-2014-0116 Application E2A/T3/S2

## **Renewable Enabling Improvement Investments**

## Background

Toronto Hydro stated that there is significant renewable generation activity across its distribution system and as of May 31, 2014, it had connected over 860 renewable generation projects representing over 29 MW of capacity, and had undertaken approximately 325 MW of pre-assessment capacity reviews. Toronto Hydro further stated that it expects to connect approximately 972 renewable energy generation facilities during the 2015 to 2019 rate period, with a corresponding capacity of 148.9 MW. Overall, by the end of 2019, Toronto Hydro anticipates having almost 2000 renewable generation facilities, with a corresponding capacity of approximately 203 MW, connected to its distribution system.

Toronto Hydro proposed that to address interconnection constraints at the distribution level, it would undertake a number of Renewable Enabling Improvement ("REI") investments as part of its 2015 to 2019 DSP. These are in the areas of generation protection, monitoring and control including an advanced protection system, installation of Bus-tie reactors and remote monitoring and control of generation (SCADA). Toronto Hydro also stated that it planned to deploy 24 energy storage systems at various strategic locations across its distribution system.

Toronto Hydro stated that the OPA had reviewed its plans for REG investments and found that: 1) the utility's plans are reasonably consistent with the OPA's information regarding REG, and 2) that the investments support and enable the connection of additional REG, which enhances the ability of local customers and proponents to participate in ongoing renewable programs, while contributing to the supply diversity within the Integrated Regional Resource Plan (IRRP) study for the Central Toronto region.

Toronto Hydro provided the table reproduced<sup>84</sup> below which summarizes its costs associated with REI investments over the 2015 to 2019 rate period. Toronto Hydro noted that it is not proposing any specific Renewable Expansion investments during the period 2015 - 2019, but that certain investments in its Station Expansion program are expected to improve the utility's ability to connect REG facilities.

<sup>&</sup>lt;sup>84</sup> EB-2014-0116 Application E2A/T8/S1, p. 5 Filed 2014 Jul 31 Corrected 2014 Sep 23.

Capital Program	2015	2016	2017	2018	2019
Generation Protection Control and Monitoring	6.12	5.19	3.26	2.10	2.02
Energy Storage	0.54	1.09	2.16	3.24	3.78
Totals	6.66	6.27	5.43	5.34	5.79

Toronto Hydro noted that in accordance with the Filing Requirements, it had applied the six percent direct benefit assumption provided by the OEB with respect to REI investments to calculate the provincial rate protection amounts summarized below:

Year	2015	2016	2017	2018	2019
Provincial					
Rate	0.31	1.00	1.69	2.31	2.93
Protection					

# Discussion and Submission

OEB staff accepts Toronto Hydro's submissions with respect to its proposed REI investments.

# 5.2 Is Toronto Hydro's proposal for the transfer of streetlighting assets appropriate?

# Background

Toronto Hydro is proposing to transfer former streetlighting assets into its rate base effective January 1, 2015 at a transfer price of \$39.8 million. The OEB had, in its Decision and Order dated August 3, 2011, approved a value of \$28.9 million for the assets that were found eligible to be transferred.

Toronto Hydro stated that this value represents the opening net book value of the assets in 2015, which is the actual cost incurred by Toronto Hydro to acquire the 2012 transferred assets from TH Energy, the additional assets that were put into service in the intervening 2012 to 2014 period as well as depreciation on all assets.

Toronto Hydro submitted that the revised transfer value of the streetlighting assets has no effect on its revenue requirement for all rate classes other than the Street Lighting and Unmetered Scattered Load (USL) rate classes because the costs associated with the street lighting assets are directly allocated to the Streetlighting (95%) and the USL (5%) rate classes.

Toronto Hydro stated that for the streetlighting class, these costs are offset by revenues from a Service Agreement with the City of Toronto and that for the USL class the effects are minimal. Toronto Hydro further noted that for the purpose of the present application, the effects of the proposed transfer have been fully integrated into its capital and operating expenses as well as its cost allocation model.

Toronto Hydro stated that in its Decision and Order of February 11, 2010, the OEB had rejected, for regulatory purposes, the discounted cash flow valuation that underpinned the original purchase of the streetlighting assets by TH Energy from the City of Toronto in 2006 and found that the depreciated historic cost (DHC) method was more appropriate for rate setting purposes.

Toronto Hydro stated that the detailed analysis it had undertaken created new information pertaining specifically to the transferred assets that was not available at the time the OEB's valuation decision was rendered. Toronto Hydro further stated that the new information, resulting from the detailed analysis, provides a better proxy for the depreciated historic cost of the transferred assets than does the depreciated replacement cost approach with its results scaled down to match the then existing asset value carried on TH Energy's books. However, Toronto Hydro noted in conclusion that the detailed analysis does not increase the value of the overall asset but changes the proportion of the unchanged total amount that is transferred to Toronto Hydro.

Toronto Hydro stated that the revenue requirement consequences of its proposal are a base revenue requirement impact of zero. This is because 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. Toronto Hydro proposed that given the transfer of a portion of these assets into its rate base as distribution assets, it would allocate a portion of the revenue it expects to receive to exactly offset the revenue requirement impacts arising from the transfer.

## Discussion and Submission

OEB staff does not oppose the asset transfer arrangements proposed by Toronto Hydro. However OEB staff does note two implications of Toronto Hydro's proposed approach.

The first is that the OEB's Valuation Decision of August 3, 2011 had determined that while the use of historic costs was preferable, the DRC valuation technique should be used:

Given that historic costs are unavailable, the Board must consider a "next best" solution and concludes that the DRC valuation methodology is a reasonable approach to establish a starting point for the determination of an appropriate transfer value.<sup>85</sup>

OEB staff notes that Toronto Hydro's approach, which uses historic costs, is not strictly in accordance with OEB's Valuation Decision, but considers that Toronto Hydro has provided adequate justification for its proposed departure.

The second is that the justification for Toronto Hydro's approach of zeroing out the revenue requirement impact of the transfer of the streetlighting assets into Toronto Hydro's rate base is not clear.

During the proceeding, OEB staff sought further clarification of this matter from Toronto Hydro, but did not obtain the clarity that was being sought. OEB staff asked through an undertaking whether or not Toronto Hydro could confirm that the portion of revenue it is receiving from TH Energy's contract with the City of Toronto is equivalent to the portion of the assets transferred over to Toronto Hydro and Toronto Hydro said that it could not do so.<sup>86</sup>

OEB staff therefore submits that there may not be an adequate basis given the evidence on the record to make a determination as to whether or not these arrangements result in a cross-subsidy going from Toronto Hydro to TH Energy or vice-versa.

<sup>&</sup>lt;sup>85</sup> EB-2009-0180,0181,0182,0183 *Decision and Order* August 3, 2011, p.15

<sup>&</sup>lt;sup>86</sup> EB-2014-0116 Oral Hearing Schedule J6.7

# 5.3 Is the capital structure and cost of capital component of the revenue requirement appropriate?

## Background

Toronto Hydro's proposed capital structure and cost rates for the 2015 Test year are reproduced below from its evidence. Toronto Hydro is incorporating the OEB's deemed capital structure and cost of equity, but is proposing its own long and short term debt rates. This is shown in the table below:

Line No.	Particulars	Сар	italiza	tion Ratio	Cost Rate	Return
	Debt	(%)		(\$)	(%)	(\$)
1	Long-term Debt	56.0%		\$1,855,547,537	4.31%	\$79,974,099
2	Short-term Debt	4.0%	(1)	\$132,539,110	1.38%	\$1,829,040
3	Total Debt	60.0%		\$1,988,086,646	4.11%	\$81,803,139
	Equity					
4	Common Equity	40.0%		\$1,325,391,098	9.30%	\$123,261,372
5	Preferred Shares			\$ -		\$-
6	Total Equity	40.0%		\$1,325,391,098	9.30%	\$123,261,372
7	Total	100.0%		\$3,313,477,744	6.19%	\$205,064,511

# a) Long-Term Debt Rate

Toronto Hydro stated that its debt is issued at the Toronto Hydro Corporation (THC) level via medium term notes in the Canadian public debt market. The promissory notes are written on the same terms as the parent debt as the borrowing is done on behalf of the corporation's affiliates with a fee of five basis points charged for administration.

The table reproduced below is Table 3: Long-Term Debt from Toronto Hydro's updated evidence.<sup>87</sup> This table shows the overall rate on Toronto Hydro's outstanding debt as being 3.94%. Table 4 of the same reference shows an issue of \$300 million Series 11 promissory note with a forecast coupon rate of 4.17%.

<sup>&</sup>lt;sup>87</sup> EB-2014-0116 Application E5/T1/S1/p.4 Filed: 2014 Jul 31, Corrected: 2014 Sep 23

Description	Maturity	Outstanding Principal	Rate
\$245M Prom Note	Nov. 14, 2017	\$245,057,739	5.20%
\$245M Prom Note	Nov. 12, 2019	\$245,057,739	4.54%
\$300M Prom Note	Nov. 19, 2021	\$300,000,000	3.59%
\$15M Prom Note	Jan. 1, 2022	\$15,000,000	3.32%
\$250M Prom Note	Apr. 10, 2023	\$250,000,000	2.96%
\$200M Prom Note	May 21, 2040	\$200,000,000	5.59%
\$200M Prom Note	Apr. 9, 2063	\$200,000,000	4.01%
\$200M Prom Note	Sep. 16, 2044	\$200,000,000	4.13%
\$45M Prom Note	Due on demand	\$45,000,000	6.16%
Total		\$1,700,115,478	3.94%

#### b) Short-Term Debt Rate

Toronto Hydro stated that over the 2014-15 period, it plans to issue short-term debt in order to better match its liquidity needs in an effort to minimize net financing charges and that THC maintains a revolving credit facility and also has the ability to issue commercial paper available for Toronto Hydro when short-term funds are required.

Toronto Hydro forecasted a short-term debt rate of 1.43% for 2015 which it stated represents the forecasted 30-Day Banker's Acceptance rate (using Bloomberg L.P.) for the year, used as a proxy for Commercial Paper issuance rate, plus a five basis point administrative fee.

# Discussion and Submission

a) Long-Term Debt Rate

OEB staff has two concerns with the cost of long-term debt proposed by Toronto Hydro.

The first relates to the overall cost rate proposed of 4.31%. OEB staff notes that in Toronto Hydro's original filing of July 31, 2014 this rate was 4.34% and was updated to 4.31%. However, at the time of the original filing, the Series 10, \$200 million promissory note had not been issued and the coupon rate was projected to be 4.74%. As the actual coupon rate was 4.13%, OEB staff is unclear why only a three basis point reduction in the overall cost of debt had been made. In this context, OEB staff notes that Table 3 in the application as filed July 31, 2014 showed an overall cost of debt of 4.30%, which is very close to the 4.34% overall rate originally proposed for 2015. However, even though this overall cost of debt in the revised version of Table 3 shown above dropped by 36

basis points to 3.94%, Toronto Hydro has only adjusted its overall long term debt cost rate down by three basis points.

OEB staff's second concern relates to the \$45 million promissory note due to THC which is due on demand. OEB staff notes that this promissory note does not appear to be written on the same terms as THC debt as it does not show up in Note 13 Debentures of THC's December 31, 2013 and 2012 "Notes To Consolidated Financial Statements".<sup>88</sup> During cross-examination by OEB counsel,<sup>89</sup> Toronto Hydro was asked to explain why it is reasonable for Toronto Hydro to pay Toronto Hydro Corporation a 6.16 percent coupon rate on the \$45 million promissory note which is due on demand by THC. Toronto Hydro's response through an undertaking<sup>90</sup> was that this note "was part of an earlier instrument -2003 Series 1 Note – held by the parent company at the time the note was issued. As a result, the \$45 million promissory note was issued at the same rate as the original instrument."

OEB staff notes that this response does not directly address the reasonableness question asked and as it appears that this issue is no longer outstanding at the THC level, it no longer meets the criteria of being written on the same terms as THC debt. Furthermore, it is callable and the coupon rate of 6.16% is more than 50 basis points higher than any of the other outstanding promissory note issues of Toronto Hydro. OEB staff notes that if THC was charging Toronto Hydro rates in the 4 to 4.15% coupon rate for this \$45 million, which is the range of rates on Toronto Hydro's two most recently issued promissory notes, the annual savings to Toronto Hydro would be in the \$900 thousand to \$1 million range per annum which is right around the materiality threshold. OEB staff submits that in the absence of an adequate explanation by Toronto Hydro, the OEB should either apply the OEB's deemed long-term debt rate of 4.77%, or given that Toronto Hydro has recently issued long-term debt in the 4 to 4.15% range deem a lower rate in this range for rate-setting purposes on this debt.

b) Short-Term Debt Rate

OEB staff notes that Toronto Hydro's proposed short-term debt rate is a departure from the OEB's deemed rate of 2.16%, but does not exceed this rate. Toronto Hydro has also

<sup>88</sup> EB-2014-0116 Exhibit K7.3

<sup>&</sup>lt;sup>89</sup> EB-2014-0116 Transcript, Vol. 7, p.140, L 26 - p. 144, L22

<sup>&</sup>lt;sup>90</sup> EB-2014-0116 Oral Hearing Schedule J7.10 Filed: 2015 Mar 2

provided justification for it based on its unique circumstances. Accordingly, OEB staff accepts Toronto Hydro's proposed short-term debt rate.

# 5.4 Is the depreciation component of the revenue requirement appropriate?

# Background

Toronto Hydro stated that, in accordance with the Accounting Procedures Handbook (APH), it depreciates its assets on a straight-line basis over their estimated useful lives and that it reviews these useful lives annually to ensure that they remain relevant.

Toronto Hydro further stated that it had not made any significant material changes to its estimated useful lives since its last rebasing application (EB-2010-0142) with the exception of amortizing a software application Customer Care and Billing over 10 years rather than the previous four or five years.

# Discussion and Submission

OEB staff accepts Toronto Hydro's evidence with respect to its depreciation policy.

# 5.5 Is the taxes / PILs component of the revenue requirement appropriate?

# Background

Toronto Hydro's rate application has been prepared using USGAAP for the historical and bridge years, and MIFRS for the test year. The PILS calculation however, is prepared using MIFRS for both the bridge and test years. Toronto Hydro indicated that to be able to reconcile 2015 MIFRS amounts in the PILS model, there was a need to true up the 2014 USGAAP amounts to MIFRS amounts. Toronto Hydro has requested recovery of an amount of \$22 million for the test year for PILs.

# Discussion and Submission

OEB staff notes that there is inconsistency in the use of accounting standards between the PILS model and the rest of the rate application for 2014. The PILS proxy is calculated in accordance with MIFRS while the rest of the application is prepared under USGAAP. However, OEB staff notes that the opening 2015 amounts in the PILS model should also be under MIFRS. As such, any adjustments to the 2015 taxable income calculation using the opening 2015 amounts (e.g. reserves) would also be in accordance with MIFRS. Therefore, OEB staff submits that the 2015 PILS is appropriately calculated using MIFRS as has been done by Toronto Hydro.

## 5.6 Is the revenue offset component of the revenue requirement appropriate?

## Background

Toronto Hydro stated that in addition to revenues recovered through distribution rates, it also earns other revenue from non-distribution related services, property and facility rentals, specific service charges from services provided to customers, and short-term investment income. In addition, Toronto Hydro also receives income and recoveries from shared services that it provides to its affiliates. Furthermore, with the transfer of the former street-lighting assets into Toronto Hydro's rate base, as has been discussed in the street lighting transfer section of this submission, Toronto Hydro will also be receiving a portion of contract revenue from the City of Toronto to offset the maintenance costs of these assets. Toronto Hydro summarized its revenue offsets in the table reproduced below<sup>91</sup>

Description	Actual Year 2011	Actual Year 2012	Actual Year 2013	Bridge Year 2014	Test Year 2015
Specific Service Charges					
Excluding Pole Attachment (4235)	\$5.7	\$6.3	\$6.4	<b>\$</b> 6. <b>4</b>	<b>\$</b> 9.8
Late Payment Charge (4225)	\$4.2	\$4.0	\$3.8	\$4.0	\$4.0
Other Distribution Revenue Excluding Duct Rental (4082,4084,4090,4210,4215,4220)	\$3.9	\$3.7	\$3.7	\$3.4	<b>\$</b> 11.5
Other Income & Deductions Including Pole Attachments (4210, 4235, 4324, 4325,4330,4335,4355,4375,4398,4405)	<b>\$</b> 18.8	<b>\$</b> 5.3	<b>\$</b> 11.5	\$12.0	\$19.6
Total Revenue Offset	\$32.6	\$19.4	\$25.4	\$25.7	\$44.9

# Discussion and Submission

OEB staff has made separate submissions on the specific service charges and street lighting related recoveries in those respective sections of this submission. Subject to those submissions, and to OEB staff's position on the parallel process established for the pole attachment rate matter, OEB staff accepts Toronto Hydro's proposed revenue offsets as appropriate.

<sup>&</sup>lt;sup>91</sup> EB-2014-0116, Application E3/T2/S1, p.1 Filed: 2014 Jul 31 Corrected 2015 Mar 12

## 6. Load Forecast, Cost Allocation and Rate Design

#### 6.1 Is the load forecast appropriate?

#### Background

Toronto Hydro's total load, customer and distribution revenue forecast is summarized in Table 1: Total Loads, Revenues and Customers of its evidence<sup>92</sup> which is reproduced below. Toronto Hydro stated that the revenue forecast is calculated based on proposed distribution rates, excluding commodity, rate riders, and all other non-distribution rates.

VEAD		Total Normalized	Total Normalized	Total Distribution	Total
10	GWh MVA		Revenue (\$M)	Customers	
2009	Actual	25,572.8	42,754.7	\$475.2	689,399
2010	Actual	25,607.2	43,273.3	\$519.3	696,729
2011	Actual	25,419.0	43,020.2	\$522.2	705,756
2012	Actual	25,639.2	43,544.5	\$527.9	713,093
2013	Actual	25,213.2	42,658.7	\$529.5	724,144
2014	Bridge	25,018.5	42,712.7	\$539.4	736,974
2015	Test	24,993.3	42,697.2	\$655.1	749,679
2016	Test	25,027.4	42,806.2	\$692.8	763,091
2017	Test	24,841.6	42,631.3	\$754.4	773,850
2018	Test	24,696.9	42,584.4	\$810.5	785,107
2019	Test	24,611.4	42,529.2	\$857.8	796,865

Notes:

1. Total Normalized GWh are purchased GWh (before losses), and are weather normalized to the Test Year heating and cooling degree day assumptions.

2. Total Normalized MVA are weather normalized MVA.

3. Total Distribution Revenue is weather normalized and includes an adjustment for the Transformer allowance.

4. Total Customers are as of mid-year and exclude street lighting devices and unmetered load connections.

The above table shows that Toronto Hydro's load forecast projects a decrease in Total Normalized GWh from 25,213.2 in 2013 to 24,611.4 in 2019, a 2.4% drop. At the same time, total customers are projected to increase from 724,144 in 2013 to 796,865 in 2019, a 10% increase.

Toronto Hydro stated that its load forecast methodology consists of a three-step process which explicitly takes into account historic and forecast CDM impacts. These three steps are: (1) the actual historic cumulative CDM impacts are added back to the system

<sup>&</sup>lt;sup>92</sup> EB-2014-0116 Application E3/T1/S1, p.1 Filed: 2014 Jul 31 Corrected: 2015 Feb 6

purchased energy, (2) the load (gross of CDM) is forecasted based on multifactor regression techniques, and (3) the cumulative forecast CDM impacts are deducted from the gross load forecast to derive the load forecast (net of CDM).

Toronto Hydro further stated that energy forecasts are developed for each rate class separately with peak demand at the rate class level being estimated based on historic relationships between energy and demand and total system load summed from individual rate class loads. The forecast of customers by rate class is determined using time-series econometric methodologies. Revenues are then determined by applying the proposed distribution rates to the rate class billing determinants for the forecast period.

Toronto Hydro stated that the development of individual rate class models allows for greater detail in modelling loads and allows for the different interactions to be modelled independently. All of the regression models use monthly kWh per day as the dependent variable, and monthly values of independent variables from July 2002 through to the latest actual values to determine the monthly regression coefficients.

Toronto Hydro explained that the main drivers of the energy consumption over time are weather, energy conservation activities –both program and natural related as well as calendar, economic and demographic conditions. Toronto Hydro noted that while load impacts related to the CDM program activities are explicitly taken into account prior to and after the modelling, the remainder of the effects are captured through the multivariate regression model.

# CDM Adjustment

Toronto Hydro confirmed that it has explicitly incorporated the impacts of CDM into its load forecast and that the cumulative CDM forecast includes the CDM savings for programs delivered in each year plus the persistence of these programs through subsequent years.

Toronto Hydro stated that the forecasted CDM savings for the 2015 to 2019 period were developed based on the assumption that there will be a continuation of conservation programs throughout the rate filing period as announced in the Conservation First Framework released on March 31, 2014 by the Ministry of Energy.

Toronto Hydro noted that there are significant uncertainties with respect to the timing of CDM savings as there is very little information available regarding the landscape of conservation offerings, the level of funding and target and contribution calculations.

However, Toronto Hydro stated that it is known the new phase of programming will prioritize customer energy savings, moving away from the peak demand focus of the former saveONenergy strategies.

In this context, Toronto Hydro forecasts achieving its required energy savings. This is based on the assumption that it will be responsible for achieving approximately 21% of the provincial total of 7 TWh, or 1.5 TWh, by the end of 2020.

Toronto Hydro stated that the historical and estimated CDM savings used in the load forecast are "gross" numbers and hence include "free riders." Toronto Hydro expressed the belief that "gross" CDM savings are the correct values to apply in the load forecast used to determine billing units. However, with respect to the future lost revenue adjustment variance account (LRAMVA), Toronto Hydro stated its understanding that the CDM applied in this forecast will be the basis for the LRAMVA and that the LRAMVA balance will reflect the difference between estimated and actual CDM savings on a net basis.

Toronto Hydro provided further explanation of its use of gross and net numbers in response to an interrogatory,<sup>93</sup> stating that the load forecast that is used to determine distribution rates most appropriately includes gross CDM savings, since these will contribute to the loads that the distributor ultimately charges rates on. Toronto Hydro stated that it also believed that LRAMVA savings should properly be based on gross CDM savings and had in a previous LRAM application provided its LRAM amounts on that basis. However, as Toronto Hydro understood that LRAMVA guidelines clearly indicate that LRAMVA is to be based on net CDM savings, it accepts that for the purpose of LRAMVA claims.

#### **Discussion and Submission**

OEB 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%. Toronto Hydro provided the following explanation for this apparent anomaly in its evidence<sup>94</sup>:

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

<sup>&</sup>lt;sup>93</sup> EB-2014-0116 3-VECC-32 Filed 2014 Nov 5.

<sup>&</sup>lt;sup>94</sup> EB-2014-0116 Application E3/T1/S1/p. 3 Filed: 2014 Jul 31 Corrected: 2014 Sep 23

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.

OEB staff asked Toronto Hydro<sup>95</sup> whether this situation was entirely the effect of conservation activities, or whether other factors were also involved and if so what they are and how significant they are relative to the conservation effects.

Toronto Hydro responded that the forecast reduction in total kWh between 2014 and 2019 is largely attributed to conservation activities, as excluding the forecast CDM loads, the forecast for total kWh shows a small annual increase of approximately 0.4%. Toronto Hydro stated that this forecast represents the expected continued trend to lower use per customer than in prior periods, even before accounting for the effects of CDM activities.

OEB counsel asked Toronto Hydro during cross-examination to further discuss what was causing this trend. Toronto Hydro stated in response to this question that:

And so I guess the direct answer to your question is that I can't tell you exactly what is leading to the overall average use declines. But we certainly have seen historically, if you just take the load per customer, declines especially in the residential and GS under 50 classes.<sup>96</sup>

OEB staff submits that the forecast decline in Toronto Hydro's load is puzzling in light of the evidence in Toronto Hydro's application of economic growth in the 2015 to 2019 period. For instance, it is stated in the application, when discussing spending on new customer connections that:

According to Economic Indicators data provided by the City of Toronto Economic Development Division, an upward trend in economic growth is reflected in the number of developments being applied for through City zoning applications and building permits. In addition to the baseline amounts, a number of major projects with multi-year construction schedules are considered in the spending forecasts, including the West Don Lands work for the Pan Am Village, the TTC expansion at Leslie and Lakeshore, and several major Metrolinx projects including the Eglinton Light Rail Transit (ELRT) line.<sup>97</sup>

<sup>95</sup> EB-2014-0116 3-OEBStaff-60 Filed 2014 Nov 5

<sup>&</sup>lt;sup>96</sup> EB-2014-0116 Transcript, Vol. 8 p.7 L15 – L20

<sup>&</sup>lt;sup>97</sup> EB-2014-0116 Application E2B/S E5.2/ p. 2

Subsequently, in the same section of Toronto Hydro's evidence, it is stated that Toronto's economy will experience growth over the 2015 to 2019 period:

In addition to the large number of current developments, economic forecasts indicate that Toronto's economy will experience growth over the 2015-2019 period. According to The Conference Board of Canada, the City of Toronto's Gross Domestic Product (GDP) is forecasted to grow by 3.3% in 2015, 2.9% in 2016 and 2.4% in 2017.

Toronto Hydro's evidence<sup>98</sup> also included the table below which shows that the number of high rise buildings under construction in Toronto equals, or exceeds, in some cases by a considerable margin other large cities such as New York Mexico City and Chicago:



FIGURE 3: TORONTO ECONOMIC UPDATE JANUARY 2014 - NUMBER OF HIGH RISE BUILDINGS UNDER CONSTRUCTION

OEB staff submits that given the economic growth trend discussed by Toronto Hydro above and the anticipated increase in Total Customers of roughly 10% in the 2013 to 2019 period Toronto Hydro's forecasted load growth in the same period appears to be lower than might be expected given the evidence contained in the application.

<sup>&</sup>lt;sup>98</sup> EB-2014-0116 Application E2B/SD2/p.4

OEB staff submits that given this anomaly the OEB should use Toronto Hydro's 2013 actual load rather than the 2015 forecast for rate-setting purposes.

OEB staff submits that Toronto Hydro's CDM forecast is appropriate and in conformity with Chapter 2 of the OEB's Filing Requirements. It is OEB staff's understanding that the CDM forecasts provided by class in the application<sup>99</sup> will be used for future LRAMVA recovery applications.

# 6.2 Are the rate classes and their definitions proposed by Toronto Hydro appropriate?

## Background

Toronto Hydro has eight rate classes: (1) Residential, (2) Competitive Sector Multi-Unit Residential, (3) General Service Less Than 50 kW, (4) General Service 50 to 999 kW, (5) General service 1,000 to 4,999 kW, (6) Large Use> 5000 kW, (7) Unmetered Scattered Load and (8) Streetlighting.

Toronto Hydro also has a standby power service. Toronto Hydro noted that in RP-2005-0020, it had received approval from the OEB, on an interim basis, for Standby rates to be applied to generation customers.

Toronto Hydro further noted that in 2013, the OEB had initiated a consultation on the Development of a Standby Rates Policy for Load Displacement Generation (EB-2013-0004), which it had participated in as a member of the working group established by the OEB. However, the results of that consultation have not yet been released by the OEB.

As a result, Toronto Hydro proposed to continue with the interim rates for Standby Generation.

However, given the length of time since these rates were first determined by the OEB to be interim, Toronto Hydro expressed a concern about potential retroactivity. For that reason, Toronto Hydro requested that previous Standby Rates be declared final, but that the Standby rates proposed in the current application be made interim until such time as the OEB concludes its process on Standby Generation.

<sup>&</sup>lt;sup>99</sup> EB-2014-0116 Application E3/T1/S1/p.13 2014 Jul 31 2014 Sep 23.

# Discussion and Submission

OEB staff accepts that Toronto Hydro's rate classes are appropriate. However, where standby rates are concerned, no changes should be made until the OEB addresses this matter on a generic basis. It is not clear from the application the extent to which Toronto Hydro has engaged with customers for whom the standby charge is applicable to ensure the OEB has all applicable information. Accordingly, OEB staff does not support Toronto Hydro's proposal that previous standby rates be declared final at this time.

# 6.3 Are the inputs to the cost allocation model appropriate?

# Background

Toronto Hydro stated that in completing the Cost Allocation model, it had reviewed and updated all of the inputs to the model. Toronto Hydro further stated that the load profiles for each class used in the model for the demand allocators have been updated to reflect the most recent full year of data available (2012) and that the profiles use metered data for each rate class, weather normalized to 2015 heating and cooling degree days.

Toronto Hydro noted that in its EB-2010-0142 decision with respect to the new CSMUR class, the OEB had required it to review each of the assumptions set out in the decision and note any that may require revision at the time of its next cost of service filing. Toronto Hydro stated that it had reviewed the directions from that decision, and had not determined a need for any revisions. Toronto Hydro confirmed that allocations to the CSMUR class have been based on the same assumptions as set out in the OEB's decision.

Toronto Hydro further noted that in the same decision, the OEB had discussed an issue raised by the School Energy Coalition (SEC) related to the allocation of costs and revenues between the CSMUR class and the GS >50 classes depending on whether the CSMUR customers would be considered bulk customers or customers in the CSMUR class. The OEB had directed Toronto Hydro to establish a tracking account to record amounts related to this issue.

Toronto Hydro stated that it considered that a tracking account was unnecessary to address this issue, as it was a cost allocation issue, and effectively there would be no real costs to track. However, Toronto Hydro stated that it did understand the concerns of the OEB and SEC and expressed the belief that estimates of the potential effect of its approved CSMUR class on the costs and revenues allocated to the GS >50 class are best addressed through scenarios using the Cost Allocation Model. Toronto Hydro ran such scenarios and concluded that in the absence of the CSMUR class, the GS 50-999 class rates would be slightly higher.

Finally, Toronto Hydro noted that it had incorporated approved Streetlighting assets and operating expenses into its 2015 Revenue Requirement. For the purposes of cost allocation, it had directly allocated all assets and expenses 95% to the Streetlighting class, and 5% to the Unmetered Scattered Load class.

Toronto Hydro stated that this allocation reflected the fact that these assets are serving only these two classes currently and ensured no other rate classes are allocated these costs. In addition, Toronto Hydro noted that for the streetlighting class 100% of the additional revenue requirement is offset through a direct allocation of the revenues received through the existing Streetlighting contract to Revenue Offsets for the Streetlighting class. The effect is that for these assets and costs, the revenue-to-cost ratio is 1.0.

# Discussion and Submission

OEB staff notes that the OEB had provided two previous directives to Toronto Hydro related to cost allocation. The first was to file a cost allocation model that would disaggregate meter reading costs appropriately into Account 5310 and the second was to review each of the assumptions set out in the EB-2010-0142 Decision and Order when its cost allocation study is refreshed for its next cost of service application.

OEB staff accepts that Toronto Hydro has addressed both of these previous directives from the OEB. OEB staff has no issues with respect to Toronto Hydro's inputs into the cost allocation model.

#### 6.4 Are the proposed revenue-to-cost ratios for all rate classes appropriate?

# Background

Toronto Hydro stated that all of its proposed revenue-to-cost ratios were within the OEB target ranges as is shown in the Table below from Toronto Hydro's evidence<sup>100</sup>:

Poto Close	2011 OEB	20	OEB's Guideline		
Rate Class	Approved	Model	Proposed	Ranges	
Residential	89	94	94	85-115	
Competitive Sector Multi-Unit Residential		110	100		
General Service <50kW	97	90	92	80-120	
General Service 50-999kW	118	119	119	80-120	
Intermediate 1000-4999kW	124	102	102	80-120	
Large Use	116	95	96	85-115	
Streetlighting	71	92	82	70-120	
Unmetered Scattered Load	82	87	89	80-120	

# Discussion and Submission

OEB staff notes that Toronto Hydro's proposed revenue-to-cost ratios are all within the OEB's guideline ranges and accordingly submits that the proposed revenue-to-cost ratios are appropriate.

# 6.5 Are the proposed fixed and variable charges for all rate classes appropriate?

# Background

Toronto Hydro is proposing fixed and variable rates for all rate classes based on the current split of revenue generated through each of these components. Toronto Hydro noted that the OEB has initiated a process to review rate design for the Residential and GS<50 kW rate classes. Toronto Hydro stated that it has not incorporated any of the rate designs as outlined in the Draft Report of the Board at this time but if the OEB issues directions to distributors as a result of that process, it anticipated incorporating those directions at that time.

<sup>&</sup>lt;sup>100</sup> EB-2014-0116 Application E7/T1/S1/p. 7 Filed 2014 Jul 30 Corrected 2015 Feb 6

Toronto Hydro stated that it has maintained the fixed/variable split at 2014 approved ratios for the purposes of designing the fixed and variable components of rates for all years in this application.

Toronto Hydro provided its proposed monthly fixed charges for each customer class in the table below:<sup>101</sup>

	Residential	CSMUR	GS<50 kW	GS 50-999 kW	GS 1000- 4999 kW	Large Use	Streetlighting	USL
CA Model Floor	4.24	3.40	13.78	43.31	82.72	-35.83	0.23	9.53
CA Model Ceiling	19.34	9.32	31.66	86.22	244.36	210.01	10.53	19.32
Current (2014)	18.63	17.35	24.80	36.29	700.68	3,071.47	1.32	4.94
Proposed (2015)	22.72	18.90	30.43	43.63	831.65	3,668.99	1.32	6.12

Toronto Hydro noted that the OEB's Cost Allocation model produces estimates of the floor and ceiling monthly fixed rates for each rate class based on data from the model. Toronto Hydro stated that the proposed fixed rate for the Residential, CSMUR, GS 1000-4999 kW, and Large Use classes is above the model calculated ceiling. For the Residential and CSMUR classes, this is stated as being a result of changes in inputs to the Cost Allocation model as well as maintaining the fixed variable split at current levels. For the GS 1000-4999 kW and Large Use classes, Toronto Hydro noted that the fixed charge has been above the ceiling rate since information from the Cost Allocation model has been provided in 2006. Toronto Hydro further noted that the proportion of total revenue recovered through the fixed rate for the GS 1000-4999 kW and Large Use classes is less than 10%.

#### **Discussion and Submission**

OEB staff submits that the proposed fixed and variable charges for each class are appropriate as Toronto Hydro has maintained the current fixed/variable split at 2014 ratios for the purposes of designing the fixed and variable components of rates for all years in this application.

<sup>&</sup>lt;sup>101</sup> EB-2014-0116 Application E8/T1/S1/p. 6 Filed: 2014 Jul 31 Corrected: 2015 Feb 6

.OEB staff is in agreement with Toronto Hydro's expressed intent to incorporate any directions issued to distributors as a result of the OEB's review of rate design for the Residential and GS<50 kW rate classes at the time those directions are issued and that it is important Toronto Hydro do so. This may result in modifications to the fixed/variable split through the term of the Custom IR. Given the OEB's stated policy direction, OEB staff does not have concerns that certain fixed charges exceed the ceiling from the cost allocation model.

# 6.6 Are the proposed charges for specific and miscellaneous services appropriate?

## Background

Toronto Hydro is requesting the continued use of previously approved OEB standard charges. In addition, as a result of new requirements, Toronto Hydro is also requesting approval for several new Specific Service Charges not included on Toronto Hydro's current Tariff Sheet. Toronto Hydro also proposes to update all the rates or amounts of the Specific Service Charges that it applies to account for the passage of time and more accurately reflect the actual costs of providing these various services.

In response to interrogatory 3-SIA-30, Toronto Hydro provided a summary of all revenue received and forecast from its specific and miscellaneous service charges including new charges (which are shown in green) and changes in existing charges. This is reproduced below:

Specific Service Charge	Current Toronto Hydro Charge Amount	Proposed Toronto Hydro Charge Amount	2012 Actual	2013 Actual		2014 Bridge	2015 Test		2015 Incremental Revenue (8-OEB-83)	
Duplicate invoices for previous billing	\$15	\$25	\$ 7,680	\$ 4,967	\$	5,730	\$	2,860	-\$	2,870
Request for other billing or system information	\$0	\$25	\$ -	\$ -	\$	-	\$	31,000	\$	31,000
Easement letter	\$15	\$25	\$ 18,800	\$ 21,400	\$	16,800	\$	23,101	\$	6,301
Income tax letter	\$15	\$25	\$ -	\$ -	\$	-	\$	-	\$	-
Account history	\$0	\$25	\$ -	\$ -	\$	-	\$	6,000	\$	6,000
Returned cheque charge (plus bank charges)	\$15	\$25	\$ 81,853	\$ 68,785	\$	75,000	\$	113,925	\$	38,925
Account set up charge/change of occupancy charge	\$30	\$35	\$ 2,816,087	\$ 2,740,590	\$	2,550,000	\$	3,811,920	\$ :	1,261,920
Special meter reads	\$30	\$55	\$ -	\$ -	\$	-	\$	-	\$	-
Collection of account charge - no disconnection	\$30	\$55	\$ 3,026,321	\$ 3,075,543	\$	3,299,978	\$	4,969,096	\$ :	1,669,118
Disconnect/Reconnect at meter -during regular hours	\$65	\$120	\$ 260,555	\$ 306,540	\$	280,247	\$	498,048	\$	217,801
Install/Remove load control device - during regular hours	\$65	\$120	\$ 14,170	\$ 585	\$	15,080	\$	18,912	\$	3,832
Disconnect/Reconnect at meter -after regular hours	\$185	\$400	\$ 41,810	\$ 160,105	\$	139,120	\$	319,360	\$	180,240
Install/Remove load control device - after regular hours	\$185	\$400	\$ 3,330	\$ 370	\$	<mark>6,660</mark>	\$	9,920	\$	3,260
Disconnect/Reconnect at pole - during regular hours	\$185	\$300	\$ 9,250	\$ 5,365	\$	1,233	\$	11,152	\$	9,919
Disconnect/Reconnect at pole - after regular hours	\$415	\$820	\$ 7,055	\$ 3,735	\$	1,660	\$	1,920	\$	260
Meter dispute charge plus Measurement Canada fees	\$30	\$55	\$ -	\$ -	\$	1	\$	-	\$	1
Service call - customer owned equipment or customer missed appointment	Actual Cost/ \$0	\$55	\$	\$ -	\$	-	\$	2,000	\$	2,000
Temporary service install & remove – overhead - no transformer	Actual Cost	\$2,040	Note 1	Note 1	Note 1		\$	1,011,840		Note 1
Specific Charge for Access to Power Poles (Wireline	\$22.35	\$92.53	\$ 2,188,788	\$ 2,034,382	\$	2,174,650	\$	8,812,835	\$ (	5,638,185

Note 1: In 2012-2014, Toronto Hydro provided this service on an actual cost basis. As such, the projected 2015 revenue is not considered incremental to total 2014 service charge revenues.

OEB staff notes that the Specific Charge for Access to Power Poles rate shown above was subsequently updated from \$92.53 as shown in the above table to \$80.38. OEB staff estimates that this charge would have the effect of reducing the 2015 revenue from this charge to roughly \$7.7 million with the incremental revenue dropping to around \$5.5 million.

The incremental revenue from the changes proposed by Toronto Hydro only exceeds its materiality threshold in two other cases. These are the "Account set up charge/change of occupancy charge" which produces incremental 2015 revenue of approximately \$1.3 million and the "Collection of account charge – no disconnection" which produces incremental revenue of approximately \$1.7 million.

Toronto Hydro stated that for the Account Setup Charge, the increase it was proposing was lower than that generated by the old methodology. Toronto Hydro noted that unlike other specific service charges, this charge is unique in the sense that it is applied to all customers upon creating a new account and so is neither controllable nor optional. Toronto Hydro further stated that given advancements in technology which allow customers to register for new accounts using its online portal, as well as remote meter reads which no longer require the dispatch of a field crew in all instances, the time estimates incorporated into the old methodology are no longer accurate for this particular service. Accordingly, Toronto Hydro calculated the new rate by applying the labour and

vehicle cost inputs in the same manner as for all other charges, but has also reduced the required vehicle and field time by 75% to reflect the fact that not all transactions require a field visit.

Toronto Hydro stated that for the "Collection of account charge – no disconnection" it had used the current standard formula methodology, updated to include the labour and vehicle rates to reflect Toronto Hydro's forecast values for 2015.

Toronto Hydro also proposed changes to the descriptions of two currently authorized charges. First, for the charge " Disconnect/Reconnect at Meter – During/After Regular Hours," Toronto Hydro stated that it is currently authorized to charge a standard disconnect/reconnect at meter charge (both during and after regular hours) for the reconnection of a meter following disconnection in cases of customer non-payment. Toronto Hydro stated that since it incurs costs for this service regardless of the reason for the disconnection, it requested that it be permitted to apply this charge in all cases (e.g., when a disconnection is requested by a customer, when a disconnection is requested by a landlord for a vacant property after the end of a lease, etc.)

Second, for the charge "Specific Charge for Access to Power Poles (Wireline Attachments)," Toronto Hydro stated that given the OEB's decision to forbear from regulating Toronto Hydro's charges for wireless attachments in EB-2013-0234, it proposed to rename the "Specific Charge for Access to Power Poles" to "Specific Charge for Access to Power Poles" to "Specific Charge for Access to Power Poles" to the revised application of this charge.

Toronto Hydro stated that it currently has two specialized specific service charges on its Tariff Sheet that are no longer required: Specific Charge for Access to Power Poles (Third Party Attachments to Poles) of \$18.55 and Specific Charge for Access to Power Poles (Hydro Attachments on Third Part Poles) of \$22.75. Toronto Hydro explained that both of these charges relate to an expired reciprocal agreement between Toronto Hydro and Bell Canada, which has been superceded by the standard rate of \$22.35 in the case of Bell attachments on Toronto Hydro poles, and a new commercially negotiated rate in the case of Toronto Hydro attachments on Bell poles. As such, Toronto Hydro proposed to remove both of these charges from its Tariff Sheet.

#### **Discussion and Submission**

OEB staff notes that the OEB in Decision and Procedural Order No. 7 established certain steps including the filing of interrogatories on Toronto Hydro's evidence related to the

wireline attachment rate including an oral hearing to be held on April 16, 2015, which is subsequent to the filing date of this submission.

Accordingly, OEB staff makes no submissions at this point in time on Toronto Hydro's proposal for an increase in its wireline attachment rate or for the removal of the two specialized specific service charges presently on its Tariff Sheet related to access to power poles.

OEB staff has concerns with Toronto Hydro's proposal to nearly double reconnection charges for non-payment of accounts during regular hours and more than doubling after hours. OEB staff questions whether or not there are factors other than full cost recovery that should be taken into account in non-payment circumstances.

OEB staff is also concerned that reconnection charges this high may discourage customers from taking an outage for maintenance thereby raising potential safety issues.

Subject to this qualification, OEB staff submits that Toronto Hydro has appropriately justified its proposed changes in its specific service charges.

# 6.7 Are the proposed line losses appropriate?

#### Background

Toronto Hydro noted that in the Settlement Agreement approved by the OEB in Phase II of its ICM Application (EB-2012-0064), it had agreed to evaluate options to measure or estimate actual line losses and the impacts on Account 1588 balances in accordance with the Accounting Procedures Handbook. Subsequent to the Settlement Agreement, the OEB conducted an audit of Toronto Hydro's Group 1 and Group 2 Deferral and Variance accounts (the OEB Audit), which made a finding related to Toronto Hydro's approach of recording variance amounts in account 1588 RSVA Power. To address this finding, Toronto Hydro stated that it has undertaken a significant amount of work to accurately estimate the correct balances in the RSVA accounts, which had been carried out in consultation with OEB Audit Staff and included analyzing and estimating the actual loss factors over the 2009-2013 period.

Toronto Hydro stated that its efforts to address the OEB Audit finding with respect to Account 1588 are ongoing and that because this work is relevant to its undertaking in the

Settlement Agreement to evaluate options to measure or estimate actual line losses and the impacts on Account 1588, it proposes that the current OEB-Approved loss factors be continued until the OEB Audit concludes. Toronto Hydro stated that upon conclusion of the OEB Audit, if changes to the approved loss factor are warranted, it would be its intention to then bring forward a proposal to incorporate the revised loss factor into distribution rates at or before the rate order for 2016 distribution rates.

An OEB staff interrogatory<sup>102</sup> noted that the loss factor pages of both Toronto Hydro's currently approved Tariff of Rates and Charges and its proposed Tariff of Rates and Charges for May 1, 2015 implementation contained a "Billing Determinant" section which is unique to Toronto Hydro. Toronto Hydro was asked to state why it believed this section is necessary to include on the Tariff of Rates and Charges and, in the event the OEB was to determine that this section should be removed in order to conform Toronto Hydro may have had about doing so.

Toronto Hydro responded that the billing determinants had been a part of its OEBapproved rate schedules since 2002 and as such it had continued to include this section on its proposed 2015 rate schedule, but that it would not have any concerns if this section was removed to conform its tariff with those of other distributors.

#### **Discussion and Submission**

OEB staff does not oppose Toronto Hydro's proposal regarding its line losses. However, OEB staff submits that it is concerning that Toronto Hydro would propose over \$2.5B in spending over the next five years and not make an attempt to gauge the impact on line losses. OEB staff submits that when Toronto Hydro provides its update on line losses, that it take into account all relevant factors, not necessarily limited to a variance analysis of actual versus deemed losses. OEB staff notes that with the issuance in December 2014 of the new CDM Requirement Guidelines, distributors are encouraged to explore programs to reduce distribution losses.

OEB staff further submits that to conform Toronto Hydro's tariff to that of other distributors, the "Billing Determinant" section of its loss factor pages should be removed.

<sup>&</sup>lt;sup>102</sup> EB-2014-0116 8-OEBStaff-84

# 7. Rate Implementation

7.1 Is Toronto Hydro's proposal to implement rate and fiscal year synchronization effective January 1, 2016 appropriate?

# Background

Toronto Hydro stated that it is seeking approval in this application to align its Rate Year with its Fiscal Year effective January 1, 2016. Rates for 2015, the utility's rebasing year, are proposed to be effective May 1, 2015. Rates for the first year under the proposed Price Cap would be effective January 1, 2016. Toronto Hydro confirmed that it was not requesting any special treatment for the calculation of 2015 rates (i.e., it is not calculating rates based on recovering the full year of revenue requirement over an eight-month May to December period). Toronto Hydro expressed the belief that neither its customers nor the utility are harmed by this proposed change in rate year.

Toronto Hydro justified the proposed change by noting that its fiscal year is January to December and that as a public debt issuer, it is required to produce public financial statements on a fiscal year basis, and to regularly explain these statements to financial markets (i.e., bond holders, credit rating agencies, short-term creditors) and to the utility's shareholder. Toronto Hydro stated that when revenues received by the utility are not aligned with the costs, presentation of this material can become more complex and less transparent.

Toronto Hydro added that more importantly, having a rate year which begins four months later than the fiscal year often means that rate decisions are not available before the beginning of the year in which Toronto Hydro is making investments and operational decisions and incurring costs. Toronto Hydro stated that the uncertainty over this period makes planning much more difficult, especially in light of the significant capital work the utility is currently undertaking.

Toronto Hydro acknowledged that implementing distribution rates January 1st will introduce an additional annual rate change for customers. However, Toronto Hydro expressed the belief that customers will not be unduly affected, and noted that quarterly rate adjustments for natural gas customers has been an industry norm for some time. Additionally, a number of LDC's have previously been granted approval for moving to a January 1st rate year and Toronto Hydro is unaware of any particular instances of negative feedback. Toronto Hydro expressed the belief that the benefits of rate year synchronization have been well established in the regulatory forum, and is seeking the same treatment.

Toronto Hydro stated that the reason it was not seeking this change for January 1, 2015 implementation was that the current application is being submitted on a schedule which would not likely permit a January 2015 rate implementation date. By requesting that the change occur on January 1, 2016, Toronto Hydro stated that it would avoid the regulatory complexity of interim rates and foregone revenue rate riders for the 2015 rebasing year, which is in the interests of all stakeholders.

#### **Discussion and Submission**

OEB staff submits that Toronto Hydro's proposal to implement rate and fiscal year synchronization effective January 1, 2016 has been adequately justified.

- All of which is respectfully submitted -