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DECISION AND ORDER

EB-2018-0165

TORONTO HYDRO-ELECTRIC SYSTEM LIMITED

**Application for electricity distribution rates beginning January 1,
2020 until December 31, 2024**

BEFORE: Lynne Anderson
Presiding Member

Susan Frank
Member

Michael Janigan
Member

December 19, 2019

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1 INTRODUCTION AND SUMMARY

Toronto Hydro-Electric System Limited (Toronto Hydro) filed a five-year Custom Incentive Rate-setting (Custom IR) application, dated August 15, 2018 (updated September 14, 2018), with the Ontario Energy Board (OEB) under section 78 of the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, (Schedule B) (OEB Act), seeking approval for changes to its distribution rates, to be effective January 1, 2020 to December 31, 2024 (Application).

Toronto Hydro is seeking approval to set its 2020 distribution rates on a cost of service basis. Toronto Hydro is also seeking approval of a Custom Price Cap Index (CPCI) framework to set distribution rates for the period January 1, 2021 to December 31, 2024.¹

Over the 2020-2024 Custom IR term, Toronto Hydro is seeking to recover in rates, through its proposed CPCI formula, a cumulative base revenue requirement of \$4,192.6 million (the CPCI funded revenue requirement).² This compares to an approved CPCI funded cumulative revenue requirement for the 2015-2019 period of \$3,511.3 million.³ This represents an increase of \$681.3 million (or 19.4%). Toronto Hydro's proposed 2020 base revenue requirement reflects a decrease of \$1.1 million (or 0.14%) relative to the 2019 CPCI funded revenue requirement.⁴

The Notice of Hearing was published in Toronto area newspapers in October 2018. The OEB held five in-person community meetings and an online webinar in November and December 2018. The OEB received 15 letters of comment. In addition, ten parties were granted intervenor status in the current proceeding and filed submissions with respect to the Application. The OEB considered the letters of comment and the submissions received by parties in making its determinations in this proceeding.

¹ Exhibit 1B / Tab 4 / Schedule 1 / pp. 1-2.

² Undertaking J1.8. The CPCI funded revenue requirement set out here, based on Undertaking J1.8, includes the updates discussed in the original filing of Undertaking J1.2 (July 2, 2019). The update to Undertaking J1.2 (July 31, 2019) includes an increase to the 2020 revenue requirement of \$0.2 million related to the one-time application costs, which is not reflected here.

³ 1B-Staff-23 / p. 2.

⁴ Undertaking J1.8; and 1B-Staff-23 / p. 2. The 2020 base revenue requirement used here, based on Undertaking J1.8, includes the updates discussed in the original filing of Undertaking J1.2 (July 2, 2019). The update to Undertaking J1.2 (July 31, 2019) includes an increase to the 2020 revenue requirement of \$0.2 million related to the one-time application costs, which is not reflected here.

A summary of some of the OEB's findings in the Decision with respect to the Application are set out below.⁵

- The approved effective date is January 1, 2020, with an implementation date of March 1, 2020.
- The proposed Custom IR framework including the capital (or C) factor is approved with the following adjustments:
 - Stretch Factor of 0.6%
 - Additional Stretch Factor on Capital of 0.3%.
- Toronto Hydro is encouraged to consider an alternative approach to its proposed Custom IR framework in the future.
- The proposed 2020-2024 rate base will be reduced to reflect the application of the average of monthly averages approach for calculating rate base and a \$4 million disallowance associated with the Enterprise Resource Planning (ERP) Phase 1 project.
- The proposed 2020-2024 capital expenditures will be reduced by approximately \$114 million to reflect reductions to the Customer and Generation Connections program, the Area Conversions program, the Reactive and Corrective Capital program, the Fleet and Equipment program and Allowance for Funds Used During Construction (AFUDC).
- The customer-specific energy storage system (ESS) segment of the ESS program is not allowed in regulated rate base and revenue requirement and shall be accounted for separately.
- The proposed 2020 other revenue amount is increased by \$1 million to reflect estimated gains on the disposition of utility property. A new Gain on Sale of Property variance account is established to capture the variance related to gains on the disposition of utility property.

⁵ The detailed findings (including reasons) for all issues are found later in the Decision.

-
- The proposed 2020 operating, maintenance and administration (OM&A) amount is reduced by \$6 million to \$272.2 million.
 - The revenue-to-cost ratio for the residential rate class for the Custom IR term is revised to 100%.
 - The proposal to maintain the status quo policy with respect to vault access is accepted and Toronto Hydro is directed to maintain this policy during the Custom IR term.
 - A new Carillion Insolvency Amounts Receivable Account is established, the methodology for determining the earnings sharing amount is revised, and the proposed continuation of the Derecognition variance account is denied.

While updated forecast bill impacts will not be known until the rate order process⁶, the OEB has approved amendments that will reduce the bill impacts included in the Application.

⁶ As set out under Issue 2.1, the OEB directed Toronto Hydro to update the inflation factor used in its CPCI calculation to reflect the most recent OEB-approved inflation value annually in its Custom IR update applications. As such, the bill impacts are subject to change during the Custom IR term.

2 THE PROCESS

The Application was filed on August 15, 2018 (and updated on September 14, 2018).

A Notice of Hearing was issued on September 28, 2018. Following the Notice of Hearing, the OEB hosted five in-person community meetings in Toronto, all of which were livestreamed, and one citywide webinar, as noted below:

- November 22, 2018 - North York - North York Central Library (afternoon and evening meetings)
- November 26, 2018 - Scarborough - Scarborough Civic Centre
- December 4, 2018 - Downtown Toronto - Central YMCA
- December 5, 2018 - Etobicoke - Royal Canadian Legion
- December 6, 2018 - Citywide Webinar

Also following the Notice of Hearing, the parties listed below were granted intervenor status in this proceeding:

- Association of Major Power Consumers of Ontario (AMPCO)
- Building Owners and Managers Association, Greater Toronto (BOMA)
- Consumers Council of Canada (CCC)
- Distributed Resource Coalition (DRC)
- Energy Probe Research Foundation (Energy Probe)
- Greater Toronto Apartment Association (GTAA)
- Mr. Norman Hann
- Power Workers' Union (PWU)
- School Energy Coalition (SEC)
- Vulnerable Energy Consumers Coalition (VECC)

The final issues list for this proceeding was approved on February 5, 2019.⁷

⁷ Decision on Issues List, Partial Decision on Confidentiality and Procedural Order No. 3 / February 5, 2019.

A further Application Update was filed on April 30, 2019, which provided certain 2018 actual figures and updated certain 2019 and 2020-2024 amounts where the consequential impacts of 2018 actuals were material.⁸

The oral hearing for this proceeding commenced on June 27, 2019 and concluded on July 16, 2019. In total, there were 11 hearings days. Toronto Hydro filed its Argument-in-Chief on August 2, 2019. The OEB received 15 letters of comment and all ten parties that were granted intervenor status and OEB staff filed final submissions in this proceeding. Toronto Hydro filed a reply to submissions of intervenors and OEB staff on September 17, 2019.

The Decision that follows is structured in accordance with the final issues list approved on February 5, 2019.⁹

⁸ Exhibit U / Tab 1A / Schedule 2 / p. 1.

⁹ Decision on Issues List, Partial Decision on Confidentiality and Procedural Order No. 3 / February 5, 2019.

3 GENERAL (ISSUE 1.0)

3.1 Has Toronto Hydro responded appropriately to all relevant OEB directions from previous proceedings (Issue 1.1)?

There were four OEB directions set out in the OEB's Decision and Order with respect to Toronto Hydro's 2015-2019 Custom IR application¹⁰ as follows:

- Customer Engagement
- Loss Adjustment Factors
- Monitoring and Reporting
- Disposition of Retail Settlement Variance Account (RSVA) Balances

Customer Engagement

Background

In the Decision and Order regarding Toronto Hydro's 2015-2019 Custom IR application¹¹, Toronto Hydro was ordered to rectify certain deficiencies with respect to its customer engagement as part of the current Application. Specifically, the OEB stated that Toronto Hydro did not develop its plan in conjunction with its customer engagement activities. Instead, it sought to confirm the plan it had already prepared rather than engaging its customers to ascertain their preferred options.¹² In addition, the OEB agreed with intervenors that Toronto Hydro did not provide its customers sufficient context for the proposed application such as its existing benchmarking ranking and its relative levels of productivity and efficiency.

For its current business plan, Toronto Hydro conducted the customer engagement in two phases. The feedback received in Phase 1 was used to inform the strategic parameters for the business plan and the development of the penultimate plan that was brought back for further customer feedback in Phase 2. The feedback in Phase 2 was used to make further refinements to the business plan.¹³ Overall, the two phase

¹⁰ EB-2014-0116.

¹¹ EB-2014-0116.

¹² EB-2014-0116 / Decision and Order / December 29, 2015 / pp. 7-8.

¹³ Exhibit 1B / Tab 3 / Schedule 1 / pp. 4-5.

customer engagement process allowed customer feedback to inform both the planning and refinement of its business plan. Toronto Hydro stated that it engaged its customers in a robust and enhanced process and that its investment plan is aligned with customer priorities.¹⁴ Toronto Hydro noted that its customers, in all rate classes, generally supported its plan.¹⁵

OEB staff and a few intervenors submitted that Toronto Hydro responded appropriately to this OEB direction.¹⁶ OEB staff stated that the feedback of customers was considered by Toronto Hydro as one input in the overall planning process. OEB staff submitted that, similar to how Toronto Hydro considers customer feedback in its planning process, the OEB should consider the feedback from Toronto Hydro's customers as one input in its decision-making process along with all of the other evidence that has been filed in this proceeding. OEB staff noted that the level of detail provided in a rebasing application is well beyond what could possibly be provided in a customer engagement process.¹⁷

Many intervenors submitted that Toronto Hydro responded appropriately to the direction, but did not accept that the customer engagement process was sufficient to conclude that all customers support Toronto Hydro's rate plan. Specifically, some intervenors argued that Toronto Hydro's customers were not provided the necessary context, or were provided misleading information, in the customer engagement process.¹⁸ Finally, some intervenors noted that it is simply unrealistic for the average residential consumer to understand Toronto Hydro's investment decisions, and the implications regarding the pacing of investments.¹⁹

In addition, some intervenors argued that even Toronto Hydro's most sophisticated customers (1MW or above) were confused regarding what the plan actually entailed and did not understand that the bill impacts presented in the customer engagement process were average annual increases (as opposed to bill impacts for the entire term of the plan).²⁰

¹⁴ Toronto Hydro Argument-in-Chief / pp. 4, 23.

¹⁵ Exhibit 1B / Tab 3 / Schedule 1 / Appendix A / p. 3.

¹⁶ OEB Staff Submission / p. 7; BOMA Submission / p. 2; Energy Probe Submission / p. 4; and VECC Submission / p. 3.

¹⁷ OEB Staff Submission / p. 9.

¹⁸ AMPCO Submission / p. 8; CCC Submission / pp. 6-7; VECC Submission / p. 3; Norman Hann Submission / p. 4; and SEC Submission / p. 37.

¹⁹ CCC Submission / p. 6.

²⁰ SEC Submission / p. 37; and AMPCO Submission / pp. 8-9.

BOMA exhaustively reviewed the customer engagement survey and arrived at the conclusion that the summary statements made with respect to the results of the customer engagement are incomplete, unbalanced and do not present a truly accurate picture of the customers' needs and preferences.²¹ BOMA argued that the customers' concern about price was not adequately recognized when questions about investments were asked without providing the impact on rates of those investments.²²

Some intervenors also argued that the OEB should re-examine the form of customer engagement that is being brought forward in this proceeding (and other proceedings) in order to either relieve utilities of this burden or make the exercise more meaningful. The intervenors noted that the cost of the customer engagement (\$0.45 million) in this proceeding is high.²³

In its reply submission, Toronto Hydro stated that its customer engagement process provided customers with sufficient and accurate information that was necessary to allow customers to provide reliable feedback.²⁴ Toronto Hydro argued that the Phase 1 engagement was a direct response to the OEB direction which required discussions with customers prior to the plan being developed when no details on rate impact or planned investments could be provided. Toronto Hydro's consultant, Innovative Research Group (Innovative), noted in response to the recommendations of more details on historical costs, benchmarking and performance that there is a limited time available from customers so the engagement process must focus where customer feedback is most critical. Contrary to the intervenors' statements that Toronto Hydro did not have broad customer support for their plan, Toronto Hydro indicated that the Phase 2 process demonstrated, "...customers were able to make more informed decisions and a majority ended up supporting the plan."²⁵

²¹ BOMA Submission / p. 41. BOMA argued that the customer engagement summary results reported the combined results of customers that either supported the plan or wanted an accelerated plan (instead of showing the combined results of customers that either supported the plan or wanted a reduced plan).

²² BOMA Submission / pp. 44-45.

²³ VECC Submission / pp. 3-4; and CCC Submission / p. 7.

²⁴ Toronto Hydro Reply Submission / p. 5.

²⁵ Toronto Hydro Reply Submission / pp. 5-6, 12.

Findings

Toronto Hydro appropriately responded to the OEB direction in the 2015-2019 Custom IR decision.²⁶ The customer engagement was a significant improvement from the prior application, including the customer feedback in the development of the business plan. The customer comments were helpful to the OEB's understanding of customers' priorities, particularly the significant concern about the price of electricity delivery. As noted by OEB staff, the feedback of customers was considered by Toronto Hydro as one input, of many, in the overall planning process.

The concern expressed by some intervenors that the customer engagement lacked sufficient detail for customers to make informed comments, or that customers were confused, raised a question of the appropriateness of the customer engagement. The high cost of Toronto Hydro's engagement activities was also raised as a concern. The OEB acknowledges Innovative's observation that finding the correct balance between the level of detail provided and the willingness of customers to engage in a consultation process is difficult as there is only limited time that a customer is able to commit. The OEB finds that Toronto Hydro has achieved the correct balance in their customer engagement in this Application. In future customer engagement initiatives, there may be an opportunity to build on the current level of customer understanding and focus on some areas of particular concern. The OEB does not support more extensive stakeholdering to the extent that it raises the costs of the engagement activities.

Toronto Hydro has met the OEB's objective to gather comments from customers as an input to the planning process. However, it is not reasonable to expect that customers will understand the system investment requirements or priorities in detail. The customer comments must be used within the context of broader considerations including a requirement for continuous improvement, asset condition, system performance and other safety and regulatory requirements.

²⁶ EB-2014-0116 / Decision and Order / December 29, 2015 / pp. 7-8.

Loss Adjustment Factors

Background

Toronto Hydro was ordered to update its loss factors at its next cost of service or Custom IR rate application.²⁷ Toronto Hydro proposed updated loss factors for all rate classes in Exhibit 8 / Tab 1 / Schedule 1 / pp. 9-10.

No party submitted that Toronto Hydro did not respond appropriately to this directive.

Findings

The OEB finds that Toronto Hydro responded appropriately to this directive. The OEB's findings with respect to Toronto Hydro's proposed loss adjustment factors are set out under Issue 7.2.

Monitoring and Reporting

Background

Toronto Hydro was ordered to develop better performance metrics as part of its ongoing customer engagement efforts with the objective of achieving greater conformity with the general intent of the Renewed Regulatory Framework (RRF).²⁸

No party submitted that Toronto Hydro did not respond appropriately to this directive. However, some parties provided submissions detailing certain concerns with respect to Toronto Hydro's proposed 2020-2024 custom scorecard as discussed under Issue 2.2.

Findings

The OEB finds that Toronto Hydro responded appropriately to this directive. However, the OEB has directed that certain changes be made to Toronto Hydro's proposed 2020-2024 custom scorecard as set out under Issue 2.2.

²⁷ EB-2014-0116 / Decision and Order / December 29, 2015 / p. 46.

²⁸ EB-2014-0116 / Decision and Order / December 29, 2015 / p. 47.

Disposition of RSVA Balances

Background

Toronto Hydro was ordered to request disposition of all RSVA balances in its next rate application following the conclusion of the OEB audit.²⁹ Toronto Hydro sought disposition of the noted accounts as part of its 2017 Custom IR update proceeding.³⁰

No party submitted that Toronto Hydro did not respond appropriately to this directive.

Findings

The OEB finds that Toronto Hydro responded appropriately to this directive and sought disposition of the noted accounts as part of its 2017 Custom IR update proceeding.

3.2 Is the proposed effective date of January 1, 2020 appropriate (Issue 1.2)?

Background

Toronto Hydro proposed an effective date of January 1, 2020.³¹ Toronto Hydro filed its Application in August of 2018 in order to allow the OEB sufficient time to process its Application prior to rendering a decision. All parties that filed submissions on this issue agreed with Toronto Hydro that an effective date of January 1, 2020 is appropriate.³²

Findings

Toronto Hydro's rates are approved effective January 1, 2020. Toronto Hydro filed its Application well in advance of its requested effective date. An update to that evidence was planned in advance and filed by Toronto Hydro when expected. Furthermore, Toronto Hydro responded to information requests in a timely manner. The OEB has not

²⁹ EB-2014-0116 / Decision and Order / December 29, 2015 / p. 53.

³⁰ EB-2016-0254.

³¹ Exhibit 1A / Tab 2 / Schedule 1 / p. 2.

³² OEB Staff Submission / p. 10; SEC Submission / p. 77; BOMA Submission / p. 2; Energy Probe Submission / p. 4; CCC Submission / p. 7; and AMPCO Submission / p. 3.

agreed with all aspects of Toronto Hydro's request, however the quality of the evidence assisted the OEB in its assessment of Toronto Hydro's Application.

Given the timing of the Decision, the OEB notes that it will not be possible to implement final rates on January 1, 2020. As such, the OEB finds it appropriate to declare Toronto Hydro's existing rates to be interim until such time that final 2020 rates are implemented. Existing rate riders shall end, as applicable, in accordance with the expiry dates set out in the Tariff of Rates and Charges.

Based on the draft rate order process established later in the Decision, the OEB finds that an implementation date of March 1, 2020 is appropriate. Toronto Hydro shall calculate foregone revenue for base distribution rates for the two-month period between the effective date and the implementation date (i.e. January 1, 2020 to March 1, 2020). The rate riders for deferral and variance account (DVA) disposition will be implemented on March 1, 2020.

3.3 Are the rate and bill impacts resulting from Toronto Hydro's application appropriate (Issue 1.3)?

Background

Toronto Hydro presented bill impacts that showed an average annual increase to base distribution rates of 3.0% for a typical residential customer over the Custom IR term. With the inclusion of the disposition of DVAs through rate riders, the total average bill impact over the Custom IR term was reduced to 1.1%.³³

OEB staff submitted that no rate mitigation is required if the OEB were to accept Toronto Hydro's proposals. However, OEB staff noted that its arguments, if accepted, operate to reduce bill impacts and better smooth the bill impacts over the Custom IR term.³⁴

A number of intervenors submitted that the bill impacts resulting from Toronto Hydro's proposals are not appropriate and should be reduced.³⁵ AMPCO and SEC submitted

³³ Undertaking J7.4. The bill impacts summarized here do not include the updates provided in Undertaking J1.2.

³⁴ OEB Staff Submission / p. 11.

³⁵ BOMA Submission / p. 2; Energy Probe Submission / p. 5; and CCC Submission / p. 8.

that the increase in base distribution rates results in no benefits for customers.³⁶ BOMA provided analysis of the cumulative impact of Toronto Hydro's rate increases over the proposed 2020-2024 Custom IR term (15%-20%) and over the period from 2015-2024 (40%-60%) for various rate classes.³⁷

Toronto Hydro submitted that its proposed rates and resulting bill impacts are reasonable and should be approved. Toronto Hydro stated that the value proposition of its 2020-2024 capital plan was discussed at length during the proceeding. Toronto Hydro stated that the argument made that there is no value resulting from the base distribution rate increase is flawed and oversimplified as is demonstrated by Toronto Hydro's Distribution System Plan (DSP).³⁸

Findings

The OEB concludes that with the adjustments required throughout the Decision, rates and bill impacts will be reasonable on an average basis over the Custom IR term. While updated forecast bill impacts will not be known until the rate order process³⁹, the OEB has approved certain amendments that will reduce the bill impacts included in the Application. These findings include, but are not limited to, a reduction in the capital expenditures, the inclusion of a stretch factor on capital and a reduction to OM&A. Furthermore, under Issue 7.1, the OEB has mitigated the impact of a shift in the revenue-to-cost ratios for the residential customer class resulting from lower usage per customer for that class.

Some intervenors argued that the most important indicator for the OEB to consider is the impacts to the base distribution rates, rather than total bill impacts that include the effect from temporary rate riders. The OEB has considered the impact to the base distribution rates and the expected outcomes from Toronto Hydro's plans, as well as the total bills that customers will experience with rate riders included over the Custom IR term. These rate riders are a temporary credit to customers.

³⁶ AMPCO Submission / p. 2; and SEC Submission / p. 4.

³⁷ BOMA Submission / pp. 3-6.

³⁸ Toronto Hydro Reply Submission / pp. 13-14.

³⁹ As set out under Issue 2.1, the OEB directed Toronto Hydro to update the inflation factor used in its CPCI calculation to reflect the most recent OEB-approved inflation value annually in its Custom IR update applications. As such, the bill impacts are subject to change during the Custom IR term.

While the OEB concludes that these average impacts are reasonable, the OEB is concerned by how the bill impacts fluctuate throughout the term. The preliminary bill impacts (including rate riders) show a bill decrease for 2020 and then bill increases in 2021 to 2024 for most customer classes. As discussed further under Issue 8.2, given the March 2020 implementation date, the OEB requires Toronto Hydro to provide options for the recovery of Group 1 DVAs over ten months from March 1, 2020 to December 31, 2020 and 22 months from March 1, 2020 to December 31, 2021. As part of the draft rate order, the OEB also requires Toronto Hydro to provide one or more alternatives to its proposed approach that would smooth the bill impacts throughout the term (including a consideration of how the disposition of Group 2 DVA balances can be spread over the Custom IR term).

4 CUSTOM INCENTIVE RATE-SETTING (ISSUE 2.0)

4.1 Are all elements of Toronto Hydro's Custom Incentive Rate-setting proposal for the determination of rates appropriate (Issue 2.1)?

Toronto Hydro proposed the continuation of its Custom IR framework as approved in its 2015-2019 Custom IR proceeding.⁴⁰

The proposed Custom IR framework seeks to establish 2020 distribution rates on a cost of service basis. The rates for 2021-2024 would be adjusted annually by Toronto Hydro's proposed CPCI as follows:

$$\begin{aligned} \text{CPCI} &= I - X + C - g; \text{ or} \\ \text{CPCI} &= I - X + C_n - (\text{Scap} * I) - g \end{aligned}$$

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" (or the capital factor) is the difference between:
 - "C_n" a reflection of Toronto Hydro's capital investment needs
 - "Scap (or the scaling factor) * I" is an offsetting reduction required to ensure that the capital factor provides funding only in excess of what is already provided for capital through the inflation factor
- "g" is the growth factor determined by growth in distribution revenue due to changes in load and customer count over the Custom IR term.⁴¹

⁴⁰ Exhibit 1B / Tab 4 / p. 1.

⁴¹ Exhibit 1B / Tab 4 / p. 12.

Below is a summary of Toronto Hydro's proposed 2020 revenue requirement and the proposed inputs for the calculation of the CPCI values, which are used to determine rates for the 2021-2024 period.⁴²

Table 1
2020 Revenue Requirement and Inputs for the 2021-2024 CPCI Calculation

(\$M)	2020	2021	2022	2023	2024	Total
ROE	\$162.0	\$170.4	\$179.1	\$189.3	\$198.9	\$899.7
Interest	\$100.2	\$105.4	\$110.8	\$117.1	\$123.0	\$556.4
Depreciation	\$265.5	\$281.5	\$292.3	\$314.0	\$327.1	\$1,480.5
PILs	\$12.7	\$22.0	\$13.4	\$27.8	\$40.4	\$116.3
Capital-related revenue requirement (CRR)	\$540.5	\$579.3	\$595.6	\$648.1	\$689.4	\$3,052.8
OM&A	\$278.0	\$280.5	\$283.0	\$285.6	\$288.1	\$1,415.2
Revenue Offsets	-\$47.1	-\$47.5	-\$47.9	-\$48.4	-\$48.8	-\$239.6
Non capital-related revenue requirement	\$230.9	\$233.0	\$235.1	\$237.2	\$239.4	\$1,175.6
Base Revenue Requirement (RR)	\$771.4	\$812.3	\$830.7	\$885.3	\$928.7	\$4,228.4

The table below provides the calculation of the proposed CPCI values and the proposed CPCI funded revenue requirement (i.e. the revenue requirement funded in rates) based on the inputs listed above.⁴³

⁴² Undertaking J8.5. This includes the updates discussed in the original filing of Undertaking J1.2 (July 2, 2019). However, there was a minor update to Undertaking J1.2 (July 31, 2019) for the application costs (\$0.2 million) that is not reflected in these amounts.

⁴³ Undertaking J1.8. The 2020-2024 CPCI funded revenue requirement is lower than the total base revenue requirement. The base revenue requirement shown in Tables 1 and 2 forms part of the calculation of the CPCI values. While the CPCI funded revenue requirement is a result of the CPCI formula, which includes certain offsetting adjustments (stretch and growth factors).

Table 2
Calculation of Proposed CPCI Values and CPCI Funded Revenue Requirement
(\$M)

Revenue Requirement	2020	2021	2022	2023	2024	Total
CRR	\$ 540.46	\$ 579.30	\$ 595.57	\$ 648.13	\$ 689.36	\$ 3,052.82
Non-CRR	\$ 230.93	\$ 233.01	\$ 235.10	\$ 237.22	\$ 239.35	\$ 1,175.61
Base RR	\$ 771.39	\$ 812.31	\$ 830.67	\$ 885.35	\$ 928.71	\$ 4,228.43
I		0.0120	0.0120	0.0120	0.0120	
X		0.0030	0.0030	0.0030	0.0030	
Cn		0.0504	0.0200	0.0633	0.0466	
Scap		0.7132	0.7170	0.7321	0.7423	
G		0.0020	0.0020	0.0020	0.0020	
CPCI		0.0488	0.0184	0.0615	0.0447	
CPCI Funded RR		\$ 809.03	\$ 823.94	\$ 874.60	\$ 913.66	\$ 4,192.61

Over the 2020-2024 Custom IR term, Toronto Hydro is seeking to recover in rates, through its proposed CPCI formula, a base revenue requirement of \$4,192.6 million.⁴⁴

Toronto Hydro's proposed Custom IR framework also includes an earnings sharing mechanism (ESM), certain capital-related variance accounts, Z-factor and off-ramp provisions.⁴⁵

The OEB has structured its decision on the proposed Custom IR framework as follows:

- The appropriateness of the proposed Custom IR framework
- The cost benchmarking studies
- The components of the proposed CPCI formula
- The non-CPCI aspects of the proposed Custom IR framework

⁴⁴ Undertaking J1.8. Note that the 2020 revenue requirement is included in the total CPCI funded revenue requirement of \$4,192.6 million for the 2020-2024 Custom IR term (as this is the total amount that Toronto Hydro requested be funded in rates over the term). However, the 2020 revenue requirement is not impacted by the CPCI formula. The CPCI formula only impacts the years 2021 to 2024. In addition, the cited CPCI funded revenue requirement amount includes a proxy for the inflation factor that will be in place in each year over the 2021-2024 period. Toronto Hydro's proposal is to update the inflation factor each year based on the most recent OEB-approved inflation factor.

⁴⁵ Exhibit 1B / Tab 4 / pp. 13-14.

The Appropriateness of the Proposed 2020-2024 Custom IR Framework

Background

Many parties filed detailed submissions that criticized Toronto Hydro's proposed Custom IR framework and argued for specific changes.

OEB staff submitted that the proposed CPCI is not sufficiently distinct from a multi-year cost of service. OEB staff stated that Toronto Hydro, through its CPCI formula, recovers nearly every dollar related to its forecast capital needs (reflected by the increase in the year-over-year capital-related revenue requirement) over the Custom IR term (net of only a small stretch factor). In the current proceeding, the proposed stretch factor of 0.3% results in a \$17.2 million reduction to the total forecast capital need (as reflected by the capital-related revenue requirement). This amounts to an approximate 0.56% reduction to the total 2020-2024 proposed capital-related revenue requirement of \$3,052.8 million.⁴⁶ VECC made a similar argument.⁴⁷

In its reply argument, Toronto Hydro submitted that its proposed Custom IR framework is an allowable option based on the OEB's Report on the RRF⁴⁸ and the OEB's Rate Handbook⁴⁹. Toronto Hydro noted that, if parties wish to challenge Custom IR or its availability as a rate-setting option, an individual utility's rate application is not the appropriate forum. Toronto Hydro further submitted that the claim that Toronto Hydro's proposed Custom IR and a multi-year cost of service are the same (or similar) is false. Toronto Hydro stated that its proposed Custom IR is different than a multi-year cost of service as it shifts risk more squarely on the utility, provides greater protection for customers, decouples rates from costs and includes a comprehensive outcomes framework linked to customer needs and preferences.⁵⁰

OEB staff also submitted that the proposed Custom IR framework does not reflect continuous improvement and does not incorporate a sufficient productivity incentive.⁵¹ AMPCO, supported by other parties, submitted that Toronto Hydro's plan does not build

⁴⁶ OEB Staff Submission / pp. 17-19.

⁴⁷ VECC Submission / p. 4.

⁴⁸ Report of the Board on Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach / October 18, 2012.

⁴⁹ OEB Handbook to Utility Rate Applications / October 2016.

⁵⁰ Toronto Hydro Reply Submission / pp. 22-24.

⁵¹ OEB Staff Submission / pp. 19-23.

in productivity that can be measured in actual dollars.⁵² SEC argued that, if a utility cannot quantify the savings of planned initiatives, then those productivity savings cannot be included in the forecast capital and OM&A budgets.⁵³

In response, Toronto Hydro submitted that through its proposed Custom IR framework, ratepayers get the benefit of productivity achievements in the rebasing year, and a guaranteed up-front productivity adjustment that persists throughout the period. Toronto Hydro stated that, over a ten-year period (2015-2024), its Custom IR framework provides ratepayers with a guaranteed total discount of \$45 million. Toronto Hydro further submitted that its evidence demonstrates that over the 2015-2024 period, its ratepayers not only received significant discounts, they also benefited from improved levels of service.⁵⁴

OEB staff submitted that the proposed Custom IR framework does not incentivize appropriate utility decision-making.⁵⁵ OEB staff further submitted that the need for the proposed C-factor is reduced. OEB staff provided analysis showing that the need for a Custom IR framework (including a C-factor) has reduced for the 2020-2024 period relative to the 2015-2019 period. OEB staff also submitted that Toronto Hydro would receive a level of depreciation expense funding for its in-service additions (which is closely related to capital expenditures), if price-cap incentive rate-setting mechanism (IRM) treatment were applied, that is nearly the same as what all other utilities in the province receive on average.⁵⁶

SEC submitted that the proposed Custom IR framework represents a significant shifting of risk from the utility to ratepayers, compared to other rate-setting options and models, without any corresponding increase in benefits. SEC stated that, at its core, the proposed Custom IR framework is a five-year cost of service for Toronto Hydro's significant capital program, with a limited stretch factor applied to it. While Toronto Hydro's OM&A is adjusted by inflation minus a stretch factor, Toronto Hydro has proposed a symmetrical ESM to true-up any differences beyond a 100 basis-point deadband. SEC stated that this is essentially a true-up of OM&A overspending.

⁵² AMPCO Submission / p. 4; SEC Submission / pp. 30-33; and BOMA Submission / p. 22.

⁵³ SEC Submission / p. 31.

⁵⁴ Toronto Hydro Reply Submission / pp. 51-52.

⁵⁵ OEB Staff Submission / p. 23.

⁵⁶ OEB Staff Submission / pp. 23-29.

SEC compared Toronto Hydro's proposed approach to what is available under a price-cap IRM. Under price-cap IRM, a utility would have no ability to true-up its OM&A, and a utility can only have ratepayers fund additional capital above what would be funded by the test year approvals and growth by way of an incremental capital module (ICM) or an advanced capital module (ACM). SEC submitted that an ICM / ACM does not fund all additional capital, but only projects that are discrete, incremental, necessary, material, and not part of typical annual capital programs. In addition, SEC noted that the OEB only funds eligible projects in an ICM / ACM above a materiality threshold that includes a 10% deadband.⁵⁷

SEC stated that there are many different mechanisms available to the OEB to ensure that risk is more appropriately balanced between the utility (and its shareholders) and ratepayers. Consistent with the RRF, regardless of the approach it takes, the OEB should only approve a Custom IR framework that appropriately allocates the risks and benefits between Toronto Hydro and its customers equitably. SEC submitted that the current plan allocates too much risk (and cost) to customers, without the corresponding benefits.⁵⁸

In its reply argument, Toronto Hydro submitted that assertions that Toronto Hydro's plan includes elements that reduce risk for Toronto Hydro and transfer capital risk to customers do not have a basis in fact or policy, and the OEB should reject them. Toronto Hydro further stated that this type of assertion disregards the reality that there is a category of utilities that, in IR years, have a significant gap between their capital expenditure requirements and capital funding embedded in rates. This fact was at the heart of the OEB's creation of the Custom IR option.⁵⁹

OEB staff, AMPCO, BOMA, CCC, Energy Probe, SEC and VECC all argued for specific adjustments to the proposed Custom IR framework.⁶⁰ PWU supported Toronto Hydro's proposed Custom IR framework.⁶¹

⁵⁷ SEC Submission / pp. 11-12.

⁵⁸ SEC Submission / p. 13.

⁵⁹ Toronto Hydro Reply Submission / p. 24.

⁶⁰ OEB Staff Submission / p. 14; AMPCO Submission / pp. 3-5; BOMA Submission / pp. 6-15; CCC Submission / pp. 8-11; Energy Probe Submission / pp. 5-6; SEC Submission / pp. 6-7; and VECC Submission / pp. 4-8.

⁶¹ PWU Submission / pp. 1-6.

Most parties argued for changes to the proposed stretch factor, the inclusion of an incremental stretch factor on capital, an increase to the growth factor and a change to the ESM calculation methodology. Certain parties argued that the C-factor should not be approved by the OEB.⁶² More specifically, SEC submitted that given the significant problems with the capital plan, no C-factor should be approved by the OEB and rates should be adjusted after 2020 through only the price-cap IRM formula.⁶³

In its reply argument, Toronto Hydro submitted that no changes should be made to its proposed Custom IR framework and the arguments of parties should be rejected based on their lack of merit.⁶⁴ Toronto Hydro also submitted that its proposed ratemaking formula is structurally the same as the one approved in its 2015-2019 Custom IR proceeding.⁶⁵

In addition, Toronto Hydro submitted that the changes to the Custom IR framework proposed by parties result in a severe underfunding of necessary capital expenditures. Toronto Hydro provided detailed analysis providing its view of how the proposed changes to the Custom IR framework impact the funding available for capital expenditures. Toronto Hydro stated that the result of the changes to the Custom IR framework proposed by parties would be a step backwards for customers and the grid that serves them.⁶⁶

BOMA submitted that the OEB should set a deadline after which it will not accept a C-factor as part of a Custom IR proposal from any Ontario utility. BOMA argued that a Custom IR with C-factor treatment of capital is not consistent with the RRF.⁶⁷

OEB staff submitted that, in addition to the specific adjustments to the proposed CPCI, the OEB should signal to Toronto Hydro that it should not expect continued approval of a Custom IR framework that includes a C-factor in future applications. OEB staff stated that, if Toronto Hydro cannot address the framework design issues and provide evidence verifying improved cost performance and need, Toronto Hydro should be encouraged to file a price-cap IRM (with ACM / ICM eligibility for only discrete and

⁶² SEC Submission / pp. 6-7; CCC Submission / p. 11; and AMPCO Submission / p. 5. All of these parties stated that if the OEB determines that a C-factor is appropriate, an incremental stretch factor on capital should be included in the CPCI formula.

⁶³ SEC Submission / pp. 6-7.

⁶⁴ Toronto Hydro Reply Submission / p. 21.

⁶⁵ Toronto Hydro Reply Submission / p. 27.

⁶⁶ Toronto Hydro Reply Submission / pp. 28-38.

⁶⁷ BOMA Submission / p. 15.

material capital projects) or an alternative Custom IR framework that does not include a C-factor cost recovery mechanism.⁶⁸

Toronto Hydro submitted that the argument that the OEB should signal to Toronto Hydro that its next rate period should be set on a different basis than Custom IR should be rejected. Toronto Hydro stated that this argument is effectively asking the OEB panel to either make changes to generic policy through a particular utility's rate application or to fetter the discretion of a future panel, both of which are inappropriate. Toronto Hydro further stated that it disagrees with the submissions of parties that the OEB should use the Decision to send a message to the sector. Toronto Hydro stated that, instead, subsequent to the current proceeding, there would be value in a generic review of OEB ratemaking policy.⁶⁹

Finally, Toronto Hydro noted that in replying to the submissions of parties with respect to need for the Custom IR framework and the CPCI factors, the risks associated with the seemingly interchangeable elements of capital-related revenue requirement, in-service additions and capital expenditures is apparent.

Traditionally, the OEB ratemaking process, as it pertains to funding for capital investments, is centered on capital expenditures as evidenced by the Chapter 2 and Chapter 5 Filing Requirements. To avoid unintended consequences related to changes to the Custom IR framework as proposed by parties, Toronto Hydro recommended two approaches.

The first approach would be to only make a finding with respect to the capital expenditures for the rebasing year and establish an annual average capital expenditure amount for the outlying years.

The second approach would be to create a safety net in the Decision, in which the OEB would make an overarching ruling that, "Notwithstanding the specific comments in this Decision, and recognizing the complex interplays of the various rate-setting elements in Custom IR application, the OEB's determination is that Toronto Hydro's rates should fund [capital expenditures] of no less than \$517M in 2020 and no less than an annual average of \$574M in the outlying years."⁷⁰ Toronto Hydro stated that the

⁶⁸ OEB Staff Submission / p. 31.

⁶⁹ Toronto Hydro Reply Submission / pp. 20, 49.

⁷⁰ Toronto Hydro Reply Submission / p. 49.

implementation of either of these recommendations would provide clarity to all parties and allow parties to back-solve to the intended results of the Decision in the draft rate order process.⁷¹

Findings

Toronto Hydro's proposed use of a Custom IR framework with a CPCI formula is accepted. The OEB acknowledges that several parties were critical of the need for a Custom IR framework. However, the OEB accepts that utilities have the option as to what approach to incentive regulation best suits the situation for the utility and its customers.

The RRF objectives of customer-focused outcomes and continuous improvement were not particularly well serviced under Toronto Hydro's 2015-2019 Custom IR framework. Toronto Hydro made significant investments in its system resulting in increases to rates and declining cost performance. The OEB will be making several changes to Toronto Hydro's Custom IR proposal to increase compliance with the objectives set out in the RRF.⁷²

Several intervenors noted that Toronto Hydro's Custom IR framework proposal provides little difference in the revenues relative to a multi-year cost of service approach. The manner in which the costs associated with capital programs are recovered was identified by SEC as transferring the capital risk to customers. Toronto Hydro indicated that its Custom IR approach places risk more squarely on the utility, provides greater protection for customers, decouples rates from costs and includes a comprehensive outcomes framework linked to customer needs / preferences. The OEB does not agree that the proposed Custom IR framework provides the benefits to ratepayers suggested by Toronto Hydro compared to a standard IRM application.

The need for a Custom IR approach was challenged by OEB staff. OEB staff used several approaches to test the need for the proposed Custom IR including comparisons to IRM and levels of approved depreciation expense available to fund capital expenditures. OEB staff's analysis concluded that a Custom IR treatment is less required at this time and will likely be even be less needed in the future.

⁷¹ Toronto Hydro Reply Submission / pp. 48-49.

⁷² Report of the Board on Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach / October 18, 2012.

The lack of productivity improvement in Toronto Hydro's application was a common theme among intervenors. The suggestions to address this concern included increasing the stretch factor; applying an incremental stretch factor to capital; increasing the growth factor; rejecting the C-factor; and modifying the symmetrical ESM. Finally, SEC submitted that an IRM with an ICM / ACM would encourage more focus on capital productivity. SEC noted that an ICM / ACM does not fund all additional capital, but only projects that are discrete.

Toronto Hydro indicated that intervenors are asking the OEB panel to either make changes to generic policy through a particular utility's rate application or to fetter the discretion of a future panel. Toronto Hydro also submitted that its proposed ratemaking formula is structurally the same as the one approved in its 2015-2019 Custom IR proceeding. The OEB notes that the Custom IR approach taken has required extensive evidence and time to consider the details provided. Toronto Hydro is encouraged to consider an alternative approach in the future that might be more efficient in establishing the revenue requirement for the base year and following years as well as meeting OEB RRF objectives, and improving the balance of risk between customers and the utility. Toronto Hydro should not assume that future panels will continue to accept Toronto Hydro's current proposed Custom IR framework.

The OEB agrees with Toronto Hydro that the decision on the Custom IR framework and the CPCI factors are related to the consideration of in-service additions and capital expenditures. The OEB has ensured that its findings on the Custom IR framework and on in-service additions and capital expenditures under Issue 3.2 were considered in parallel.

The OEB will address each component of the proposed CPCI formula (i.e. inflation factor, base productivity, stretch factor, C-factor and growth factor) in detail later in this section of the Decision. The non-CPCI aspects of the Custom IR framework (i.e. ESM, capital-related variance accounts, Z-factor and off-ramps) will also be addressed later in this section of the Decision.

The Cost Benchmarking Studies

Background

Toronto Hydro stated that its proposed Custom IR framework is supported by robust evidence, including internal and external benchmarking analyses. Toronto Hydro stated that benchmarking is a fundamental requirement of a Custom IR application and its evidence demonstrably meets and exceeds the standard. Toronto Hydro noted that it filed 21 external assessments and reports, six of which are benchmarking analyses.⁷³ These reports support the proposed plans and programs, demonstrate continuous improvement and offer the OEB an independent perspective of Toronto Hydro's needs, costs and performance.⁷⁴

The arguments made by parties with respect to the Custom IR framework generally focused on three benchmarking studies.⁷⁵ The first is the total cost benchmarking study completed by Power System Engineering, Inc. (PSE) filed by Toronto Hydro. The second is the total cost benchmarking study completed by OEB staff's consultant, Pacific Economics Group Research LLC (PEG). The third is the unit cost benchmarking study completed by UMS Group filed by Toronto Hydro.

The discussion regarding the appropriate stretch factor as set out in the PSE and PEG reports is discussed later in the Decision. This section more generally focuses on Toronto Hydro's total and unit cost performance based on the relevant benchmarking studies.

PSE provided the following table that shows a comparison of the results of both PSE's and PEG's studies.⁷⁶

⁷³ The OEB notes that seven reports are listed under the heading of "External Benchmarking Reports" in Toronto Hydro Argument-in-Chief / Appendix A.

⁷⁴ Toronto Hydro Argument-in-Chief / pp. 13, Appendix A.

⁷⁵ The OEB notes that some parties made submissions that refer to other benchmarking studies in their arguments on capital expenditures and employee compensation.

⁷⁶ Exhibit M3 / p. 4. PSE stated that the column titled, "PEG TC Results (2012 Capital Level)" shows the updated PEG results from its interrogatory responses.

Table 3
PSE Total Cost Results vs. PEG Total Cost Results

Year	PSE TC Results	PSE—Average Results Prior 3 Years	PEG TC Results (2012 Capital Level)	PEG—Average Results Prior 3 Years
2015	-18.4%		-7.6%	
2016	-15.7%		-3.1%	
2017	-13.8%		-0.2%	
2018	-10.5%	-16.0% (SF=0.15%)	3.5%	-3.6% (SF=0.30%)
2019	-9.3%	-13.3% (SF=0.15%)	4.8%	0.1% (SF=0.30%)
2020	-7.2%	-11.2% (SF=0.15%)	7.5%	2.7% (SF=0.30%)
2021	-5.5%	-9.0% (SF=0.30%)	9.4%	5.3% (SF=0.30%)
2022	-3.3%	-7.3% (SF=0.30%)	11.8%	7.2% (SF=0.30%)
2023	-1.6%	-5.3% (SF=0.30%)	13.8%	9.6% (SF=0.30%)
2024	-0.1%	-3.5% (SF=0.30%)	15.4%	11.7% (SF=0.45%)
CIR Avg.	-3.5%		+11.6%	

OEB staff, SEC, BOMA, VECC, CCC, and AMPCO all submitted that the total cost benchmarking studies completed by PSE and PEG show declining cost performance over time.⁷⁷

SEC raised a number of concerns with respect to the methodology employed by PEG and PSE in determining Toronto Hydro's cost performance relative to the benchmark. SEC stated that Toronto Hydro has been one of the poorest performers in the province based on the OEB's generic benchmarking.

SEC noted that, in the 2015-2019 Custom IR proceeding⁷⁸, Toronto Hydro argued that it was simply different from other distributors due to its urban core responsibilities. As such, Toronto Hydro thought it was reasonable to add an urban core variable to the benchmarking analysis with the result that it did not look like a poor cost performer. The new variable was criticized by OEB staff's expert, PEG, at that time and was ultimately not accepted by the OEB.

⁷⁷ OEB Staff Submission / pp. 20-21; SEC Submission / pp. 26-27; BOMA Submission / p. 8; VECC Submission / p. 6; CCC Submission / p. 11; and AMPCO / p. 4.

⁷⁸ EB-2014-0116.

SEC stated that, in the current proceeding, Toronto Hydro's expert, PSE, has again created a new more sophisticated congested urban variable to allow its external benchmarking standard to be easier to achieve. With this variable, Toronto Hydro is not a poor performer. In fact, it becomes a strong performer. Although its performance is getting worse and converging towards the expected costs, according to PSE it will, until the end of the current Custom IR period, keep its costs below the expected costs in the benchmark. SEC noted that PEG, while critical of PSE's variable, included a more moderate version of the congested urban variable in its benchmarking analysis.

SEC performed detailed analysis of the impact that both PSE's and PEG's version of the congested urban variable has on expected cost. SEC submitted that the congested urban variable included in PSE's model increased expected costs by a consistent 69%, while the congested variable in PEG's model increased expected costs by 27%.

SEC stated that it is intuitive that urban utilities may have specific challenges that increase their costs. It is not intuitive that the incremental cost of being in a big city is 69%, or even 27%. As such, SEC submitted that Toronto Hydro's position that it is merely converging on the benchmark is not credible. SEC submitted that, without a large increase in the benchmark level, Toronto Hydro remains a poor cost performer and Toronto Hydro's suggestion that the OEB treat it as a good cost performer is not reasonable.⁷⁹

In its reply argument, Toronto Hydro submitted that both experts, PSE and PEG, agree that benchmarking Toronto Hydro using econometrics should include comparisons with utilities that serve large American cities, incorporate a congested urban variable, and various other elements. Toronto Hydro stated that the experts arrived at very similar conclusions that may be the most aligned conclusions that the experts have arrived at in any OEB proceeding. Toronto Hydro submitted that the expertly prepared PSE evidence is of exceptional quality, and more than meets the standard for the OEB to rely on in setting rates and it is the best available evidence.⁸⁰

Toronto Hydro filed a unit cost benchmarking study by UMS Group that benchmarked Toronto Hydro's capital construction and maintenance costs for major asset categories and maintenance programs. The results demonstrate that Toronto Hydro is a better

⁷⁹ SEC Submission / pp. 22-26.

⁸⁰ Toronto Hydro Reply Submission / pp. 53-54.

than average cost performer on 10 of the 11 categories benchmarked.⁸¹ Toronto Hydro stated that the unit cost benchmarking study was filed in response to the OEB's specific guidance in its 2015-2019 Custom IR proceeding.⁸²

OEB staff, SEC, BOMA, VECC, and Norman Hann filed various criticisms of the unit cost benchmarking completed by the UMS Group.⁸³

SEC noted that UMS Group makes a number of adjustments to the data. SEC stated that there are two categories of adjustments to the data. The first ensures that the data is comparable across the peer group. SEC raised no concerns with these adjustments. The second category of adjustments reflects factors that UMS Group believes impact the cost for the utility to replace or undertake an activity. These include relative regional cost differences, weather / climate, population density, vegetation, underground utility congestion and other external factors. SEC argued that, while it does not dispute that many of these factors impact costs, UMS Group has used specific calculations or has translated qualitative factors into arbitrary quantitative adjustments. SEC argued that these adjustments cause significant changes in costs for the peer distributors and are not based on empirical research.

SEC submitted that if only the more basic adjustments (i.e. exchange rate, unit of measurement, and accounting) are considered, then Toronto Hydro's costs are higher than the median in 10 of the 11 categories.⁸⁴

OEB staff filed similar arguments to SEC noting that the normalizations completed required a great deal of judgement on behalf of UMS Group. OEB staff concluded that regardless of where one lands on the normalizations applied by UMS Group, the study shows that Toronto Hydro has room for improvement in terms of unit cost performance.⁸⁵

BOMA noted that UMS Group did not audit the unit cost data as part of the study. In addition, BOMA raised concerns about the peer group used in the study.⁸⁶

⁸¹ Exhibit 1B / Tab 2 / Schedule 1 / Appendix B / pp. 7-8 and 16-17.

⁸² Toronto Hydro Reply Submission / p. 56.

⁸³ OEB Staff Submission / pp. 21-23; SEC Submission / pp. 51-54; BOMA Submission / pp. 31-33; VECC Submission / p. 5; and Norman Hann Submission / pp. 6-7.

⁸⁴ SEC Submission / pp. 52-53.

⁸⁵ OEB Staff Submission / pp. 21-22.

⁸⁶ BOMA Submission / pp. 32-33.

In its reply argument, Toronto Hydro submitted that professional judgement is an inherent part of designing benchmarking assessments. Toronto Hydro referenced a response from its expert at the Oral Hearing that supported the normalization methodology.

Toronto Hydro also submitted that the UMS Group confirmed that Toronto Hydro's unit cost performance is consistent with its peers. Further, UMS Group noted that Toronto Hydro has initiatives in place to further improve, which is unlike many of its peers.⁸⁷

Findings

The OEB notes that Toronto Hydro filed several cost benchmarking studies and there was extensive examination of these studies in interrogatories and oral evidence. In addition, these studies were the focus of many submissions. In an attempt to compare Toronto Hydro's performance to other utilities, the experts introduced adjustments to normalize Toronto Hydro's cost performance. An updated, improved, congested urban variable was introduced by PSE and used by PEG. As noted by SEC, this variable significantly improved Toronto Hydro's cost benchmarking performance. The OEB accepts that a well-constructed congested urban variable may be appropriate for Toronto Hydro. However, the OEB concludes that the congested urban variable needs further research and refinement before it can be accepted as a meaningful adjustment to the assessment of cost benchmarking performance. Similarly, the adjustments made by UMS Group changed Toronto Hydro's benchmark data from being poorer than the median in 10 of the 11 categories to a better than average cost performer on 10 of the 11 categories benchmarked. Given the considerable variability of cost performance, it is difficult for the OEB to arrive at any specific conclusions based on the cost benchmarking.

The only conclusion that is clear is that the benchmark performance has deteriorated considerably in the past and is expected to continue to deteriorate over the Custom IR term according to both PSE and PEG. The OEB finds that Toronto Hydro needs to be more aggressive in its search for increased productivity. Accordingly, the OEB has increased the stretch factor in the CPCI as explained in the following section.

⁸⁷ Toronto Hydro Reply Submission / pp. 56-58.

The Components of the Proposed CPCI Formula

In the sub-sections that follow, the OEB provides its findings on each of the components of the proposed CPCI formula.

Inflation Factor

Background

Toronto Hydro proposed to use the OEB's existing two-factor Input Price Index (IPI) for electricity distributors, which is updated and published annually. The IPI is a weighted average of labour (30%) and non-labour (i.e. capital and materials) annual price changes based on data published by Statistics Canada. Toronto Hydro proposed to update the inflation factor used in its CPCI calculation at the draft order stage to reflect the most recent OEB-approved inflation value and in each of its annual Custom IR update applications.⁸⁸

Toronto Hydro indicated that a change in the inflation calculation methodology as a result of any generic review for electricity distribution rate-setting methodologies would have to be reviewed at the time that the change is made to determine whether it should apply to its CPCI calculation.⁸⁹

OEB staff, and some intervenors, submitted that they had no concerns with Toronto Hydro's proposals with respect to the inflation factor.⁹⁰

SEC and CCC agreed with Toronto Hydro's proposal to use the OEB's approved inflation factor. However, these parties submitted that, if the OEB were to change the inflation calculation methodology as part of a generic review, the new inflation calculation methodology should apply to Toronto Hydro.⁹¹

In its reply argument, Toronto Hydro submitted that its plan is a set of programs that need to be funded through the inflation factor and other ratemaking provisions. If the

⁸⁸ Exhibit 1B / Tab 4 / Schedule 1 / p. 5.

⁸⁹ 1B-Staff-18; and Oral Hearing Transcripts / Vol. 7 / p. 140-141.

⁹⁰ OEB Staff Submission / p. 34; BOMA Submission / p. 6; VECC Submission / p. 5; and AMPCO Submission / p. 3.

⁹¹ SEC Submission / pp. 13-14; and CCC Submission / p. 8.

inflation factor funding were to be reduced due to changes in the OEB's inflation factor, Toronto Hydro would likely need to change its plan.

Toronto Hydro submitted that rather than waiting for the OEB to consider this issue in its next rebasing application, it would be prudent for the OEB to consider the issue at the next available opportunity. For example, the OEB might establish a variance account to ensure that Toronto Hydro can continue to work its plan, or the OEB might decide that greater or lesser funding should drive corresponding changes to the outcomes on the performance scorecard.⁹²

Findings

The OEB finds that Toronto Hydro has appropriately incorporated the OEB's two-factor IPI into its CPCI formula. The OEB also agrees with Toronto Hydro's plan to update the inflation factor used in its CPCI calculation at the draft order stage to reflect the most recent OEB-approved inflation value and in each of its annual Custom IR update applications.

Intervenors' suggestion that Toronto Hydro be forced to modify the inflation factor consistent with a generic study are not accepted at this time. If and when a generic study modifies the approach to the inflation factor, that study will advise how and when the revised inflation factor should be used.

Productivity Factor and Stretch Factor

The X-factor component of the proposed Custom IR framework includes both a base productivity factor and a stretch factor.

Productivity Factor

Background

Toronto Hydro proposed to use the base productivity of 0%, as approved by the OEB for price-cap IRM.⁹³ Toronto Hydro indicated that a change in the base productivity amount as a result of any generic review for electricity distribution rate-setting

⁹² Toronto Hydro Reply Submission / pp. 39-40.

⁹³ Exhibit 1B / Tab 4 / Schedule 1 / p. 6; and EB-2013-0379 / Supplemental Report / November 2013.

methodologies would have to be reviewed at the time that the change is made to determine whether it should apply to Toronto Hydro's CPCI calculation.⁹⁴

OEB staff and some intervenors submitted that they have no concerns with respect to Toronto Hydro's proposed base productivity factor.⁹⁵

SEC submitted that the OEB should consider a base productivity factor of 0.31%. SEC stated that PEG had recently conducted research calculating the productivity trend of US distributors. PEG found that there is a positive annual productivity trend of 0.45% in the US distributor sector for the years 1988-2014 and 0.39% for a more recent 1996-2014 sample period. In another cited study, PEG found that a sample of utilities had a 0.43% productivity trend for the 1996-2016 period, and for utilities in the Northeast US it was 0.31% per year.

SEC concluded that a productivity factor of 0.31% could be considered as it is similar to what PEG has found with respect to US utilities and represents the lowest of the cited amounts in those studies. If Toronto Hydro wants to compare itself to mainly US utilities for stretch factor purposes, then it should do so for the setting of its productivity factor.⁹⁶

In its reply argument, Toronto Hydro submitted that there would be lasting practical consequences if the OEB were to accept SEC's proposal. Toronto Hydro noted that the RRF applies the base productivity factor on an industry-wide basis for all rate-setting options and the appropriate forum to re-examine the OEB's base productivity factor policy is in a generic proceeding.⁹⁷

If the CPCI funding were to be reduced due to changes in the OEB's base productivity amount based on a generic review, Toronto Hydro would likely need to change its plan. Toronto Hydro submitted that the OEB might establish a variance account to ensure that Toronto Hydro can continue to work its plan, or the OEB might decide that greater or lesser funding should drive corresponding changes to the outcomes on the performance scorecard.⁹⁸

⁹⁴ 1B-Staff-19; and Oral Hearing Transcripts / Vol. 7 / p. 141-142.

⁹⁵ OEB Staff Submission / pp. 34-35; BOMA Submission / p. 6, 11; VECC Submission / pp. 5-6; and Energy Probe Submission / p. 6.

⁹⁶ SEC Submission / p. 16.

⁹⁷ Toronto Hydro Reply Submission / pp. 41-42.

⁹⁸ Toronto Hydro Reply Submission / p. 41.

Findings

The OEB agrees that it is appropriate for Toronto Hydro to apply a 0% base productivity factor consistent with price-cap IRM. The OEB will not introduce a change in the base productivity or the method to calculate the base productivity in this proceeding. The recent research by PEG has not been sufficiently tested to allow the OEB to adopt it at this time.

Stretch Factor

Toronto Hydro and its consultant, PSE, have proposed a stretch factor of 0.3%.⁹⁹ OEB staff's consultant, PEG, proposed a stretch factor of 0.45%.¹⁰⁰ These both represent a change from the 0.6% stretch factor approved for Toronto Hydro's previous Custom IR plan for 2015-2019.¹⁰¹

OEB staff submitted that the stretch factor applicable within the CPCI formula should be 0.45%. This was supported by BOMA and Energy Probe.¹⁰² OEB staff submitted that this is the stretch factor recommended in the PEG evidence.¹⁰³ In addition, OEB staff recognized that there were some concerns that emerged and were contested over the course of the current proceeding with respect to the total cost benchmarking undertaken by the experts (PSE and PEG). As such, OEB staff submitted that a 0.45% stretch factor is reasonable as it also reflects an average of Toronto Hydro's proposed stretch factor 0.3%, PEG's recommended stretch factor 0.45% and the OEB's most recent generic stretch factor assigned to Toronto Hydro of 0.6%.¹⁰⁴

SEC, VECC and AMPCO submitted that the stretch factor applicable to the CPCI formula should be 0.6%.¹⁰⁵

As discussed previously, SEC raised concerns with respect to the impact that the congested urban variable has on the cost benchmarking that was completed by the experts.¹⁰⁶ SEC also submitted that the 0.3% stretch factor proposed by Toronto Hydro

⁹⁹ Exhibit 1B / Tab 4 / Schedule 1 / pp. 6-7.

¹⁰⁰ Exhibit M1 / pp. 9, 61.

¹⁰¹ EB-2014-0116 / Decision and Order / December 29, 2015 / p. 19.

¹⁰² OEB Staff Submission / pp. 34-35; BOMA Submission / p. 6, 11; and Energy Probe Submission / p. 6.

¹⁰³ Updated Exhibit M1 / PEG Report.

¹⁰⁴ OEB Staff Submission / p. 35.

¹⁰⁵ SEC Submission / pp. 6, 14-16; VECC Submission / p. 6; and AMPCO Submission / pp. 4-5.

¹⁰⁶ SEC Submission / pp. 21-26.

is contrary to the OEB's Rate Handbook. In setting the productivity factor, the OEB was clear in its expectation that it should include a stretch factor that is no less than the OEB's stretch factor for price-cap IRM.¹⁰⁷ SEC noted that the OEB imposed a stretch factor of 0.6% in the 2015-2019 Custom IR proceeding, which equaled the OEB-approved productivity and stretch factor at the time.¹⁰⁸

VECC submitted that a 0.6% stretch factor is reasonable for Toronto Hydro as it is achievable within its current revenue requirement framework and represents a reasonable expectation for improvements in cost efficiency.

VECC submitted that the two experts (PSE and PEG) argue as between 0.3% and 0.45% for the stretch factor but both outcomes are presented on the basis of an unwarranted degree of accuracy of the models. It is the very nature of econometric modelling that it is inherently inaccurate. The basis of the test of reasonableness that the OEB should apply is in the assessment of the resulting outcome and whether what is provided offers the utility with a reasonable opportunity to achieve the approved rate of return. Toronto Hydro has a revenue requirement in the order of \$800 million. VECC submitted that within that envelope, it has numerous opportunities to achieve its targeted rate of return. VECC noted that Toronto Hydro was largely able to achieve and often exceed the OEB allowed rate of return with a 0.6% stretch factor historically.¹⁰⁹

AMPCO submitted that the OEB should approve a stretch factor of 0.6% given that Toronto Hydro continues to be a poor cost performer, and Toronto Hydro's plan does not build in productivity that can be measured in actual dollars.¹¹⁰

CCC submitted that the X-factor (combined base productivity and stretch factor) should be 1.0%. CCC stated that a 0.3% stretch factor does not provide sufficient upfront benefit to ratepayers over the term of the plan and Toronto Hydro's proposal is inconsistent with the Rate Handbook. CCC submitted that the X-factor should be 1.0% in order to allow for ratepayers to benefit from expected future productivity savings.¹¹¹

PWU submitted that the stretch factor should be 0.15% and no higher than 0.3%. PWU submitted that PSE's results indicate three-year average relative cost performance is

¹⁰⁷ OEB Handbook to Utility Rate Applications / October 2016 / p. 26.

¹⁰⁸ SEC Submission / p. 15.

¹⁰⁹ VECC Submission / p. 7.

¹¹⁰ AMPCO Submission / pp. 4-5.

¹¹¹ CCC Submission / pp. 9-10.

below -10% and Toronto Hydro should therefore be assigned a 0.15% stretch factor. PEG's results indicate average historical cost performance and a stretch factor of 0.3%. PWU submitted that, regardless of which study the OEB prefers, the maximum stretch factor applicable to Toronto Hydro is 0.3%. A stretch factor of 0.45% (as advocated by OEB staff) would be inconsistent with past practice and contrary to the OEB's policy on stretch factor derivation.¹¹²

In its reply argument, Toronto Hydro submitted that the OEB's generic benchmarking that produces the 0.6% stretch factor is not part of the record. There is no evidence that it produces a result that should be used in any way by the OEB in determining the appropriate stretch factor to apply to Toronto Hydro. Toronto Hydro submitted that all of the evidence in this proceeding is that the generic benchmark and its 0.6% assessment are not reasonable. Toronto Hydro submitted that the PSE and PEG benchmarking evidence in this proceeding is expert and thoroughly tested. There is only an evidence-based determination of a stretch factor of 0.3% or 0.45%.

With respect to the PSE finding of 0.3%, Toronto Hydro submitted that neither OEB staff nor the intervenors have demonstrated that PSE's methodology or result is not sufficient to determine the correct stretch factor. Toronto Hydro submitted that the OEB's test for rate application evidence is reasonableness. Given the close alignment in the final methodologies of PSE and PEG, and the close proximity of the results of their benchmarking reports, Toronto Hydro submitted that the PSE evidence is reasonable and therefore meets the appropriate standard of review for ratemaking. Toronto Hydro argued that the OEB should rely on the PSE evidence to establish the stretch factor.

Finally, Toronto Hydro noted that the stretch factor is based on forecasted costs run through the econometric model. As such, Toronto Hydro submitted that, in the event the Decision sets out funding that reduces the costs of the plan, the model should be updated during the draft rate order process. Toronto Hydro submitted that PSE should re-run its model to determine whether the implications of the Decision result in a stretch factor of 0.3% or some other value.¹¹³

¹¹² PWU Submission / pp. 2-3.

¹¹³ Toronto Hydro Reply Submission / pp. 42-43.

Findings

The OEB directs a stretch factor of 0.6% to be applied in Toronto Hydro's CPCI calculation.

The stretch factors recommended by the various parties range from 0.15% to 0.6%. A 0.3% stretch factor is based on the evidence provided by PSE. PEG's adjusted model yielded a stretch factor of 0.45%. The OEB concluded above that it cannot rely on the congested urban variable until there is further research and refinement of it. Therefore, the recommendations for the stretch factor provided by PSE and PEG are not accepted. The August 2019 benchmark report by PEG indicated that Toronto Hydro's stretch for 2020 under IRM should be 0.6% based on the OEB's generic benchmarking approach.¹¹⁴ This generic approach to cost benchmarking has been used by the OEB for rate-setting for electricity distributors every year since 2014. For the 2015-2019 Custom IR term, the stretch factor was set at 0.6%.¹¹⁵

In the previous section on benchmarking, the OEB stated that a deterioration in cost competitiveness was noted by both PSE and PEG. Reducing the stretch factor below 0.6% is inconsistent with the deterioration experienced in recent years and forecasted to continue in the future. While a utility can recommend a different stretch factor in a Custom IR, as SEC noted, the OEB was clear in the Rate Handbook that it expects a Custom IR stretch factor will be no less than the OEB's stretch factor for price-cap IRM given a utility's ability to customize the approach to rate-setting to meet its specific circumstances.¹¹⁶

Capital Factor and Stretch Factor on Capital

Background

Toronto Hydro proposed a "C" (or capital) factor, which is designed to provide funding incremental to I-X in its CPCI.¹¹⁷

The C-factor, as proposed, is the difference between:

¹¹⁴ Report to the Ontario Energy Board – Empirical Research in Support of Incentive Rate-setting (2018 Update) / August 2019.

¹¹⁵ EB-2014-0116 / Decision and Order / December 29, 2015 / p. 15.

¹¹⁶ OEB Handbook to Utility Rate Applications / October 2016 / p. 26.

¹¹⁷ Exhibit 1B / Tab 4 / Schedule 1 / p. 2.

- “Cn” a reflection of Toronto Hydro’s capital investment needs
- “Scap * I” is an offsetting reduction required to ensure that the capital factor provides funding only in excess of what is already provided for capital through the inflation factor.¹¹⁸

SEC, CCC and AMPCO argued that the C-factor should not be approved by the OEB. Alternatively, if the OEB determines that a C-factor is appropriate, a stretch factor on capital of 0.64% should be included in the CPCI formula.¹¹⁹ SEC submitted that given the significant problems with the capital plan, no C-factor should be approved by the OEB and rates should be adjusted after 2020 through only the price-cap IRM formula.¹²⁰

VECC submitted that, if Toronto Hydro’s proposition that extraordinary capital investments are required is accepted, the question arises as to whether a capital factor adjustment is the best regulatory tool for addressing such severe circumstances. VECC stated that a capital factor adjustment (subject to an incentive offset) might be appropriate in the case of a utility with a normal year-over-year capital investment portfolio. In these circumstances, adjustments might be anticipated for one-time events or modest growth in investment requirements. In VECC’s assessment, the OEB’s ICM / ACM framework was contemplated to address the issue of extraordinary capital requirements under incentive ratemaking. The ICM / ACM framework allows the OEB to closely monitor rate recovery for extraordinary events and to ensure that ordinary capital investments do not escape the ambit of incentive ratemaking.

VECC submitted that the OEB should address the issue first by introducing a stretch factor to the capital adjustment part of the formula. VECC submitted that Toronto Hydro can reasonably be called upon to meet the efficiency requirements embodied in a stretch factor on capital of 0.6%. VECC also submitted that Toronto Hydro should reduce its DSP to the average of its past five-year plan and identify those items which need to be addressed in a project-specific ICM application.¹²¹

¹¹⁸ Exhibit 1B / Tab 4 / Schedule 1 / p. 12.

¹¹⁹ SEC Submission / pp. 6-7; CCC Submission / p. 11; and AMPCO Submission / p. 5.

¹²⁰ SEC Submission / pp. 6-7.

¹²¹ VECC Submission / pp. 7-8.

In its reply argument, Toronto Hydro submitted that the C-factor is the very core of its Custom IR framework. It is the principal element that makes it a CPCI. It is the means by which the CPCI achieves the Custom IR framework's core function, which is to fund a large, multi-year capital program that is unlike historical experience. Toronto Hydro further submitted that the removal of the C-factor would significantly underfund its capital plan. Toronto Hydro also submitted that the C-factor is in accordance with the RRF.¹²²

OEB staff submitted that it has no concerns with the manner in which the Cn factor is calculated. OEB staff also stated that it has no concerns with respect to the offsetting adjustment made through the "Scap * I" term, which ensures that the Cn factor only provides capital funding in excess of what is already provided through the inflation factor. However, OEB staff submitted that an additional offsetting adjustment should be included within the C-factor. OEB staff submitted that an incremental stretch factor on capital of 0.64% should be applied.¹²³ BOMA and Energy Probe also submitted that a 0.64% stretch factor on capital should be applied within the CPCI formula.¹²⁴

OEB staff submitted that in the context of the significant capital funding provided by the proposed C-factor (i.e. every dollar of capital-related revenue requirement is recovered from ratepayers, minus a small stretch factor), a higher stretch factor on capital than that proposed by Toronto Hydro in this proceeding is necessary. OEB staff submitted that the incremental stretch factor on capital (0.64%) will ensure that Toronto Hydro is required to find incremental capital-related productivity over the Custom IR term.¹²⁵

OEB staff noted that PEG calculated the incremental stretch factor on capital to be equivalent to the materiality threshold for supplemental capital revenue available through ACM and ICM treatment under a price-cap IRM. Essentially, an incremental stretch factor on capital of 0.64% is designed as a proxy of the "markdown" provided by the materiality threshold in an ICM or an ACM. The PEG calculation assumed that all of Toronto Hydro's incremental capital qualified for ICM / ACM (which it does not).

¹²² Toronto Hydro Reply Submission / pp. 38-39.

¹²³ OEB Staff Submission / p. 46.

¹²⁴ BOMA Submission / p. 14; and Energy Probe Submission / p. 6.

¹²⁵ The total stretch factor applied to the capital-related revenue requirement would be 1.09%. Calculated as 0.45% (base stretch factor) plus 0.64% (incremental stretch factor).

OEB staff noted that the OEB approved an incremental stretch factor on capital in Hydro One's 2018-2022 Custom IR application.¹²⁶ In that proceeding, the OEB applied an incremental stretch factor on capital of 0.15%.¹²⁷ PEG specifically considered an incremental stretch factor on capital of 0.15% in its analysis for Toronto Hydro. PEG stated that the ICM / ACM equivalent stretch factor on capital required for Toronto Hydro is more than three times higher than in the recent Hydro One decision.¹²⁸

PWU submitted that the proposal for a 0.64% stretch factor should be rejected. PWU stated that the capital stretch factor is based on questionable logic and methodology, improperly calculated inputs, does not induce incentives to improve cost performance, and has not been probed by intervenors. PWU further argued that the capital stretch factor acts as a means to disallow the costs of capital projects that the OEB has otherwise deemed prudent. An arbitrary disallowance of capital projects cannot result in just and reasonable rates.¹²⁹

With respect to the argument that an incremental stretch factor should be applied to capital, Toronto Hydro responded that this is inappropriate. Specifically, Toronto Hydro described the stretch factor on capital as a funding cut provision. Toronto Hydro submitted that applying a stretch factor to capital is not an incentive and would not increase productivity. Instead, if implemented it would dramatically reduce Toronto Hydro's capital expenditures and its effect would only be to harm the utility's ability to deliver on outcomes that matter to customers.

Toronto Hydro submitted that the stretch factor applied to capital is a major departure from the RRF and the OEB-approved Custom IR framework. Toronto Hydro stated that the proposal to include this mechanism is a penalty to the utility for selecting a Custom IR rate-setting approach.

Toronto Hydro also argued that the calculation, operation and implication of the 0.64% stretch factor were not tested at all in this proceeding and therefore cannot be relied upon to formulate just and reasonable rates.

¹²⁶ EB-2017-0049 / Decision and Order / March 7, 2019 / pp. 31-33.

¹²⁷ EB-2017-0049 / Decision and Order / March 7, 2019 / p. 31.

¹²⁸ OEB Staff Submission / pp. 46-48.

¹²⁹ PWU Submission / pp. 3-5.

Finally, Toronto Hydro argued that the 0.64% stretch factor on capital is more than four times greater than the provision that was applied in the Hydro One proceeding.¹³⁰ Toronto Hydro noted that both PSE and PEG evaluated Hydro One as a poorer benchmark performer than Toronto Hydro. As such, Toronto Hydro stated that the proposed stretch factor on capital operates in a directionally opposite manner relative to the base stretch factor. Toronto Hydro argued that this demonstrates that the proposed stretch factor on capital is not grounded in empirical evidence and should be rejected.¹³¹

Findings

As summarized earlier in this section, parties stated that Toronto Hydro's Custom IR proposal provides nearly the same capital-related revenue requirement as a multi-year cost of service approach.

Some intervenors argued that the OEB should reject Toronto Hydro's C-factor entirely. The OEB's ICM / ACM approach to capital for IRM applications was seen as a more appropriate method of dealing with large capital expenses. However, the OEB accepts the use of a C-factor as proposed by Toronto Hydro in its Custom IR application. The RRF allows utilities to make custom filings that better reflect the situation of the utility.

Several intervenors suggested the introduction of an incremental capital stretch factor. The deadband in the ACM / ICM framework was seen as an appropriate basis for a stretch factor on capital. A 0.64% capital stretch factor would be a proxy for the materiality threshold in an ICM or an ACM. The OEB introduced the approach of an incremental stretch factor on capital in Hydro One's 2018-2022 Custom IR application of 0.15%.¹³²

Despite the concerns expressed by Toronto Hydro about the negative impact on the capital program of any proposed reductions to or elimination of the C-factor, the OEB does not accept the significant year-over-year increases in capital expenditures. Under Issue 3.2, the proposed level of capital expenditures are assessed in detail by the OEB. In addition, over the Custom IR term, the OEB expects that Toronto Hydro will find improved capital productivity. Therefore, the OEB accepts a C-factor but requires an incremental stretch factor on capital of 0.3% be applied. It is a fundamental component

¹³⁰ EB-2017-0049 / Decision and Order / March 7, 2019 / p. 31.

¹³¹ Toronto Hydro Reply Submission / pp. 44-47.

¹³² EB-2017-0049 / Decision and Order / March 7, 2019 / p. 31.

of the OEB's RRF that utilities must demonstrate ongoing continuous improvement in their productivity and cost performance while delivering on system reliability and quality objectives.¹³³ In addition, the OEB notes that pacing and prioritization is an important aspect of an efficient capital plan.

Growth Factor

Background

Toronto Hydro proposed a "g" (or growth) factor of 0.2%, which forms part of its CPCI calculation. The growth factor is determined by growth in distribution revenue due to changes in forecasted load and customer counts over the Custom IR period.¹³⁴

OEB staff, SEC, Energy Probe, CCC, AMPCO and VECC submitted that the growth factor should be 0.25%.¹³⁵ SEC submitted that the underlying calculations that result in Toronto Hydro's proposed 0.2% stretch factor if rounded to two decimal places, consistent with the OEB's approach to the stretch factor, results in a growth factor of 0.25%.¹³⁶

PWU submitted that the growth factor should be 0.2%. PWU noted that rounding the growth factor to the first decimal place is consistent with the rounding convention used for the inflation factor.¹³⁷

In its reply argument, Toronto Hydro submitted that the proposed 0.2% growth factor is appropriate. Specifically, Toronto Hydro stated that, as a matter of principle, the OEB should generally follow its own precedents when faced with identical facts. The relevant precedent is Toronto Hydro's 2015-2019 Custom IR proceeding in which the OEB approved a growth factor of 0.3%. Toronto Hydro stated that the rounding for the growth factor is based on OEB precedent and no parties provided any explanation for why the OEB precedent is wrong.¹³⁸

¹³³ OEB Handbook to Utility Rate Applications / October 2016 / p. 3.

¹³⁴ Exhibit 1B / Tab 4 / Schedule 1 / p. 12.

¹³⁵ OEB Staff Submission / p. 49; SEC Submission / p. 17; Energy Probe Submission / p. 6; CCC Submission / p. 11; AMPCO Submission / p. 5; and VECC Submission / p. 5.

¹³⁶ SEC Submission / p. 17.

¹³⁷ PWU Submission / p. 6.

¹³⁸ Toronto Hydro Reply Submission / pp. 47-48.

Findings

The OEB accepts Toronto Hydro's rounded growth factor of 0.2%. The OEB has previously rounded the growth factor to one decimal place.

The Non-CPCI Aspects of the Proposed Custom IR Framework

In the sub-sections that follow, the OEB provides its findings on the non-CPCI aspects of the proposed Custom IR framework.

Earnings Sharing Mechanism

Background

Toronto Hydro's proposed Custom IR framework includes an ESM. The proposed ESM is based on the same methodology that was approved as part of Toronto Hydro's 2015-2019 Custom IR application.¹³⁹

A number of parties made submissions on Toronto Hydro's proposed ESM. These parties noted that the purpose of a properly designed ESM is to allow ratepayers to share in overearnings during an IR term. A detailed summary of parties' submissions on this issue is set out under Issue 8.3.

Findings

The OEB approves an ESM for the 2020-2024 Custom IR term. The OEB's findings on the appropriate methodology for calculating the ESM is discussed under Issue 8.3.

Capital-related Variance Accounts

Background

Toronto Hydro proposed the continuation of three capital-related variance accounts that are associated with its proposed Custom IR framework. The three accounts are: the

¹³⁹ EB-2014-0116 / Decision and Order / December 29, 2015 / p. 49.

Capital Related Revenue Requirement variance account (CRRRVA), the Externally-Driven Capital variance account and the Derecognition variance account.¹⁴⁰

A number of parties made submissions with respect to the above noted capital-related variance accounts. A detailed summary of parties' submissions with respect to these accounts is set out under Issue 8.3.

Findings

The CRRRVA and Externally-Driven Capital variance account will continue as part of 2020-2024 Custom IR framework. The derecognition account will be closed.

The arguments of parties and the OEB's detailed findings with respect to each of the above noted accounts are discussed under Issue 8.3.

Z-factor and Off-Ramps

Background

Toronto Hydro proposed that it continue to be allowed to have Z-factor relief available based on the OEB's generic criteria for such relief.¹⁴¹ The generic criteria for Z-factor relief is set out in the Report of the Board on 3rd Generation Incentive Regulation.¹⁴²

Toronto Hydro also proposed that the OEB's generic policy continue to apply to Toronto Hydro with respect to off-ramps for the 2020-2024 Custom IR term.¹⁴³ The OEB's generic policy for off-ramps is discussed in the Rate Handbook and the Chapter 3 Filing Requirements.¹⁴⁴

No parties raised any concerns with Toronto Hydro's Z-factor or off-ramp proposals.

¹⁴⁰ Exhibit 9 / Tab 1 / Schedule 1 / pp. 10-19.

¹⁴¹ Exhibit 1B / Tab 4 / Schedule 1 / p. 14.

¹⁴² Report of the Board on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors / July 14, 2008 / pp. 35-36 and Appendix A / p. 4-6.

¹⁴³ Exhibit 1B / Tab 4 / Schedule 1 / p. 13.

¹⁴⁴ OEB Handbook to Utility Rate Applications / October 2016 / p. 28; and OEB Chapter 3 Filing Requirements for Incentive Rate-setting Applications / July 12, 2018 / p. 30.

Findings

Toronto Hydro will continue to have access to Z-factor relief and off-ramps as discussed in the Rate Handbook.¹⁴⁵

4.2 Is Toronto Hydro's proposed custom scorecard appropriate (Issue 2.2)?

Background

Toronto Hydro proposed 15 additional custom scorecard measures incremental to the OEB's standard electricity distributor scorecard (EDS). This results in a total of 44 unique measures to be reported annually.¹⁴⁶

The additional custom scorecard measures are summarized in the table below.¹⁴⁷

¹⁴⁵ OEB Handbook to Utility Rate Applications / October 2016 / pp. 27-28.

¹⁴⁶ Exhibit 1B / Tab 2 / Schedule 1 / p. 6.

¹⁴⁷ Exhibit 2B / Section C2 / p. 5.

Table 4
2020-2024 Proposed Custom Performance Scorecard Measures

Toronto Hydro Outcome	OEB Reporting Category	Toronto Hydro's Custom Measures	Target
Customer Service	Customer Satisfaction	Customers on eBills	Improve
Safety	Safety	Total Recorded Injury Frequency	Maintain
		Box Construction Conversion	Improve
		Network Units Modernization	Improve
Reliability	System Reliability	SAIDI - Defective Equipment	Maintain
		SAIFI - Defective Equipment	Maintain
		FESI 7 System	Improve
		FESI-6 Large Customers	Maintain
	Asset Management	System Capacity	Maintain
		System Health (Asset Condition) – Wood Poles	Monitor
Financial	Cost Control	Direct Buried Cable Replacement	Improve
		Average Wood Pole Replacement Cost	Monitor
		Vegetation Management Cost per Km	Monitor
Environment	Environment	Oil Spills Containing PCBs	Improve
		Waste Diversion Rate	Monitor

The full list of scorecard measures (both the standard scorecard measures and the proposed custom scorecard measures) are summarized at Exhibit 1B / Tab 2 / Schedule 1 / Appendix A. Toronto Hydro also mapped both the standard and custom scorecard measures to the RRF outcomes.¹⁴⁸

OEB staff and CCC submitted that the custom measures proposed by Toronto Hydro reflect a reasonable list of metrics upon which its performance can be measured during the 2020-2024 period. However, with respect to the cost control measures for both the vegetation management cost per kilometre and average wood pole replacement cost, OEB staff and CCC submitted that the target should be changed to “improve”.¹⁴⁹ In its reply submission, Toronto Hydro stated that it is not feasible to set measurable

¹⁴⁸ 1B-BOMA-8.

¹⁴⁹ OEB Staff Submission / p. 54; and CCC Submission / p. 13.

improvement targets for the proposed cost control metrics as it does not have a full data set or the requisite operational experience to set targets or baselines.¹⁵⁰

SEC argued that the proposed cost control metrics are not being taken seriously by Toronto Hydro as they do not have targets and are not included on Toronto Hydro's corporate scorecard. In addition, the proposed cost control metrics only reflect a relatively small portion of the total capital and OM&A budget. Finally, SEC argued that Toronto Hydro previously established cost control metrics in its 2015-2019 Custom IR application¹⁵¹ that it has removed from the customer scorecard in the current proceeding. SEC submitted that this is not appropriate as the OEB will never be able to hold Toronto Hydro accountable if they continually propose a new set of metrics each application.¹⁵² In its reply argument, Toronto Hydro stated that it selected the proposed cost control metrics as they are complementary to the cost efficiency measures included on the standard EDS and represent a balanced view of the material aspects and outcomes of its plan. Toronto Hydro also stated that its proposal to publicly report the proposed custom scorecard represents a commitment to be held accountable to its performance on these measures.¹⁵³

Energy Probe and SEC also argued that the DSP implementation metric that is in the EDS and included on Toronto Hydro's corporate scorecard is not appropriate as it tracks capital expenditures rather than in-service additions. This means that it measures and rewards spending as opposed to capital efficiency and performance.¹⁵⁴ Toronto Hydro replied that the DSP implementation measure should be evaluated within the larger context of the three other corporate scorecard measures related to capital which operate to measure more than just capital spending. These other corporate scorecard measures evaluate reliability and customer connections. Toronto Hydro also noted that it does track in-service additions along with a number of other detailed performance indicators to evaluate whether capital spending achieves operational results and outcomes for customers.¹⁵⁵

¹⁵⁰ Toronto Hydro Reply Submission / p. 65.

¹⁵¹ EB-2014-0116.

¹⁵² SEC Submission / pp. 28, 30.

¹⁵³ Toronto Hydro Reply Submission / pp. 62-64.

¹⁵⁴ Energy Probe Submission / p. 16; and SEC Submission / p. 29.

¹⁵⁵ Toronto Hydro Reply Submission / pp. 67-68.

A number of parties argued that Toronto Hydro's custom scorecard should include numerical targets for the custom measures.¹⁵⁶ In its reply submission, Toronto Hydro stated that its proposed custom measures include historical baselines (with the exception of those listed as "monitor") and its evidence is comprehensive enough to hold the utility accountable to the proposed scorecard without having to set numerical targets. Toronto Hydro also stated that it will have to revisit its outcomes and performance objectives as part of a full business planning cycle if the OEB were to render a decision that reduces revenue requirement.¹⁵⁷

AMPCO submitted that a number of incremental measures should be included in Toronto Hydro's custom scorecard.¹⁵⁸ Toronto Hydro stated that it would be inappropriate to introduce new and untested measures on the performance scorecard without analyzing if they contribute to the customer-focused outcomes of the plan. In addition, Toronto Hydro listed a number of concerns with the incremental measures proposed by AMPCO.¹⁵⁹

AMPCO also submitted that Toronto Hydro should not remove the Momentary Average Interruption Frequency Index (MAIFI) measure from the custom scorecard as avoidable momentary outages arising from defective equipment or other controllable factors are a concern for industrial customers. AMPCO noted that the tracking and reporting on momentary events over the 2020-2024 period would help Toronto Hydro to continue to work with its customers affected by momentary outages as well as with industry colleagues to devise more precise MAIFI reduction objectives.¹⁶⁰ Toronto Hydro objected to AMPCO's requested continuation of the MAIFI statistic, noting that Toronto Hydro has a 4-kilovolt legacy system within its distribution network and not all of the municipal stations that feed the 4-kilovolt system have supervisory control and data acquisition (SCADA) or are SCADA enabled. This hampers the measurement of MAIFI.¹⁶¹

Energy Probe submitted that Toronto Hydro should provide specific targets for System Average Interruption Frequency Index (SAIFI), System Average Interruption Duration

¹⁵⁶ CCC Submission / p. 13; BOMA Submission / pp. 45-48; and Energy Probe Submission / p. 16.

¹⁵⁷ Toronto Hydro Reply Submission / pp. 69-70.

¹⁵⁸ AMPCO Submission / p. 6. These additional metrics include cost and schedule performance metrics. AMPCO referenced certain metrics that Alectra Utilities Inc. has proposed with respect to cost and schedule performance.

¹⁵⁹ Toronto Hydro Reply Submission / pp. 70-71.

¹⁶⁰ AMPCO Submission / p. 7.

¹⁶¹ Toronto Hydro Reply Submission / p. 72.

Index (SAIDI) and MAIFI for the Custom IR term. Toronto Hydro should also provide specific subset targets related to improving system reliability due to defective equipment. In addition, Energy Probe submitted that Toronto Hydro should provide disaggregated reporting of system reliability indices / performance for the parts of the service area that, in 2018, had worse than average interruptions. Finally, Energy Probe submitted that Toronto Hydro should file a plan to improve MAIFI performance.¹⁶²

Norman Hann argued for two definitional changes with respect to Toronto Hydro's proposed custom scorecard. Specifically, Mr. Hann argued that the definitions used for vegetation management and defective equipment should be more accurate.¹⁶³

Toronto Hydro responded that its proposed definitions of these custom scorecard measures are already well defined.¹⁶⁴

Findings

The OEB finds that the custom scorecard is appropriate with the amendments set out in the table below.

¹⁶² Energy Probe Submission / p. 10.

¹⁶³ Norman Hann Submission / p. 7.

¹⁶⁴ Toronto Hydro Reply Submission / p. 73.

Table 5
2020-2024 Approved Custom Performance Scorecard Measures

Toronto Hydro Outcome	OEB Reporting Category	Toronto Hydro's Custom Measures	Target
Customer Service	Customer Satisfaction	Customers on eBills	Improve
Safety	Safety	Total Recorded Injury Frequency	Maintain
		Network Units Modernization	Improve
Reliability	System Reliability	SAIDI - Defective Equipment	Maintain
		SAIFI - Defective Equipment	Maintain
		FESI 7 System	Improve
		FESI-6 Large Customers	Maintain
		MAIFI	Monitor
		System Capacity	Maintain
	Asset Management	System Health (Asset Condition) – Wood Poles	Monitor
		Direct Buried Cable Replacement	Improve
		In-Service Additions	Monitor ¹⁶⁵
		Average Wood Pole Replacement Cost	Improve
Financial	Cost Control	Vegetation Management Cost per Km	Improve
		Oil Spills Containing PCBs	Improve
Environment	Environment	Waste Diversion Rate	Monitor

Specifically, the OEB notes that while the DSP implementation measure that appears on both the standard EDS and the corporate scorecard may be informative, it also agrees with SEC and Energy Probe that a metric that tracks the management and progress of in-service additions should be included. As Toronto Hydro notes, this measure is already being derived as one of a set of key performance indicators that are prepared as part of its performance management activities.¹⁶⁶ The OEB finds that it would be a useful addition to its custom scorecard as well.

While the proposed cost control metrics appear somewhat narrow in the selection of operational costs to track, the OEB accepts that they may be indicative of overall utility

¹⁶⁵ The OEB directed Toronto Hydro to report on in-service additions at the capital investment category level as part of the CRRVA reporting (under Issue 8.3). This information should be used to monitor Toronto Hydro's actual in-service additions relative to approved amounts for the custom scorecard.

¹⁶⁶ Toronto Hydro Reply Submission / p. 68.

cost performance by isolating two key measurements of the business. However, the OEB is not convinced that Toronto Hydro should only monitor these measures. Cost control is integral to the fulfillment of the identified customer priority of keeping distribution rates as low as possible.

The OEB notes that while these new measures, the average wood pole replacement cost and vegetation management cost per kilometre metrics, may lack the data set of five entries of three-year rolling averages preferred by Toronto Hydro¹⁶⁷, they are being put forward as important indicators of cost control. These indicators are designed to demonstrate Toronto Hydro's accountability in fulfilling its commitment for continuous improvement in efficiency and performance. As OEB staff points out, Toronto Hydro has at least five years of data associated with these metrics¹⁶⁸, and clearly, enough experience with the operational costs associated with these metrics to provide them as a barometer of overall robust cost management. Accordingly, Toronto Hydro is directed to revise the target for the cost control metrics set out in the custom scorecard to improve (as opposed to monitor).

The OEB will not require specific targets for defective equipment outages for SAIFI, SAIDI and MAIFI for the custom scorecard as suggested by Energy Probe. The OEB notes the presence of specific targets for SAIDI and SAIFI metrics on the standard EDS, which should provide sufficient data available for comparison purposes to inform required assessments of Toronto Hydro's performance. Moreover, while disaggregated reliability statistics for areas experiencing worse than average interruptions may be important information for initiating operational measures and regulatory review, they are not required to be reported on the custom scorecard.

The OEB does not approve Toronto Hydro's proposed removal of the MAIFI measure from the custom scorecard. As AMPCO has noted¹⁶⁹, Toronto Hydro's reasons for wanting to remove the measure were not raised as an issue when Toronto Hydro introduced the MAIFI metric in the 2015-2019 Custom IR framework. The OEB is aware that Toronto Hydro has trouble in providing accurate measurement of MAIFI because of the presence of a 4-kilovolt legacy system. However, the importance of continued work towards the reductions of such interruptions, particularly for industrial customers,

¹⁶⁷ Toronto Hydro Reply Submission / p. 66.

¹⁶⁸ OEB Staff Submission / p. 55.

¹⁶⁹ AMPCO Submission / p. 7.

justifies the challenges of MAIFI measurement. The OEB directs that the MAIFI metric be included on Toronto Hydro's custom scorecard.

The OEB does not approve Mr. Hann's recommendation for definitional changes as it agrees with Toronto Hydro that the current definitions have sufficient clarity.

Finally, while the OEB understands the safety concerns associated with the box construction conversion work, the measurement of the safety improvements associated with this relatively small aspect of Toronto Hydro's operations is unlikely to be instructive as to the overall corporate safety performance. This is particularly the case where Toronto Hydro proposes to continue the investment from the 2015-2019 DSP to remove all box construction by 2026.¹⁷⁰ As such, the OEB finds that the custom scorecard measure associated with box construction shall be removed.

¹⁷⁰ Exhibit 2B / Section E6.1 / p. 19.

5 RATE BASE AND CAPITAL PLAN (ISSUE 3.0)

5.1 Are the proposed 2020-2024 rate base amounts (including the working capital allowance amounts) reasonable (Issue 3.1)?

Background

Toronto Hydro's proposed rate base, including the application updates discussed in Undertaking J1.2, are set out in the following table.¹⁷¹

Table 6
2020-2024 Rate Base

Rate Base (\$M)	2020	2021	2022	2023	2024
Average Property, Plant & Equipment (PP&E) NBV	\$ 4,369.7	\$ 4,601.9	\$ 4,844.4	\$ 5,128.5	\$ 5,393.2
WCA	\$ 222.9	\$ 227.2	\$ 232.0	\$ 237.0	\$ 243.1
Rate Base	\$ 4,592.6	\$ 4,829.1	\$ 5,076.4	\$ 5,365.5	\$ 5,636.3

The updated working capital allowance (WCA) amounts shown in Undertaking J1.7 and as reflected in Table 6 include the updates to the WCA set out in Undertaking J1.2.¹⁷² Toronto Hydro also proposed to update the electricity prices used in the WCA calculation at the draft rate order stage of the proceeding.¹⁷³

OEB staff accepted Toronto Hydro's proposal to update the WCA calculation at the draft rate order stage of the proceeding.¹⁷⁴ No other parties commented directly on the proposed WCA amounts.

¹⁷¹ Undertaking J1.7.

¹⁷² Updated to align the cost of power expense forecast with the value resulting from the OEB's Appendix 2-Z and for changes to the OEB's Customer Service Rules.

¹⁷³ Undertaking J1.2.

¹⁷⁴ OEB Staff Submission / p. 55.

A number of parties filed submissions stating that the proposed methodology used to calculate the rate base amounts for the 2020-2024 period should be changed to an average of monthly averages approach.¹⁷⁵

OEB staff and SEC also filed submissions with respect to Toronto Hydro's methodology for forecasting in-service additions.¹⁷⁶

In addition, a number of parties argued for rate base disallowances with respect to the Copeland Phase 1 project¹⁷⁷ and the ERP Phase 1 project.¹⁷⁸

In its reply argument, Toronto Hydro submitted that the OEB should reject the rate base arguments and proposals advanced by OEB staff and intervenors. Toronto Hydro submitted that the proposed 2020-2024 rate base amounts are appropriate and should be approved by the OEB.¹⁷⁹

Findings

The arguments of parties and the detailed findings with respect to the proposed methodology used to calculate the rate base amounts for the 2020-2024 period, the in-service addition forecasting methodology, the Copeland Phase 1 project and the ERP Phase 1 project are discussed in detail in the sub-sections that follow. All other aspects of the rate base are approved as filed. The OEB supports Toronto Hydro's proposal to update the WCA calculation at the draft rate order stage of the proceeding to reflect updated electricity prices.¹⁸⁰

Concerns regarding Toronto Hydro's proposed treatment of behind-the-meter energy storage assets are addressed under Issue 3.3.

¹⁷⁵ OEB Staff Submission / pp. 56-57; SEC Submission / pp. 69-71; BOMA Submission / p. 19; and VECC Submission / p. 10.

¹⁷⁶ OEB Staff Submission / pp. 98-100; and SEC Submission / pp. 70-71.

¹⁷⁷ OEB Staff Submission / pp. 58-61; SEC Submission / pp. 62-64; BOMA Submission / p. 21; PWU Submission / p. 22; Energy Probe Submission / p. 19; and AMPCO Submission / pp. 27-28.

¹⁷⁸ SEC Submission / pp. 58-59; and AMPCO Submission / pp. 27-28.

¹⁷⁹ Toronto Hydro Reply Submission / p. 75.

¹⁸⁰ The OEB notes that the updated electricity prices are found in the Regulated Price Plan Report for the November 1, 2019 to October 31, 2020 period / October 22, 2019. The WCA calculation should also include the impact of the Ontario Electricity Rebate of 31.8% on the total bill.

Rate Base Calculation Methodology

Background

Toronto Hydro determines rate base using the average of the opening and closing balances for the net book value of its fixed assets (PP&E) plus a WCA.¹⁸¹

OEB staff, SEC, BOMA and VECC submitted that the OEB should order Toronto Hydro to calculate rate base using an average of monthly averages approach.¹⁸²

OEB staff submitted that in Toronto Hydro's calculation of rate base, it uses the half-year rule for the inclusion of in-service additions (based on annual information).¹⁸³ However, the depreciation expense that is included in the rate base calculation is not determined using the half-year rule. Instead, the depreciation expense included in the rate base calculation is based on monthly information.

OEB staff submitted that there is a disconnect within the rate base calculation in terms of how in-service additions and depreciation are valued. OEB staff noted that Toronto Hydro has monthly information available for both in-service additions and depreciation expense. Toronto Hydro stated, with respect to depreciation expense, that using monthly information provides a more accurate forecast of depreciation expense than the half-year rule approach. OEB staff submitted that using monthly information for in-service additions would similarly provide a more accurate forecast of rate base than the half-year rule approach.

OEB staff also stated that the average of monthly averages approach is listed as an alternative approach in the OEB's Chapter 2 Filing Requirements.¹⁸⁴ In addition, OEB staff noted that the former Union Gas Limited and Enbridge Gas Distribution Inc. used an average of monthly averages approach to calculate rate base in their respective 2013 rebasing applications.¹⁸⁵

¹⁸¹ Exhibit 2A / Tab 1 / Schedule 1 / pp. 1-3; and Toronto Hydro Argument-in-Chief / p. 19.

¹⁸² OEB Staff Submission / pp. 56-57; SEC Submission / pp. 69-71; BOMA Submission / p. 19; and VECC Submission / p. 10.

¹⁸³ Exhibit 2A / Tab 1 / Schedule 1 / p. 2.

¹⁸⁴ OEB Filing Requirements for Electricity Distribution Rate Applications / Chapter 2 / July 12, 2018 / p. 14.

¹⁸⁵ EB-2011-0210 / Exhibit B3 / Tab 2 / Schedule 1 / p. 1; and EB-2011-0354 / Exhibit B3 / Tab 1 / Schedule 2.

OEB staff calculated, based on Undertaking J1.9¹⁸⁶, that the rate base in each year during the 2020-2024 period would be on average approximately \$74 million lower than the proposed rate base amounts. The main revenue requirement impact of this proposed methodological change will be on the cost of capital associated with rate base (with a related impact on PILs) as the depreciation expense is already forecast on a monthly basis (and included in the revenue requirement using the monthly information).¹⁸⁷

SEC made similar submissions and stated that since using monthly information is more accurate, and is already being done for the purposes of its depreciation calculation, Toronto Hydro should be required to use the monthly calculation for in-service additions. SEC submitted that the rationale for the differing approaches, between in-service additions and depreciation expense, appears to be nothing more than historical happenstance.

SEC further submitted that the half-year rule is used as a proxy, since most utilities cannot accurately forecast when an asset will go into service within a year. However, Toronto Hydro is able to do so, on a monthly basis, and admits that a larger proportion of distribution assets go into service in the latter half of the year due to the natural construction cycle. SEC noted that Toronto Hydro expects this pattern to continue. SEC argued that allowing Toronto Hydro to continue to use the half-year rule in light of its actual average in-service date is overcompensating Toronto Hydro.¹⁸⁸

In its reply argument, Toronto Hydro submitted that the half-year rule is part of general ratemaking principles endorsed by the OEB and it has been consistently applied in electricity distribution rate-setting decisions for many years. Toronto Hydro noted that the OEB's Chapter 2 Filing Requirements¹⁸⁹ acknowledge this general policy. Toronto Hydro further submitted that the half-year approach is codified as a mandatory rule for rate applications in the OEB's Chapter 2 Filing Requirements.¹⁹⁰

¹⁸⁶ OEB staff noted that the rate base amounts will change if other arguments with respect to rate base and capital expenditures are accepted by the OEB.

¹⁸⁷ OEB Staff Submission / pp. 56-57.

¹⁸⁸ SEC Submission / pp. 69-70.

¹⁸⁹ OEB Filing Requirements for Electricity Distribution Rate Applications / Chapter 2 / July 12, 2018 / p. 34.

¹⁹⁰ OEB Filing Requirements for Electricity Distribution Rate Applications / Chapter 2 / July 12, 2018 / p. 14.

Toronto Hydro submitted that the proposal to change the methodology to an average of monthly averages approach is a departure from standard ratemaking practices and is arbitrary and contrary to procedural fairness.

Toronto Hydro also submitted that OEB staff mischaracterized the OEB's Chapter 2 Filing Requirements¹⁹¹ in stating that the average of monthly averages approach is listed as an alternative approach. Toronto Hydro submitted that the average of monthly averages approach is not an alternative approach and the language in the OEB's Chapter 2 Filing Requirements¹⁹² is simply referring to if a utility deviates from the standard practice that utility must document the methodology used.

Toronto Hydro further stated that the argument that the half-year rule should be abandoned because the amount of accumulated depreciation included in the calculation of rate base is determined on a different basis than the average of the opening and closing balance should be rejected. Toronto Hydro submitted that the OEB's Chapter 2 Filing Requirements does not specify the basis or methodology for the calculation of accumulated depreciation included in the half-year calculation of rate base.

Toronto Hydro also stated that there is nothing unique about it forecasting monthly amounts of in-service additions for the purpose of calculating depreciation. Contrary to the unsubstantiated belief that most utilities cannot accurately forecast when an asset will go in service, the fact that Toronto Hydro can provide these amounts means that any other Ontario distributor can do the same.

Finally, Toronto Hydro submitted that a departure from the standard half-year rule is not justified in the current proceeding. To the extent that the OEB wishes to consider deviations from the half-year rule as standard approaches to ratemaking, Toronto Hydro believes that the appropriate forum would be a generic proceeding. A generic review is the most appropriate mechanism to facilitate proper consideration of new approaches, provide distributors reasonable notice of the proposed change, and ensure consistent applicability across the sector.¹⁹³

¹⁹¹ OEB Filing Requirements for Electricity Distribution Rate Applications / Chapter 2 / July 12, 2018 / p. 14.

¹⁹² OEB Filing Requirements for Electricity Distribution Rate Applications / Chapter 2 / July 12, 2018 / p. 14.

¹⁹³ Toronto Hydro Reply Submission / pp. 88-91.

Findings

The OEB finds that the use of monthly information for in-service additions would provide a more accurate forecast of rate base than the half-year rule approach provides. Toronto Hydro has indicated that the normal construction cycle results in more in-service additions occurring in the second half of the year. Toronto Hydro has also indicated that using monthly averages for depreciation has produced a more accurate forecast of depreciation expense than the half-year rule approach.

The OEB's Chapter 2 Filing Requirements allows distributors to use an alternative approach to the half-year rule for determining rate base. In the circumstance where an alternative approach such as monthly average is more accurate, the OEB concludes that the utility should move to this more accurate basis of determining rate base.

The suggestion by Toronto Hydro that using the monthly average approach should be considered as part of a generic proceeding to ensure consistent applicability across the sector is not a compelling argument. Toronto Hydro has applied a Custom IR approach to its Application which is different than the cost of service rate application approach for which the Chapter 2 Filing Requirements were issued. Although a distributor using Custom IR should consider the Chapter 2 Filing Requirements, Custom IR is by its very nature a custom approach to rate-setting. The OEB concludes that the monthly average approach for rate base is appropriate as it is more accurate.

The large annual capital expenditures and in-service additions planned by Toronto Hydro increases the need for a more granular approach to calculating rate base. Given that Toronto Hydro has the information to calculate monthly averages of in-service additions and it would increase the accuracy of the calculation, and, in fact, Toronto Hydro uses monthly averages to calculate depreciation because it is more accurate, the OEB directs Toronto Hydro to change its methodology for calculating rate base to use monthly averages of in-service additions.

Conversion of Capital Expenditures and Construction Work in Progress to In-Service Additions Methodology

Background

Toronto Hydro's forecasting methodology for the conversion of capital expenditures and Construction Work in Progress (CWIP) to in-service additions is a multi-step approach based on historical data.

For the assets in large discrete distribution systems projects (e.g. Copeland and Hydro One station work) and for general plant investments, Toronto Hydro uses the latest projections of expected completion dates to forecast the in-service amounts.

For the assets in the categories of system access, system renewal, and system service (e.g. excluding Copeland and Hydro One station work), in-service additions are calculated based on the historical conversion of capital expenditures and CWIP. The in-service additions total is then proportioned across relevant asset classes based on historical rates of in-service additions by asset class.¹⁹⁴

OEB staff submitted that it accepts Toronto Hydro's methodology for calculating in-service additions as part of the current proceeding.¹⁹⁵ However, for the next cost-based application, OEB staff submitted Toronto Hydro should revise its approach to forecasting in-service additions. For the distribution capital programs, Toronto Hydro should track the conversions at the program level during the 2020-2024 period. Toronto Hydro should then forecast its in-service additions at the program level using the data it collected over the 2020-2024 period. OEB staff stated that Toronto Hydro should maintain its granular approach for forecasting in-service additions related to major capital projects and general plant.¹⁹⁶ SEC filed similar arguments.¹⁹⁷

OEB staff submitted that relying on historical aggregate information (i.e. the historical conversion of aggregate distribution capital investments to in-service additions) to determine the conversion ratio would only result in accurate forecasts if the levels of spending between programs do not change over time. OEB staff stated that this is not a reasonable assumption. As the level of investment in different programs changes over time, relying on a conversion ratio that is calculated based on historical information at the aggregate (as opposed to the program level) will result in inaccurate forecasts of in-service additions.

In addition, OEB staff submitted that Toronto Hydro's in-service addition conversion methodology does not allow it to present a forecast of in-service additions at the

¹⁹⁴ Toronto Hydro Reply Argument / p. 91.

¹⁹⁵ OEB staff submitted that the CRRRVA will capture variances in the quantum and timing of actual in-service additions relative to forecast. OEB staff stated that the protection provided by the CRRRVA is sufficient to satisfy its concerns with respect to the in-service addition forecasting methodology used in the current Application.

¹⁹⁶ OEB Staff Submission / pp. 98-100.

¹⁹⁷ SEC Submission / pp. 70-71.

program level in an accurate manner. As such, due to Toronto Hydro's in-service addition forecasting methodology, there is no evidence upon which to conduct a review, in a future proceeding, as to whether Toronto Hydro actually brought into service the assets that it is seeking approval of as part of the current proceeding.¹⁹⁸

In its reply argument, Toronto Hydro submitted that its methodology for forecasting in-service additions is appropriate. Toronto Hydro stated that the arguments of OEB staff and SEC are premised on the assertions that Toronto Hydro's forecasting methodology is inaccurate and a forecasting methodology based on conversions tracked at the program level is more accurate. Toronto Hydro submitted that these assertions are incorrect. Toronto Hydro further submitted that the emphasis on in-service additions by program is misaligned with a key feature of the current regulatory framework, which is that within the approved capital envelope, Toronto Hydro has the flexibility to implement its plan and to respond to changes as needed. Toronto Hydro submitted that flexibility was essential to Toronto Hydro's ability to deliver the reliability objectives of its 2015-2019 Custom IR plan within 1% of the approved in-service addition amounts for the period.

Toronto Hydro also submitted that it does not forecast its in-service additions at a capital program level because it involves a complex mapping exercise that requires numerous assumptions which are not helpful for operational or financial purposes. Toronto Hydro submitted that the OEB should reject OEB staff and SEC's submission that tracking in-service at the program level is in any way more accurate than Toronto Hydro's methodology.¹⁹⁹

Findings

For large discrete capital projects and general plant investments, Toronto Hydro uses the targeted completion date to forecast in-service additions. The broad brush approach used to forecast in-service additions for other capital expenditures was criticized by OEB staff and SEC. The OEB finds that developing in-service addition forecasts based on program level information, while increasing accuracy during a period of evolving capital programs, would add administrative costs and provide information that Toronto Hydro's management does not use for its internal forecasting. In addition, this change would likely immaterially change the forecasted in-service additions.

¹⁹⁸ OEB Staff Submission / pp. 98-100.

¹⁹⁹ Toronto Hydro Reply Submission / pp. 91-97.

The OEB directed Toronto Hydro to report on in-service additions at the capital investment category level as part of the CRRVA reporting (under Issue 8.3). This information might demonstrate that the aggregate approach to forecasting in-service additions is inappropriate. This information could support a reassessment of the current approach to forecasting in-service additions at the time of the next rebasing.

No change to the current approach to in-service additions is directed at this time.

Copeland Phase 1 Project

Background

The total OEB-approved and actual costs of the Copeland Phase 1 project are set out in the table below.²⁰⁰

Table 7
Copeland Phase 1 – Cost Variance

Item	Description	OEB Approved Cost (\$M)	Current Forecast – 2018 (\$M)
Station Cost	Land	\$5.6	\$5.6
	Building	\$53.3	\$66.7
	Substation Equipment	\$52.6	\$45.5
	Distribution Modification	\$2.3	\$2.3
	Design & Construction PM – Substation	\$6.2	\$26.1
Tunnel	Design & Construction PM	\$0.6	\$3.5
	Construction	\$14	\$14.4
Hydro One	Capital Contribution	\$60.4	\$39.9
Total Cost:		\$195.0	\$204.0

A number of parties submitted that a rate base disallowance related to the Copeland Phase 1 project should be ordered by the OEB. The rate base disallowances proposed by OEB staff and some intervenors ranged from \$1.5 million to \$29.5 million.²⁰¹ VECC

²⁰⁰ 2B-Staff-95 / p. 4.

²⁰¹ PWU Submission / p. 22; OEB Staff Submission / p. 61; SEC Submission / p. 64; AMPCO Submission / p. 27; BOMA Submission / p. 20; and Energy Probe Submission / p. 19.

recognized the uniqueness and complexity of the Copeland Phase 1 project and concluded that the cost variances in excess of the OEB-approved costs were related to the unique aspects of the project. Therefore, VECC did not argue for any rate base disallowances associated with the Copeland Phase 1 project.²⁰²

PWU submitted that Toronto Hydro does not appear to have considered a realistic assessment of the difference between external and internal labour (including the consideration of contractor risk). PWU submitted that there are real costs that can arise when a contractor is unable to complete its work. The Copeland Phase 1 project was delayed and costs have increased, partially due to its contractor, Carillion, filing for creditor protection. This forced Toronto Hydro to engage another contractor to complete the required work. PWU argued that the additional costs and project delays were entirely within the control of Toronto Hydro as it made the decision to contract this work. PWU submitted that a disallowance of at least \$1.5 million is appropriate to recognize the additional costs and project delays and to ensure that ratepayers do not bear the costs incurred by Toronto Hydro's decision to contract for the same work twice.²⁰³

In its reply argument, Toronto Hydro submitted that through the application of its enterprise risk management (ERM) framework²⁰⁴ its senior management reviewed and assessed the project costs and schedule, along with other key risks such as contractor performance, on a monthly basis. Toronto Hydro submitted that by managing contractor performance through the ERM framework, the costs associated with the Carillion insolvency were prudently contained. Toronto Hydro noted that when Carillion filed for creditor protection, Toronto Hydro determined (through the application of the ERM framework) that the only viable solution for Toronto Hydro was to contract the remainder of the work. Without sourcing another contractor, it would not have been possible to complete the Carillion portion of the project in 2018.²⁰⁵

OEB staff and some intervenors noted that the total cost variance on the project is \$9 million (4.7%) between the actual cost and the amount approved by the OEB in the 2015-2019 Custom IR proceeding.²⁰⁶ However, there was a very significant change in

²⁰² VECC Submission / pp. 10-11.

²⁰³ PWU Submission / p. 22.

²⁰⁴ Exhibit U / Tab 1C / Schedule 5 / p. 55. Toronto described the ERM as an integral part of the strategic management of its business and is routinely considered in forecasting, planning and executing all aspects of Toronto Hydro's operations.

²⁰⁵ Toronto Hydro Reply Submission / pp. 83-84.

²⁰⁶ EB-2014-0116.

the capital contribution paid to Hydro One in respect of this project. When looking at the project in terms of the work that Toronto Hydro completed (i.e. removing the capital contribution from both the OEB-approved and actual amounts), the OEB-approved amount was \$134.6 million and the actual cost was \$164.1 million. This represents an overspend on Toronto Hydro's portion of the project of \$29.5 million (21.9%).²⁰⁷

OEB staff noted that Toronto Hydro explained that while the Hydro One contribution was lower than approved (due to Hydro One installing six high voltage breakers as opposed to the originally planned ten high voltage breakers), Toronto Hydro incurred additional costs because of the modification to the scope of work that Hydro One completed. Toronto Hydro also discussed further delays caused by Hydro One that required Toronto Hydro to energize the project in two phases. OEB staff submitted that the transfer of work between Hydro One and Toronto Hydro was not the entire cause of the cost overrun on Toronto Hydro's aspect of the project.

OEB staff stated that Toronto Hydro discussed a number of factors that caused increased costs and scheduling delays. The factors include unusually adverse weather events, challenging site conditions, logistical challenges, and contractor performance. OEB staff submitted that the challenging site conditions and logistical challenges caused cost overruns on the Copeland Phase 1 project and these two issues were firmly within management's control. OEB staff submitted that the portion of the cost overrun related to the Copeland Phase 1 project that was caused by factors that were within management's control should not be allowed to be recovered from ratepayers as these costs were imprudently incurred. Therefore, OEB staff argued that \$5 million should be permanently removed from the 2020 opening rate base amount.²⁰⁸

SEC submitted that Toronto Hydro's explanation for the cost overruns incurred with respect to the Copeland Phase 1 project does not demonstrate that its actions were prudent. For example, Toronto Hydro stated that the site conditions "were unknown to us at the time of planning and we encountered during our construction".²⁰⁹ SEC stated that the surprise site conditions are that the "proximity to the heritage Roundhouse required special care and protection of the adjacent historic building".²¹⁰ SEC argued that the heritage nature of the Roundhouse, which sits right next to the Copeland

²⁰⁷ OEB Staff Submission / p. 58; BOMA Submission / p. 20; and Energy Probe Submission / p. 19.

²⁰⁸ OEB Staff Submission / pp. 60-61.

²⁰⁹ Oral Hearing Transcripts / Vol. 1 / p. 123.

²¹⁰ 2B-Staff-95(b); and K1.2 / p. 130.

station, is not something that was an unknown to Toronto Hydro. If it was, that would represent a serious issue regarding Toronto Hydro's planning, but it clearly was not.

SEC further submitted that the issue related to the logistical challenges of a downtown construction site should also not have been unknown to Toronto Hydro. In a proceeding in which Toronto Hydro itself discusses in detail its special urban challenges, SEC found it more than a little ironic that those same challenges were apparently not built into Toronto Hydro's Copeland Phase 1 planning, but were used as an excuse for cost overruns on a major project.

SEC submitted that, if Toronto Hydro had properly planned for these issues, there might have been additional costs, but it would have been able to better plan and mitigate the issues, which would have resulted in a lower incremental cost. SEC stated that it is the poor planning that was a significant cause of the cost increase. Alternatively, SEC stated that it is also possible that these issues are being brought up after the fact to divert attention from the more obvious explanation for the cost overruns: insufficient cost control and / or lax project management. If the OEB does not believe that Toronto Hydro planned this project without realizing that heritage buildings and urban locations can increase costs, then it may conclude that the real reason was not in the planning, but in the execution. On this basis, SEC argued that \$9 million should be disallowed from rate base related to the Copeland Phase 1 project.²¹¹ AMPCO supported SEC's submission.²¹²

BOMA submitted that a substantial part of the cost overrun of \$29.5 million on Toronto Hydro's part of the Copeland Phase 1 project was the result of improper planning and failure to properly assess issues of potential project risks. As such, BOMA argued that the OEB should disallow \$10 million of the cost overrun.

Energy Probe submitted that Toronto Hydro has not provide any credible explanation for the cost variance that would absolve its management of the cost overage relative to the OEB's approved budget. As such, Energy Probe submitted that the cost overrun is Toronto Hydro's responsibility and the OEB should hold it accountable by disallowing \$29.5 million from rate base.²¹³

²¹¹ SEC Submission / pp. 63-64.

²¹² AMPCO Submission / p. 27.

²¹³ Energy Probe Submission / p. 19.

In its reply argument, Toronto Hydro submitted that there is no evidentiary basis for justifying a disallowance of any amount. On the contrary, the evidence demonstrates that the costs related to the Copeland Phase 1 project were prudently incurred for the benefit of ratepayers.

Toronto Hydro submitted that it forecasts the completion of the Copeland Phase 1 project at a total cost of \$204 million, with a 2019 in-service date. Relative to the original OEB-approved cost of \$195 million, this is an increase of 4.7%. Toronto Hydro argued that a cost variance of less than 5% is well within the range of reasonable for a project the size and complexity of the Copeland Phase 1 project.

Toronto Hydro argued that the Copeland Phase 1 project should be evaluated as a single integrated project. Toronto Hydro stated that there is no basis to exclude the capital contribution to Hydro One in the evaluation of the project costs. Toronto Hydro noted that the Copeland Phase 1 project was approved by the OEB on the basis of it being an integrated project and no aspects of the project costs were ring-fenced or considered to be something other than project costs.

Toronto Hydro further submitted that the exclusion of Hydro One's costs from the rest of the project ignores that the reduction to the capital contribution only arose as a result of Toronto Hydro's efforts to manage costs and focus on outcomes. Toronto Hydro initiated the design change that led to the \$20.5 million reduction in the capital contribution paid to Hydro One to offset other cost increases. Toronto Hydro argued that the parties seek to punish the utility for taking action to prudently manage costs.

Toronto Hydro also submitted that it planned and executed the Copeland Phase 1 project prudently. Toronto Hydro submitted that there is no merit to the submissions of parties, which argue that the challenging site conditions and logistical challenges were within management's control and that the cost consequences of these circumstances are imprudent. Similarly, Toronto Hydro submitted that the claims that the cost overruns incurred were due to poor execution are without merit.

More specifically, Toronto Hydro submitted that parties did not explain how the claimed indicators of imprudence contributed to the cost variance on the Copeland Phase 1 project. Also, the parties did not explain how the factors of site conditions and logistical challenges were within Toronto Hydro's control. Toronto Hydro also stated that parties did not explain how its conduct was imprudent having regard to the circumstances that it faced.

Toronto Hydro submitted that it carried out comprehensive planning for the Copeland Phase 1 project, which included thorough consideration of the site conditions. Despite this extensive planning, the challenges that Toronto Hydro faced were unforeseen and outside of management's control. Finally, Toronto Hydro stated that it used appropriate governance and risk management tools to prudently manage the Copeland Phase 1 project.

Toronto Hydro concluded that the Copeland Phase 1 project was a single integrated project and should be reviewed holistically in evaluating the reasonableness of the costs. Applying a holistic approach, the cost variance of \$9 million (or 4.7%) is a reasonable variance given the magnitude, complexity and novelty of this project. It is also a reasonable variance because the evidence demonstrates that Toronto Hydro effectively planned and managed the project. Despite encountering challenges, the costs incurred were prudent and there was no evidence to the contrary provided to justify a disallowance. Toronto Hydro submitted that the OEB should approve the full cost of the project.²¹⁴

OEB staff and a number of intervenors noted that there is ongoing litigation with respect to the Carillion insolvency. These parties argued that a Carillion Insolvency Payments Receivable deferral account should be established to record the revenue requirement impact of the reduction to rate base (associated with any payment received).²¹⁵ Detailed discussion of this proposed deferral account is found under Issue 8.3.

Findings

The OEB agrees with Toronto Hydro's request to consider the Copeland Phase 1 project on an integrated basis and not to separately consider the work performed by Hydro One. Toronto Hydro had the flexibility to change the construction of the project to manage costs and schedule, ensuring that the station will deliver the promised capability.

The challenging site conditions and logistical challenges cited by Toronto Hydro to explain the cost overrun were questioned by intervenors as factors that should have been part of the planning process and within management's control. The OEB agrees

²¹⁴ Toronto Hydro Reply Submission / pp. 75-84.

²¹⁵ OEB Staff Submission / pp. 61, 146; BOMA Submission / p. 20; Energy Probe Submission / p. 19; VECC Submission / p. 27; and CCC Submission / p. 16.

that more thorough planning might have avoided this cost overrun, potentially saving \$5 to \$10 million. However, in a project the size and complexity of the Copeland Phase 1 project, it is not surprising that there will be issues that arise during construction. Keeping the cost overrun to within 5% of the approved level is acceptable to the OEB.

The \$204 million cost for the Copeland Phase 1 project is approved for addition to the rate base. As indicated under Issue 8.3, a variance account to record potential Carillion insolvency payments will be established.

Enterprise Resource Planning Phase 1 Project

Background

The ERP Phase 1 project was forecast to cost \$51.3 million over the 2015-2019 period for a total of \$54 million (with \$2.7 million spent prior to 2015). The ERP Phase 1 project cost was \$62 million on an actual basis.²¹⁶ The variance between the forecast and actual cost is \$8 million.²¹⁷

SEC submitted that the OEB should disallow the \$8.8 million cost overrun associated with the ERP Phase 1 project. SEC calculated the cost overrun as the difference between the forecast cost of \$54 million and actual cost of \$62.8 million.²¹⁸ SEC submitted that the ERP Phase 1 project came in over-budget, behind schedule and without most of the benefits that were forecast.

With respect to the benefits, SEC submitted that the monetary benefits of the ERP Phase 1 project and the direct cost savings were significantly lower than were originally forecast. SEC provided detailed analysis of the change to the forecast benefits in its

²¹⁶ Oral Hearing Transcripts / Vol. 5 / pp. 110-111; and Toronto Hydro Reply Argument / p. 86.

²¹⁷ Oral Hearing Transcripts / Vol. 5 / p. 113.

²¹⁸ The \$62.8 million actual cost figure used in SEC's calculation appears to be sourced from Exhibit 2B / Section 8.4 / p. 18. The testimony at Oral Hearing Transcripts / Vol. 5 / p. 113 and in the Toronto Hydro Reply Submission / p. 86 cite a \$62 million actual cost amount for the ERP Phase 1 project. It is unclear which variance amount (\$8 million or \$8.8 million) is correct. However, this minor difference in the cost variance as between SEC's calculation and Toronto Hydro's calculation did not influence the OEB's decision.

argument.²¹⁹ SEC submitted that ratepayers ended up paying more for the ERP Phase 1 project and received less benefits.

SEC stated that Toronto Hydro attempted to dismiss the difference between the original and updated forecast of benefits as its inability to measure certain cost savings related to reduced overtime. However, even if that is true, the overtime savings (if it is assumed that 100% of the forecast overtime savings occurred) would not cover the variance in the forecast versus revised expectation of the project benefits.²²⁰

AMPCO supported SEC's proposal to remove \$8.8 million from 2020 opening rate base related to the cost overrun on the ERP Phase 1 project. AMPCO further submitted that the outcome of the delay in the go live date for the ERP Phase 1 project (from 2016 to late 2018) is that improved data integrity was not achieved prior to the development of Toronto Hydro's business plan.²²¹

In its reply argument, Toronto Hydro submitted that SEC's submission relies heavily on the monetary benefits of the ERP Phase 1 project and fails to consider the specific cost considerations that drove the variances and the broader context of this investment.

Toronto Hydro submitted that it needed to invest in a new ERP to replace the obsolete legacy system that had been in use for more than ten years. This project was necessary to mitigate significant technical risks (e.g. cyber security), financial risks and operational limitations. Toronto Hydro stated that although it was at a stage in the project where it could, and did, quantify the monetary benefits, this is not an OEB requirement for approval of a project, and the need for the ERP was independent of quantifying those benefits.²²²

Toronto Hydro further submitted that if SEC had considered all of the benefits of the project (as opposed to a limited subset of the benefits), the value is \$57.9 million, which compares to a total project cost of \$62 million.²²³ Furthermore, Toronto Hydro submitted that the \$57.9 million estimated total benefit is conservative as it only captures the cost

²¹⁹ SEC Submission / p. 59. The analysis relies on information provided in both the current proceeding (Undertaking J5.8) and the 2015-2019 Custom IR proceeding (EB-2014-0116 / Exhibit 2B / Section E8.6 / p. 47).

²²⁰ SEC Submission / pp. 58-59.

²²¹ AMPCO Submission / pp. 27-28.

²²² Toronto Hydro Reply Submission / pp. 85-86.

²²³ Undertaking J5.8.

savings that could be directly attributed to the ERP Phase 1 project. Overall, Toronto Hydro stated that the appropriate comparison is one that looks at the actual costs and total benefits. The delta between these numbers is much smaller than what SEC argued, particularly after including the unquantified benefits (e.g. inherent value of an updated ERP system and indirect benefits that were not captured in the analysis).²²⁴

Toronto Hydro also submitted that the evidence demonstrates that the cost variance for the ERP Phase 1 project was prudently incurred. Toronto Hydro explained that the cost variance was attributable to the following factors:

- An additional \$4.9 million resulting from incremental resources that were required for the project, changes in infrastructure costs following a more detailed technical assessment, and exchange rate fluctuations
- An additional \$1.8 million resulting from a three-month schedule extension to allow the alignment of various activities and streamline project-related tasks
- An additional \$1.3 million in subscription fees for certain modules. These modules bring additional functionalities such as compensation, recruiting, onboarding, performance & goals, workforce analytics & planning.²²⁵

Toronto Hydro submitted that the costs noted above were prudently incurred for the successful completion of the project. Toronto Hydro stated that no parties challenged these cost variances by way of cross-examination at the Oral Hearing. Furthermore, SEC failed to provide any specific reasons to question the prudence of the noted variances.²²⁶

With respect to the perceived delay in completing the project relative to the schedule contemplated in 2014, Toronto Hydro submitted that the implementation timeline for the ERP was contingent on the timing of the 2015-2019 Custom IR decision. As that decision was issued on December 29, 2015, Toronto Hydro did not start the implementation until January 2016, and the new system went live in October 2018. The project took approximately 22 months to complete, which is consistent with the original estimate.

²²⁴ Toronto Hydro Reply Submission / p. 86.

²²⁵ Toronto Hydro Reply Submission / pp. 87-88.

²²⁶ Toronto Hydro Reply Submission / p. 88.

Toronto Hydro concluded that the ERP Phase 1 project costs are prudent and should be approved for inclusion in rate base.²²⁷

Findings

While there was some discussion that the ERP system will fail to deliver the originally identified benefits, the OEB believes that the focus needs to be on prudent cost management, as the ERP was required to replace an obsolete legacy system. As Toronto Hydro noted, the project was necessary to mitigate significant technical risks (e.g. cyber security), financial risks and operational limitations. The introduction of the ERP system will have benefits, but the difference between originally forecast benefits and current estimate is not the basis on which to disallow costs for an obsolete legacy system.

In its reply argument, Toronto Hydro identified three reasons for the cost overrun.²²⁸ The OEB finds that the addition of certain modules (and associated subscription fees) and the additional resources required for the project were within management's discretion and resulted in a material difference in cost. The OEB is not persuaded that the benefit of the enhancements justifies the cost overruns. As such, the OEB disallows half of the \$8 million cost overrun related to the ERP Phase 1 project. While not the determining factor in the \$4 million disallowance, it is interesting to note that the difference between the benefits over the 2019 to 2026 period and the cost is \$3.9 million.²²⁹

The OEB approves the cost associated with the ERP Phase 1 project, net of a \$4 million disallowance, to be added to rate base.

²²⁷ Toronto Hydro Reply Submission / p. 88.

²²⁸ Toronto Hydro Reply Submission / pp. 87-88.

²²⁹ The \$3.9 million variance is cited in Toronto Hydro's Reply Submission / p. 86.

5.2 Is the level of proposed 2020-2024 capital expenditures and capital in-service additions arising from the distribution system plan appropriate and is the rationale for planning and pacing choices, including trade-offs between capital and operating costs, appropriate and adequately explained (Issue 3.2)?

Background

Toronto Hydro's proposed net capital expenditures are set out in the following table²³⁰:

**Table 8
2020-2024 Capital Expenditures**

(\$M)	2020	2021	2022	2023	2024	Total
System Access	\$ 92.80	\$ 93.30	\$ 93.90	\$ 106.00	\$ 116.40	\$ 502.40
System Renewal	\$ 307.60	\$ 325.70	\$ 323.10	\$ 339.00	\$ 325.60	\$1,621.00
System Service	\$ 34.60	\$ 60.10	\$ 71.30	\$ 33.60	\$ 38.50	\$ 238.10
General Plant	\$ 79.60	\$ 93.70	\$ 89.00	\$ 77.70	\$ 85.20	\$ 425.20
Other	\$ 7.00	\$ 9.00	\$ 9.80	\$ 9.50	\$ 8.70	\$ 44.00
Sub-Total	\$ 521.60	\$ 581.80	\$ 587.10	\$ 565.80	\$ 574.40	\$2,830.70
Less Non-Rate Regulated Utility Assets	\$ (4.40)	\$ (3.10)	\$ (3.20)	\$ (3.30)	\$ (3.50)	\$ (17.50)
Total	\$ 517.20	\$ 578.70	\$ 583.90	\$ 562.50	\$ 570.90	\$2,813.20

The proposed 2020-2024 capital expenditures of \$2,830.7 million compares to approved capital expenditures for the 2015-2019 period of \$2,240.4 million.²³¹ This is an increase of \$590.3 million (26.3%). This also compares to actual capital expenditures

²³⁰ Exhibit U / Tab 2 / Schedule 2 / Appendix A updated for U-Staff-168 / Table 2. In U-Staff-168 / Table 2, Toronto Hydro proposed a \$3.2 million increase to capital expenditures due to carryover projects from the 2015-2019 Custom IR term. The OEB has included that \$3.2 million increase in the relevant categories based on U-Staff-168 / Table 2.

²³¹ U-Staff-171 / Appendix A. The OEB is using the capital expenditure amounts prior to the removal of the non-rate regulated utility assets for the comparisons in this section as it does not believe that there are approved capital expenditure amounts with the non-rate regulated utility assets removed available on the record of this proceeding. In any case, the removal of the non-rate regulated utility assets has only a minimal impact on these comparisons.

for the 2015-2019 period of \$2,379.4 million.²³² This is an increase of \$451.3 million (19.0%).

Toronto Hydro's proposed in-service additions associated with its proposed capital expenditures (and CWIP) are set out in the table below.²³³

Table 9
2020-2024 In-Service Additions

(\$M)	2020	2021	2022	2023	2024	Total
In-Service Additions	\$ 539.90	\$ 475.00	\$ 587.40	\$ 590.50	\$ 583.60	\$2,776.40

Toronto Hydro stated that its proposals reflect the “minimum level of investment” needed for its distribution system.²³⁴ Specifically, with respect to its capital plan, Toronto Hydro stated that it is “a restrained plan that represents a minimum level of investment necessary to maintain average reliability and customer service performance and deliver targeted improvements for customers experiencing below average service.”²³⁵

A number of parties submitted that the OEB should make reductions to the proposed capital budget. The submissions of parties were supported by detailed rationale.

OEB staff submitted that the 2020-2024 capital expenditures should be reduced by \$246.8 million based on reductions to certain capital programs.²³⁶

SEC submitted that, if the OEB finds that a C-factor mechanism is appropriate, the OEB should reduce the proposed capital expenditures over the 2020-2024 period by \$590 million as a starting point. The OEB should also further reduce the capital expenditures to account for productivity benefits that Toronto Hydro should have achieved during its 2015-2019 Custom IR plan, as well as additional productivity that Toronto Hydro knows that it will achieve during the Custom IR term (but has not built into its capital forecast).²³⁷

²³² Exhibit U / Tab 2 / Schedule 2 / p. 3. Note that the 2019 capital expenditures are still considered forecast.

²³³ Undertaking J1.7.

²³⁴ Toronto Hydro Argument-in-Chief / p. 1.

²³⁵ Toronto Hydro Argument-in-Chief / p. 23.

²³⁶ OEB Staff Submission / p. 64.

²³⁷ SEC Submission / p. 7.

AMPCO submitted that the OEB should reduce the proposed 2020-2024 capital expenditures by \$590 million and approve a capital budget consistent with current levels.²³⁸ CCC agreed with AMPCO that Toronto Hydro's capital spending levels for the 2020-2024 Custom IR term should not be increased beyond historical capital spending levels.²³⁹

BOMA submitted that the large sustained capital expenditures are excessive and the resulting in-service additions and rate impacts are unacceptable. BOMA also noted that Toronto Hydro committed only to maintain reliability (as opposed to improving reliability).²⁴⁰

Energy Probe submitted that the level of proposed 2020-2024 capital expenditures and in-service additions are not appropriate. Energy Probe stated that Toronto Hydro did not provide the OEB with evidence of meaningful trade-offs between capital and operating costs. Energy Probe also argued for capital expenditure reductions related to specific programs.²⁴¹

VECC submitted that the outcome of the 2015-2019 Custom IR plan does not support an increase in capital expenditures as compared to the previous period. The asset condition methodology used by Toronto Hydro to support the capital expenditure increase is untested, incomplete in its implementation and yet to be demonstrated as a reasonable approach. VECC further submitted that the need for weather hardening investments are unsupported by any data. VECC submitted that it took an envelope approach to capital expenditure reductions. VECC stated that a utility is better positioned than intervenors to prioritize investments and react to varying circumstances. VECC submitted that the evidence does not support a capital plan that is in excess of the average capital expenditures over the 2015-2019 Custom IR term. VECC calculated this as an average capital expenditure amount of \$476 million per year.²⁴²

PWU largely supported Toronto Hydro's proposed capital budget and noted that the deferral of investment on the system will cost more later and expose the system to increased levels of risk.²⁴³ However, PWU submitted that Toronto Hydro has

²³⁸ AMPCO Submission / p. 10.

²³⁹ CCC Submission / p. 13.

²⁴⁰ BOMA Submission / pp. 22, 28.

²⁴¹ Energy Probe Submission / pp. 20-29.

²⁴² VECC Submission / pp. 16-17.

²⁴³ PWU Submission / pp. 7-18.

increasingly relied on third-party external contracting services for both capital and maintenance work and plans to increase its reliance on external resources in the test period. PWU submitted that Toronto Hydro has not sufficiently justified in evidence the level of external contractor spending or demonstrated that contracted services have resulted in lower costs for ratepayers. On this basis, PWU proposed a disallowance of 5% to the portion of OM&A and capital expenditures undertaken by third parties. PWU estimated that this would result in a disallowance of \$84.6 million to capital expenditures over the 2020-2024 period.²⁴⁴

DRC submitted that it supports a number of Toronto Hydro's capital programs and stated that the OEB should consider the available electric vehicle (EV) financial incentives in its consideration of Toronto Hydro's proposed fleet capital budget.²⁴⁵

In its reply argument, Toronto Hydro noted that OEB staff and most intervenors claimed that Toronto Hydro's proposed 2020-2024 capital expenditures are unreasonable and should be reduced. Toronto Hydro stated that these arguments are based on concerns about: (a) the maturity of the utility's asset management processes; (b) the alignment (or perceived lack thereof) of capital expenditure proposals with underlying data such as asset condition, historical reliability, and unit costs; and (c) a small number of specific programs.

Toronto Hydro submitted that the arguments advanced by OEB staff and intervenors are unfounded. The arguments rely on assertions that are not rooted in, or are directly contradicted by, the evidence. In many instances, parties rely on narrow interpretations of the evidence.

Toronto Hydro stated that its 2020-2024 DSP is its most advanced system plan to date. The record in this proceeding overwhelmingly demonstrates that the proposed capital investments are necessary to meet immediate needs of the grid and to sustain long-term performance in alignment with customer needs and preferences.

Toronto Hydro submitted that the OEB should reject the capital expenditure reductions (and associated in-service additions reductions) proposed by various parties for the reason that they would demonstrably, negatively impact service levels and result in sub-

²⁴⁴ PWU Submission / pp. 18-24.

²⁴⁵ DRC Submission / p. 17-22.

optimal outcomes contrary to customers' expressed needs and expectations. Toronto Hydro provided detailed rationale supporting its position.²⁴⁶

Findings

The OEB has reviewed Toronto Hydro's proposed capital expenditure budget for the 2020-2024 Custom IR term. The OEB approves the proposed capital expenditures, subject to the reductions set out in the table below. These reductions are in addition to the change to the stretch factor and the additional stretch factor on capital discussed under Issue 2.1. The stretch factors were considered in the assessment of the capital expenditures. The reasons for the reductions are discussed in the sub-sections that follow.

Table 10
2020-2024 Net Capital Expenditure Reductions

Category	Program(s)	2020-2024 Net Capital Expenditure Reduction
System Access	Customer and Generation Connections	\$14.7 million
System Renewal	Area Conversions	\$54.0 million
	Reactive and Corrective Capital	\$35.6 million
System Service	None	None ²⁴⁷
General Plant	Fleet and Equipment	\$4.2 million
Other	AFUDC	\$5.4 million
Total		\$113.9 million

System Access

Background

The table below provides the proposed net capital expenditures for each program within the system access category.²⁴⁸

²⁴⁶ Toronto Hydro Submission / pp. 104-107.

²⁴⁷ The OEB's findings on the Energy Storage System-related proposals are discussed under Issue 3.3.

²⁴⁸ Exhibit U / Tab 2 / Schedule 2 / Appendix A updated for U-Staff-168 / Table 2.

Table 11
2020-2024 System Access Capital Expenditures

Programs (\$M)	2020	2021	2022	2023	2024	Total
Customer and Generation Connections	\$ 42.9	\$ 43.9	\$ 44.8	\$ 45.6	\$ 46.3	\$ 223.4
Externally Initiated Plant Relocations & Expansion	\$ 11.4	\$ 20.8	\$ 4.6	\$ 4.7	\$ 4.5	\$ 46.1
Generation Protection, Monitoring and Control	\$ 3.7	\$ 2.3	\$ 2.4	\$ 2.5	\$ 2.7	\$ 13.6
Load Demand	\$ 11.3	\$ 11.4	\$ 18.5	\$ 22.6	\$ 23.6	\$ 87.5
Metering	\$ 23.6	\$ 14.8	\$ 23.6	\$ 30.6	\$ 39.2	\$ 131.8
System Access Total	\$ 92.8	\$ 93.3	\$ 93.9	\$ 106.0	\$ 116.4	\$ 502.4

With respect to system access-related capital programs, OEB staff filed a submission on the Customer and Generation Connections program²⁴⁹ and Mr. Hann filed a submission related to the Metering program.²⁵⁰

OEB staff noted that the Customer and Generation Connections program includes the costs of system investments that are required to provide customers with access to the system.

Generation connections are fully funded by contributions received from connecting generators. Customer connections, that include both residential and commercial customers, are partially funded by contributions for those connections.²⁵¹

The proposed 2020-2024 capital contributions in the customer connection segment of this program were based on a weighted average of 2013-2017 customer contributions.²⁵² Toronto Hydro provided updated gross capital expenditures and capital contributions for the customer connections segment of the program based on the most recent available information (which includes 2018 actuals).²⁵³

²⁴⁹ OEB Staff Submission / pp. 66-67.

²⁵⁰ Norman Hann Submission / pp. 7-10.

²⁵¹ Exhibit 2B / Section E5.1 / p. 14.

²⁵² 2B-Staff-78(b).

²⁵³ Undertaking J1.6.

OEB staff submitted that the most recent data available (2018 actuals) should be added to the data set used to determine the net costs for this program.²⁵⁴ As such, the total net cost of the program should be reduced from \$223.4 million to \$208.7 million (a reduction of \$14.7 million or 6.6%).²⁵⁵

In its reply argument, Toronto Hydro submitted that OEB staff's proposed \$14.7 million reduction to the Customer and Generation Connections program is inappropriate as it fails to appropriately consider the volatility of customer connection activities. Specifically, Toronto Hydro submitted that OEB staff derived its recommended reduction to Toronto Hydro's customer connections forecast by simply shifting the historical period to 2014-2018 following the Application Update.

Toronto Hydro submitted that OEB staff's error in this approach was that it was overly-simplistic, and fails to consider the underlying volatility of the program and the implications for computing an average customer contribution rate. Specifically, OEB staff's analysis overlooks how its proposal causes the projection calculation to overemphasize the customer contribution ratio experienced in 2017, which was an outlier year.²⁵⁶ As a result, OEB staff's proposed customer connections forecast is demonstrably understated due to an overstated customer contributions ratio. Toronto Hydro submitted that the original data used is a better fit for the weighted average calculation and that the OEB should accept the utility's customer connections forecast as filed for this reason.²⁵⁷

Toronto Hydro submitted that its Metering program investments for the 2020-2024 period include a ramp-up in 2022 for end-of-life low-volume customer meter replacements. Toronto Hydro stated that, without intervention, 90% of these meters will be operating beyond their expected useful life as of 2025, presenting unacceptable levels of risk to customer service outcomes.²⁵⁸

²⁵⁴ The updated data set would include the years 2014-2018.

²⁵⁵ OEB Staff Submission / pp. 66-67.

²⁵⁶ Toronto Hydro further explained that this effect is a result of the following dynamic: the second lowest annual customer contribution rate is eliminated from the calculation (i.e. 31% in 2013), and the weighting placed on the lowest annual rate (i.e. 21% in 2014) is reduced. The net result of this is a shift in the calculated average customer contribution rate toward the unusually high 62% rate in 2017.

²⁵⁷ Toronto Hydro Reply Submission / pp. 163-165.

²⁵⁸ Toronto Hydro Reply Submission / pp. 165-167.

Findings

The OEB approves the capital expenditure budgets for all the programs included in the system access category for the 2020-2024 Custom IR term with the exception of the Customer and Generation Connection program.

Toronto Hydro's proposal for capital contributions for customer connections in the 2020-2024 period is based on a weighted average of 2013-2017 customer contributions. The OEB finds that the updated actual 2018 gross capital expenditures and customer contributions should be included in the data set (i.e. 2014-2018) used for forecasting the anticipated net costs of the customer connection segment of the Customer and Generation Connection program over the 2020-2024 Custom IR term. This approach results in an approved program cost of \$208.7 million, a reduction of \$14.7 million.²⁵⁹

System Renewal

Background

The table below provides the proposed capital expenditures for each program within the system renewal category.²⁶⁰

²⁵⁹ Undertaking J1.6.

²⁶⁰ Exhibit U / Tab 2 / Schedule 2 / Appendix A updated for U-Staff-168 / Table 2.

Table 12
2020-2024 System Renewal Capital Expenditures

(\$M)	2020	2021	2022	2023	2024	Total
Area Conversions	\$ 41.9	\$ 47.2	\$ 46.3	\$ 50.4	\$ 35.6	\$ 221.3
Network System Renewal	\$ 18.6	\$ 19.3	\$ 18.5	\$ 17.7	\$ 18.3	\$ 92.4
Reactive and Corrective Capital	\$ 61.2	\$ 62.4	\$ 63.5	\$ 64.4	\$ 65.8	\$ 317.2
Stations Renewal	\$ 28.0	\$ 35.3	\$ 29.4	\$ 27.0	\$ 22.4	\$ 142.0
Underground Renewal - Downtown	\$ 15.1	\$ 22.5	\$ 23.9	\$ 30.0	\$ 30.6	\$ 122.0
Underground Renewal - Horseshoe	\$ 93.0	\$ 88.7	\$ 90.3	\$ 93.1	\$ 95.2	\$ 460.3
Overhead System Renewal	\$ 49.8	\$ 50.4	\$ 51.3	\$ 56.5	\$ 57.7	\$ 265.7
System Renewal Total	\$ 307.6	\$ 325.7	\$ 323.1	\$ 339.0	\$ 325.5	\$ 1,621

A number of parties made submissions on issues associated with system renewal-related capital expenditures (and, more broadly, Toronto Hydro's capital planning processes).

OEB staff submitted that the planned system renewal budget (which OEB staff defined to exclude area conversions and reactive & corrective capital) should be reduced by 15%.²⁶¹

SEC and AMPCO provided detailed submissions with respect to the capital planning process applied by Toronto Hydro, which resulted in the SEC proposal that the proposed capital budget (in aggregate across all programs) should be reduced by, at least, \$590 million.²⁶² CCC supported the arguments of SEC and AMPCO.²⁶³

²⁶¹ OEB Staff Submission / p. 69.

²⁶² SEC Submission / p. 35; and AMPCO Submission / p. 10.

²⁶³ CCC Submission / pp. 13-14.

Some parties argued that Toronto Hydro did not fully transition to its new asset condition assessment (ACA) methodology upon which it makes capital investment decisions.²⁶⁴

AMPCO submitted that there are shortcomings in Toronto Hydro's implementation of the Common Network Asset Indices Methodology (CNAIM) that need to be considered by the OEB before accepting that it has improved the accuracy of the Health Index (HI) scores and can be relied upon to support investment planning decisions. Specifically, AMPCO submitted the following:

- Toronto Hydro has not yet implemented all of the components of the CNAIM. Toronto Hydro has only calculated the first element of the CNAIM, the current and future health scores of the 26 asset groups and refinements are needed to these calculations to improve accuracy. The full CNAIM addresses probability of failure, consequence of failure and asset criticality. Toronto Hydro has not yet developed these elements.
- Within the HI calculations, some of the modifiers important to the calculations have not yet been derived and have been set to a default value of one. The inclusion of these modifiers improves the accuracy of the HI results.
- By not implementing all of the aspects of CNAIM, Toronto Hydro has not achieved all of the benefits of CNAIM with respect to assessing asset health and probability of failure. Toronto Hydro is currently in the process of developing the formulas required to convert a HI score produced by CNAIM into a probability of failure. As such, the benefit of a stronger and more objective relationship between condition and probability of failure has not yet been realized.
- Only one year of asset condition information using the CNAIM was available in developing the DSP. One year of asset condition provides a static view and is not sufficient.²⁶⁵

In its reply argument, Toronto Hydro submitted that it has fully and appropriately transitioned to its new ACA methodology. Toronto Hydro submitted that the HI component of the CNAIM can be relied upon even if the criticality and risk index

²⁶⁴ OEB Staff Submission / pp. 70-73; SEC Submission / pp. 38-44; and AMPCO Submission / pp. 16-18.

²⁶⁵ AMPCO Submission / pp. 16-17.

components of the methodology have not been implemented. Toronto Hydro also submitted that it has both sufficiently implemented and tested the HI component of the CNAIM.

More specifically, Toronto Hydro submitted that it has fully implemented the HI component of CNAIM for the purposes of: (a) accurately determining the current and future health scores of assets; and (b) placing those asset health scores within five HI bands from best to worst condition. This can be relied upon for condition-based asset planning, not unlike the intended purpose of Toronto Hydro's previous ACA.

Toronto Hydro noted that it adopted the CNAIM approach to replace its previous methodology, which was effectively just the HI component. As such, it is unreasonable to suggest that the new ACA methodology is somehow deficient.

Toronto Hydro also submitted that, in addition to measured and observable condition data, the CNAIM approach includes other health score modifiers (i.e. location, duty, and reliability factors) that, where available and justified, can incrementally enhance the accuracy of health scores. Toronto Hydro noted that these additional modifiers have the potential to improve the accuracy of ACA results and are worth investigating as part of continuous improvement. However, with respect to the capital plan currently before the OEB, Toronto Hydro submitted that these additional modifier variables are not necessary (and in a number of cases are not appropriate) to develop accurate health score calculations. In addition, there is no evidence to suggest that the inclusion of these factors would drive significantly different (i.e. healthier or more deteriorated) health scores across an asset population.²⁶⁶

Some parties argued that Toronto Hydro lacks a centralized approach to system investment decision-making, and risk-based analysis was not completed in a centralized manner.²⁶⁷ SEC submitted that Toronto Hydro's risk assessment framework is a combination of many disparate tools and processes. SEC submitted that Toronto Hydro does not use a tool that is able to consistently determine asset risk amongst a range of different assets that it manages across the system. SEC submitted that a common risk-based analysis across assets and programs, which incorporates and combines all input

²⁶⁶ Toronto Hydro Reply Submission / pp. 126-128.

²⁶⁷ OEB Staff Submission / pp. 70-73; SEC Submission / 38-44; and AMPCO Submission / pp. 16-18, p. 22.

data to measure the probability and consequence of asset failure, is an approach to risk assessment across the system that is more consistent with best practices.²⁶⁸

In its reply argument, Toronto Hydro submitted that the criticisms of its risk assessment framework are misplaced. Toronto Hydro stated that the record demonstrates that it has achieved considerable maturity and sophistication in its investment planning process and the tools that support it. Toronto Hydro submitted that it ensures it thoroughly evaluates asset risk as part of its Investment Planning and Portfolio Reporting (IPPR) process. Toronto Hydro's risk assessment accounts for both the probability of failure and consequence of failure. Probability of failure is determined based on asset condition assessment (leading to HI scores), predictive failure modeling (involving the derivation of hazard rate functions for each asset class), and historical reliability analysis (identifying assets with a high failure frequency). Through various qualitative and quantitative risk analysis methods, Toronto Hydro determines the risk of failure to inform risk mitigation choices.²⁶⁹

OEB staff also submitted that one of the tools Toronto Hydro uses to evaluate asset risk, the economic risk-based analysis (which leverages the Feeder Investment Model (FIM) to produce the necessary calculations), relies on inputs from Toronto Hydro's Customer Interruption Cost (CIC) study. The CIC is an important input in the economic risk-based analysis that Toronto Hydro undertakes. The CIC used in the analysis was intended to be updated in advance of the current proceeding but a revised CIC study was never completed. Therefore, OEB staff submitted that one of the tools that Toronto Hydro currently uses to evaluate risk relies on outdated information that Toronto Hydro had intended to update in advance of the current proceeding.²⁷⁰ SEC and AMPCO made similar arguments.²⁷¹

In its reply argument, Toronto Hydro clarified that while CIC values are an input to the economic risk-based analysis within the FIM, the capital programs set out in the DSP are not directly predicated on the results of this analysis. Rather, the purpose of this analysis is to derive the monetized risk cost associated with an asset, which helps ensure that projects (within programs) are designed and scheduled to optimize the cost-benefit ratio of asset interventions over time.

²⁶⁸ SEC Submission / pp. 39-40.

²⁶⁹ Toronto Hydro Reply Submission / pp. 111-117.

²⁷⁰ OEB Staff Submission / p. 72.

²⁷¹ SEC Submission / pp. 43-44; and AMPCO Submission / p. 25.

Toronto Hydro also submitted that it disagrees with parties' characterization of the existing CIC values as out of date. The values that Toronto Hydro has historically used are generic values that result from broadly accepted academic research. Toronto Hydro has demonstrated the reasonableness of these values in past proceedings and has explained why they are sufficient and appropriate for making prioritization decisions regarding assets and projects within a program.

Toronto Hydro stated that the CIC study that is currently in progress will generate Toronto-specific values. While these values will provide enhanced granularity and insight into customer preferences in the utility's service territory, the fact that these values will be available later than planned does not render the previous values out of date. Toronto Hydro noted that it is on track to complete the CIC study in the near future and expects to incorporate the results of the study into its planning processes during the 2020-2024 period.²⁷²

With respect to the change in asset condition during the historical period, AMPCO developed a table that shows the change in ACA results over time using Toronto Hydro's previous ACA methodology.²⁷³ Specifically, the table compares the 2014 ACA data that underpinned Toronto Hydro's 2015-2019 Custom IR application and the latest ACA results available, using the previous ACA methodology, for 2016. The table shows that the number of Toronto Hydro's assets in very poor and poor condition improved from 7% in 2014 to 2% in 2016.²⁷⁴

AMPCO submitted that the trend in asset condition between 2014 and 2016 based on the previous ACA methodology does not support the increase in asset renewal quantities and associated capital spending that is requested by Toronto Hydro.²⁷⁵

²⁷² Toronto Hydro Reply Argument / pp. 117-118.

²⁷³ Exhibit K3.3 / p. 40.

²⁷⁴ AMPCO Submission / pp. 11-13. AMPCO noted that Toronto Hydro provided a correction to the AMPCO table in Undertaking J4.8. Toronto Hydro's correction reduced the percentage of total assets in very poor and poor condition in 2014 from 7% to 3% and the 2% in 2016 was unchanged. In the Toronto Hydro Reply Submission / pp. 159-160, Toronto Hydro seems to have confirmed that AMPCO's original table (Exhibit K3.3 / p. 40) was correct in the context of the way in which AMPCO has used the data.

²⁷⁵ AMPCO Submission / pp. 12-13. The trend used in AMPCO's submission shows a decrease from 6% in 2014 to 2% in 2016 (in terms of assets in very poor and poor condition). This is based on further revisions that AMPCO applied to the corrections made by Toronto Hydro in Undertaking J4.8. As discussed previously, Toronto Hydro seems to have confirmed that AMPCO's original calculation was correct.

AMPCO, SEC and OEB staff submitted that a comparison of the two methodologies highlights that, across asset classes, the new CNAIM methodology makes Toronto Hydro's system appear to be in worse condition than it did under the previous ACA methodology.²⁷⁶

In its reply argument, Toronto Hydro acknowledged that it is difficult to compare HI results before and after CNAIM adoption. However, this is hardly unexpected for such a significant shift in methodology. In light of known issues that limited the effectiveness of the previous ACA model, Toronto Hydro stated that it was appropriate to pursue enhancements to its ACA capabilities by moving to the CNAIM. Toronto Hydro submitted that it would be unreasonable to disregard the improvements made in this important aspect of investment planning. The unavoidable difficulty in comparing output before and after adopting an enhanced model should not be used to penalize the utility for having made such enhancements.²⁷⁷

AMPCO and SEC submitted that the transition to the CNAIM methodology is part of the reason that Toronto Hydro is proposing to increase spending on system renewal work.²⁷⁸ AMPCO noted that, based on 2017 year-end asset data using the CNAIM methodology, 9% of assets are in the worst two HI bands (HI4 and HI5).²⁷⁹ HI4 condition is defined as material deterioration, and HI5 condition is defined as end of serviceable life.²⁸⁰

AMPCO submitted that Toronto Hydro proposed to replace almost 20% more assets over the 2020-2024 Custom IR term relative to the 2015-2019 Custom IR term. AMPCO submitted that the quantity of assets that Toronto Hydro proposed to replace (25,349) greatly exceed the number of assets categorized in HI4 and HI5 (13,606) using the CNAIM methodology.²⁸¹ SEC submitted that Toronto Hydro is replacing significantly more assets than its own forecasts show would be required.²⁸²

In its reply argument, Toronto Hydro submitted that its ACA supports the need for a large, sustained system renewal program. In evaluating the relationship between the

²⁷⁶ AMPCO Submission / p. 11; SEC Submission / p. 48; and OEB Staff Submission / p. 73.

²⁷⁷ Toronto Hydro Reply Submission / pp. 155-156.

²⁷⁸ AMPCO Submission / p. 11; and SEC Submission / p. 48.

²⁷⁹ AMPCO Submission / pp. 13-14.

²⁸⁰ Exhibit 2B / Section D3 / p. 22.

²⁸¹ AMPCO Submission / pp. 14-15.

²⁸² SEC Submission / p. 44.

ACA and asset replacement levels, Toronto Hydro submitted that all of the information provided in the DSP must be considered.

Toronto Hydro submitted that AMPCO's argument has three significant problems as follows:

1. The asset replacement count (25,349) includes data from two asset classes for which Toronto Hydro does not compute or rely upon health scores (i.e. 6,700 pole top transformers and 519 km of cable).
2. AMPCO focuses exclusively on the current health scores, ignoring the future health score projections. These projections show that an additional 25,525 assets are expected to become HI4 or HI5 by 2024.
3. The comparison of replacement volumes versus ACA volumes ignores the other legitimate factors that drive the replacement of assets that are not in HI4 / HI5 condition (e.g. PCB contamination in underground transformers, flooding risk in network units, and equipment replacements required to bring 4 kV feeders up to standard voltages).

Toronto Hydro also submitted that its system renewal plan will replace, on a planned basis, approximately 2,000 fewer assets than are projected to become HI4 / HI5 by 2024. In reality, this gap is wider because not every asset replaced will be in HI4 or HI5 condition. At the same time, the gap will be offset somewhat by unplanned replacements within the Reactive and Corrective Capital program.

Overall, Toronto Hydro submitted that its system renewal plan is firmly rooted in the ACA where applicable, and is calibrated to generally maintain the number of assets in HI4 and HI5 condition on a forecast basis.²⁸³

OEB staff, AMPCO and SEC submitted that the proposed asset replacements in the Underground System Renewal – Horseshoe program are in excess of the amount that would be required based on HI scores determined by the CNAIM methodology.²⁸⁴

²⁸³ Toronto Hydro Reply Submission / pp. 132-137.

²⁸⁴ OEB Staff Submission / pp. 75-77; AMPCO Submission / pp. 25-26; and SEC Submission / pp. 44-47.

In response, Toronto Hydro noted that the parties focused on the fact that Toronto Hydro plans to replace more underground transformers and padmount switches than is strictly necessary to maintain HI4 / HI5 condition during the period. However, its investment strategies for these two asset classes are tied not only to condition, but to other risks and objectives that are unique to the underground distribution system in the Horseshoe area. Toronto Hydro submitted that, once these drivers are accounted for the pace of replacement for these assets is actually restrained.

Toronto Hydro stated that a key driver for underground transformer replacement is the presence of equipment containing, or at risk of, containing PCBs. OEB staff and intervenors did not dispute that PCB risk mitigation is a legitimate need. Rather, the argument is that replacing PCB at-risk transformers should not drive investment levels significantly beyond what is necessary to maintain HI4 / HI5 condition. Toronto Hydro submitted that this is an incorrect conclusion as it is unreasonable to assume that every PCB at-risk transformer would be categorized as being in HI4 / HI5 condition.

Toronto Hydro submitted that the needs in the Underground System Renewal – Horseshoe program are not overstated. Toronto Hydro further submitted that any reductions to the planned expenditures in this program will materially jeopardize its ability to: (a) manage poor performing feeders; (b) minimize customer disruptions through coordinated area rebuilds; (c) prevent PCB contaminated oil spills in residential and commercial areas; and (d) enable efficient and cost-effective customer connections by converting end-of-life 4 kV circuits.²⁸⁵

AMPCO also submitted that the quantity of assets proposed to be replaced in the Overhead System Renewal program are in excess of those that are in the HI4 / HI5 categories resulting in an overstatement of capital needs. AMPCO further submitted that the reliability data does not support the increased spending in this program during the 2020-2024 Custom IR term. Specifically, reliability data for poles and overhead transformers does not support an accelerated renewal rate.²⁸⁶

In its reply argument, Toronto Hydro submitted that AMPCO's analysis is flawed. Toronto Hydro stated that more than a third of the assets that Toronto Hydro plans to replace in the Overhead System Renewal program are pole top transformers for which the utility does not compute or rely upon health scores. Instead, Toronto Hydro uses

²⁸⁵ Toronto Hydro Reply Submission / pp. 138-141.

²⁸⁶ AMPCO Submission / pp. 25-26.

visual and infrared inspection information from line patrols as well as age-based probability of failure to determine whether a pole-top transformer should be replaced reactively (or as part of an area rebuild). While Toronto Hydro does not normally replace pole top transformers on a spot basis, in the 2020-2024 period, the most important driver for the majority of the overhead transformer replacements is the need to remove assets containing or at risk of containing PCBs, which drives an overall increase in transformer replacements

Mr. Hann cited a statement from evidence as follows, “Toronto Hydro will install taller poles with armless construction and tree-proof wire to reduce vegetation contact risks.”²⁸⁷ Mr. Hann submitted that this appears to be a capital-based vegetation management process that will require Toronto Hydro to refresh the poles every time the trees grow into the lines. Mr. Hann stated that, at some point, it will not be possible to purchase poles that are taller than the trees and a new strategy will need to be developed.²⁸⁸

In its reply argument, Toronto Hydro submitted that it has not stated that pole replacements are caused by tree contacts and noted that there is no capital program for which vegetation management is a driver. Rather, as Toronto Hydro rebuilds overhead lines that are in poor condition, and at risk of failure, it may install taller poles along with tree-proof conductor. This is intended to improve system resiliency in light of specific environmental conditions for assets that are expected to be in-service for a long period of time.

Toronto Hydro stated that its primary program for addressing tree contacts is the Vegetation Management segment of its Preventative and Predictive Overhead Line Maintenance OM&A program.²⁸⁹

OEB staff submitted that Toronto Hydro has not adequately accounted for the amount of planned capital work that is ultimately completed on a reactive basis. As such, there is a double-counting of forecasted capital spending in the planned system renewal budget.

OEB staff noted that Toronto Hydro proposed budgets for both planned (proactive) system renewal and reactive system renewal. Toronto Hydro stated that 10% to 20% of

²⁸⁷ Exhibit 2B / Section D2 / p. 8.

²⁸⁸ Norman Hann Submission / p. 7.

²⁸⁹ Toronto Hydro Reply Submission / pp. 144-145.

its reactive capital work requests involve an intervention on an asset that is already part of an existing planned capital scope of work. These requests result in less than \$5 million in capital expenditures annually and only a fraction (\$2 million of this overlap of work) result in opportunities to reduce planned capital. Toronto Hydro further stated that where opportunities exist to reduce planned capital expenditures, it has accounted for these opportunities, typically, by reducing planned volumes of work.²⁹⁰

OEB staff submitted that it is understated to estimate that only 10% to 20% of reactive work involves an asset that is already part of a planned scope of work, or Toronto Hydro is not targeting its planned capital investments at assets that are in the worst condition. An estimate that only \$2 million of the overlap in work results in opportunities to reduce planned capital cannot be accurate.²⁹¹

In its reply argument, Toronto Hydro submitted that OEB staff's assertion of a double-counting of forecasted capital spending in the planned system renewal budget is incorrect.

Toronto Hydro stated that OEB staff's assessment fails to consider that there are entire major asset classes as well as countless minor assets for which Toronto Hydro does not carry-out a proactive renewal approach. Without reactive capital, these assets would simply not be replaced at all.

Toronto Hydro further stated that OEB staff's assessment fails to consider that for stations, Toronto Hydro generally strives to avoid doing any reactive work due to the infeasibility of reactively addressing station asset failures within a reasonable timeframe. As a result, the increase in the Stations Renewal program in 2020-2024 will merely maintain this low level of reactive stations work and does nothing to substantially offset the need for reactive capital expenditures.

Toronto Hydro also submitted that OEB staff fails to consider the limited opportunities to reduce certain types of planned expenditures following reactive work. For example, reactively replacing an asset on a 4 kV feeder is only a temporary solution. When that 4 kV feeder is replaced in full, the asset will need to be brought up to standard. Toronto Hydro further submitted that assets in HI1, HI2 and HI3 bands have a greater than zero probability of failure. Toronto Hydro cannot perfectly predict when an asset

²⁹⁰ Undertaking JTC 1.11.

²⁹¹ OEB Staff Submission / pp. 77-80.

will fail, even with comprehensive condition information. These unplanned replacements (which are not forecasted in the planned program work) will continue to put significant pressure on the Reactive and Corrective Capital program.

Finally, Toronto Hydro submitted that it has taken into account the typical rate of reactive replacement for its assets in arriving at a restrained pace of system renewal investment. Toronto Hydro noted that, in nine of the 13 asset groups for which Toronto Hydro calculates health scores, the utility plans to replace a number of units that is lower than the number of units forecast to move into the HI4 / HI5 bands by 2024. These deficits in planned work will necessarily contribute to activity in the Reactive and Corrective Capital program.²⁹²

OEB staff also submitted that the capital budget for the Area Conversions program should be reduced.²⁹³ Energy Probe supported OEB staff's submission.²⁹⁴

Specifically, OEB staff submitted that Toronto Hydro overstated the unit costs for the rear lot conversions by using only a limited set of data for which it has the expenses grouped in a specific manner. OEB staff submitted that a reasonable estimate of the unit costs that should be used for the rear lot conversion forecast is \$0.03 million (which reflects a reduction of \$0.006 million to the proposed unit costs).

OEB staff also submitted that the amount spent on rear lot conversions is extremely high on a per customer converted basis (irrespective of whether the unit costs used are as proposed by Toronto Hydro or OEB staff). The OEB should apply a downward adjustment to the pacing of the program as the cost per customer is too high and the conversions should be completed over a longer period of time.²⁹⁵

DRC supported Toronto Hydro's proposed Area Conversions program on the basis of the improvements it will make to the distribution system designs in certain areas, including high growth and density areas, to facilitate distributed energy resources (DER) and EV-related DER integration and connection.²⁹⁶

²⁹² Toronto Hydro Reply Submission / pp. 150-152.

²⁹³ OEB Staff Submission / p. 68.

²⁹⁴ Energy Probe Submission / p. 20.

²⁹⁵ OEB Staff Submission / p. 83.

²⁹⁶ DRC Submission / p. 17.

In its reply argument, Toronto Hydro noted that OEB staff provided a high-level analysis in which it applies Toronto Hydro's unit cost (\$0.036 million per customer) to the number of customers converted in the 2015-2019 period (2,347 customers) to arrive at a total cost of \$84.5 million. OEB staff compares this to the \$59.9 million that Toronto Hydro actually spent in 2015-2019 and concludes that Toronto Hydro would have had to spend \$24.6 million on the same conversions in the period prior to 2015 to make up for the difference. OEB staff then asserts that this level of spending would have been unlikely as the average duration of a rear lot project is 13 months. Toronto Hydro submitted that OEB staff's claim that Toronto Hydro overstated the rear lot conversion unit costs is not correct for the following reasons:

- While the average duration of a 200 customer rear lot project phase is 13 months, some project areas took considerably longer. For example, Markland Woods, with 806 customers, took from 2014 to 2017. Spending on those conversions occurred prior to 2015.
- Spending was higher than originally forecast for 2015 and 2016 in part due to a higher than expected number of projects carried over into the 2015-2019 period. This further supports the conclusion that conversions completed in 2015-2016 would have incurred costs prior to 2015.
- In the two years immediately prior to 2015, rear lot conversions spending was \$23.8 million and \$22.7 million. Toronto Hydro submitted that contrary to OEB staff's speculation, it is entirely reasonable to assume that \$24.6 million of that spending would have been directed to conversions completed in 2015 or 2016.

Toronto Hydro also submitted that OEB staff's argument that a downward adjustment to the pacing of the rear lot conversion program should be rejected as it has no factual basis. Toronto submitted that the reductions proposed by OEB staff would exacerbate reliability issues, increase the need for employee exposure to poorly accessible plant (a safety risk) and jeopardize Toronto Hydro's ability to fulfill a key commitment of its DSP.²⁹⁷

²⁹⁷ Toronto Hydro Reply Submission / pp. 145-150.

Findings

The OEB finds it appropriate to reduce the 2020 to 2024 capital expenditures for system renewal by approximately \$54 million for the Area Conversions program and approximately \$35.6 million for the Reactive and Corrective Capital program. The approved capital budget for the Area Conversions program is approximately \$167.3 million and the approved capital budget for the Reactive and Corrective Capital program is approximately \$281.6 million.²⁹⁸

The OEB finds that the operating premise of Toronto Hydro's proposal for system renewal capital expenditures (i.e. the replacement of aging and deteriorating assets through a steady program of expenditures that are prioritized based on condition) is necessary for maintaining system reliability. Such a program avoids a build-up of failing assets generally termed "the snowplow effect".

In furtherance of that objective, Toronto Hydro submitted that its system renewal plan represents the minimum investment necessary to address the needs of aging and deteriorating infrastructure and to provide the reliability that customers say they need. To accomplish that goal, Toronto Hydro employed asset management tools and processes including its IPPR process to produce an optimized mix of programs set out in the DSP.²⁹⁹ This process was informed by the adoption of a new ACA methodology, CNAIM, used by all UK utilities and the Office of Gas and Electricity Markets (Ofgem), that provided asset health scores that were used both on their own and as inputs to the risk-based FIM.³⁰⁰

As OEB staff, AMPCO and other parties have noted, Toronto Hydro has not implemented all the components of the CNAIM methodology that are designed to address probability of failure, consequence of failure and asset criticality. While Toronto Hydro does use the CNAIM-derived health scores in drawing conclusions on those issues, the OEB finds that Toronto Hydro does not, at this time, have a centralized methodology that provides a risk analysis upon which the OEB may place sole reliance. The OEB also notes the potential effect on the accuracy of Toronto Hydro projections caused by the delay in completing the CIC study as an input to the FIM. Accordingly, the OEB will not simply adopt, across the board, all the proposed capital expenditure

²⁹⁸ Exhibit U / Tab 2 / Schedule 2 / Appendix A updated for U-Staff-168 / Table 2.

²⁹⁹ Toronto Hydro Reply Submission / pp. 106-107, 118.

³⁰⁰ Toronto Hydro Reply Submission / p. 122.

levels for the system renewal capital programs requested by Toronto Hydro as derived from its asset management and risk analysis processes.

The OEB encourages Toronto Hydro to proceed with the development of improvements to its ACA through refinements and adaptations to its methodology to assist in the analysis of the condition of Toronto Hydro's capital assets. However, the CNAIM methodology will not be the only determinant of need, pricing and pacing of system renewal investments for the proposed Custom IR term.

In general terms, the OEB accepts Toronto Hydro's new CNAIM methodology to derive the increase to the quantum of assets placed in the HI4 (material deterioration) and HI5 (end of serviceable life) categories. Notwithstanding that not all of the assets in these categories are scheduled to be replaced in the Custom IR term, they do appear to constitute much of the increase to system renewal capital expenditures planned for the 2020-2024 period. The OEB has used Toronto Hydro's proposed system renewal budget, informed by its new ACA methodology, as the framework for determining the appropriate level of capital expenditures in that category. However, the OEB has made changes as appropriate to achieve prudent results in keeping with the goals of cost efficiency and reliability.

The OEB approves the proposed capital expenditures in all system renewal-related capital programs with the exception of the amounts requested for the Area Conversions program and Reactive and Corrective Capital program. This approval includes the proposed capital budgets for Stations Renewal, Network System Renewal, Underground Renewal (both Downtown and Horseshoe) and Overhead System Renewal programs.

In doing so, the OEB recognizes the importance of the underground transformer replacement program because of the risk of PCB leaks. This risk also drives the necessity for replacements of underground transformers that contain PCBs that do not necessarily fall within the HI4 and HI5 category. The OEB also approves the proposed pacing of other underground investments such as padmount switches.

The OEB also accepts Toronto Hydro's approach to overhead system renewal recognizing the critical need to replace PCB-laden pole top transformers, which is driving budget increases. The proposed pacing of the replacement of non-PCB affected overhead assets is also found to be reasonable.

The OEB notes that Toronto Hydro is now proposing to replace almost 20% more assets than were replaced in the 2015-2019 period.³⁰¹ These asset replacements form part of Toronto Hydro's system renewal plan that proposes to increase system renewal-related capital expenditures, not including the Reactive and Corrective Capital program, by approximately 27% relative to the actual spending during the 2015-2019 period.³⁰²

The OEB understands that the planned system renewal budget is not designed to replace all assets that will reach HI4 / HI5 condition during the 2020-2024 period. As well as funding unplanned replacements of assets in those condition categories, the Reactive and Corrective Capital program budget addresses other reactive work required for assets with health scores that are better than HI4 / HI5. The asset health scores derived from Toronto Hydro's new CNAIM methodology were used to inform the proposed planned system renewal capital expenditures. This resulted in an increase to the level of replacement of assets found to be in the HI4 / HI5 category in the planned renewal capital expenditure categories that might have otherwise required such intervention under the Reactive and Corrective Capital program. However, this overlap does not appear to be reflected in the proposed budget of the Reactive and Corrective Capital program budget. Toronto Hydro has proposed an increase to that budget of almost 13% relative to the 2015-2019 actual spending.³⁰³ The OEB does not approve the proposed increase and approves the same budget for the Reactive and Corrective Capital program that was spent on an actual basis during the 2015-2019 period. This reduces the proposed Reactive and Corrective Capital program by approximately \$35.6 million, to \$281.6 million, for the 2020-2024 Custom IR term.³⁰⁴

The OEB acknowledges the improvements to reliability and safety occasioned by the Area Conversions program. However, the OEB is not convinced that Toronto Hydro's estimated costing of the planned rear lot conversions accurately reflects the potential costs. While the OEB acknowledges that site conditions and project sequencing demands may greatly affect cost estimates based on yearly averages, the OEB is not convinced of the magnitude of the cost increases per customer set out in the proposed budget.

³⁰¹ U-AMPCO-132 / Appendix A.

³⁰² Exhibit U / Tab 2 / Schedule 2 / Appendix A with 2020-2024 updated for U-Staff-168 / Table 2.

³⁰³ Exhibit U / Tab 2 / Schedule 2 / Appendix A.

³⁰⁴ Exhibit U / Tab 2 / Schedule 2 / Appendix A.

As well, the OEB notes that the proposed capital expenditures for 2020 to 2024 across all categories of spending is about 19% higher than the actual 2015-2019 capital expenditures.³⁰⁵ Given this large increase in capital expenditures, the OEB considers it appropriate to consider the pacing of investments. While the benefits of increased reliability and safety associated with rear lot conversions are acknowledged, the remedial measures associated with this program are a lesser priority when compared to capital expenditures approved by the OEB in other categories. Extending the time period for completing rear lot conversions can accommodate the reduction to the budget for the rear lot conversion segment of the Area Conversions program to the same amount as was actually spent during the 2015-2019 period. This reduces the Area Conversions program budget by approximately \$54 million, to approximately \$167.3 million, for the Custom IR period.³⁰⁶

AMPCO's submissions and tables in this proceeding have cast some doubt on the actual percentage of assets in poor or very poor condition when Toronto Hydro's capital plan was initially developed.³⁰⁷ However, the evidence presented by Toronto Hydro does indicate that there has been a reduction of 3% in the percentage of assets past useful life attributed to the system renewal capital expenditures during the 2015-2019 period. The reduction has been accompanied by small but significant improvements in reliability and safety in the same period.³⁰⁸ These achievements do show progress along the path to a steady state. In light of that progress, the OEB is concerned with Toronto Hydro's apparent conclusion that the overall condition of its assets will not improve over the 2020-2024 term³⁰⁹, notwithstanding the system renewal budget approved by the OEB.

Toronto Hydro had gross assets at the beginning of 2011 of around \$4.2 billion.³¹⁰ Between 2011 and the end of 2024, the utility will have spent, or proposes to spend, nearly the same amount (approximately \$4 billion) in system renewal-related

³⁰⁵ Exhibit U / Tab 2 / Schedule 2 / Appendix A with 2020-2024 updated for U-Staff-168 / Table 2.

³⁰⁶ Exhibit U / Tab 2 / Schedule 2 / p. 9; Exhibit 2B / Section E6.1 / p. 20; and Exhibit U / Tab 2 / Schedule 2 / Appendix A with 2020-2024 updated for U-Staff-168 / Table 2. The OEB does not know whether the \$0.5 million update to the Area Conversions program budget for 2020 shown at U-Staff-168 / Table 2 is related to rear lot conversion or box construction conversion. In either case, the OEB notes that the \$0.5 million update is not material to this finding.

³⁰⁷ AMPCO Submission / pp. 10-13.

³⁰⁸ Toronto Hydro Reply Submission / pp. 156-157.

³⁰⁹ Oral Hearing Transcripts / Vol. 4 / pp. 130-132.

³¹⁰ EB-2014-0116 / Exhibit 2A / Tab 1 / Schedule 2 / p. 1 (updated Feb. 6, 2015).

expenditures.³¹¹ In addition, while Toronto Hydro will have spent or proposes to spend approximately an incremental \$3 billion on other categories of capital expenditures during the same period³¹², the percentage of its assets at the end of useful life may not change. Notwithstanding the substantial increases to capital expenditures proposed, the utility will still be far from achieving the steady state goal that was formerly an important objective of its 2015-2019 DSP.³¹³

Given the level of renewal capital spending approved in this proceeding, the OEB expects there to be an improvement to the overall health of the utility's assets. With healthier assets, Toronto Hydro should be able to reduce costs for asset renewal in the future. Reducing costs while maintaining reliability performance should be an objective in the next rebasing application.

System Service

Background

The table below provides the proposed net capital expenditures for each program within the system service category.³¹⁴

³¹¹ EB-2014-0116 / Exhibit 2B / Schedule 00 / p. 26; 2B-SEC-46 / Appendix A; and U-Staff-168 / Appendix B / p. 8. The OEB notes that this is a high-level estimate based on the proposed proportion of 2020-2024 system renewal-related capital expenditures relative to total capital expenditures (57%).

³¹² EB-2014-0116 / Exhibit 2B / Schedule 00 / p. 26; 2B-SEC-46 / Appendix A; and U-Staff-168 / Appendix B / p. 8.

³¹³ EB-2014-0116 / Exhibit 2B / Schedule 00 / pp. 7, 17-18. The 2015-2019 DSP proposed to achieve a steady state by 2037 that contemplated a 15% reduction to the percentage of assets at the end of useful life at that time from the 26% reported in 2014. This target was set to allow pacing of the increases in system renewal capital investment to avoid rate shock.

³¹⁴ Exhibit U / Tab 2 / Schedule 2 / Appendix A updated for U-Staff-168 / Table 2.

Table 13
2020-2024 System Service Capital Expenditures

(\$M)	2020	2021	2022	2023	2024	Total
Energy Storage Systems	\$ 1.0	\$ 3.7	\$ 3.8	\$ 1.0	\$ 1.0	\$ 10.5
Network Condition Monitoring and Control	\$ 8.0	\$ 10.2	\$ 12.6	\$ 15.3	\$ 17.4	\$ 63.4
Stations Expansion	\$ 19.5	\$ 40.0	\$ 49.3	\$ 12.5	\$ 15.2	\$ 136.4
System Enhancements	\$ 6.2	\$ 6.2	\$ 5.6	\$ 4.8	\$ 4.9	\$ 27.7
System Service Total	\$ 34.6	\$ 60.1	\$ 71.3	\$ 33.6	\$ 38.5	\$ 238.1

The system service category includes capital expenditures related to system enhancements, energy storage systems, network condition monitoring and control, and station expansions. The investments are designed to support the utility's asset management objectives and deliver customer value using technology-driven solutions.³¹⁵

With the exception of the Energy Storage Systems program, no parties raised any direct concerns with respect to the System Service category of capital expenditures. The submissions on the Energy Storage Systems program are summarized under Issue 3.3.

DRC submitted that it supports the local demand response (DR) segment of the Stations Expansion program.³¹⁶

Findings

The proposed system service-related capital expenditures are designed by Toronto Hydro to address capacity investments in areas of high growth and development, and make improvements to system design to diminish risk and enhance customer value. The capital budget associated with Energy Storage Systems program is discussed and determined under Issue 3.3.

³¹⁵ Exhibit 2B / Section E2 / p. 37.

³¹⁶ DRC Submission / p. 20.

The OEB approves the 2020-2024 system service capital budget as proposed by Toronto Hydro for the remaining programs. These are the Network Condition, Monitoring and Control program; the Stations Enhancement program; and the System Enhancements program.

General Plant

Background

The table below provides the proposed capital expenditures for each program within the general plant category.³¹⁷

Table 14
2020-2024 General Plant Capital Expenditures

(\$M)	2020	2021	2022	2023	2024	Total
Facilities Management and Security	\$ 11.6	\$ 11.8	\$ 12.1	\$ 12.3	\$ 12.6	\$ 60.4
Fleet and Equipment	\$ 8.6	\$ 8.9	\$ 8.5	\$ 8.7	\$ 7.8	\$ 42.4
IT/OT Systems	\$ 55.6	\$ 55.7	\$ 49.5	\$ 56.6	\$ 64.8	\$ 282.2
Control Operations Reinforcement	\$ 3.9	\$ 17.4	\$ 18.9	-	-	\$ 40.2
General Plant Total	\$ 79.6	\$ 93.7	\$ 89.0	\$ 77.7	\$ 85.2	\$ 425.2

The general plant category includes capital expenditures related to facilities management and security, fleet and equipment, Information Technology (IT) / Operational Technology (OT) systems, and control operations reinforcement. The investments in this category are designed to keep the utility running efficiently and effectively and are generally driven by lifecycle cost management principles, business continuity needs and emerging customer needs.³¹⁸

³¹⁷ Exhibit U / Tab 2 / Schedule 2 / Appendix A updated for U-Staff-168 / Table 2.

³¹⁸ Exhibit 2B / Section E2 / p. 40.

Parties made submissions with respect to the Control Operations Reinforcement program³¹⁹, the Fleet and Equipment Services program³²⁰, and the IT / OT program.³²¹ These submissions are summarized in the sub-sections that follow.

In its reply argument, Toronto Hydro submitted that its general plant-related investments are critical to ensure grid resiliency, operational effectiveness and productivity. Therefore, these investments are essential to Toronto Hydro's capital plan.³²²

Findings

The OEB finds that the proposed general plant capital expenditures are appropriate with the exception of the spending associated with the Fleet and Equipment Services program.

The OEB's detailed findings with respect to Control Operations Reinforcement program, the Fleet and Equipment Services program, and the IT / OT program are set out in the sub-sections that follow. The OEB notes that the determination of the prudence of the capital expenditures associated with ERP Phase I and its subsequent addition to rate base is dealt with under Issue 3.1.

Control Operations Reinforcement

Background

Toronto Hydro proposed to construct a fully functional control centre, which will operate and control Toronto Hydro's distribution grid in parallel with the primary control centre (the dual control centre).³²³ The proposed dual control centre will replace Toronto Hydro's existing back-up control centre.³²⁴ The cost of project is forecast to be \$40.2 million and the dual control centre is forecast to come into service in 2022.³²⁵

³¹⁹ OEB Staff Submission / pp. 92-94; SEC Submission / pp. 54-55; Energy Probe Submission / pp. 29-30; and DRC Submission / p. 20.

³²⁰ OEB Staff Submission / pp. 94-95; SEC Submission / p. 64; Energy Probe Submission / pp. 21-25; AMPCO Submission / p. 28; and DRC Submission / p. 21.

³²¹ SEC Submission / pp. 56-61; and Energy Probe Submission / pp. 25-29.

³²² Toronto Hydro Reply Submission / p. 169.

³²³ Exhibit 2B / Section E8.1 / p. 1; and 2B-Staff-96.

³²⁴ Exhibit 2B / Section E8.1 / p. 1.

³²⁵ 2B-Staff-96 (d).

Toronto Hydro filed a report by London Economics International (LEI), which undertook a review of comparator utilities to assess Toronto Hydro's proposed investment in a dual control centre.³²⁶

A number of parties raised concerns with the proposed capital expenditures associated with the dual control centre.³²⁷

SEC submitted that the outcome of LEI's analysis is that, of the identified utilities who have a fully functioning backup control centre, Toronto Hydro's proposed costs were aligned with the other utilities. However, LEI's report shows that there appear to be only a few large utilities that have fully functioning backup control centres. LEI was able to identify only five utilities among the 20 largest (by number of customers) US utilities and five largest Canadian distributors. In addition, at least three of the five utilities also operate transmission assets, unlike Toronto Hydro. SEC noted that none of this is to suggest that there are no benefits from a fully functional dual operating facility, or that one is not in the best interest of Toronto Hydro customers. But any investment must consider the trade-off between the increase in rates and the benefits for the customers, and a comparison of that cost / benefit analysis with a similar analysis for other capital investments that could be made.

SEC further submitted that based on LEI's survey of distribution utilities, similarly large and important urban centres such as Los Angeles, Washington D.C., and Chicago, do not have backup facilities that have all the capabilities of its main control centre. SEC submitted that the proposed expenditure requires a more careful consideration of the scope of the project, and a more comprehensive cost benefit analysis, than the one provided in Toronto Hydro's business case.³²⁸

OEB staff filed a similar argument and suggested that Toronto Hydro complete another jurisdictional review, in advance of its next rebasing proceeding, to determine whether there has been a large movement towards a dual control centre model and this request can be revisited at that time. Energy Probe supported the submissions of SEC and OEB staff.³²⁹

³²⁶ Exhibit 2B / Section E8.1 / p. 3.

³²⁷ OEB Staff Submission / pp. 92-94; SEC Submission / pp. 54-55; and Energy Probe Submission / pp. 29-30.

³²⁸ SEC Submission / pp. 54-55.

³²⁹ Energy Probe Submission / pp. 29-30.

DRC submitted that it supports the proposed dual control centre.³³⁰

In its reply argument, Toronto Hydro noted that parties generally agreed that the dual control centre proposed by Toronto Hydro would be beneficial.

Toronto Hydro submitted that the LEI study does not say that 20 (out of 25) of the largest utilities in Canada and the US operate in the absence of a dual control centre. LEI instead noted that based on publicly available data, it could only identify five. LEI specifically stated that more utilities may also use a backup control center, but that they were excluded from the review as no public information was available.

Toronto Hydro also submitted that the parties opposing the dual control centre did not address a key aspect of LEI's analysis, namely its consideration of the value of lost load (VoLL). LEI concluded that \$30,000/MWh is an appropriate VoLL assumption for Toronto Hydro's service territory. Taking Toronto Hydro's average load per hour of 2,913 MWh, and assuming a VoLL price of \$30,000/MWh, the \$40.2 million cost for the dual control center represents reducing the duration of a system-wide outage by 28 minutes at VoLL prices. Based on other scenarios considered, LEI concluded that relatively short duration outages would end up costing the equivalent of the \$40.2 million cost of the dual control center. Therefore, if the dual control center could reduce the duration of potential outages or allow for a fully functional alternative in the event that the main control center needs to be evacuated, the avoided outage effects mean that the dual control center could essentially pay for itself.

In the event that the OEB is persuaded by OEB staff and SEC that certain aspects of the LEI report are suboptimal, Toronto Hydro submitted that the OEB should nevertheless support this investment. Toronto Hydro's evidence demonstrates that the expenditure is underpinned with a valid need and corresponding benefits given the critical nature of the dual control centre and the potential risks and consequences. If the events described in the evidence do occur and a solution was available, an incremental report will provide little comfort to the customers of Toronto Hydro and the city that it serves.³³¹

³³⁰ DRC Submission / p. 20.

³³¹ Toronto Hydro Reply Submission / pp. 171-173.

Findings

The OEB agrees that there are benefits associated with risk reduction and operational resiliency that would be provided by the development of the dual control centre. The dual control centre, as proposed, is designed to safely operate the grid and withstand external threats including extreme weather events, terrorism and cyber-attacks. The dual control centre may also be desirable because of the potential increase to distributed generation raising reliability problems where the utility has taken on a transmission-like function.

However, the LEI study did not identify many large utilities in Canada and the US that operate with a dual control centre. Toronto Hydro urges that Toronto's pre-eminence in terms of its size and importance provides a rationale for the \$40.2 million project. The OEB finds that, despite the dearth of utility examples, there is merit in the development of the dual control centre to enhance system reliability and safety. The OEB approves the proposed budget for the dual control centre.

Fleet and Equipment Services

Background

Toronto Hydro's proposed 2020-2024 fleet and equipment services budget is \$42.5 million. The Fleet and Equipment Services program is responsible for the procurement, maintenance, and disposal of vehicles and equipment that are needed to support Toronto Hydro's functional and operation needs.³³² The majority of the budget is related to the replacement of heavy duty and light duty vehicles.³³³

A number of parties filed submissions on the proposed Fleet and Equipment Services program.³³⁴

OEB staff submitted that Toronto Hydro's forecast fleet utilization rate of 50% for 2020 is low. Toronto Hydro's vehicles being in their home zone for half of a standard work day, does not reflect optimal utilization of its assets. If Toronto Hydro were to increase

³³² Exhibit 2B / Section E8.3 / p. 1.

³³³ Exhibit 2B / Section E8.3 / p. 8.

³³⁴ OEB Staff Submission / pp. 94-95; SEC Submission / p. 64; Energy Probe Submission / pp. 21-25; AMPCO Submission / p. 28; and DRC Submission / p. 21.

its utilization rate it would be able to manage with fewer vehicles over time. As such, OEB staff submitted that a 10% reduction (\$4.2 million) to the Fleet and Equipment Services program budget is appropriate. This would require Toronto Hydro to more effectively utilize a smaller number of vehicles.³³⁵ SEC and AMPCO filed similar submissions.³³⁶

In its reply argument, Toronto Hydro submitted that the utilization measure relied upon by OEB staff and certain intervenors only measures one aspect of vehicle usage and does not provide a full representation of vehicle use, so it is an incorrect basis upon which to draw conclusions regarding vehicle utilization rate.

More specifically, Toronto Hydro noted that the utilization measure only considers one aspect of utilization, being the vehicle's use during standard hours.³³⁷ Toronto Hydro submitted that simply referring to standard hours significantly underrepresents vehicle utilization (and referenced a discussion at the Technical Conference that addresses this issue).³³⁸

Toronto Hydro submitted that it continues to look for opportunities and strategies to refine the fleet size and composition. The right-sizing of the fleet is expected to continue throughout 2020-2024.

In addition, Toronto Hydro submitted that parties ignore the fact that Toronto Hydro replaces its vehicles based on condition assessments, which underpin the capital expenditures the utility proposed.

Toronto Hydro submitted that it derived its fleet investment plans from rigorous asset management processes aligned with the principles of its distribution system asset management approach. The planning balanced the need to minimize overall lifecycle costs, mitigate safety and security risks, improve efficiencies, and ensure business continuity.³³⁹

³³⁵ OEB Staff Submission / pp. 94-95.

³³⁶ SEC Submission / p. 64; and AMPCO Submission / p. 28.

³³⁷ Toronto Hydro noted that standard hours is a specifically defined term, meaning "the hours between 7:30 am – 3:30 pm during weekdays (excluding Statutory Holidays)", and is "the total hours the vehicle is outside its home zone during standard hours, divided by the total number of standard hours per work day." The quotes provided by Toronto Hydro are sourced from 4A-AMPCO-94(b).

³³⁸ Technical Conference Transcripts / Vol. 3 / p. 138-139.

³³⁹ Toronto Hydro Reply Submission / pp. 173-175.

Energy Probe filed detailed analysis of Toronto Hydro's fleet services capital and operating costs. Energy Probe concluded that the OEB should order Toronto Hydro to reduce the 2020-2024 fleet replacement capital budget by \$1 million to coincide with the Life Cycle Analysis (LCA) option. Energy Probe also submitted that for the 2025 rebasing, the OEB should direct Toronto Hydro to benchmark its fleet replacement capital and operating costs against similar North American utilities.³⁴⁰

In its reply argument, Toronto Hydro submitted that Energy Probe's analysis of LCA is flawed for the reason that it engages in an incorrect comparison between the LCA analysis presented by Toronto Hydro's consultant and the managed fleet replacement option proposed by Toronto Hydro. Toronto Hydro stated that it used the LCA methodology as a basis for forecasting the optimized total lifetime costs that Toronto Hydro will use under the managed fleet replacement option. As a result, the managed fleet replacement option is based on the LCA analysis. Toronto Hydro submitted that the \$1 million difference between the \$41.5 million capital cost under the LCA option and the \$42.5 million capital cost under the managed fleet replacement option is attributable to the exclusion of trailers and lifts from the LCA option, which Toronto Hydro incorporated in its managed fleet replacement option as run-to-fail assets.

With respect to Energy Probe's argument that Toronto Hydro should be required to benchmark its fleet costs and profile against similar Ontario and North American utilities, Toronto Hydro submitted that this is not a reasonable suggestion. Toronto Hydro submitted that there is no known industry standard or benchmark parameter for vehicle utilization in the electric industry and any standard that may exist may not necessarily be appropriate for benchmarking, given the significant utilization differences between utilities with different fleet sizes or functionalities.³⁴¹

DRC submitted that all fleet-related investments should be supported by a breakdown of fuel, capital and operating costs. DRC stated that the legacy costs associated with internal combustion engine vehicles should not be included in the revenue requirement absent such information. In addition, DRC submitted that the OEB should consider the available EV financial incentives in its determination of Toronto Hydro's proposed fleet capital and operating budgets.³⁴²

³⁴⁰ Energy Probe Submission / pp. 21-25.

³⁴¹ Toronto Hydro Reply Submission / pp. 176-177.

³⁴² DRC Submission / p. 21.

In response, Toronto Hydro submitted that its approach to determining vehicle type (electric vs. internal combustion engine) is appropriate. Toronto Hydro submitted that there is no regulatory basis for electricity distributors to provide, as part of their rate application, a granular comparison of the differences between the fuel costs of EVs and non-EVs.

Toronto Hydro further submitted that implicit in DRC's critique is an assumption that EVs are always an appropriate substitute for combustion engine vehicles across a distributor's operations. This is simply not the case. An important use of a distributor's fleet are in times of power outages when electricity is not available in certain areas of the city, or potentially, at all. Similarly, EVs require charging and there is no indication that Toronto will have an integrated EV charging network across the city during the 2020-2024 Custom IR term. Further, Toronto Hydro noted that it does include EVs in its fleet where it makes sense to do so. For example, Toronto Hydro currently owns nine fully electric cars, 41 hybrid light duty vehicles (cars, pick-up trucks, and SUVs), and three heavy duty vehicles (single bucket trucks). Toronto Hydro also submitted it will continue to consider investing in additional zero emission vehicles based on various factors including whether it would qualify for any applicable incentives.³⁴³

Findings

The OEB agrees with parties that the utilization rate of 50% for vehicles appears to be low notwithstanding Toronto Hydro's qualifier that the measurement only considers standard hours. The proposed Fleet and Equipment Services program budget is \$42.5 million for the 2020-2024 Custom IR term. This compares to approximately \$19 million spent during the 2015-2019 period.³⁴⁴ The OEB notes that no benchmarking has been done by Toronto Hydro of its utilization rates as compared to other contractors or utilities. The OEB reduces the capital budget for the Fleet and Equipment Services program budget to \$38.3 million, a reduction of \$4.2 million (which is 10% of the proposed budget).³⁴⁵

The OEB agrees with DRC that there should be further analysis of the overall costs of Toronto Hydro's mix of fleet. The differences between fuel costs of EVs and non-EVs is certainly one criterion to assess the prudence of Toronto Hydro's fleet expenditures.

³⁴³ Toronto Hydro Reply Submission / pp. 177-179.

³⁴⁴ Exhibit U / Tab 2 / Schedule 2 / Appendix A / p. 1.

³⁴⁵ Exhibit U / Tab 2 / Schedule 2 / Appendix A.

The OEB directs Toronto Hydro to provide more detailed cost benefit analysis between EV, hybrid and combustion engines for its fleet program for future rebasing applications. In addition, the OEB directs Toronto Hydro to develop utilization measures beyond fleet use in standard hours.

Information Technology (IT) and Operational Technology (OT)

Background

The table below provides the proposed capital expenditures for the segments of the IT / OT program.³⁴⁶

Table 15
2020-2024 IT / OT Program Capital Expenditures

(\$M)	2020	2021	2022	2023	2024	Total
IT Hardware	\$ 11.5	\$ 10.3	\$ 11.6	\$ 14.0	\$ 14.5	\$ 61.9
IT Software	\$ 41.0	\$ 43.0	\$ 35.8	\$ 40.5	\$ 48.2	\$ 208.5
Communications Infrastructure	\$ 2.2	\$ 2.4	\$ 2.1	\$ 2.1	\$ 2.1	\$ 10.9
Total	\$ 55.5	\$ 55.7	\$ 49.5	\$ 56.6	\$ 64.8	\$ 282.2

The IT / OT program invests in hardware, software, and communication assets that provide critical support to Toronto Hydro's customer and business-facing services. Toronto Hydro relies on IT / OT systems to execute capital and operational programs, including customer-facing and operationally critical functions.³⁴⁷

SEC and AMPCO filed detailed submissions with respect to the ERP Phase 1 project.³⁴⁸ Those submissions are summarized under Issue 3.1.

SEC and Energy Probe filed submissions with respect to Toronto Hydro's proposed 2020-2024 IT / OT budget.³⁴⁹

³⁴⁶ Exhibit 2B / Section E8.4 / p. 14 updated for U-Staff-168 / Table 2. The OEB notes that \$0.8 million was added to the 2020 total and the 2020-2024 total columns to reflect the update made to the IT / OT program budget in U-Staff-168 / Table 2. As it is unclear to what segment of the IT / OT budget this update is applicable, only the totals were updated.

³⁴⁷ Exhibit 2B / Section E8.4 / p. 1.

³⁴⁸ SEC Submission / pp. 58-59; and AMPCO Submission / pp. 27-28.

³⁴⁹ SEC Submission / pp. 56-61; and Energy Probe Submission / pp. 25-29.

Generally, SEC submitted that the proposed increased capital spending for the IT / OT program is not appropriate. SEC noted that Toronto Hydro provided a benchmarking study undertaken by Gartner Consulting (Gartner) to attempt to demonstrate that its current and forecasted IT spending is reasonable. SEC submitted that the methodology used by Gartner is flawed and, if anything, shows that Toronto Hydro's IT spending is higher than its peer group.

Energy Probe also submitted that it has major concerns with the Gartner benchmarking report.³⁵⁰ Energy Probe submitted that Toronto Hydro has not provided the necessary evidence to prove that its 2020-2024 IT / OT program costs are reasonable. Energy Probe offered two options for the OEB's consideration:

1. Constrain the 2020-2024 IT budgets to 2013-2018 levels (i.e. a reduction of \$6.5 million a year for a total \$50 million comprising a reduction of \$32.5 million over the Custom IR term).
2. Accept inflationary increases for some costs over the Custom IR term (i.e. accept the 2020 base year spend including a built-in inflation increase of 2.5% above the historic average of \$49.7 million). This results in a \$54.8 million approved spend in 2020.³⁵¹

In its reply argument, Toronto Hydro submitted that it filed extensive evidence justifying the critical need for the requested funding and demonstrating the prudence of its IT / OT capital budget. Toronto Hydro also stated that the Gartner evidence provides reliable and appropriate benchmarking results. More specifically, Toronto Hydro submitted that Gartner concluded that for 2017 and the forecast 2020 year, Toronto Hydro's IT spending both as a percentage of revenue and of operational expenses are lower than the peer group. Toronto Hydro also provided detailed responses to the criticism of the Gartner benchmarking study filed by SEC and Energy Probe.³⁵²

SEC also made specific submissions on the proposed ERP Phase 2 project and the new Customer Information System (CIS). SEC noted that the proposed \$46.3 million capital budget for the ERP Phase 2 project is expected to upgrade the new core ERP system as well as include initiatives that bring additional benefits of productivity,

³⁵⁰ Energy Probe Submission / pp. 25-28.

³⁵¹ Energy Probe Submission / pp. 25-28.

³⁵² Toronto Hydro Reply Submission / pp. 182-186.

efficiency, ease of doing business and improve customer service. However, Toronto Hydro has not actually attempted to quantify those benefits at this time.

SEC submitted that, without quantification of the benefits, several concerns arise. First, SEC submitted that Toronto Hydro selected the proposed option without any rigorous analysis. This is unacceptable for a project with such a significant expenditure. Second, SEC submitted that if Toronto Hydro did not quantify the benefits, then those benefits have not been included in the OM&A or capital budgets. Therefore, from the customers' perspective, the benefits are effectively zero until the next rebasing.

SEC further noted that Toronto Hydro proposed to spend \$38.5 million to change to a new CIS system. SEC submitted that Toronto Hydro has not quantified the benefit of this project. SEC submitted that customers expect quantifiable benefits for new investments and rigorous decision-making when their funds are being committed.³⁵³

In its reply argument, Toronto Hydro submitted that SEC failed to acknowledge the critical need for the ERP Phase 2 and CIS projects in its consideration of the benefits. Toronto Hydro also submitted that SEC makes the incorrect assertion that Toronto Hydro did not perform a rigorous internal analysis on the proposed projects. For ERP Phase 2, Toronto Hydro compared five different options of varying scope and investment levels and concluded that implementing the moderate scope option, which forms the basis of the ERP Phase 2 project plan, would be the optimal approach to address the need and risks in this area. Toronto Hydro stated that a comparable options analysis was undertaken for the CIS upgrade.

With respect to the benefits arising from the ERP Phase 2 project, Toronto Hydro stated that it has in fact set out benefits associated with the project. However, its ability to do that with the same quantitative granularity as with the ERP Phase 1 project is limited simply by the timing of ERP Phase 2.

Toronto Hydro further submitted that without the investment in the ERP Phase 2 project, the reliability and security of Toronto Hydro's key IT infrastructure will be at risk and impaired. Toronto Hydro stated that a singular focus on the monetary forecasted benefits as proposed by SEC misses one of the most significant benefits, which is that ratepayers have the benefit of an upgraded network that is secure and reliable.

³⁵³ SEC Submission / pp. 59-61.

Toronto Hydro also submitted that the CIS upgrade is critically needed. Toronto Hydro currently processes approximately \$18 million per day in electricity costs and issues approximately 43,000 bills per day through its CIS. Billing delays due to CIS issues can give rise to major customer and financial impacts. In addition, Toronto Hydro submitted that the current legacy system entails increased security risks because it no longer receives security patches from the vendor.³⁵⁴

Findings

The OEB approves the overall IT / OT program including the specific approvals set out herein. The OEB notes that the determination of the prudence of the capital expenditures associated with the ERP Phase 1 project and its subsequent addition to rate base is addressed under Issue 3.1.

With respect to the ERP Phase 2 and CIS projects, the OEB finds that both projects address important system needs. The ERP Phase 2 project is designed to “increase company-wide benefits that include efficiency by integrating ERP with other systems”.³⁵⁵ The OEB agrees that the proposed upgrade to the ERP system is necessary to provide accurate information, security and reliability.³⁵⁶ As such, the OEB approves the proposed budget of \$46.3 million for the ERP Phase 2 project.³⁵⁷ The OEB assumes that this concludes the ERP project and that the scope as presented in this proceeding will not be expanded. The functionality of the ERP Phase 2 project should not be enlarged with attendant increases in costs.

The CIS system upgrade is driven by concerns associated with the threat to the legacy CIS system by the withdrawal of vendor support with resultant reliability and cybersecurity risks.³⁵⁸ The OEB agrees that the major financial and customer impacts of CIS failure justify the project. The OEB approves the proposed capital expenditures of \$38.5 million related to the CIS upgrade project.³⁵⁹

³⁵⁴ Toronto Hydro Reply Submission / pp. 180-182.

³⁵⁵ Toronto Hydro Reply Submission / p. 180.

³⁵⁶ Toronto Hydro Reply Submission / p. 181.

³⁵⁷ Exhibit 2B / Section E8.4 / p. 18. It is not clear whether the 2020 update to the IT / OT budget set out in U-Staff-168 / Table 2 impacts the ERP Phase 2 budget.

³⁵⁸ Toronto Hydro Reply Submission / p. 182.

³⁵⁹ Exhibit 2B / Section E8.4 / p. 18. It is not clear whether the 2020 update to the IT / OT budget set out in U-Staff-168 / Table 2 impacts the CIS budget.

Other Category of Capital Expenditures**Background**

Toronto Hydro's proposed amounts included in the other category of capital expenditures are shown in the table below.³⁶⁰

Table 16
2020-2024 Capital Expenditures – Other Category

(\$M)	2020	2021	2022	2023	2024	Total
AFUDC	\$ 6.0	\$ 8.2	\$ 8.7	\$ 8.9	\$ 7.7	\$ 39.5
Miscellaneous	\$ 1.0	\$ 0.8	\$ 1.2	\$ 0.6	\$ 1.0	\$ 4.6
Other Total	\$ 7.0	\$ 9.0	\$ 9.8	\$ 9.5	\$ 8.7	\$ 44.1

OEB staff submitted that the Allowance for Funds Used During Construction (AFUDC) has not been calculated correctly and should be reduced by \$5.4 million.

The total proposed AFUDC for the 2020-2024 period is \$39.5 million.³⁶¹ Toronto Hydro applied a 4.2% debt rate in its calculation of AFUDC for the 2020-2024 period.³⁶² Toronto Hydro stated that it has revised its proposal and that the AFUDC should be calculated using its weighted-average debt rate of 3.64%.³⁶³

OEB staff agreed with Toronto Hydro that the lower debt rate of 3.64%, which reflects the weighted-average cost of debt, should be used in the calculation of its AFUDC. OEB staff noted that this will reduce the AFUDC amounts by \$5.4 million³⁶⁴ over the 2020-2024 period.³⁶⁵

Findings

The OEB notes that Toronto Hydro agreed that the weighted average cost of debt of 3.64% should be used in the calculation of AFUDC instead of the originally proposed 4.2% debt rate. Accordingly, Toronto Hydro is required to recalculate the AFUDC based

³⁶⁰ Exhibit U / Tab 2 / Schedule 2 / Appendix A.

³⁶¹ Exhibit U / Tab 2 / Schedule 2 / Appendix A.

³⁶² 2A-Staff-55(b).

³⁶³ Undertaking J2.1.

³⁶⁴ 2A-Staff-55 / Table 1 (Average Monthly Eligible CWIP * 3.64%).

³⁶⁵ OEB Staff Submission / pp. 96-97.

on the approved capital expenditures and a debt rate of 3.64% and file the revised calculation as part of the draft rate order.

5.3 Energy Storage Systems, Renewable Enabling Improvements and Electric Vehicles (including Issue 3.3)

In this section the OEB has addressed issues related to energy storage systems (ESS), renewable enabling improvements (REI), and EVs. There are links between these matters and consideration of attributes benefiting the environment.

Energy Storage Systems

Background

Toronto Hydro proposed capital expenditures in three distinct segments for the ESS program:

- Grid performance ESS would use batteries to remediate power quality problems, improve reliability, and increase feeder capacity at peak periods.³⁶⁶
- Renewable enabling ESS would use batteries to absorb excess energy from renewable generators to maintain an appropriate generation to load ratio on a feeder.³⁶⁷ Toronto Hydro requested provincial funding for most of this segment of its ESS program as permitted by section 79.1 of the OEB Act.
- Customer-specific ESS would use a battery installed behind a customer's meter, at the customer's request, to provide improved power quality and reliability, as well as financial benefits from peak-shaving and Global Adjustment relief for Class A customers through the Industrial Conservation Initiative.³⁶⁸

³⁶⁶ Exhibit 2B / Section E7.2 / p. 2.

³⁶⁷ Exhibit 2B / Section E7.2 / p. 21.

³⁶⁸ Exhibit 2B / Section E7.2 / p. 4.

The costs for each segment of the ESS program and Toronto Hydro's proposed mechanisms for recovery of the costs are set out in the table below.³⁶⁹

Table 17
Energy Storage System Capital Expenditures by Category (2020 to 2024)

ESS Segment (\$M)	Rate Base (A)	Provincial Funding ³⁷⁰ (B)	Net Costs (C = A + B)	Capital Contribution from Customer (D)	Gross Costs (D + C)
Grid Performance	\$5.5	\$0	\$5.5	\$0	\$5.5
Renewable Enabling Investments (REI)	\$0.3	\$4.7	\$5.0	\$0	\$5.0
Customer Specific	\$0	\$0	\$0	\$42.3	\$42.3
Total	\$5.8	\$4.7	\$10.5	\$42.3	\$52.8

The cost of grid performance ESS is to be recovered entirely through rate base; the cost of renewable enabling ESS is to be largely recovered through the Provincial Rate Protection program (94%), which is discussed in more detail in the sub-section that follows; the cost of the customer-specific ESS is to be entirely recovered through capital contributions (with no impact on rate base).³⁷¹

OEB staff submitted that it does not oppose the grid performance and renewable enabling ESS projects proposed for the 2020-2024 Custom IR term as they are conceptually reasonable applications of storage for the distribution system. However, in future rate applications, OEB staff submitted that proposals for ESS projects should be supported by a more rigorous cost-benefit assessment, including some estimation or quantification of the value of deferring other distribution system investment where applicable.³⁷²

³⁶⁹ 2B-Staff-87(c). The total net costs were corrected to \$10.5 million (from \$10.8 million as shown in 2B-Staff-87(c)) as this reflects the information provided in Exhibit U / Tab 2 / Schedule 2 / Appendix A and properly sums to the rest of the table.

³⁷⁰ Provided through the Independent Electricity System Operator (IESO). See further information in the next sub-section.

³⁷¹ 2B-Staff-87(c).

³⁷² OEB Staff Submission / pp. 85-86. OEB staff also provided further submissions on the proposed cost recovery of renewable enabling ESS through the Provincial Rate Protection program, which is discussed in a later sub-section under Issue 3.3.

DRC submitted that it supports both the grid performance ESS projects and the renewable enabling ESS projects. DRC submitted that grid performance ESS projects benefit customers and assist in remediating power quality problems, improving reliability, and increasing feeder capacity at peak. DRC submitted that the renewable enabling ESS projects support the growth of distributed renewable generation and may offset generation and transmission investments and produce environmental benefits. DRC also submitted that more rigorous cost-benefit assessment, including some estimation of the value of deferring other distribution system investment, to support future proposals for ESS projects should be required.³⁷³

In its reply argument, Toronto Hydro submitted that it intends to undertake more detailed benefit analysis based on project-specific circumstances. The ESS project sites proposed for the 2020-2024 period are potential locations with varying sizes being considered.³⁷⁴

While DRC supported the customer-specific ESS investments, a number of parties challenged the appropriateness of these investments.³⁷⁵

DRC stated that the customer-specific ESS does not appear to add to the rate base or revenue requirement. In addition, all of the customer-specific ESS projects are related to transit electrification and one of the projects (Toronto Transit Commission (TTC) Arrow Road Garage ESS) explicitly supports the TTC's initiative to electrify its bus fleet. DRC also submitted that customer-specific ESS investments may constitute distribution activities.³⁷⁶

OEB staff submitted that Toronto Hydro's customer-specific ESS program is not a distribution activity. However, it appears to be permitted under the exemption established in section 71(3) of the OEB Act. Therefore, OEB staff submitted that this program must be accounted for separately from distribution activities, in accordance with the OEB's Regulatory and Accounting Treatments for Distributor Owned Generation Facilities (Generation Guidelines).³⁷⁷ In addition, OEB staff submitted that

³⁷³ DRC Submission / pp. 18-19.

³⁷⁴ Toronto Hydro Reply Submission / pp. 103-104.

³⁷⁵ OEB Staff Submission / pp. 86-91; SEC Submission / pp. 65-69; BOMA Submission / p. 34; Energy Probe Submission / p. 17; and CCC Submission / p. 14.

³⁷⁶ DRC Submission / pp. 18-19.

³⁷⁷ OEB Guidelines: Regulatory and Accounting Treatment for Distributor-Owned Generation Facilities / September 15, 2009.

Toronto Hydro's customer-specific ESS program raises policy concerns that OEB staff believes should be considered in the OEB's Responding to DERs consultation.³⁷⁸ BOMA and CCC agreed that these issues should be addressed as part of the OEB's Responding to DERs consultation.³⁷⁹

Energy Probe submitted that behind the meter assets should not be included in rate base.³⁸⁰

SEC submitted that the OEB should send a clear message to Toronto Hydro that it is not permissible to undertake behind-the-meter energy storage activities as part of its regulated utility activities. The market is currently competitive, so there is no reason for ratepayers to bear any risk from this activity. SEC submitted that risk related to customer-specific ESS projects is borne by ratepayers because the capital contribution that the customer must pay is a forecast of the initial capital costs of the ESS project, and a forecast of the incremental OM&A costs incurred over the life of the asset. As Toronto Hydro is utilizing its current offer to connect policy, the actual capital costs to construct the ESS project are not trued-up. The risk of a cost overrun, on a large capital project that Toronto Hydro has limited experience constructing and operating, is borne by ratepayers.

SEC submitted that if Toronto Hydro wants to undertake customer-specific ESS projects, it should be separate from its regulated activity, preferably through an affiliate, in compliance with all of the existing rules that protect its distribution customers.³⁸¹

In its reply argument, Toronto Hydro submitted that its customer-specific ESS investments are appropriate and should be allowed in rate base.

Toronto Hydro submitted that instances already exist in the electricity industry where utilities are allowed to provide rate-regulated services despite there being a competitive market for the service.³⁸² Toronto Hydro also submitted that providing customers with

³⁷⁸ OEB Staff Submission / pp. 86-87.

³⁷⁹ BOMA Submission / p. 34; and CCC Submission / p. 14.

³⁸⁰ Energy Probe Submission / p. 17.

³⁸¹ SEC Submission / pp. 65-69.

³⁸² Toronto Hydro stated that the OEB determined, in the context of sub-metering, that there should be competition in the market, whereby sub-metering providers are able to sub-meter condominiums, while electricity distributors can also continue to provide suite metering services to multi-unit buildings.

the option of a regulated service provider within the energy storage market does not harm competition. Instead, it promotes competition by adding another provider.

Toronto Hydro submitted that the argument that behind-the-meter energy storage should not be accounted for in rate base and that these activities should be carried out in a non-rate regulated environment are premised on an antiquated distinction of the meter being the demarcation point between the distribution system and the customers' equipment.

Toronto Hydro submitted that the distinction between in-front and behind-the-meter is not relevant with respect to energy storage technology because this technology can provide the same distribution benefits and services regardless of where it is placed relative to the meter. Toronto Hydro further submitted that customer-specific ESS meets the test for a distribution asset as it can provide a range of services, which are properly considered distribution activities. Toronto Hydro stated that customer-specific ESS meets the OEB's intended use test. Energy storage is an asset type that can provide services to more than one customer even if it is located behind a customer's meter. Toronto Hydro also submitted that its proposal for customer-specific ESS is in accordance with the beneficiary pays principle by requiring customers to pay a 100% contribution for the cost of a customer-specific ESS project. However, Toronto Hydro also proposed to undertake a more detailed analysis in respect of the proposed projects over the 2020-2024 Custom IR term to assess the benefits and develop a cost allocation framework for these investments.

Toronto Hydro stated that it agrees that issues raised with respect to its proposed customer-specific ESS investments should be contemplated further in the OEB's ongoing consultation on Responding to DERs³⁸³. However, Toronto Hydro submitted that the ability of a distributor to engage in behind-the-meter activities should not be preemptively denied. The investments in customer-specific ESS could provide useful experience, insight, and information on the application of ESS and the potential role for utilities in this regard.

With respect to the concerns that potential capital or OM&A cost overruns on customer-specific ESS projects are not subject to true-up, Toronto Hydro noted that it elected to use firm offers in its standard connection process and has applied the same treatment to ESS connections. However, if the OEB finds that this approach is not appropriate,

³⁸³ EB-2018-0288.

that is not a reason to deny customer-specific ESS projects. Rather, the OEB can direct Toronto Hydro to apply the estimate offer approach for ESS connections. In addition, Toronto Hydro submitted that asset renewal and maintenance costs would not affect ratepayers until future rate periods, as operating costs are recovered from the customer for a ten-year period.³⁸⁴

Findings

The OEB approves Toronto Hydro's proposed expenditures over the 2020-2024 Custom IR term for grid performance ESS of \$5.5 million and for REI ESS of \$5 million. Only \$0.3 million of the REI ESS is included in Toronto Hydro's rate base and the remaining \$4.7 million is eligible for provincial funding, as discussed in more detail in the next sub-section of this issue. The OEB accepts Toronto Hydro's evidence that the grid performance ESS will provide benefits to the power quality, reliability and capacity of the distribution system, and the REI ESS will balance energy flows to allow renewable generation connections to proceed.

The OEB finds that the proposed customer-specific ESS investments of \$42.3 million are not rate-regulated projects and therefore cannot be considered part of Toronto Hydro's regulated rate base and associated revenue requirement.³⁸⁵ These customer-specific ESS investments are behind a customer's meter, and are to the benefit of that particular customer. The OEB concludes that the remaining Toronto Hydro customers should not bear any risk for customer-specific ESS investments.

The OEB agrees that Toronto Hydro is permitted to undertake the customer-specific ESS projects under section 71(3) of the OEB Act. However, section 72 of the OEB Act requires that financial records for these other activities must be kept separate from distributing electricity. Furthermore, the Generation Guidelines state:

A distributor may also choose to own and operate a generation facility directly as part of its utility business. Under this scenario, costs would

³⁸⁴ Toronto Hydro Reply Submission / pp. 97-103.

³⁸⁵ The OEB acknowledges that there is no impact on Toronto Hydro's rate base calculation due to customer contributions. However, the gross capital expenditures and gross assets would be affected by these projects.

not be recovered through rates and a regulatory return would not be earned on the investment.³⁸⁶

The Generation Guidelines include energy storage facilities in the definition of a generation facility.³⁸⁷ Furthermore, the Generation Guidelines set out the accounting procedures for segregating generation activities from rate-regulated distribution activities.

Toronto Hydro argued that the distinction of the meter being a demarcation point between the distribution system and the customers' equipment is antiquated and not relevant because the technology can provide the same distribution benefits and services regardless of where it is placed relative to the meter. Toronto Hydro further proposed that Toronto Hydro's experience with customer-specific ESS could provide information to the OEB as part of the Responding to DERs consultation.³⁸⁸ The Responding to DERs consultation is well underway, and the OEB concludes that it is the appropriate forum to consider the role of distributors for customer-specific ESS and whether any regulatory policies should be amended. Given the current policies, the OEB concludes that it is not appropriate to consider these projects distribution activities.

The OEB notes that, as highlighted by SEC³⁸⁹, in an analogous situation for the provision of renewable natural gas (RNG) upgrading,³⁹⁰ the OEB concluded that customers should not bear any risk for the RNG upgrading competitive service.

Toronto Hydro may choose to undertake the customer-specific ESS projects as non-rate regulated activities, in accordance with relevant legislation and regulatory policies.

³⁸⁶ OEB Guidelines: Regulatory and Accounting Treatment for Distributor-Owned Generation Facilities / September 15, 2009 / p. 3.

³⁸⁷ OEB Guidelines: Regulatory and Accounting Treatment for Distributor-Owned Generation Facilities / September 15, 2009 / p. 1.

³⁸⁸ Toronto Hydro Reply Submission / pp. 98-99.

³⁸⁹ SEC Submission / p. 67.

³⁹⁰ EB-2017-0319 / Decision and Order / October 18, 2018 / p. 11.

Funding for Renewable Enabling Investments (REI)

Background

Under section 79.1 of the OEB Act, the OEB may provide rate protection for a distributor's customers related to investments made by the distributor to connect or enable renewable generation facilities (REI Investments).³⁹¹ Under this rate protection, the costs for eligible investments are recovered from all customers in the province, rather than only from the distributor's customers. This rate protection is in the form of a payment through the IESO to the distributor to cover the revenue requirement of the costs incurred. The OEB issues a separate decision to direct the IESO as to the amount of payment to be made to each eligible distributor, including Toronto Hydro. The difference between the provincial funding based on the forecast expenditures and the revenue requirement of the actual expenditures is recorded in a variance account, Renewable Generation Connection Funding Adder Deferral Account - Sub-account Provincial Rate Protection Payment Variances (Account 1533).

As part of the 2015-2019 Custom IR term, the OEB approved REI investments for Toronto Hydro.³⁹² For 2019, the annual funding approved for Toronto Hydro was \$2.6 million.³⁹³ Toronto Hydro spent less than the approved amount over the 2015-2019 Custom IR term and recorded a credit in Account 1533.³⁹⁴

For this Custom IR term, Toronto Hydro proposed that \$18.6 million of its capital expenditures over the 2020 to 2024 term be treated as REI Investments. The proposed REI Investments are capital expenditures that fall in the categories of generation protection, monitoring & control of \$13.6 million and ESS of \$5.0 million discussed in the preceding sub-section.³⁹⁵

Toronto Hydro applied the generic 6% direct benefit assumption provided in the Chapter 2 Filing Requirements.³⁹⁶ On that basis, \$1.1 million of the REI costs would be funded through Toronto Hydro's rate base and the remainder (\$17.5 million) would be

³⁹¹ Qualifying generation facilities include wind, water, biomass, biogas, biofuel, solar energy, geothermal energy, tidal forces and such other energy sources as may be prescribed by the regulations.

³⁹² EB-2014-0116 / Decision and Order / December 29, 2015 / pp. 32-33.

³⁹³ Exhibit U / Tab 9 / Section 1 / p. 10; and EB-2018-0295 / Decision and Order / January 24, 2019 / p. 5.

³⁹⁴ Exhibit U / Tab 9 / Section 1 / p. 10.

³⁹⁵ Exhibit J4.9.

³⁹⁶ OEB Chapter 2 Filing Requirements for Cost of Service / July 12, 2018 / p. 21.

recovered through provincial funding (\$12.8 million for generation protection, monitoring & control and \$4.7 million for ESS).³⁹⁷ Toronto Hydro's response to an interrogatory on the Application Update calculated the funding for these projects over the 2020 to 2024 term to be as shown in the following table.³⁹⁸

Table 18
Provincial Funding of Renewable Enabling Investment-related Revenue Requirement

(\$M)	2020	2021	2022	2023	2024	Total
Generation Protection, Monitoring, and Control	\$0.66	\$0.91	\$1.10	\$1.30	\$1.51	\$5.48
Energy Storage Systems	\$0.31	\$0.42	\$0.53	\$0.64	\$0.75	\$2.65
Total	\$0.97	\$1.33	\$1.63	\$1.94	\$2.26	\$8.13

This funding includes the ongoing revenue requirement from projects approved for the previous Custom IR term, plus the revenue requirement from the proposed \$18.6 million (\$17.5 million net of direct benefits) in capital expenditures for the 2020 to 2024 term.

With the exception of Energy Probe, no party opposed Toronto Hydro's proposed treatment of REI investments. However, OEB staff noted that Toronto Hydro indicated that certain storage projects, which are subject to REI treatment, may provide additional benefits to the distribution system³⁹⁹ but has not quantified them.⁴⁰⁰ OEB staff argued that if those additional benefits to the distribution system prove to be material, it may be appropriate to recover a larger proportion of the costs of renewable enabling ESS from Toronto Hydro's customers (and to recover less from provincial ratepayers). OEB staff submitted that going forward, Toronto Hydro should provide a more robust cost benefit assessment to support its storage proposals, and should provide a direct benefits analysis to support any future renewable enabling ESS proposals.⁴⁰¹

³⁹⁷ Toronto Hydro Argument-in-Chief / p. 46.

³⁹⁸ U-Staff-166.2 / Appendices A and B. The OEB expects that this is Toronto Hydro's updated request for REI funding based on the most up-to-date historical actuals and forecasts.

³⁹⁹ 2B-Staff-88(a) / pp. 2-3; and Exhibit 2B / Section E7.2 / p. 17.

⁴⁰⁰ 2B-Staff-88(b); and 2B-Staff-88(c) / p. 3.

⁴⁰¹ OEB Staff Submission / pp. 100-101.

Energy Probe stated that Toronto Hydro provided no evidence about specific issues that can arise from renewable investments and no proposal to deal with these issues.⁴⁰²

Toronto Hydro responded that it filed extensive evidence regarding its renewable enabling investments and provided a list of references where that evidence can be located.⁴⁰³

Findings

The \$18.6 million in REI projects proposed by Toronto Hydro for the 2020-2024 Custom IR term are approved for provincial funding (less 6% in direct benefits that are funded by Toronto Hydro customers). This is inclusive of the \$5 million for REI ESS expenditures approved by the OEB in the previous sub-section of this issue. The OEB concludes that the projects will facilitate the connection of renewable generation facilities, and therefore, pursuant to section 79.1 of the OEB Act, Toronto Hydro's customers are eligible for rate protection for these projects. The OEB will issue a separate decision that will direct the IESO to make payments to Toronto Hydro for the revenue requirement of the REI investments to enable this rate protection.

The OEB notes that the calculation for REI funding set out in OEB Appendix 2-FB⁴⁰⁴ should be based on assets in-service (historical actual and forecast). As part of the draft rate order, Toronto Hydro is required to provide an updated funding calculation (and an update to Table 18) to reflect as necessary:

- An updated 2020 opening balance to reflect the best available information regarding actual spending on REI projects in 2018 and 2019⁴⁰⁵
- The expected in-service dates for the REI ESS projects

⁴⁰² Energy Probe Submission / p. 30.

⁴⁰³ Toronto Hydro Reply Submission / p. 187.

⁴⁰⁴ U-Staff-166.2 / Appendices A and B. The OEB expects that this is Toronto Hydro's updated request for REI funding based on the most up-to-date historical actuals and forecasts available at the time that the cited interrogatory response was filed.

⁴⁰⁵ The OEB notes that there is a discussion of changes and some potential uncertainty with respect to REI-related in-service additions in Exhibit U / Tab 2 / Schedule 2 / p. 19 and Exhibit U / Tab 9 / Schedule 1 / p. 10.

Toronto Hydro's evidence shows that the three REI ESS projects are expected to be placed in-service as follows:

2020 - \$0.8 million
2022 - \$1.9 million
2024 - \$2.3 million⁴⁰⁶

Since the variance account (Account 1533) is expected to be calculated based on the revenue requirement impact of differences in actual in-service additions relative to approved for these projects, the OEB concludes that the funding should also be calculated based on forecast in-service additions.

The OEB also requires Toronto Hydro to provide a reconciliation of the opening balance for the REI funding calculation with the balance in Account 1533 as of December 31, 2019.

The OEB agrees that there should be further review of the sharing of benefits for ESS projects between Toronto Hydro and provincial customers. The OEB expects Toronto Hydro to provide an assessment of appropriate sharing of benefits for ESS projects as part of any future requests for funding for provincial rate protection. The outcome of the OEB's consultation on Responding to DERs may assist with that review.

Electric Vehicles

Background

DRC commissioned expert evidence prepared by Dr. Josipa Petrunic, Executive Director and CEO of the Canadian Urban Transit Research & Innovation Consortium (CUTRIC) (the CUTRIC evidence).⁴⁰⁷ DRC commissioned the CUTRIC evidence in order to facilitate consideration of EVs and related DERs as valid investments to assist in ensuring distribution system efficiency and reliability. In its submission, DRC summarized the CUTRIC evidence as follows.

- The CUTRIC evidence examined the customer efficiencies that may be effected through progressive integration of EVs (including battery electric buses (BEBs))

⁴⁰⁶ Exhibit 2B / Section E7.2 / p. 25 / Table 16.

⁴⁰⁷ Exhibit M2.

and related DERs into electricity distribution systems. CUTRIC concluded that there are a number of distribution and other customer efficiencies that are likely to result from EVs and EV-related DERs during Toronto Hydro's Custom IR term.

- CUTRIC noted that the integration of EVs and BEB rates may reasonably assist in optimizing the distribution network and help Toronto Hydro to achieve OM&A savings and contribute to revenues.
- In light of overall customer efficiencies, the CUTRIC evidence recommended that the OEB should allow distributors to actively consider cost effective EV, and EV-related DER strategic initiatives as valid DSP investments.
- The CUTRIC evidence took no position on the ownership structure or investment model and on whether Toronto Hydro should include capital and OM&A costs of EV charging infrastructure in its 2020-2024 revenue requirement to be funded by ratepayers.

DRC submitted that the CUTRIC evidence supported the view that Toronto Hydro should not be precluded from including cost effective capital and OM&A costs of EV charging infrastructure in its 2020 to 2024 revenue requirement, and the OEB may wish to clarify this. DRC also submitted that the OEB should direct Toronto Hydro to report on its integration of EVs and EV DERs into the distribution system, its EV customer-specific stakeholder consultations, and the outcome of any EV and EV-related DER initiatives.⁴⁰⁸

OEB staff submitted that owning and operating EV charging stations and providing EV charging services is a non-distribution activity. This is consistent with the July 7, 2016 OEB Staff Bulletin⁴⁰⁹ which sets out OEB staff's view that "the ownership or operation of an EV charging station, and the selling of EV charging services from that facility, do not constitute distribution or retailing."⁴¹⁰

Contrary to OEB staff's submission and the existing OEB guidance on electric mobility DERs, DRC submitted that the OEB should consider electrified transportation DERs as

⁴⁰⁸ DRC Submission / pp. 11-13.

⁴⁰⁹ OEB Staff Bulletin on Electric Vehicle Charging / July 7, 2016 / p. 2.

⁴¹⁰ OEB Staff Submission / p. 91.

potentially eligible distribution investments where they are economic, prudent and facilitate long-term customer efficiency.⁴¹¹

DRC further submitted that DERs and EV-related DER growth and integration are resulting in fundamental changes to the distribution grid that will impact electricity supply and demand, customer preferences, capital expenditures and productivity during the Custom IR term. DRC also stated that DER-related growth and capital investments may result in productivity enhancements but further monitoring, tracking and reporting of relevant information is required. DRC submitted that a number of Toronto Hydro's proposed DER-related investments may be beneficial to customers.⁴¹²

DRC argued for a number of EV and DER-related reporting requirements for Toronto Hydro for the Custom IR term.⁴¹³ DRC also requested that Toronto Hydro ascertain the existing number of EV DER customers and the growth rate of such customers in its service territory, and that the OEB consider exempting certain DER capital investments from the stretch factor that the OEB arrives at in relation to the proposed C-factor.⁴¹⁴

DRC also provided detailed submissions supporting Toronto Hydro's proposed Area Conversions program, ESS program, the local DR segment of Toronto Hydro's Stations Expansion program, and the Control Operations and Reinforcement program. DRC stated that the OEB should consider the customer benefits and potential productivity gains associated with the above noted capital programs.⁴¹⁵

Energy Probe submitted that CUTRIC wants the OEB to direct Toronto Hydro to provide CUTRIC with information for its research. Energy Probe stated that considering Toronto Hydro is a member of CUTRIC, it is not clear why the OEB would provide such a direction. The members of CUTRIC should be able to exchange information without involving the OEB.⁴¹⁶

In its reply argument, Toronto Hydro submitted that DRC's reporting proposals are administratively burdensome and extend far beyond the OEB's Filing Requirements⁴¹⁷,

⁴¹¹ DRC Submission / pp. 16-17.

⁴¹² DRC Submission / p. 4.

⁴¹³ DRC Submission / pp. 14-16.

⁴¹⁴ DRC Submission / pp. 4-5.

⁴¹⁵ DRC Submission / pp. 5, 17-21.

⁴¹⁶ Energy Probe Submission / p. 32.

⁴¹⁷ Filing Requirements for Electricity Distribution Rate Applications / July 12, 2018.

Rate Handbook⁴¹⁸, and Reporting and Record Keeping Requirements (RRR).⁴¹⁹ Furthermore, DRC advanced the proposed reporting requirements without having put them to Toronto Hydro during the proceeding. There was ample opportunity during this proceeding to lead evidence and engage in discovery.

Toronto Hydro further submitted that DRC appears to be using this rate application as a platform to collect information to advance its members' interests. That is not the purpose of a rate application. Toronto Hydro submitted that DRC's proposal provides no value to the OEB in the exercise of its statutory jurisdiction to set just and reasonable rates. Given the potential implications of DRC's requests on other utilities, Toronto Hydro submitted that DRC's proposal should be considered as part of a generic review rather than in the context of this rate application.⁴²⁰

Findings

As noted in an earlier sub-section under Issue 3.3, the OEB concludes that the Responding to DERs consultation is the appropriate forum to consider the role of distributors for customer-specific ESS and whether any regulatory policies should be amended. Similarly, the OEB finds that many of the issues raised by DRC regarding EV-related DERs are also appropriately considered in the Responding to DERs consultation. Therefore, the OEB will not direct specific information gathering and reporting functions as proposed by DRC, or modify the Custom IR framework specifically for DERs.

However, under Issue 3.2, the OEB directed Toronto Hydro to provide more detailed cost benefit analysis between EV, hybrid and combustion engines for its fleet program for future rebasing applications.

Furthermore, as part of Issue 4.1 on the load forecast, the OEB established an expectation that Toronto Hydro complete a more detailed analysis of the impact of DERs and EVs on load and load profiles to be considered for any future load forecasts.

⁴¹⁸ Handbook for Utility Rate Applications / October 13, 2016.

⁴¹⁹ Electricity Reporting & Record Keeping Requirements / November 29, 2018.

⁴²⁰ Toronto Hydro Reply Submission / p. 74.

6 LOAD AND OTHER REVENUE FORECAST (ISSUE 4.0)

6.1 Is Toronto Hydro's 2020-2024 load forecast reasonable (Issue 4.1)?

Background

Toronto Hydro provided an updated load forecast as part of its April 30, 2019 Application Update. The load forecast is used both for setting base rates in 2020 and for the growth factor in the Custom Price Cap Index applied from 2021 to 2024.

The table below compares the originally filed load forecast to the update provided at Exhibit U / Tab 3 / Schedule 1.⁴²¹

Table 19
Total Load, Revenues and Customers (Historical and Forecast)

Year		Total Normalized GWh		Total Normalized MVA		Total Distribution Revenue (\$M)		Total Customers	
		Original	Update	Original	Update	Original	Update	Original	Update
2013	Actual	25,245.1	25,312.2	42,737.5	42,828.4	531.9	533.5	724,144	724,144
2014	Actual	25,132.0	25,200.9	41,866.4	41,960.8	536.6	537.7	735,262	735,262
2015	Actual	25,031.1	25,097.8	41,320.7	41,410.4	628.0	629.5	747,811	747,811
2016	Actual	24,909.3	24,964.8	41,335.6	41,414.0	661.4	657.6	759,031	759,031
2017	Actual	24,427.6	24,498.5	40,731.3	40,744.9	693.6	700.4	765,559	765,559
2018	Bridge / Actual	24,378.2	24,609.4	40,925.0	40,220.7	740.7	740.6	771,079	769,571
2019	Bridge	24,123.8	24,195.5	40,761.1	40,662.4	771.5	773.7	776,786	776,890
2020	Forecast	24,036.0	24,044.0	40,408.1	40,232.3	796.9	800.2	784,330	784,236
2021	Forecast	23,818.0	23,763.4	40,275.5	39,999.7	824.2	824.9	790,944	790,979
2022	Forecast	23,651.8	23,651.0	40,200.6	39,918.9	846.8	848.2	798,591	799,336
2023	Forecast	23,475.3	23,541.8	40,104.6	39,857.0	885.2	886.7	806,238	805,850
2024	Forecast	23,396.7	23,494.7	40,166.6	39,887.4	924.2	927.1	813,886	811,785

⁴²¹ Exhibit U / Tab 3 / Schedule 1 / p. 1. The historical and forecast loads in the update columns reflect normalization based on average Heating Degree Days and Cooling Degree Days over the 2009 to 2018 period. The distribution revenue is based on Toronto Hydro's proposed rates, excluding rate riders and all other non-distribution rates.

Toronto Hydro's original load forecast was based on regression models using actual historical loads and input variables to the end of 2017, and forecasts of input variables for the 2018-2024 period. For the updated forecast, regression models were re-run using actual historical loads and input variables to the end of 2018.⁴²²

OEB staff and VECC noted that Toronto Hydro's load forecast explicitly accounts for the Conservation and Demand Management (CDM) impact on load. However, the load forecast was prepared prior to the recent government announcements with respect to the discontinuation of certain CDM programs in the province. Toronto Hydro noted that, based on its high-level analysis, removing the CDM programs that are expected to be cancelled from the load forecast will have an immaterial impact.⁴²³ OEB staff and VECC accepted that adjustments to the load forecast for the noted CDM programs are expected to be immaterial and therefore no changes are warranted.⁴²⁴

With the exception of Energy Probe, no party sought changes to the load forecast in the current proceeding. However, some parties argued for changes to the methodology in future proceedings.

DRC submitted that there does not appear to be any quantification of the impact of DERs on load forecasting, capital, operations, reliability and productivity. DRC stated that Toronto Hydro's updated load forecast does not incorporate EV or DER estimates. DRC submitted that it is difficult to reconcile Toronto Hydro's expectation that DERs will be immaterial to load growth during the 2020-2024 Custom IR term in the context of the large amount of interest Toronto Hydro has received with respect to DERs. As a result, as previously discussed under Issue 3.3, DRC argued for a number of EV and DER-related reporting requirements for Toronto Hydro for the Custom IR term.⁴²⁵

VECC cited certain concerns with Toronto Hydro's load forecasting methodology. VECC noted that the customer count forecast uses extrapolation models (particularly, linear trend models) and argued that these models do not incorporate any considerations as to the projected economic conditions and can lead to counterintuitive results. VECC

⁴²² Exhibit U / Tab 3 / Schedule 1 / p. 2.

⁴²³ Toronto Hydro Argument-in-Chief / p. 48; and Oral Hearing Transcripts / Vol. 6 / pp. 137-139. In part, this is due to the completion of residential rate design (transitioning residential rates to fixed monthly charges), so that costs for serving the customers is fully recovered from rates invariant of changes in consumption for CDM or other factors.

⁴²⁴ OEB Staff Submission / p. 102; and VECC Submission / p. 20.

⁴²⁵ DRC Submission / pp. 14-16.

submitted that Toronto Hydro's customer count forecasts could be improved by using models that link customer counts to changes in economic and demographic conditions. VECC submitted that the OEB should direct Toronto Hydro to explore such models for its next rebasing application.⁴²⁶

CCC argued that the OEB should order Toronto Hydro to file an independent review of its load forecasting methodology as part of the next rebasing proceeding.⁴²⁷ OEB staff submitted that Toronto Hydro should better document its load forecasting methodology in future proceedings.⁴²⁸

In its reply argument, Toronto Hydro submitted that it used a robust approach to prepare the load forecast, which is consistent with the OEB's Chapter 2 Filing Requirements⁴²⁹ and historical experience. Toronto Hydro noted that it relied on this same methodology to set rates in its 2015-2019 Custom IR application⁴³⁰ and its load forecasting approach is proven to produce accurate and reliable results. As such, Toronto Hydro submitted that it is not necessary for the OEB to order Toronto Hydro to change, or conduct a review of, its load forecasting methodology for the next rebasing application. Toronto Hydro stated that, in the alternative, if the OEB finds merit in arguments of VECC and CCC, Toronto Hydro would be willing to address the concerns by providing enhanced documentation of the methodology in future proceedings as was suggested by OEB staff.⁴³¹

Energy Probe argued that the load forecast is too low and that the OEB should freeze the forecast at 2018 bridge year levels. In support of its argument, Energy Probe noted the discrepancy between the load forecast for billing unit purposes (energy and non-coincident peak demand by class) and the load forecast used for planning purposes (station peak loads). Specifically, Energy Probe submitted that Toronto Hydro's rate base is expected to increase by 22.73% (some of which is related to adding thousands of new condominium units), which should result in load growth instead of a decline in load as proposed.⁴³²

⁴²⁶ VECC Submission / pp. 18-20.

⁴²⁷ CCC Submission / p. 14.

⁴²⁸ OEB Staff Submission / p. 102.

⁴²⁹ OEB Filing Requirements for Electricity Distribution Rate Applications, Chapter 2, July 12, 2018, pp. 22-28.

⁴³⁰ EB-2014-0116.

⁴³¹ Toronto Hydro Reply Submission / pp. 189-190.

⁴³² Energy Probe Submission / pp. 32-33.

Toronto Hydro submitted that Energy Probe's comparison is flawed and provides no meaningful information for the evaluation of the load forecast used to set rates. Toronto Hydro stated that there is no evidentiary basis for the assumption that there should be a positive relationship between rate base growth and load growth.⁴³³

Findings

The OEB accepts the load and customer / connection forecast as updated by Toronto Hydro in Exhibit U.⁴³⁴ However, the OEB expects Toronto Hydro to enhance its approach to forecasting customers / connections for its next rebasing application.

Toronto Hydro has stated that historical experience provides proof that its load forecasting approach produces accurate and reliable results. The OEB agrees that the past results for the load forecast demonstrate a reasonable approach; however, that does not appear to be the same for the customer / connection forecast.

The actual weather normalized GWh forecast fluctuated both higher and lower than the OEB-approved load forecast between 2015 to 2018⁴³⁵, and the OEB agrees this was within a reasonable range. Over the same time period, the actual customer count fell short of the forecast by an increasing amount each year.⁴³⁶ While this higher customer count forecast was to the benefit of customers, it does raise questions about the reliability of the forecasting methodology. The OEB expects Toronto Hydro to enhance its approach to forecasting customers / connections through the consideration of economic and demographic conditions, as submitted by VECC, to improve the accuracy of future forecasts.

Toronto Hydro used internal resources to do the forecast. The OEB concludes that Toronto Hydro has the necessary resources and expertise to do its own load forecasting. However, when using internal resources it is still important that the methodology and assumptions are well documented. The OEB expects there to be a greater level of documentation for future rate proceedings.

⁴³³ Toronto Hydro Reply Submission / pp. 190-191.

⁴³⁴ Exhibit U / Tab 3 / Schedule 1.

⁴³⁵ Toronto Hydro Reply Submission / p. 190.

⁴³⁶ Toronto Hydro Reply Submission / p. 190.

The OEB accepts Toronto Hydro's explanation that there is a distinction between the load forecast for setting rates and the load forecast for system planning. Toronto Hydro clarified that the impact of EVs and DERs is captured in its station load forecast to inform targeted system investments. The OEB accepts Toronto Hydro's position that EVs and DERs are not yet material enough to require a specific adjustment to the overall load forecast used for rate-setting purposes for the Custom IR term. However, the information brought forward by DRC indicates that the impact of EVs and DERs may grow rapidly. The OEB expects Toronto Hydro to do a more detailed analysis of the impact of EVs and DERs on load and load profile to be considered for any future load forecasts. The OEB recognizes that Toronto Hydro may not necessarily know where electric vehicle charging stations are within its system, as customers have no requirement to notify Toronto Hydro when they are installed.⁴³⁷ However, there may be other channels to gather better information, such as surveys or research studies.

The province's Conservation First Framework has been discontinued and replaced by an Interim Framework. This may result in changes to the scope and impacts of CDM programs in the post-2020 period. For the CDM adjustment in the load forecast, Toronto Hydro has acknowledged that it did not account for the discontinuation of certain CDM programs, but submitted that any impacts will be well within the margin of error for its models. This period of transition for the delivery of CDM programs does create some uncertainty; therefore, the OEB accepts Toronto Hydro's proposal of not adjusting its load forecast for any changing circumstances at this time. Once the details of any final CDM framework are known, the OEB may review the Lost Revenue Adjustment Mechanism variance account (LRAMVA) mechanism. The OEB expects that any outcome of that review will apply to Toronto Hydro.

6.2 Are Toronto Hydro's 2020 other revenue and shared services forecasts reasonable (Issue 4.2)?

Background

Toronto Hydro's historical 2015-2019 other revenues and updated 2020 other revenue forecast is shown in the following table.⁴³⁸

⁴³⁷ Oral Hearing Transcripts / Vol. 4 / p. 16.

⁴³⁸ U-VECC-83.

Table 20
Other Revenues

USoA #	USoA Description	2015 Actual	2016 Actual	2017 Actual	2018 Actual	Bridge Year	Test Year
		2015	2016	2017	2018	2019	2020
	<i>Reporting Basis</i>	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS	MIFRS
4235	Specific Service Charges	\$6,786,826	\$9,497,848	\$7,186,822	\$5,966,102	\$5,107,243	\$3,689,939
4225	Late Payment Charges	\$4,126,310	\$4,540,398	\$3,696,196	\$3,323,433	\$3,732,947	\$3,751,641
4082	Retailers' Fixed charge	\$5,320	\$5,280	\$5,520	\$5,280	\$10,840	\$10,840
4082	Retailers' Variable Charge	\$257,269	\$225,343	\$178,662	\$146,005	\$342,772	\$324,840
4082	Distributor Consolidated Billing (DCB) Charges	\$143,718	\$125,603	\$106,118	\$87,079	\$198,415	\$188,134
4082	Retail Consolidated Billing (RCB) Credit	-\$9,072	-\$8,351	-\$635	\$0	\$0	\$0
4084	Retailer Service Transaction Request	\$13,764	\$12,656	\$10,350	\$8,302	\$18,563	\$17,632
4084	Retailer Service Transaction Processing	\$6,344	\$5,722	\$4,485	\$3,190	\$8,542	\$8,162
4090/4086	SSS Admin Charge	\$2,196,126	\$2,317,539	\$2,269,960	\$2,313,558	\$2,389,560	\$2,407,409
4210	Parking Rental	\$3,790	\$1,200	\$1,200	\$4,408	\$0	\$0
4210	Property Rental	\$41,516	\$46,854	\$53,414	\$47,228	\$0	\$0
4215	TTC Rectification	\$253,250	\$303,900	\$303,900	\$303,900	\$303,900	\$303,900
4215	Settlement Discounts Taken	\$404,384	\$381,359	\$523,847	\$340,755	\$389,382	\$389,382
4215	Stale Dated Cheques	\$453,706	\$417,078	\$736,416	\$462,171	\$533,368	\$533,368
4220	Street Lighting	\$7,055,723	\$8,200,259	\$9,229,601	\$8,035,739	\$8,536,375	\$8,076,074
4325	Merchandise and Jobbing Revenue	\$23,108,588	\$32,769,384	\$45,929,144	\$47,400,242	\$36,014,502	\$37,732,615
4330	Merchandise and Jobbing Costs	-\$14,047,565	-\$19,805,704	-\$29,913,621	-\$27,406,949	-\$15,651,688	-\$15,991,089
4335	Gain/Loss on disposals	\$211,338	\$0	\$0	\$0	\$0	\$0
4375	Shared Services Recovery ¹	\$2,927,027	\$3,212,613	\$4,829,010	\$5,670,327	\$5,494,615	\$5,507,706
4355	Gain on Disposition of Utility and Other Property	\$4,062,681	\$2,132,160	\$515,158	\$576,205	\$1,630,000	\$0
4398	Foreign Exchange Gain/(Loss)	-\$1,500,430	\$162,383	\$54,784	-\$128,336	\$0	\$0
4405	Investment Interest Income	\$1,298,537	\$186,388	\$9	\$0	\$120,000	\$120,000
Specific Service Charges		\$6,786,826	\$9,497,848	\$7,186,822	\$5,966,102	\$5,107,243	\$3,689,939
Late Payment Charges		\$4,126,310	\$4,540,398	\$3,696,196	\$3,323,433	\$3,732,947	\$3,751,641
Other Operating Revenues		\$10,825,837	\$12,034,443	\$13,422,839	\$11,757,613	\$12,731,715	\$12,259,740
Other Income or Deductions		\$16,060,177	\$18,657,224	\$21,414,483	\$26,111,488	\$27,607,430	\$27,369,233
Total		\$37,799,149	\$44,729,912	\$45,720,340	\$47,158,636	\$49,179,335	\$47,070,553

Toronto Hydro's updated 2020 other revenue forecast⁴³⁹ includes the following:

- A change to the other income or deductions category to reflect the capitalization of major assets related to accident claims
- A change to the specific service charges category to reflect the revisions made to the OEB's Customer Service Rules⁴⁴⁰
- A change to retailer service charges category to reflect the approvals made by the OEB in a separate proceeding.⁴⁴¹

⁴³⁹ U-VECC-83; and Undertaking J1.2.

⁴⁴⁰ EB-2017-0183.

⁴⁴¹ EB-2015-0304.

OEB staff, supported by BOMA, Energy Probe and VECC, submitted that the 2020 other revenue forecast should be increased by \$1.78 million in respect of the disposition of utility and other property.⁴⁴²

OEB staff submitted that the 2020 other revenue forecast of zero for gains on disposition of utility and other property is not reasonable. OEB staff argued that there have been gains from the disposition of utility and other property in each year from 2015 to 2019.⁴⁴³ Over the five-year period, the total other revenues derived from this category was \$8.92 million. OEB staff submitted that Toronto Hydro's position that there will be no sales in this category, for the first time in five years, is not reasonable. OEB staff stated that a reasonable forecast for the other revenues that will be generated through the disposition of utility and other property for 2020 is \$1.78 million, which reflects the annual average for the 2015-2019 period.⁴⁴⁴

In its reply argument, Toronto Hydro submitted that it makes decisions on property sales based on business requirements and after following a specific needs assessment process. Accordingly, property sales are not regular or routine occurrences. Rather, they are specific sales, based on business considerations relating to the particular property. In the 2015-2019 period, a number of decommissioned municipal stations have been (or are in the process of being) sold following Toronto Hydro's business needs assessment process. Toronto Hydro stated it has no plans to sell any properties in 2020. Further, even if a property sale occurs in 2020, there is no proper or reliable basis to expect that the revenue would be \$1.78 million as any such revenue would depend on the particular circumstances of the property.

Toronto Hydro further argued that OEB staff's proposal could also create a perverse incentive for utilities to dispose of property with a view to managing revenue offsets (as opposed to doing so on the basis of a proper needs-based assessment). Toronto Hydro concluded by stating that its proposal of zero revenue from property sales in 2020 should be accepted. However, if the OEB has any concern in this regard, a deferral account could be created to track any additional revenue from property sales in 2020 and future years.⁴⁴⁵

⁴⁴² OEB Staff Submission / pp. 103-105; BOMA Submission / p. 48; Energy Probe Submission / p. 33; and VECC Submission / pp. 21-22.

⁴⁴³ U-VECC-83.

⁴⁴⁴ OEB Staff Submission / pp. 104-105.

⁴⁴⁵ Toronto Hydro Reply Submission / pp. 191-193.

OEB staff also submitted that further updates to the 2020 other revenue forecast may be required at the draft rate order stage if there are any further generic updates made by the OEB to specific service charges.⁴⁴⁶

Findings

The OEB approves other revenue of \$48.1 million, approximately \$1 million higher than proposed by Toronto Hydro, to reflect an amount for the gain from the sale of utility property. This other revenue is an offset to distribution revenue requirement. The OEB also approves a symmetrical variance account to track the difference between the \$1 million adjustment and the actual gains on the sale of utility property.

Toronto Hydro has argued that it has no plans to sell properties in 2020. That submission misses the point that this is a five-year Custom IR framework. Within a Custom IR framework, it is appropriate for the OEB to consider the costs and revenues for the whole term, in addition to the Custom Price Cap Index.⁴⁴⁷ The question is whether Toronto Hydro will sell any utility property for a gain during the 2020 to 2024 term. There were gains from the sale of properties in each year of the last Custom IR term (2015 to 2019), ranging from a low of \$0.5 million to a high of \$4.1 million. It is simply not reasonable to assume there will be no gains at all to share with customers during the 2020 to 2024 term. The average gain on the disposition utility property for the past three actual years (2016 to 2018) is just over \$1 million. The OEB has therefore increased the other revenue forecast accordingly. This will insure that customers receive a benefit related to gains as soon as possible. However, the OEB also recognizes that gains have been both higher and lower than \$1 million in any individual year. For this reason, the OEB is establishing a symmetrical variance account to track the difference between the \$1 million and the actual gains. Toronto Hydro is expected to seek disposition of this account in its next rebasing application.

The OEB finds that the other aspects of the other revenue forecast are reasonable. The forecast revenue generally trends from revenue collected in previous years, other than for specific service charges. For specific service charges, the forecast reflects the

⁴⁴⁶ OEB Staff Submission / p. 105.

⁴⁴⁷ The Handbook for Utility Rate Applications / p. 24 describes a Custom IR as follows: "Under this methodology, rates are set for five years considering a five-year forecast of the utility's costs and sales volumes."

outcome of the OEB's generic assessment of customer service charges, including the elimination of a collection charge.

The OEB notes that for Account 4375 Shared Services Recovery, Toronto Hydro does not record the associated expenses in Account 4380, as required by the Accounting Procedures Handbook.⁴⁴⁸ Toronto Hydro disclosed this point in its evidence⁴⁴⁹, however, this approach makes it more difficult to assess that there are no cross-subsidies between regulated and non-regulated activities. Toronto Hydro is expected to follow the requirements of the Accounting Procedures Handbook going forward.

⁴⁴⁸ OEB Accounting Procedures Handbook / p. 128.

⁴⁴⁹ Exhibit U / Tab 3 / Schedule 2 / Appendix A / Note 1.

7 OPERATIONS, MAINTENANCE AND ADMINISTRATION (OM&A) COSTS, DEPRECIATION EXPENSES AND PAYMENTS IN LIEU OF TAXES (PILS) AMOUNTS (ISSUE 5.0)

7.1 Is the level of proposed OM&A expenditures appropriate and is the rationale for planning choices appropriate and adequately explained (Issue 5.1)?

Background

Toronto Hydro's proposed 2020 OM&A expenditures, shown at the program level, are set out in the table that follows.⁴⁵⁰

⁴⁵⁰ Exhibit 4A / Tab 1 / Schedule 1 / pp. 2-3 updated for Exhibit U / Tab 4A / Schedule 1 / pp. 1-2; and Exhibit 4A / Tab 2 / Schedule 18 / Appendix A (updated July 31, 2019).

Table 21
Proposed 2020 OM&A Expenditures

OM&A Program	2020 (\$M)
Preventative and Predictive Overhead Line Maintenance	\$ 6.00
Preventative and Predictive Underground Line Maintenance	\$ 5.50
Preventative and Predictive Station Maintenance	\$ 5.60
Corrective Maintenance	\$ 17.20
Emergency Response	\$ 16.60
Disaster Preparedness Management	\$ 2.70
Control Centre Operations	\$ 8.70
Customer-Driven Work	\$ 10.60
Asset and Program Management	\$ 13.90
Work Program Execution	\$ 21.80
Fleet and Equipment Services	\$ 11.00
Facilities Management	\$ 24.00
Supply Chain Services	\$ 12.60
Customer Care	\$ 49.40
Human Resources and Safety	\$ 15.90
Finance	\$ 16.20
Information Technology	\$ 44.00
Legal and Regulatory	\$ 16.10
Charitable Donations and LEAP	\$ 1.00
Common Costs and Adjustments	\$ (0.70)
Allocations and Recoveries	\$ (19.90)
Total OM&A	\$ 278.20

Toronto Hydro's total proposed OM&A costs of \$278.2 million was provided in its Argument-in-Chief, based on updates filed as part of Exhibit U on April 30, 2019, and a further update on July 31, 2019.⁴⁵¹

The OEB has also produced the following table that shows the trend in OM&A since 2015 based on Undertaking J6.10, adjusted to reflect the proposed updated costs.⁴⁵²

⁴⁵¹ Toronto Hydro Argument-in-Chief / p. 50.

⁴⁵² Undertaking J6.10 updated for Exhibit U / Tab 4A / Schedule 1 / pp. 1-2 and Exhibit 4A / Tab 2 / Schedule 18 / Appendix A (updated July 31, 2019). Undertaking J6.10 did not reflect the updated costs.

Table 22
OM&A Expenditures - 2015 to 2020

	2015 OEB- Approved	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Bridge	2020 Test	Increase from 2020 to 2015 Actual
O&M		\$115.7	\$120.0	\$119.3	\$131.7	\$128.3	\$128.9	11.4%
Admin Expenses		\$128.3	\$129.9	\$135.9	\$136.6	\$139.7	\$149.3	16.4%
Total	\$243.9	\$244.0	\$249.8	\$255.3	\$268.3	\$267.9	\$278.2	14.0%

Toronto Hydro submitted that the trend for OM&A between 2015 to 2020 should be normalized for \$9.2 million in accounting changes that included:

- Costs for the transition to monthly billing that had been recorded in a deferral account and are now included in OM&A
- A transition from the cash to accrual approach to recording other post-employment benefits (OPEBs)
- A new accounting standard for leases that results in costs for contact voltage scanning being expensed rather than capitalized.⁴⁵³

Toronto Hydro also noted its compounded growth in customer count of 1% per year from 2015 to 2020.⁴⁵⁴

Toronto Hydro's full-time equivalent (FTE) count and compensation amount for the 2015-2019 historical period and the 2020 test year proposal is set out in the following table.⁴⁵⁵

Assumptions have been made on how to allocate the Exhibit U and application cost changes to total OM&A between O&M and administration expenses based on the program description. As the overall change was only \$0.7 million, any impact of these assumptions on the percentage trends should be minimal.

⁴⁵³ Undertaking J6.10.

⁴⁵⁴ Undertaking J6.10.

⁴⁵⁵ U-SEC-102.

Table 23
FTE Count and Compensation

	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Bridge	2020 Test
Number of Employees						
Total	1,483	1,484	1,473	1,425	1,523	1,517
Total Compensation						
Total	\$211,095,573	\$212,358,484	\$216,426,119	\$217,721,582	\$232,896,535	\$241,463,807

Toronto Hydro stated that its compensation costs make up approximately 46% of the overall OM&A budget.⁴⁵⁶

OEB staff noted that the proposed 2020 OM&A expenditures of \$278.2 million are an increase of \$34.3 million or 14.1% compared to the OEB-approved 2015 OM&A expenditures of \$243.9 million. The proposed 2020 OM&A expenditures compared to 2018 actual OM&A expenditures of \$268.3 million is an increase of \$9.9 million or 3.7%.⁴⁵⁷

OEB staff argued that the 2020 OM&A budget should be reduced by \$9.4 million (approximately 3%). BOMA and CCC supported this argument.⁴⁵⁸ OEB staff provided detailed arguments supporting the following specific OM&A reductions:

- Customer Care Program - \$3.7 million reduction to address an overstatement of the forecast 2020 bad debt expense and external services costs associated with the management of bad debt.
- Asset and Program Management Program - \$1.2 million reduction associated with the removal of the forecast of CWIP write-offs.
- Legal and Regulatory Program - \$0.3 million reduction associated with the amortized one-time costs for the current application.

⁴⁵⁶ Toronto Hydro Argument-in-Chief / p. 56.

⁴⁵⁷ OEB Staff Submission / p. 107.

⁴⁵⁸ BOMA Submission / pp. 49-50; CCC Submission / pp. 14.

- Overall OM&A Budget - \$2.5 million reduction to the overall OM&A budget to reflect the inclusion of all the originally forecast cost savings related to the ERP project.
- Compensation - \$1.7 million reduction to reflect the most recent forecast of compensation costs (\$3.2 million in total, \$1.7 million OM&A and \$1.5 million capital).⁴⁵⁹

OEB staff and SEC, supported by other parties, submitted that a \$3.2 million reduction to compensation costs is appropriate because Toronto Hydro's proposed 2020 FTE count and related compensation amount are not based on the most recent information.⁴⁶⁰ Toronto Hydro's most recent FTE forecast for 2020 is 1,491⁴⁶¹, which is 26 FTEs lower than the proposed amount of 1,517.⁴⁶² This FTE reduction results in compensation costs that are \$3.2 million lower than the proposed amount.⁴⁶³ This has an impact on both the capital and OM&A budgets. OEB staff and SEC estimated that the impact on OM&A costs is about \$1.7 million (with the remainder of \$1.5 million impacting the capital budget).

OEB staff also submitted that it supports Toronto Hydro's use of the accrual method for purposes of recovering its pension and OPEB costs because it is consistent with the default methodology set out in the OEB's Report on the Regulatory Treatment of Pension and OPEB Costs⁴⁶⁴ (OEB Pension and OPEB Report).⁴⁶⁵

VECC argued for a \$9.5 million reduction to the 2020 OM&A budget on an envelope basis. The reduction was calculated by applying the principal that the prior rate plan was intended to provide for cost increases no larger than the rate of inflation.⁴⁶⁶ VECC submitted that if the OM&A in the new plan exceeds the rate of inflation for the past period then there is no compelling reason to continue on this form of incentive ratemaking. VECC argued that when there is a change in circumstances, a utility should

⁴⁵⁹ OEB Staff Submission / pp. 107-115.

⁴⁶⁰ OEB Staff Submission / pp. 107-115; SEC Submission / pp. 74-75; AMPCO Submission / p. 29; BOMA Submission / pp. 49-50; and CCC Submission / pp. 14-15.

⁴⁶¹ Undertaking J5.2 / Appendix A.

⁴⁶² U-SEC-102.

⁴⁶³ Undertaking J5.2 / Appendix A. The total compensation costs based on the most recent update are \$238.3 million.

⁴⁶⁴ OEB Report on the Regulatory Treatment of Pension and OPEB Costs / September 14, 2017.

⁴⁶⁵ OEB Staff Submission / p. 115.

⁴⁶⁶ VECC Submission / pp. 22-23.

find ways to reduce the cost of that new risk, as would a firm operating in a competitive environment.

SEC, supported by AMPCO, argued for a reduction of at least \$18.3 million to the 2020 OM&A forecast to reflect:

- The impact of hiring delays (\$1.7 million) (as discussed previously)
- An incorrect forecast of bad debt expenses (\$2.4 million)
- An amount to reflect both annual efficiencies during the current Custom IR period and incremental amounts that were not built into the 2020 test year budget (\$14.2 million).⁴⁶⁷

SEC also submitted that Toronto Hydro's proposed 2020 OM&A budget represents a compound annual increase of 2.6% relative to the previous OEB-approved amount. SEC stated that Toronto Hydro's cost per customer has increased, especially its administrative costs per customer. SEC noted that it would be expected that as Toronto Hydro increases the number of customers served, the administrative costs to serve on a per customer basis would decline due to scale economies. SEC noted that Toronto Hydro's administrative costs per customer have increased 11.7% between 2015 and 2020, which is a compound annual growth rate of 2.3% per year, and because it is on a per customer basis, it already factors in growth.⁴⁶⁸

Energy Probe argued that compensation for the non-management / non-union and executive employees is not reasonable. For non-management / non-union employees, Energy Probe submitted that there should be a reduction in compensation of approximately \$5 million to reflect a 2.5% maximum average annual increase (2018 actual to 2020).⁴⁶⁹ With respect to the executive compensation, Energy Probe submitted that there should be approximately a \$0.75 million reduction to limit incentive pay to 40% of the base salary.⁴⁷⁰

PWU submitted that executive and managerial compensation increases should be limited to the average compensation increase for non-executive and non-managerial

⁴⁶⁷ SEC Submission / pp. 73-75; and AMPCO Submission / p. 29.

⁴⁶⁸ SEC Submission / p. 73.

⁴⁶⁹ Energy Probe Submission / pp. 33-36.

⁴⁷⁰ Energy Probe Submission / pp. 36-37.

employees (2.4%). On this basis, PWU submitted that a disallowance of \$1.6 million to the 2020 compensation budget is appropriate.⁴⁷¹ PWU also argued that Toronto Hydro has not sufficiently demonstrated that contracted service has resulted in lower costs for ratepayers. On this basis, PWU proposed a disallowance of 5% to the portion of OM&A and capital expenditures undertaken by third parties. PWU estimated that this would reduce OM&A in 2020 by \$5.37 million and capital expenditures by \$84.6 million over the 2020-2024 period.⁴⁷²

In its reply argument, Toronto Hydro stated that the OEB should reject the OM&A reductions proposed by various parties because they would negatively impact service levels and result in sub-optimal outcomes contrary to customers' expressed needs and expectations. Toronto Hydro stated that it already reduced its proposed OM&A budget by approximately \$25 million during its rigorous business planning process, and has made significant efforts and difficult trade-offs to constrain its forecast spending in these areas. Toronto Hydro also submitted that it outlined how each program contributes to delivering customer-focused outcomes and details the utility's historical and forecast plans and initiatives to achieve continuous improvement in cost efficiency and productivity.

Toronto Hydro further submitted that its proposed 2020 OM&A reflects a modest and reasonable increase from its last rebasing application⁴⁷³ of an approximate 1% annual growth rate, when adjusted for customer count and accounting changes as appropriate, and this is an achievement considering its many cost pressures. Toronto Hydro argued that the increase in customers significantly increases costs and the relevant accounting changes distort the comparability of the 2015 and 2020 test years.⁴⁷⁴

Toronto Hydro filed detailed responses to each of the program and cost driver-specific OM&A reductions proposed by parties with respect to the Customer Care Program, Asset and Program Management Costs, Legal and Regulatory Costs and the ERP-related OM&A reduction.⁴⁷⁵

Toronto Hydro argued that the proposed \$3.2 million reduction to compensation costs is based on a single data point that has been taken out of its proper context. Toronto

⁴⁷¹ PWU Submission / pp. 27-28.

⁴⁷² PWU Submission / pp. 18-24.

⁴⁷³ EB-2014-0116.

⁴⁷⁴ Toronto Hydro Reply Submission / pp. 194-196.

⁴⁷⁵ Toronto Hydro Reply Submission / pp. 197-208, 217-220.

Hydro submitted that it is still hiring the originally forecasted number of FTEs, albeit on a slightly delayed timeline. Toronto Hydro submitted that it will still be hiring for the forecasted level of FTEs and in the interim period it is temporarily increasing external contractor costs until the remaining FTEs have been hired. On this basis, it would be inappropriate to accept OEB staff's and SEC's proposals to reduce compensation costs.⁴⁷⁶

Toronto Hydro referred to the Mercer benchmarking analysis that concluded that:

- Toronto Hydro's compensation for the non-management / non-union employees is market competitive
- Toronto Hydro's executive compensation is below market
- Toronto Hydro's management and professional positions are generally positioned competitively against the 50th percentile in the energy sector, and at, or below, the market 50th percentile relative to the general industry.⁴⁷⁷

Further, Toronto Hydro stated that the reasonableness of its executive compensation is evidenced by the fact that this category of compensation has remained stable over the 2015-2020 period and declined by 16.6% over the 2011-2020 period.

Toronto Hydro stated that its compensation strategy is designed to strike a balance between controlling costs and providing market-competitive compensation and compensation is reasonable and justified.⁴⁷⁸

Toronto Hydro submitted that there is no basis for PWU's proposed disallowance of \$5.37 million in OM&A spending in 2020 and \$84.6 million of capital expenditures over the 2020-2024 period related to third-party service providers. Toronto Hydro submitted that third-party service providers enable the utility to cost effectively ensure resource availability to meet peak demands, maintain flexibility in operations and gain access to specified expertise. Toronto Hydro submitted that, in all circumstances, the evidence demonstrates that its use of external resources is appropriate.⁴⁷⁹

⁴⁷⁶ Toronto Hydro Reply Submission / pp. 208-211.

⁴⁷⁷ Toronto Hydro Reply Submission / pp. 212-215.

⁴⁷⁸ Toronto Hydro Reply Submission / pp. 212-214.

⁴⁷⁹ Toronto Hydro Reply Submission / pp. 215-216.

Findings

The OEB approves 2020 OM&A costs of \$272.2 million. This is a reduction of \$6 million. The OEB concludes that Toronto Hydro's OM&A forecast is too high for 2020, considering the actual OM&A of \$244.0 million for 2015⁴⁸⁰ and Toronto Hydro's plans.

The OEB's RRF includes four categories of expected outcomes applicable to all rate-setting options for utilities. Included within these expected outcomes are Operational Effectiveness and Financial Performance. For Operational Effectiveness, the OEB expects utilities to demonstrate ongoing continuous improvement in their productivity and cost performance while delivering on system reliability and quality objectives. For Financial Performance, utilities are expected to demonstrate sustainable improvements in their efficiency and in doing so will have the opportunity to earn a fair return.⁴⁸¹

While the OEB is setting Toronto Hydro's rates for 2020 based on a forecast of costs, the OEB finds that Toronto Hydro's OM&A costs for 2020 should be lower due to the productivity improvements that should have been achieved through the last Custom IR term and continued into the 2020 to 2024 term. Improvement in productivity and cost performance is expected to be ongoing, not limited to the term of a Custom IR plan.

The OEB has considered the trend in OM&A cost growth from 2015 actual to the forecast 2020 of 14%, including a 16.4% increase in administration costs. The OEB concludes that expected productivity improvements in 2016 to 2019⁴⁸² have not been sustained into the 2020 forecast. Therefore, the OEB finds that the proposed 2020 OM&A costs shall be reduced by 0.6% of the 2015 actual OM&A (\$1.5 million) for each year of the four-year period from 2016 to 2019. The approved OM&A costs of \$272.2 million for 2020 reflect an increase of 11.6% from the 2015 actual OM&A costs (2.2% compounded growth per year).

During the Oral Hearing, Toronto Hydro explained that it had already reduced its OM&A budget by \$25 million as part of its business planning process.⁴⁸³ Toronto Hydro argued that any further reduction would compromise the utility's ability to continue to deliver its

⁴⁸⁰ Undertaking J6.10. The 2015 OEB-approved OM&A is \$243.9 million and the 2015 actual OM&A is \$244.0 so there is no material difference.

⁴⁸¹ OEB Rate Handbook for Utility Rate Applications / October 13, 2016 / pp. 2-3.

⁴⁸² The previous 2015-2019 Custom IR term had a stretch factor of 0.6% applied to the rates for 2016 to 2019 inclusive. Rates for 2015 were based on a cost forecast.

⁴⁸³ Oral Hearing Transcripts / Vol .8 / pp. 61-62.

current level of service.⁴⁸⁴ The OEB expects that any well run utility will have a rigorous business planning process and multiple iterations of its budget to prioritize its plans to reflect the optimum outcomes for customers. It is therefore both expected and appropriate that Toronto Hydro's final OM&A budget is lower than earlier drafts. However, beyond effective business planning, the OEB also expects a utility to implement productivity improvements to enhance services or improve efficiency for its customers. The OEB has therefore reduced the recovery of 2020 OM&A costs by \$6 million to reflect this expectation.

The OEB's approach has looked at the required OM&A costs from an envelope perspective. But in so doing, the OEB considered a number of factors to conclude that this envelope is reasonable. These considerations are discussed in the paragraphs that follow. The OEB is not directing how Toronto Hydro will manage this OM&A cost reduction, however, it is expected that the reductions will target the administration functions.

Toronto Hydro compared its proposed increase in OM&A costs (normalized for accounting changes) against the City of Toronto inflation rate (calculated based on the consumer price index (CPI)) and determined that its OM&A cost increases are lower than inflation.⁴⁸⁵ However, the OEB uses a two-factor Input Price Index (IPI) to determine inflation for electricity distributors, including Toronto Hydro. This approach considers both the increases in non-labour (GDP IPI) and labour costs when setting an inflation factor.⁴⁸⁶ The OEB sets this inflation factor annually, and it has averaged 1.7% for 2015 to 2020 incentive rate-setting applications.⁴⁸⁷ Therefore, the OEB does not accept Toronto Hydro's argument that its proposed 2020 OM&A has increased by less than inflation.

⁴⁸⁴ Toronto Hydro Reply Submission / pp. 194-195.

⁴⁸⁵ Toronto Hydro Reply Submission / pp. 195-196; and 4A-AMPCO-71. Specifically, Toronto Hydro stated that the compound annual average increase in its OM&A costs from 2015-2020 is 1.9% when normalized for accounting changes. 1.9% is below the City of Toronto inflation rate of 2.2% in the last five years. The City of Toronto inflation rate of 2.2% cited in 4A-AMPCO-71 references the Statistics Canada CPI (annual average, not seasonally adjusted).

⁴⁸⁶ EB-2010-0379 / Report of the Board: Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario's Electricity Distributors / December 4, 2013 / pp. 7-11.

⁴⁸⁷ The OEB's two-factor inflation numbers are published publicly on the Electricity Distribution Rates (EDR) pages of the OEB's website for each year. The OEB has calculated the compound average growth rate of the published Input Price Indices from 2015 to 2020.

Toronto Hydro reviewed its 2020 OM&A costs on a normalized basis taking into consideration accounting changes and customer growth.⁴⁸⁸ Toronto Hydro has experienced a modest increase in customers of 1% per year.⁴⁸⁹ The OEB would expect Toronto Hydro could absorb this increase in customers with limited pressure on its costs through economies of scale. The OEB certainly would expect less than a one to one relationship between customer growth and growth in OM&A costs.⁴⁹⁰

Toronto Hydro has experienced some accounting changes that have affected OM&A costs⁴⁹¹ and the OEB has taken those accounting changes into consideration in permitting an increase in OM&A costs as high as 11.6% for the five-year period from 2015 to 2020. The OEB agrees that moving to the accrual approach for OPEB costs is appropriate as this is consistent with OEB policy⁴⁹², and the OEB accepts that other changes were required by IFRS. The OEB notes that it expects Toronto Hydro to minimize the cost of monthly billing through continued enhancement of its online services, such as its planned drive for further adoption of eBilling and therefore normalizing for the full amount of this transition should not be necessary.

OEB staff and intervenors have argued that Toronto Hydro's forecast for bad debt expenses and the management of bad debt is too high, and should be reduced. OEB staff argued that bad debt expenses should be forecast based on an average of 2015 to 2018 actuals and reduced by \$1.6 million, and there should be a further \$2.1 million reduction in external services costs to support the management of bad debts.⁴⁹³ Toronto Hydro argued that bad debt expense is a lagging indicator and it is seeing an increase in its receivables. Toronto Hydro submitted that the winter moratorium on disconnections and several other factors are expected to increase bad debt. Toronto Hydro also stated that it is in the midst of transitioning its operations for arrears and is adopting different mechanisms for controlling arrears.⁴⁹⁴ While the OEB is not making a specific reduction related to bad debt management, the OEB concludes that there is

⁴⁸⁸ Toronto Hydro Reply Submission / pp.195-196.

⁴⁸⁹ Undertaking J6.10.

⁴⁹⁰ PEG Report to the Ontario Energy Board: Empirical Research in Support of Incentive Rate-Setting – 2018 Benchmarking Update / p. 7. The OEB notes that PEG's econometric benchmarking of Ontario LDC's estimates that, for each 1% change in number of customers, costs change by 0.44%. While not a direct comparison of the impact of customer growth on Toronto Hydro's OM&A costs, the cited report by PEG provides the OEB with a high-level estimate of the potential impact of changes in customer count relative to total costs.

⁴⁹¹ Undertaking J6.10.

⁴⁹² OEB Report on the Regulatory Treatment of Pension and OPEB Costs / September 14, 2017.

⁴⁹³ OEB Staff Submission / pp. 109-110.

⁴⁹⁴ Toronto Hydro Reply Submission / pp. 198-201.

room for Toronto Hydro to reduce its costs while still effectively managing this issue through transitioning its operations.

For compensation, the OEB notes that Mercer concluded that Toronto Hydro's compensation is generally competitive against or below the 50th percentile.⁴⁹⁵ The OEB finds that this is the minimum expectation. However, Toronto Hydro's most recent information shows it is behind in its hiring to reach the forecast FTEs. Toronto Hydro stated that it intends to meet its hiring forecast and until then will be using external resources.⁴⁹⁶ While the OEB is not directing a specific reduction to compensation, the OEB concludes that there is a significant hiring gap that will provide Toronto Hydro with the opportunity to reduce its costs for 2020.

Toronto Hydro implemented a new ERP that was expected to provide monetary benefits. OEB staff stated that the OM&A budget should be reduced \$2.5 million to reflect the forecast cost savings.⁴⁹⁷ The OEB concludes that with this new ERP, Toronto Hydro should be able to mitigate cost pressures and achieve productivity improvements in 2020 and over the Custom IR term.

While Toronto Hydro's regulatory costs for managing this application do appear high, the OEB notes that Toronto Hydro has amortized these costs over the five-year term of the Custom IR. The OEB accepts Toronto Hydro's explanation that it has to augment its internal staff with external resources to manage the workload of a major rate application.⁴⁹⁸ Under Issue 2.1, the OEB encouraged Toronto Hydro to look for an alternative approach in the future that might be more efficient in establishing the revenue requirement and other aspects of a rate application. More focused evidence might streamline the rate application process, and reduce the cost of future applications.

In conclusion, the OEB is reducing the 2020 OM&A budget by \$6 million for expected productivity enhancements. By considering the preceding factors, the OEB concludes that this revised budget is reasonable and achievable while meeting the service expectations of customers.

⁴⁹⁵ Toronto Hydro Reply Submission / pp. 212-215.

⁴⁹⁶ Toronto Hydro Reply Submission / p. 208.

⁴⁹⁷ OEB Staff Submission / p. 112.

⁴⁹⁸ Toronto Hydro Reply Submission / pp. 205-206.

7.2 Are Toronto Hydro's proposed depreciation expenses (including decommissioning provision and derecognition) for 2020-2024 appropriate (Issue 5.2)?

Background

Toronto Hydro's proposed 2020-2024 depreciation expense is set out in the following table.⁴⁹⁹

Table 24
Proposed 2020-2024 Depreciation Expense

(\$M)	2020	2021	2022	2023	2024	Total
Depreciation	\$239.75	\$254.53	\$265.40	\$285.76	\$298.66	\$1,344.09
Derecognition	\$25.80	\$27.00	\$26.90	\$28.30	\$28.50	\$136.50
Total	\$265.55	\$281.53	\$292.30	\$314.06	\$327.16	\$1,480.59

The depreciation expense (including derecognition) is part of the 2020 revenue requirement and is required for the 2021-2024 CPCI calculation.

No party opposed Toronto Hydro's proposed depreciation expense, derecognition expense⁵⁰⁰ or decommissioning provision⁵⁰¹. Some parties objected to the continuation of the derecognition variance account. This issue is discussed under Issue 8.3.

OEB staff noted that Toronto Hydro calculates depreciation expense based on the month that an asset comes into service (as opposed to using the half-year rule).⁵⁰² OEB staff submitted that this is the appropriate methodology to use in the calculation of depreciation expense when monthly information is available. OEB staff submitted that

⁴⁹⁹ Depreciation expense is from U-Staff-168 / Appendix A / Net Fixed Asset Schedules and derecognition expense is from Undertaking JTC1.1. The total annual expense for both depreciation and derecognition combined matches the depreciation expense provided in Undertaking J8.5, which is the latest depreciation expense provided.

⁵⁰⁰ Exhibit 4B / Tab 1 / Schedule 2 / p. 1. Derecognition expense is associated with the requirement for PP&E and intangible assets to be derecognized upon disposal or when their use is no longer expected to offer future economic benefits.

⁵⁰¹ Exhibit 4B / Tab 1 / Schedule 1 / p. 4. Decommissioning provision is related to the recognition of liabilities for the future removal and handling costs for contamination in distribution equipment and future environmental remediation of certain properties.

⁵⁰² Exhibit 4B / Tab 1 / Schedule 1 / p. 3.

using monthly information provides for the best possible forecast of depreciation expense.

OEB staff also stated that Toronto Hydro has a number of asset classes for which the useful life applied to determine depreciation expense is outside the range established in the Kinectrics Report completed for the OEB (the OEB 2010 Study).⁵⁰³ For nearly all asset classes where Toronto Hydro's proposed useful life is outside the Kinectrics range, the useful life applied is shorter. The useful lives applied by Toronto Hydro are largely based on an August 2009 report completed by Kinectrics for Toronto Hydro specifically (the Toronto Hydro 2009 Study).⁵⁰⁴ OEB staff, supported by Energy Probe, submitted that Toronto Hydro should complete a new study specifically for its asset classes that it applies useful lives that are outside of the range set out in the OEB 2010 Study and file this new study with its next cost-based application.⁵⁰⁵

In its reply argument, Toronto Hydro submitted that it is not necessary to complete another useful life study as the Toronto Hydro 2009 Study justifies the useful life ranges using a similar methodology as the OEB 2010 Study. Furthermore, Toronto Hydro noted that it filed evidence explaining why certain assets are outside of the ranges established in the OEB 2010 Study. In addition, Toronto Hydro submitted that it reviews its useful lives on an annual basis to ensure consistency with the capitalization policy and confirmed that there have been no changes to the useful lives since the Toronto Hydro 2009 Study was completed.⁵⁰⁶

Findings

The OEB accepts Toronto Hydro's approach to determining the depreciation expense, derecognition expense and decommissioning provision. Toronto Hydro shall update these amounts to reflect the adjustments required to rate base and the capital expenditures under Issues 3.1 and 3.2. The OEB supports the use of monthly information to calculate the depreciation expense. As discussed under Issue 8.3, the OEB rejects the proposed continuation of the derecognition variance account.

⁵⁰³ Kinectrics Report – Asset Depreciation Study for the Ontario Energy Board / July 8, 2010.

⁵⁰⁴ Toronto Hydro Electric System Useful Life of Assets / August 2009.

⁵⁰⁵ OEB Staff Submission / p. 118; and Energy Probe Submission / p. 38.

⁵⁰⁶ Toronto Hydro Reply Submission / p. 220.

The need to undertake an updated depreciation study was raised by OEB staff. The last study was the August 2009 report completed by Kinectrics for Toronto Hydro. When the next cost-based application is filed the Toronto Hydro 2009 Study will be over 15 years old, a sufficiently long period that material changes could have happened to service lives. Toronto Hydro submitted that it reviews its useful lives on an annual basis to ensure consistency with the capitalization policy. There are limited details on the nature of these annual reviews. However, this information may be helpful in assessing the ongoing appropriateness of the Toronto Hydro 2009 Study findings. For the next rebasing application, the OEB directs Toronto Hydro to file either the annual useful lives reviews to demonstrate that no change is required to the useful lives or a new depreciation study.

7.3 Are Toronto Hydro's proposed PILs and other tax amounts for 2020-2024 appropriate (Issue 5.3)?

Background

Toronto Hydro's proposed 2020-2024 PILs amounts are summarized in the following table.⁵⁰⁷

Table 25
Proposed 2020-2024 PILs Amounts

(\$M)	2020	2021	2022	2023	2024	Total
PILs	\$12.7	\$22.0	\$13.4	\$27.8	\$40.4	\$116.3

The PILs amount is part of the 2020 revenue requirement and is required for the 2021-2024 CPCI calculation.

On June 21, 2019, Bill C-97, the Budget Implementation Act, 2019, No. 1, was given Royal Assent. Included in Bill C-97 are various changes to the federal income tax regime.

⁵⁰⁷ Undertaking J8.5.

One of the changes introduced by Bill C-97 is the Accelerated Investment Incentive (All) program, which provides for a first-year increase in capital cost allowance (CCA) deductions on eligible capital assets acquired after November 20, 2018.

Toronto Hydro updated the PILs calculations in order to reflect the revenue requirement impact of the new CCA rules for the period 2020-2024.⁵⁰⁸ The PILs amounts presented in Table 25 includes the projected impacts of the All program.

OEB staff and SEC noted that at the time Toronto Hydro filed its updated PILs calculations, the legislation enacting the new CCA rules had not been passed. However, since then, the new rules received Royal Assent and are now fully enacted. Furthermore, Toronto Hydro has since filed its 2018 tax return under the new CCA rules. OEB staff and SEC submitted that, as part of the draft rate order in this proceeding, Toronto Hydro should update its PILs estimates based on its more up-to-date understanding of the tax changes, and incorporate any changes in assumptions or new information within its 2020-2024 PILs calculations.⁵⁰⁹ Energy Probe and VECC supported the submissions of OEB staff on PILs-related issues.⁵¹⁰ Toronto Hydro agreed to update its PILs calculations at the draft rate order stage of the proceeding.⁵¹¹

Toronto Hydro indicated that its existing CRRRVA would capture the 2018 and 2019 revenue requirement impacts of the CCA rule changes.⁵¹² The CRRRVA captures the variance between the actual capital-related revenue requirement and the capital-related revenue requirement approved in rates during the Custom IR term.⁵¹³ The capital-related revenue requirement includes PILs.⁵¹⁴

OEB staff submitted that the CCA rule change relates entirely to the amount of CCA deduction that can be applied to capital additions in a given year. Since the CRRRVA is designed to capture the revenue requirement impact associated with a variance in the projected in-service additions for the plan period, it would include any variance between the projected CCA and actual CCA on the in-service additions. As such, OEB staff agreed with Toronto Hydro that the CRRRVA will properly capture the 2018 and 2019

⁵⁰⁸ U-Staff-188 / Table 1.

⁵⁰⁹ OEB Staff Submission / p. 120; and SEC Submission / pp. 75-76.

⁵¹⁰ Energy Probe Submission / p. 38; and VECC Submission / p. 23.

⁵¹¹ Toronto Hydro Reply Submission / p. 220.

⁵¹² U-Staff-188 (d).

⁵¹³ Exhibit 9 / Tab 1 / Schedule 1 / p. 10.

⁵¹⁴ Undertaking J8.5.

revenue requirement impact of the new CCA rules. Based on this, Toronto Hydro would not need to use the new sub-account of Account 1592 that the OEB established for this purpose.⁵¹⁵

OEB staff submitted that it does not appear that Toronto Hydro has calculated and included any amount within its CRRRVA related to the 2018 revenue requirement impact of the new CCA rules. OEB staff submitted that Toronto Hydro should update its CRRRVA balance to include the 2018 revenue requirement impact in the draft rate order stage of the proceeding.⁵¹⁶ Toronto Hydro agreed with this proposal.⁵¹⁷

OEB staff also submitted that, if for some reason the large credit that is currently forecast in the CRRRVA for 2019 does not materialize (i.e. the account ends in a debit) and thereby offsets any refund to ratepayers related to the 2019 revenue requirement impact of the new CCA rules, in accordance with the OEB's July 25, 2019 letter regarding Bill C-97 (the OEB's Bill C-97 Letter)⁵¹⁸, the amounts pertaining to the 2019 revenue requirement impact of the new CCA rule changes should be moved into the new sub-account of 1592.⁵¹⁹ Toronto Hydro also accepted this proposal.⁵²⁰

SEC and BOMA submitted that Toronto Hydro should record the amounts associated with the impact of the All program in Account 1592 as directed in the OEB's Bill C-97 Letter.⁵²¹ SEC submitted that the CRRRVA was meant to specifically protect customers from variances between actual and approved capital-related revenue requirement due to lower than expected spending and in-service delays. The sub-account of 1592 is designed to allow customers to benefit from the new capital cost allowance rules contained in Bill C-97. SEC stated that the risk of allowing the impact of the All program to be accounted for in the CRRRVA is that any credit to customers that may arise from the tax changes, may be offset by other elements of Toronto Hydro's actual annual capital-related revenue requirement.⁵²²

⁵¹⁵ OEB Staff Submission / p. 121; and Energy Probe Submission / p. 38.

⁵¹⁶ OEB Staff Submission / p. 122.

⁵¹⁷ Toronto Hydro Reply Submission / p. 220.

⁵¹⁸ OEB Accounting Direction Regarding Bill C-97 and Other Changes in Regulatory or Legislated Tax Rules for Capital Cost Allowance / July 25, 2019.

⁵¹⁹ OEB Staff Submission / p. 122.

⁵²⁰ Toronto Hydro Reply Submission / p. 220.

⁵²¹ SEC Submission / p. 76; and BOMA Submission / pp. 50-51.

⁵²² SEC Submission / p. 76.

In its reply argument, Toronto Hydro submitted that the proposal of SEC and BOMA with respect to the treatment of the impact of the All program should be rejected. Toronto Hydro submitted that this proposal creates additional tasks with respect to the separation of tax expense amounts in Account 1592. Toronto Hydro submitted that the CRRVA will properly record the PILs impact of the CCA rule change for 2018 and 2019 and there is no need to perform additional work to record the amounts in Account 1592. Toronto Hydro also noted that the PILs impact of Bill C-97 will be embedded in the 2020-2024 capital forecast at the time of the draft rate order, which means that the CRRVA will capture any forecasting variances over that period.⁵²³

Toronto Hydro is also seeking to recover \$5.5 million related to its property tax costs for the 2020 test year.⁵²⁴ OEB staff and BOMA submitted that the amount appears to be reasonable as it is consistent with the actual historical trend for property taxes for the period 2015-2018.⁵²⁵

Findings

The OEB accepts Toronto Hydro's approach to determining PILs with the exception of its proposed treatment of the 2018 and 2019 revenue requirement impacts of Bill C-97 as discussed below. Toronto Hydro shall update the PILs to reflect the adjustments required in other aspects of the Decision.

The OEB acknowledges that Toronto Hydro has attempted to estimate and reflect the impact of the CCA tax rule changes that were introduced by the All program in Bill C-97 within its regulatory tax calculations for the 2020-2024 application period. However, those calculations were performed prior to the actual enactment of Bill C-97. Therefore, there is potentially more up-to-date information available. The OEB notes that Toronto Hydro agreed to update its PILs calculations at the draft rate order stage of the proceeding. The OEB finds that this is the appropriate approach.

In addition, the OEB finds that, in accordance with the OEB's Bill C-97 Letter⁵²⁶, Toronto Hydro shall be required to record the entire 2018 and forecasted 2019 revenue requirement impact of the CCA tax rule changes within the new sub-account of Account

⁵²³ Toronto Hydro Reply Submission / pp. 220-221.

⁵²⁴ Exhibit U / Tab 4A / Schedule 1 / p. 7.

⁵²⁵ OEB Staff Submission / p. 119; and BOMA submission / p. 50.

⁵²⁶ OEB Accounting Direction Regarding Bill C-97 and Other Changes in Regulatory or Legislated Tax Rules for Capital Cost Allowance / July 25, 2019 / pp. 1-2.

1592 – PILs and Tax Variances – CCA changes. The OEB directs Toronto Hydro to dispose of the noted sub-account as part of the current proceeding.

The OEB approves the \$5.5 million related to Toronto Hydro's property tax costs.

8 COST OF CAPITAL (ISSUE 6.0)

8.1 Are Toronto Hydro's proposed 2020-2024 cost of capital amounts (interest on debt and return on equity) appropriate (Issue 6.1)?

Background

Toronto Hydro's proposed cost of capital amounts for the 2020-2024 period are set out in the following table.⁵²⁷

Table 26
Proposed 2020-2024 Cost of Capital

(\$M)	2020	2021	2022	2023	2024	Total
Return on Equity (ROE)	\$162.00	\$170.40	\$179.10	\$189.30	\$198.90	\$899.70
Deemed Interest Expense	\$100.20	\$105.40	\$110.80	\$117.10	\$123.00	\$556.50
Cost of Capital	\$262.20	\$275.80	\$289.90	\$306.40	\$321.90	\$1,456.20

Toronto Hydro proposed to use the OEB's deemed capital structure in its calculation of the cost of capital. More specifically, Toronto Hydro proposed a debt to equity split of 60% debt (including 4% short-term debt) and 40% equity.⁵²⁸

Toronto Hydro proposed to use the OEB-approved 2020 ROE value in the calculation of both the 2020 revenue requirement and the CPCI for the 2021-2024 period. Toronto Hydro estimated the 2020 ROE to be 8.82%, which is the value used throughout the application in the calculation of the cost of capital. Toronto Hydro proposed to update its cost of capital to reflect the OEB-approved ROE once it becomes available.⁵²⁹ On October 31, 2019 the OEB issued a letter setting the 2020 ROE at 8.52%.⁵³⁰

⁵²⁷ Undertaking J8.5.

⁵²⁸ Exhibit 5 / Tab 1 / Schedule 1 / p. 1.

⁵²⁹ Exhibit 5 / Tab 1 / Schedule 1 / p. 2.

⁵³⁰ OEB 2020 Cost of Capital Parameter Update / October 31, 2019.

Toronto Hydro is assigned long-term debt through promissory notes from its parent, Toronto Hydro Corporation. The promissory notes are written on the same terms as Toronto Hydro Corporation's debt plus a five basis point fee for administration.⁵³¹ Toronto Hydro's proposed long-term debt rate is 3.71%.⁵³²

With respect to short-term debt, Toronto Hydro uses one-month Bankers' Acceptance rates as a proxy for its short-term debt rate.⁵³³ Toronto Hydro's proposed 2020 short-term debt rate is 2.61%.⁵³⁴

Toronto Hydro applied the weighted average forecasted debt rates to determine its deemed interest expense for the 2020-2024 period.

Most parties did not raise any concerns with respect to Toronto Hydro's proposed cost of capital calculation methodology or its proposed 2020-2024 cost of capital amounts. However, Energy Probe submitted that Toronto Hydro has lower risk than other Ontario distributors. Therefore, if the OEB does not make adjustments to increase productivity incentives through larger stretch factors, the OEB should consider reducing Toronto Hydro's ROE.⁵³⁵

VECC and CCC submitted that they have no specific concerns with respect to Toronto Hydro's cost of capital amounts. However, they argued that circumstances have changed considerably with respect to the relative risks and rewards associated with utility regulation since the last generic cost of capital review and the OEB should undertake such a review as soon as possible.⁵³⁶

In its reply argument, Toronto Hydro submitted that its proposal for cost of capital is appropriate and should be approved.⁵³⁷

⁵³¹ Exhibit 5 / Tab 1 / Schedule 1 / pp. 4-5.

⁵³² Exhibit 5 / Tab 1 / Schedule 2 / p. 2. There were no updates to the long-term debt rate included in Exhibit U / Tab 5 / Schedule 1 relative to the original filing.

⁵³³ Exhibit 5 / Tab 1 / Schedule 1 / pp. 6-7.

⁵³⁴ Exhibit 5 / Tab 1 / Schedule 2 / p. 2. There were no updates to the short-term debt rate included in Exhibit U / Tab 5 / Schedule 1 relative to the original filing.

⁵³⁵ Energy Probe Submission / p. 38.

⁵³⁶ VECC Submission / p. 24; and CCC Submission / p. 16.

⁵³⁷ Toronto Hydro Reply Submission / p. 222.

Findings

The OEB accepts Toronto Hydro's use of the OEB's deemed capital structure and the OEB-approved 2020 ROE value of 8.52%. The long-term and short-term debt rates are also accepted.

Despite being calculated on a different basis, Toronto Hydro's short-term debt rate is very close to the deemed short-term debt rate of 2.75% established by the OEB on October 31, 2019.⁵³⁸ In the 2015-2019 Custom IR application⁵³⁹, Toronto Hydro used the one-month Bankers' Acceptance rates as a proxy for its short-term debt rate which was approved by the OEB. The OEB approves the continuation of the same approach for setting the current short-term debt rate.

The cost of capital calculations will need to be updated in the draft rate order process to reflect the changes made to rate base and planned capital expenditures in Issues 3.1 and 3.2 as well as the current OEB-approved ROE.

⁵³⁸ OEB 2020 Cost of Capital Parameter Update / October 31, 2019.

⁵³⁹ EB-2014-0116.

9 COST ALLOCATION AND RATE DESIGN (ISSUE 7.0)

9.1 Are Toronto Hydro's cost allocation and revenue-to-cost ratio proposals appropriate (Issue 7.1)?

Background

Cost allocation is the process of dividing a utility's total costs amongst different customer classes as fairly as possible. The objective is to allocate costs in a way that reflects how each customer class uses the utility's services. Once the costs are allocated to each customer class, the rates are set to recover those costs.

Toronto Hydro stated that it used the cost allocation model issued by the OEB. The cost allocation model for 2020 was updated in Exhibit U / Tab 7 / Schedule 1 to reflect a number of corrections and updated forecasts.⁵⁴⁰ The status quo revenue-to-cost ratios produced by the updated cost allocation model and Toronto Hydro's proposed revenue-to-cost ratios for 2020 are set out in the following table.⁵⁴¹

⁵⁴⁰ Exhibit U / Tab 7 / Schedule 1. The full list of corrections and updates reflected is described at Exhibit U / Tab 7 / Schedule 1 / p. 1.

⁵⁴¹ Exhibit U / Tab 6 / Schedule 1 / Appendix A / p. 11.

Table 27
Revenue-to-Cost Ratios

Name of Customer Class	Previously Approved Ratios	Status Quo Ratios	Proposed Ratios	Policy Range
	Most Recent Year: 2015 %	(7C + 7E) / (7A) %	(7D + 7E) / (7A) %	
Residential	94.3%	103.2%	103.2%	85 - 115
Competitive Sector Multi-Unit Residential	100.0%	102.2%	100.0%	80 - 120
GS <50	91.5%	88.9%	89.5%	80 - 120
GS - 50 to 999	119.0%	105.8%	105.8%	80 - 120
GS - 1000 to 4999	101.9%	90.8%	91.2%	80 - 120
Large Use >5MW	95.3%	88.2%	88.8%	85 - 115
Street Light	82.7%	108.9%	108.9%	80 - 120
Unmetered Scattered Load	90.5%	137.1%	120.0%	80 - 120

With the exception of Energy Probe, no parties raised any concerns with respect to Toronto Hydro's proposed cost allocation. VECC submitted that it had no issues with the cost allocation methodology employed by Toronto Hydro. VECC noted that the cost allocation methodology is based on the latest model available from the OEB at the time the Application was prepared. VECC also noted that the direct allocations and the minimum system customer component employed by Toronto Hydro have both been approved previously by the OEB.

With respect to the proposed revenue-to-cost ratio adjustments, VECC submitted that:

- None of the customer class ratios are being moved further away from 100%.
- For those classes outside the OEB's policy range, the ratios are being moved to the boundary of the policy range.
- The ratio for the competitive sector multi-unit residential (CSMUR) rate class is being set at 100% in accordance with a previous OEB decision.⁵⁴²

⁵⁴² EB-2010-0142.

- To make up the revenue shortfall from (ii) and (iii) customers with ratios below 100% are seeing an increase. VECC also noted that those classes whose ratios are the furthest away from (i.e. below) 100% are experiencing the largest adjustments.

Overall, VECC submitted that it has no issues with Toronto Hydro's proposed adjustments to the status quo revenue-to-cost ratios.⁵⁴³

OEB staff submitted that there have been a number of updates to the revenue requirement made by Toronto Hydro since the cost allocation model was last run.⁵⁴⁴ Therefore, Toronto Hydro should reflect the impact of the application updates and the OEB's final decision in the cost allocation model at the draft rate order stage of the proceeding.⁵⁴⁵

Energy Probe submitted that the residential revenue-to-cost ratio should remain at current levels or that, if adjustments are needed, 100% is the appropriate ceiling for that class. Energy Probe noted that the OEB directed Toronto Hydro to set the CSMUR revenue-to-cost ratio at 100%.⁵⁴⁶

In its reply argument, Toronto Hydro submitted that Energy Probe's submission departs from the standard OEB policy, which Toronto Hydro followed to calculate its revenue-to-cost ratios. Toronto Hydro noted that the residential ratio falls within the OEB's established guideline ranges. Unlike the CSMUR class, the OEB did not previously instruct Toronto Hydro to set the revenue-to-cost ratio for the residential class at 100%. Toronto Hydro submitted that the proposed ratios for all rate classes are consistent with OEB policy, are appropriate and should be approved.⁵⁴⁷

Findings

The OEB has an established policy for cost allocation, first adopted in 2007, and refined several times since then. The OEB's policy uses a range approach recognizing the assumptions and judgement that are inherent in allocating costs between customer

⁵⁴³ VECC Submission / pp. 24-25.

⁵⁴⁴ Updated Undertaking J1.2 (July 31, 2019).

⁵⁴⁵ OEB Staff Submission / pp. 124-125.

⁵⁴⁶ Energy Probe Submission / p. 39.

⁵⁴⁷ Toronto Hydro Reply Submission / p. 223.

classes. The revenue-to-cost ratios proposed by Toronto Hydro all fall within the ranges established by the OEB.

However, the OEB is concerned by the large shift for the residential class from well below 100% to above 100% (94.3% to 103.2%)⁵⁴⁸ at the same time that residential rates are transitioning to a fully fixed rate design. This shift of 8.9 percentage points has a direct impact on the distribution rates for the residential class, and, when combined with the transition to fixed rates, can have a compounding impact on the bills for low volume consumers. The OEB concludes that this impact should be mitigated. Therefore, the OEB is setting the revenue-to-cost ratio for the residential class at 100% for the Custom IR term. In the next rebasing application, the OEB will assess whether the standard policy range will again be applied, rather than continuing to fix the ratio at 100%.

Toronto Hydro is expected to update the cost allocation based on the findings of the Decision using its same approach, with the modified revenue-to-cost ratio for the residential class. This approach includes:

- Using the OEB's cost allocation model, modified as necessary for Toronto Hydro's circumstances
- Ensuring all customer classes fall within the OEB's policy range for revenue-to-cost ratios
- Where a customer class falls outside of the range, adjusting the revenue-to-cost ratios to within the range, and applying the amount of adjusted revenue proportionately to those classes furthest from a ratio of 100%
- Setting the ratio for the residential and CSMUR rate classes at 100%

The OEB notes that the revenue-to-cost ratio for the CSMUR class was set at 100% by the OEB when the class was first established for 2012 rates (and as implemented in 2013).⁵⁴⁹ There are now several years of actual data for this new class that can be assessed. The OEB concludes that it is appropriate to review in Toronto Hydro's next

⁵⁴⁸ Exhibit U / Tab 6 / Schedule 1 / Appendix A / p. 11.

⁵⁴⁹ EB-2010-0142; and EB-2012-0064.

rebasement application the characteristics of this class, and whether a range should be adopted for the revenue-to-cost ratios going forward.

9.2 Are Toronto Hydro's proposals for rate design (including, but not limited to, fixed / variable split, loss factors, retail transmission service rates, specific and other service charges) appropriate (Issue 7.2)?

The rate design related issues are discussed in detail in the sub-sections that follow.

Fixed / Variable Split

Background

Distribution rates typically include a monthly fixed charge and a volumetric rate (a cost per unit of electricity used). The ratio between the revenue from the fixed charge and the volumetric charge is often called the fixed / variable split.

Toronto Hydro proposed to maintain the fixed / variable splits at the OEB-approved 2015 ratios for the 2020-2024 period for all rate classes, with the exception of the residential and CSMUR classes.

The OEB's residential rate design policy stipulates that distributors will transition residential customers to a fully fixed monthly distribution service charge over a four-year period.⁵⁵⁰ Toronto Hydro began this transition in 2017 for the residential and CSMUR rate classes. Therefore, 2020 is the last year of the transition to a fully fixed rate structure.⁵⁵¹

The OEB expects distributors to apply two tests to evaluate whether mitigation of bill impacts for customers is required during the transition period. The first test is to calculate the change in the monthly fixed charge, and to consider mitigation if it exceeds \$4. The second is to calculate the total bill impact of the proposals in the application for low volume residential customers (defined as those residential Regulated Price Plan

⁵⁵⁰ EB-2012-0410 / OEB Residential Rate Design Policy / April 2, 2015.

⁵⁵¹ EB-2018-0071 / Tab 2 / Schedule 1 / p. 10.

customers whose consumption is at the 10th percentile for the class). Mitigation may be required if the bill impact related to the application exceeds 10% for these customers.⁵⁵²

Toronto Hydro's evidence shows that the transition to fixed rates results in an increase to the fixed charge of \$3.51 for the residential class and \$2.47 for the CSMUR class⁵⁵³, and the bill impacts are below 10% for low volume customers in both rate classes.⁵⁵⁴

No parties raised any concerns with respect to the proposed fixed / variable splits.

Findings

The OEB approves Toronto Hydro's rate design proposal.

The OEB finds that the transition to the fully fixed monthly charge for the residential rate classes (residential and CSMUR) is in accordance with the OEB's residential rate design policy.⁵⁵⁵ The results of the monthly fixed charge, and total bill impact for low consumption residential consumers, demonstrate that no mitigation is required related to this transition. With this approval, Toronto Hydro has now completed its transition to a fully fixed rate structure for residential rate classes.

For the non-residential rate classes, the OEB concludes that maintaining the fixed / variable splits at the 2015 ratio is reasonable.

Transformer Allowance

Background

Toronto Hydro proposed to maintain the transformer allowance credit of \$0.62/kVA per 30 days.⁵⁵⁶ This reflects no change to the transformer allowance credit relative to the last proceeding.

No parties raised any concerns with respect to the proposed transformer allowance.

⁵⁵² EB-2012-0410 / Implementing a New Rate Design for Electricity Distributors / July 16, 2015.

⁵⁵³ Exhibit U / Tab 6 / Schedule 1 / Tab 12 and 12.1.

⁵⁵⁴ Exhibit U / Tab 8 / Schedule 1 / Appendix A.

⁵⁵⁵ EB-2012-0410 / OEB Residential Rate Design Policy / April 2, 2015.

⁵⁵⁶ Exhibit 8 / Tab 1 / Schedule 1 / p. 5.

Findings

The OEB approves the continuation of the transformer allowance credit of \$0.62/kVA.

Standby Rates

Background

The OEB previously approved Toronto Hydro's standby rates on an interim basis, and Toronto Hydro proposed to continue this treatment.⁵⁵⁷ Toronto Hydro provided examples of how standby rates are applied in different generation output scenarios.⁵⁵⁸

No parties raised any concerns with respect to the proposed standby rates.

Findings

The OEB approves the standby rates on an interim basis. The standby rates have been interim for many years, on the expectation that a generic rate design policy may be adopted that would eliminate the need for standby rates.

Under the OEB's Chapter 2 Filing Requirements, a distributor may seek approval for its standby charges on a final basis, but must provide evidence confirming that they have advised all affected customers of the proposal.⁵⁵⁹ Toronto Hydro did not seek approval for its standby rates to be made final.

Given the length of time that the standby rates have been set on an interim basis, the OEB requires Toronto Hydro to file a proposal in its next rebasing application to address this situation, unless it has been otherwise superseded by a generic policy.

⁵⁵⁷ Exhibit 8 / Tab 1 / Schedule 1 / p. 6.

⁵⁵⁸ 8-Staff-146(b).

⁵⁵⁹ OEB Chapter 2 Filing Requirements / p. 47.

Loss Adjustment Factors

Background

Toronto Hydro noted that it complied with the OEB's decision in the 2015-2019 Custom IR proceeding, which required Toronto Hydro to update its loss factors in its next rebasing application.⁵⁶⁰

Toronto Hydro filed an engineering study supporting its change to the loss factor for the Large User rate class and used the OEB's standard approach for forecasting loss factors for all other rate classes (in accordance with Appendix 2-R of the OEB's Chapter 2 Filing Requirements).⁵⁶¹ The proposed loss factors for all rate classes have reduced relative to the previously approved amounts.⁵⁶²

No parties raised any concerns with respect to the proposed loss factors.

Findings

The OEB approves the loss factors proposed by Toronto Hydro. All of the updated loss factors are lower than those previously approved.

For the Large User rate class, the OEB accepts the engineering analysis that leads to a total loss factor of 1.0172 for secondary metered customers and 1.0070 for primary metered customers. For all other rate classes, the approach used by Toronto Hydro is consistent with the OEB's standard approach and results in reasonable loss factors (1.0295 for secondary metered customers and 1.0192 for primary metered customers).⁵⁶³

⁵⁶⁰ EB-2014-0116 / Decision and Order / December 29, 2015 / p. 46.

⁵⁶¹ Exhibit 8 / Tab 1 / Schedule 1 / pp. 9-10.

⁵⁶² Exhibit 8 / Tab 1 / Schedule 1 / p. 10.

⁵⁶³ Exhibit 8 / Tab 1 / Schedule 1 / pp. 9-10.

Retail Transmission Service Rates (RTSR)

Background

Toronto Hydro's proposed 2020 RTSRs have been calculated using the OEB's RTSR model. The proposed RTSRs are based on the current Uniform Transmission Rates (UTRs),⁵⁶⁴ as Toronto Hydro is fully transmission connected. In addition, Toronto Hydro proposed that the RTSRs should be updated each year, in the Custom IR update applications, to reflect the most recently approved UTRs at the time.⁵⁶⁵

VECC submitted that a revised version of the RTSR model was not filed when the 2020 load forecast was updated in April 2019.⁵⁶⁶ VECC also submitted that Toronto Hydro should update the UTR billing determinants used in the model to reflect the OEB's final determinations regarding the 2020 load forecast.⁵⁶⁷

In its reply argument, Toronto Hydro stated that it would update the RTSRs during the draft rate order process based on the most recently set UTRs and the OEB-approved load forecast.⁵⁶⁸

No other parties raised any concerns with respect to the proposed RTSRs.

Findings

As part of the draft rate order, Toronto Hydro shall update and file RTSRs based on the load forecast approved in the Decision, and the most recent UTRs approved by the OEB.⁵⁶⁹

The OEB also finds that Toronto Hydro shall update the RTSRs in each Custom IR update application to reflect the most recently approved UTRs at the time.

⁵⁶⁴ Exhibit 8 / Tab 1 / Schedule 1 / pp. 7-8.

⁵⁶⁵ Exhibit 8 / Tab 1 / Schedule 1 / p. 8.

⁵⁶⁶ VECC Submission / p. 26.

⁵⁶⁷ VECC Submission / p. 26.

⁵⁶⁸ Toronto Hydro Reply Submission / p. 223.

⁵⁶⁹ The current UTRs were approved in EB-2019-0296 / Decision and Interim Rate Order / December 17, 2019.

Retailer Service Charges

Background

On February 14, 2019, the OEB approved new retailer service charges in a separate proceeding.⁵⁷⁰ Toronto Hydro updated its other revenue forecast to reflect these updated retailer service charges.⁵⁷¹

OEB staff submitted that the updated retailer service charges should be reflected in Toronto Hydro's tariff to be filed as part of the draft rate order process.⁵⁷² No other parties raised any concerns with respect to the retailer service charges.

Findings

The OEB agrees that the updated tariff to be filed by Toronto Hydro as part of the draft rate order should include the retailer service charges that were approved by the OEB in a separate proceeding.⁵⁷³

Regulatory Charges

Background

Toronto Hydro included in its proposed tariff the specific rates for the regulatory charges (i.e. Wholesale Market Service Rate (WMS), Capacity Based Recovery (CBR), Rural and Remote Rate Protection (RRRP) and Smart Metering Entity (SME) charges).⁵⁷⁴ Toronto Hydro proposed that if these charges were to change during the Custom IR term, the updated charges should be reflected in the annual Custom IR update applications.⁵⁷⁵

OEB staff submitted that the regulatory charges should be updated at the draft rate order stage to reflect the most recent OEB approvals with respect to those charges (as

⁵⁷⁰ EB-2015-0304.

⁵⁷¹ U-VECC-83.

⁵⁷² OEB Staff Submission / p. 127.

⁵⁷³ The 2020 retailer service charges were approved in EB-2019-0280 / Decision and Rate Order / November 28, 2019.

⁵⁷⁴ Exhibit 8 / Tab 1 / Schedule 1 / p. 8.

⁵⁷⁵ Exhibit 8 / Tab 1 / Schedule 1 / p. 8.

applicable).⁵⁷⁶ No other parties raised any concerns with respect to the regulatory charges.

Findings

The RRRP, WMS and CBR rates are a component of the “Regulatory Charge” on a customer’s bill, established annually by the OEB through a separate, generic order.

The SME charge is a component of the “Distribution Charge” on a customer’s bill, established by the OEB through a separate order.

Toronto Hydro shall include the most recent approved charges on the proposed tariff that are available at the time that the draft rate order is filed.⁵⁷⁷ These charges are typically all approved in separate generic proceedings, and on that basis, Toronto Hydro’s tariff will be updated each year of the Custom IR term to reflect the most recent OEB-approved charges.

Specific Service Charges

Background

Toronto Hydro proposed to maintain its specific service charges at the existing levels, with the exception of: (a) the collection of account and install / remove load control device charges; (b) specific charge for access to power poles (wireline attachments); and (c) service call – customer owned equipment charge.⁵⁷⁸

OEB staff submitted that Toronto Hydro’s proposal to remove the collection of account and install / remove load control device charges (both during regular hours and after hours)⁵⁷⁹ is in accordance with the OEB’s Rate Order in the Customer Service Rules Review.⁵⁸⁰ This change was reflected in the updated other revenue forecast.⁵⁸¹

⁵⁷⁶ OEB Staff Submission / p. 127.

⁵⁷⁷ For the RRRP, WMS and CBR rates, the most recent rates are found in EB-2019-0278 / Decision and Order / December 17, 2019. For the SME charge, the most recent charge is found in EB-2017-0290 / Decision and Order / March 1, 2018.

⁵⁷⁸ Undertaking J1.2; U-Staff-178; and Exhibit 8 / Tab 2 / Schedule 1 / pp. 1-2.

⁵⁷⁹ Exhibit J1.2; and U-Staff-178.

⁵⁸⁰ EB-2017-0183.

⁵⁸¹ U-VECC-83.

OEB staff also submitted that Toronto Hydro's proposal to update the specific charge for access to power poles (wireline attachments) is in accordance with the OEB's Report on Wireline Pole Attachment Charges.⁵⁸² Toronto Hydro forecasted this charge to be \$44.15 for 2020.⁵⁸³ OEB staff submitted that the specific charge for access to power poles (wireline attachments) should be updated at the draft rate order stage to reflect the OEB-approved inflation factor for 2020 once it is available.

With respect to the proposed removal of the service call – customer owned equipment charge, OEB staff agreed with Toronto Hydro's proposal.⁵⁸⁴ OEB staff stated that the scope of work that could be perceived to fall under this charge is too broad and the costs for this type of work is more appropriately recovered by invoicing individual customers for the actual services required (on a cost basis).⁵⁸⁵

No parties raised any concerns with respect to the proposed specific service charges.

Findings

The OEB approves Toronto Hydro's proposal to maintain its specific service charges at the current level, with the three exceptions noted above.

The elimination of the collection of account and install / remove load control device charges is a requirement of the OEB's Rate Order issued on March 14, 2019 in a separate proceeding.⁵⁸⁶

Toronto Hydro shall update the proposed pole attachment charge (wireline attachments) to reflect the most recently approved charge⁵⁸⁷ and include it on the tariff to be filed as part of the draft rate order. Toronto Hydro shall also update the other revenue to reflect this revised charge.

⁵⁸² EB-2015-0304.

⁵⁸³ Exhibit 8 / Tab 2 / Schedule 1 / p. 3. This reflects the OEB-approved 2019 charge of \$43.63 escalated by the forecast 2020 inflation factor of 1.2%.

⁵⁸⁴ Exhibit 8 / Tab 2 / Schedule 1 / p. 2; and 8-Staff-147.

⁵⁸⁵ OEB Staff Submission / p. 128.

⁵⁸⁶ EB-2017-0183.

⁵⁸⁷ The 2020 pole attachment charge was established in OEB Letter / Inflation Adjustment for Energy Retailer Service Charges and Wireline Pole Attachment Charge for Electricity Distributors / November 28, 2019.

The OEB accepts the argument that the range of services that could fall under the service call – customer owned equipment charge is overly broad making it difficult to set a reasonable rate for all types of services. The OEB therefore accepts Toronto Hydro's proposal to eliminate this specific service charge.

Customer service charges under Toronto Hydro's conditions of service are addressed under Issue 7.3.

9.3 Is Toronto Hydro's approach to cost responsibility for customer service charges under its conditions of service appropriate (Issue 7.3)?

Background

Toronto Hydro described a number of isolation and customer / temporary services that are included in its Conditions of Service.⁵⁸⁸ Toronto Hydro invoices the individual customers based on the actual costs to provide these isolation and customer / temporary services.

Toronto Hydro stated that it reviews its Conditions of Service annually and it intends to follow the established standard process for any further changes to its Conditions of Service. As part of this process, when there are proposed changes to the Conditions of Service, Toronto Hydro informs customers of the proposed changes through various methods. Toronto Hydro gives customers the opportunity to comment and provide feedback on the proposed changes. Following the review of customer comments and feedback, Toronto Hydro finalizes the changes and amends its Conditions of Service. Where customers are unsatisfied with the result, as prescribed by the Distribution System Code (DSC) and in the Conditions of Service, customers are able to raise their concerns to Toronto Hydro. If Toronto Hydro is unable to resolve their concern, customers can escalate the matter to the OEB. Toronto Hydro submitted that the evidence demonstrates that Toronto Hydro's standard process has worked in the past, and therefore it is appropriate to continue to follow this process in the future.⁵⁸⁹

⁵⁸⁸ 8-Staff-148 / Appendix A.

⁵⁸⁹ Toronto Hydro Reply Submission / pp. 224-225.

Toronto Hydro originally proposed to revise its Conditions of Service to change its person in attendance policy for vault access for customer-owned vaults (person in attendance policy). Toronto Hydro confirmed that it withdrew its proposal to amend the current policy of attending one vault entry per year at no charge. Toronto Hydro also stated that it has no plan to amend this policy.⁵⁹⁰ Toronto Hydro communicated to its customers on March 26, 2019 that it was maintaining the status quo for 2019.⁵⁹¹

OEB staff, SEC, Energy Probe, BOMA and GTAA argued that the policy of providing one free vault access each year should remain in place until, at least, the next rebasing.⁵⁹² GTAA submitted that annual vault inspections are mandatory and access for these inspections should be provided at no cost as they promote reliability of service and safety. SEC and GTAA also argued that if Toronto Hydro were to change its person in attendance policy during the Custom IR term to recover costs directly from customers the associated revenues would not act as a revenue offset, which is unfair to all customers.⁵⁹³

SEC submitted that there is a broader issue that the OEB should consider regarding what services should be allowed to be recovered at-cost or on a pass-through basis from customers pursuant to the Conditions of Service, and what is a rate that must be included in the tariff. The line has been somewhat unclear for many years, and that likely leads to some distributors recovering certain specific costs on an at-cost basis from individual customers, and others recovering those same costs through regulated rates. SEC stated that it is not proposing that this Application be the forum for that discussion, but it is a policy issue that the OEB could investigate and consider.⁵⁹⁴

In its reply argument, Toronto Hydro noted that it confirmed at the Technical Conference and the Oral Hearing that it withdrew its proposal to amend the current policy of attending one vault entry per year at no charge, and that it does not have a plan to amend this policy. As a result, this policy is no longer a live issue in this proceeding.⁵⁹⁵

⁵⁹⁰ Toronto Hydro Argument-in-Chief / p. 68.

⁵⁹¹ Undertaking J6.11.

⁵⁹² OEB Staff Submission / p. 129; SEC Submission / pp. 77-78; Energy Probe Submission / p. 40; BOMA Submission / p. 51; and GTAA Submission / pp. 1-4.

⁵⁹³ SEC Submission / pp. 77-78; and GTAA Submission / pp. 2-3.

⁵⁹⁴ SEC Submission / p. 78.

⁵⁹⁵ Toronto Hydro Reply Submission / p. 224.

Findings

It is important during a Custom IR term that charges to customers are not increased for providing the same services (except as may be approved by the OEB), and services to customers are not diminished. A utility is expected to manage its costs through productivity improvements, not through levying additional charges to customers through changes to its Conditions of Service. The OEB expects that Toronto Hydro will not change how it charges for its services to customers through its Conditions of Service during the Custom IR term without prior OEB approval.

Toronto Hydro has stated that it does not consider the charges it levies under its Conditions of Service to be “rates”.⁵⁹⁶ Section 78 of the OEB Act requires a distributor to have an order of the OEB to charge for the distribution of electricity, and the OEB may make orders fixing just and reasonable rates for the distribution of electricity. Section 3 of the OEB Act defines rate as “a rate, charge or other consideration and includes a penalty for late payment.”

The OEB is specifically not making a finding in this proceeding on what is, or is not, a rate. It is unnecessary to do so to conclude that Toronto Hydro must not amend its approach to charging customers during the Custom IR term. The OEB does note that it has previously determined that a capital contribution is a rate.⁵⁹⁷ A capital contribution is also a matter set out in a distributor’s Conditions of Service, though based on requirements prescribed by the DSC.

Toronto Hydro has withdrawn its proposal to amend its person in attendance policy. Toronto Hydro has also indicated that it has no plans to amend its policy. However, the OEB notes that the letter that Toronto Hydro sent to its customers on March 26, 2019 states:

In January, we indicated that as of February 1, 2019, Toronto Hydro would provide one Person in Attendance (PIA) onsite – free of charge – for a maximum of two hours, once every 12 months, for customers who are accessing vaults containing Toronto Hydro equipment solely for the purpose of mandatory fire equipment inspections. Any other inspections that require a PIA would be subject to charges to cover the cost of the PIA.

⁵⁹⁶ Oral Hearing Transcripts / Vol. 2 / p. 29; and Oral Hearing Transcripts / Vol. 4 / p. 164.

⁵⁹⁷ EB-2012-0396 / Decision with Reasons / February 7, 2013 / p. 14.

After careful consideration, Toronto Hydro has decided to defer any change to the [Conditions of Service] regarding vault access fees to 2020. We are therefore maintaining the status quo of one free vault access every 12 months.⁵⁹⁸

Toronto Hydro confirmed at the Oral Hearing that it is not prepared to make a commitment that it will not change its conditions for the person in attendance policy.⁵⁹⁹ The letter to customers also left open the possibility that this issue has only been deferred. Given that this issue could arise again during the Custom IR term, the OEB concludes that this issue is in scope of this proceeding.

The OEB directs Toronto Hydro to maintain its current approach of one free vault access every 12 months during the Custom IR term. Given the potential benefits to the safety of the system and the public, and to reliability highlighted by intervenors, the OEB concludes that Toronto Hydro's current approach is appropriate for the Custom IR term. Toronto Hydro shall file the precise language for the status quo approach to vault access in the draft rate order.⁶⁰⁰ Toronto Hydro shall also confirm that this language is reflected in Toronto Hydro's current Conditions of Service and will continue to be reflected in Toronto Hydro's Conditions of Service during the Custom IR term.

⁵⁹⁸ Undertaking J6.11.

⁵⁹⁹ Oral Hearing Transcripts / Vol. 4 / pp. 163-164.

⁶⁰⁰ The OEB notes that, at Undertaking J2.2, Toronto Hydro provided a link to the following webpage: <https://www.torontohydro.com/for-home/vault-access>. At the time of drafting, the language on the noted webpage regarding Toronto Hydro's vault access policy was different than the language included in Toronto Hydro's Conditions of Service effective January 1, 2019 found at the following link: <https://www.torontohydro.com/conditions-of-service>. Therefore, the OEB requires Toronto Hydro to provide the precise language that will be included in its Conditions of Service for the status quo approach to vault access.

10 ACCOUNTING AND DEFERRAL AND VARIANCE ACCOUNTS (ISSUE 8.0)

10.1 Have the impacts of any changes in accounting standards, policies, estimates and adjustments been properly identified and recorded, and is the rate treatment of each of these impacts appropriate (Issue 8.1)?

Background

Toronto Hydro adopted and applied three new accounting standards effective January 1, 2018 as required by the International Accounting Standards Board. The new standards are:

- IFRS Financial Instruments (IFRS 9)
- IFRS Revenue from Contracts with Customers (IFRS 15)
- IFRS Leases (IFRS 16)⁶⁰¹

No parties raised any concerns related to the above noted accounting standard changes.

OEB staff noted that IFRS 9 and IFRS 15 have no impact on the revenue requirement.⁶⁰² OEB staff stated that with respect to IFRS 16, the new standard effectively eliminated the classification of an operating lease and now requires that virtually all lease arrangements be accounted for as capital leases. Capital leases are recognized as assets on the balance sheet and depreciated over their lease term. Prior to IFRS 16, lease costs associated with operating leases were recovered in rates as part of OM&A expense.

OEB staff noted that as a result of IFRS 16, operating lease costs that were previously recovered in rates through OM&A will now form part of rate base and be eligible to

⁶⁰¹ Exhibit 1C / Tab 3 / Schedule 1 / pp. 1-3.

⁶⁰² Exhibit 1C / Tab 3 / Schedule 1 / pp. 1-3.

attract a return. This treatment is consistent with how capital leases have historically been treated for ratemaking purposes.⁶⁰³

Toronto Hydro confirmed that the 2018 and 2019 revenue requirement impact associated with the change in the leases accounting standard was less than \$0.1 million.⁶⁰⁴ As such, OEB staff submitted that there is no need to establish a variance account to capture the transitional impact of the accounting standard change on the approved 2018 and 2019 revenue requirements as the amount is immaterial.⁶⁰⁵

In its reply argument, Toronto Hydro submitted that the proposed accounting changes should be approved by the OEB as proposed.⁶⁰⁶

Findings

Other than OEB staff, there were limited submissions on the accounting changes. The changes were driven by revisions introduced by the International Accounting Standards Board.

The OEB accepts the accounting changes for regulatory purposes.

10.2 Are Toronto Hydro's proposals for the disposition of balances in existing deferral and variance accounts and other amounts appropriate (Issue 8.2)?

Toronto Hydro is seeking disposition of its audited December 31, 2018 Group 1 DVA balances, its audited December 31, 2018 Group 2 DVA balances, plus forecast 2019 principal activity for certain Group 2 DVAs, and "Other Amounts".⁶⁰⁷

Toronto Hydro confirmed that it has followed the guidance provided in the OEB's Report on Electricity Distributors' Deferral and Variance Account Review⁶⁰⁸ and the OEB's

⁶⁰³ OEB Staff Submission / pp. 130-131.

⁶⁰⁴ 1C-Staff-49.

⁶⁰⁵ OEB Staff Submission / p. 131.

⁶⁰⁶ Toronto Hydro Reply Submission / p. 226.

⁶⁰⁷ Other Amounts represent balances that have accumulated but for which Toronto Hydro did not previously request OEB approval to establish a DVA to capture these balances. Toronto Hydro is seeking disposition of these Other Amounts as part of its current Application.

⁶⁰⁸ EB-2008-0046.

Chapter 2 Filing Requirements⁶⁰⁹ with respect to its DVA balances. Toronto Hydro further confirmed that the December 31, 2018 component of the above DVA balances reconciles to its December 31, 2018 RRR and audited financial statements, except where accounts have been adjusted during this proceeding. Interest on the principal portion of the DVA balances was calculated using the OEB's prescribed quarterly interest rates.⁶¹⁰

Group 1 DVA Balances

Background

The proposed Group 1 DVA balances for disposition are set out in the table below.⁶¹¹

Table 28
Group 1 DVA Balances at December 31, 2018

USofA Account #	Account Description	Total Disposition Amount (\$M)
1550	LV Variance Account	\$0.3
1551	Smart Metering Entity Charge Variance Account	(\$0.7)
1580	RSVA - Wholesale Market Service Charge	(\$5.0)
1584	RSVA - Retail Transmission Network Charge	\$9.2
1586	RSVA - Retail Transmission Connection Charge	\$17.9
1588	RSVA - Power	(\$5.6)
1589	RSVA - Global Adjustment	(\$24.3)
	TOTAL GROUP 1	(\$8.2)

Toronto Hydro is seeking disposition of its audited December 31, 2018 Group 1 DVA balances over a one-year period.

⁶⁰⁹ OEB Chapter 2 Filing Requirements for Cost of Service / July 12, 2018 / p. 60.

⁶¹⁰ Exhibit U / Tab 9 / Schedule 1 / p. 3. Toronto Hydro proposed to update the forecast prescribed interest rates for Q3 and Q4 2019 based on the actual approved rates at the draft rate order stage of the proceeding.

⁶¹¹ Exhibit U / Tab 9 / Schedule 1 / p. 1; and U-Staff-190 / Appendix A.

Toronto Hydro is not proposing to dispose of its 2018 LRAMVA balance as part of the current proceeding and expects to bring that balance forward for disposition as part of a future application.⁶¹²

OEB staff submitted that it has no concerns with the disposition of Toronto Hydro's audited December 31, 2018 Group 1 DVA balances of approximately \$8.2 million (refund to ratepayers) over a one-year period⁶¹³ as presented in Table 28.

OEB staff noted that the LRAMVA is required to be disposed of as part of a utility's cost-based rate application. However, OEB staff submitted that Toronto Hydro's proposal to defer disposition of this account could be accommodated as part of OEB staff's proposal to dispose of the audited 2019 Group 2 DVA balances in Toronto Hydro's 2021 Custom IR update application.⁶¹⁴

BOMA, CCC and Energy Probe supported OEB staff's submission with respect to the Group 1 DVAs.⁶¹⁵

In its reply argument, Toronto Hydro submitted that the OEB should approve the request for disposition of its Group 1 DVA balances as proposed. Toronto Hydro also stated that it accepts OEB staff's proposal to bring forward the 2018 and 2019 LRAMVA balances for disposition in its 2021 rates application.⁶¹⁶

Findings

The OEB accepts Toronto Hydro's audited 2018 Group 1 DVA balances totaling \$8.2 million (refund to ratepayers). Toronto Hydro had proposed a disposition over a one-year period. However, given that the rates will not be implemented until March 2020, the OEB directs Toronto Hydro to file options for the disposition over either ten months or 22 months starting on March 1, 2020.

Toronto Hydro proposed and OEB staff supported that the 2018 and 2019 LRAMVA balances be brought forward for disposition in Toronto Hydro's 2021 Custom IR update

⁶¹² U-Staff-191(b).

⁶¹³ OEB Staff Submission / p. 133.

⁶¹⁴ OEB Staff Submission / p. 133.

⁶¹⁵ BOMA Submission / p. 52; CCC Submission / p. 17; and Energy Probe Submission / p. 40.

⁶¹⁶ Toronto Hydro Reply Submission / pp. 226-227.

application. The OEB agrees to the delayed disposition of 2018 and 2019 audited LRAMVA balances.

Group 2 DVA Balances

Background

The proposed Group 2 DVA balances for disposition are set out in the table below.⁶¹⁷

⁶¹⁷ Toronto Hydro Argument-in-Chief / p. 71; and Toronto Hydro Reply Submission / p. 226. The OEB added “Other Amounts” to the table provided on page 71 of the Argument-in-Chief related to the gain on sale of 50/60 Eglinton Avenue and Accounts Receivable Credits, which are discussed in the reply argument. The OEB also reclassified the excess expansion deposit balance from a Group 2 DVA balance to Other Amounts as there was no deferral account in place for this balance during the 2015-2019 Custom IR term.

Table 29
Group 2 DVA Balances and Other Amounts

USofA Account #	Account Description	Total Disposition Amount (\$M) ⁶¹⁸
1508	Impact for USGAAP ⁶¹⁹	\$17.2
1508	CRRRVA ⁶²⁰	(\$88.4)
1508	Externally Driven Capital	(\$3.2)
1508	Derecognition Costs	(\$34.5)
1508	Wireless Attachments	(\$0.6)
1508	Monthly Billing	\$11.9
1508	Operating Centers Consolidation	(\$73.5)
1508	OPEB Cash vs. Accrual	\$8.1
1555	Stranded Meters	(\$1.4)
1575	USGAAP to IFRS Transitional PP&E	(\$1.6)
	TOTAL GROUP 2	(\$166.0)⁶²¹
	OTHER AMOUNTS:	
	Excess Expansion Deposits	(\$8.0)
	Gain on sale 50/60 Eglinton Avenue	(\$11.8)
	Accounts Receivable Credits	(\$3.4)
	TOTAL OTHER	(\$23.2)
	TOTAL GROUP 2 AND OTHER AMOUNTS	(\$189.2)

Toronto Hydro is seeking disposition of its Group 2 DVA balances and Other Amounts over a five-year period. Toronto Hydro has selected five years in order to minimize the bill impacts to all affected customers.⁶²²

OEB staff submitted that the Group 2 DVA balances and Other Amounts should be disposed as proposed by Toronto Hydro with a few exceptions. Specifically, OEB staff submitted that the 2019 forecast principal activity should not be disposed of and the \$17.2 million debit balance in the Impact for USGAAP deferral account should also not be disposed.⁶²³

⁶¹⁸ The total disposition amount of \$189.2 million includes forecast 2019 principal activity.

⁶¹⁹ The actual December 31, 2018 audited balance in this account is \$48.1 million. The \$17.2 million balance presented in Table 29 represents the portion of this total balance that Toronto Hydro is seeking to recover during its Custom IR term. It is based on the employee average remaining service life (EARSL) recovery approach that Toronto Hydro has proposed in its response to U-Staff-193.

⁶²⁰ The \$88.4 million balance in the CRRRVA reflects the inclusion of a \$10.5 million credit related to the impact of the CCA change on capital-related revenue requirement in 2019 set out in response to U-Staff-188 / Table 1.

⁶²¹ The \$8 million variance between the \$166 million shown in Table 29 and the \$174 million shown at Toronto Hydro Argument-in-Chief / p. 71 is due to the reclassification of the excess expansion deposit balance as an Other Amount.

⁶²² Exhibit 9 / Tab 1 / Schedule 1 / p. 40.

⁶²³ OEB Staff Submission / p. 135.

Toronto Hydro proposed to include the projected principal activity for 2019 as part of its Group 2 DVA and Other Amount disposition request. Toronto Hydro made this request on the basis that it provides ratepayers with the immediate and full benefit of the proposed distribution rate reduction, it enhances regulatory efficiency by eliminating the need for a process to examine and clear the 2019 principal activity, and will protect customers with respect to any variances.⁶²⁴

OEB staff submitted that approximately \$64.6 million (refund to ratepayers) of the total proposed credit amount of \$189.2 million is related to forecast 2019 principal activity.

OEB staff submitted that the OEB's stated policy is to dispose of audited DVA balances only.⁶²⁵ Although exceptions to this rule have been made in the past, OEB staff submitted that an exception should not be made as part of the current proceeding. Instead, OEB staff submitted that the 2018 audited DVA balances should be disposed of as part of the current proceeding (over a five-year period) and the 2019 Group 2 DVA activity, which will be audited in 2020, should be brought forward for disposition as part of Toronto Hydro's 2021 Custom IR update application (and be disposed over a four-year period). OEB staff submitted that ratepayers will benefit from this approach because it results in improved rate smoothing over the 2020-2024 Custom IR term compared to Toronto Hydro's current proposal.⁶²⁶

Toronto Hydro submitted that OEB staff's proposal should be rejected as its results in sub-optimal outcomes for customers in the circumstances. Toronto Hydro stated that OEB staff's proposal reduces the refund to customers in 2020, delays customers' receipt of the benefit until 2021 and results in regulatory inefficiency through additional process and costs.⁶²⁷

OEB staff also submitted that it has no concerns with Toronto Hydro's proposed allocators⁶²⁸ for its Group 2 DVAs and Other Amounts.⁶²⁹

⁶²⁴ Toronto Hydro Argument-in-Chief / pp. 72-73.

⁶²⁵ OEB Chapter 2 Filing Requirements for Cost of Service / July 12, 2018 / p. 64.

⁶²⁶ Undertaking J8.8.

⁶²⁷ Toronto Hydro Reply Submission / p. 227.

⁶²⁸ 9-Staff-161.

⁶²⁹ OEB Staff Submission / p. 135.

BOMA, CCC and Energy Probe supported OEB staff's submission with respect to the Group 2 DVAs and Other Amounts.⁶³⁰

In its reply argument, Toronto Hydro submitted that the OEB should approve the disposition of the Group 2 DVAs and Other Amounts as proposed.⁶³¹

The OEB notes that Table 29 excludes the amounts included in Account 1533 – Renewable Generation Connection Funding Adder Deferral Account, Sub-Account Provincial Rate Protection Payment Variances. This account tracks the difference between the revenue requirement associated with the REI that is funded through the Provincial Rate Protection program and collected through payments from the IESO and revenue requirement based on actual REI investments.⁶³² The balance in this account as at December 31, 2018 is a credit of \$4.3 million, and an additional credit of \$2 million is projected for 2019 (for a total expected balance of \$6.3 million by the end of 2019). Although Toronto Hydro is requesting disposition of the balance in this account as part of the current proceeding, it has no impact on rates as the amount in the account is proposed to be refunded to the IESO, not ratepayers.⁶³³

Findings

The OEB accepts the Group 2 DVA balances and Other Amounts as proposed by Toronto Hydro with two exceptions. First, while, the OEB generally accepts the proposed disposition of the CRRRVA, there may be changes to the balance with respect to the impacts of Bill C-97 as discussed under Issue 5.3. Second, the balance in the Impact for USGAAP deferral account should be revised to reflect the application of the corridor approach.

With respect to the disposition of forecast 2019 Group 2 DVA balances and Other Amounts, including the approach used to allocate to rate classes, the OEB accepts Toronto Hydro's proposal. The OEB agrees with Toronto Hydro's argument that its proposal benefits ratepayers by providing an immediate refund to customers and allows for a more efficient review and true-up process related to the 2019 Group 2 DVA

⁶³⁰ BOMA Submission / pp. 52-54; CCC Submission / p. 16; and Energy Probe Submission / p. 40.

⁶³¹ Toronto Hydro Reply Submission / p. 227.

⁶³² Exhibit 9 / Tab 1 / Schedule 1 / pp. 34-35.

⁶³³ Exhibit U / Tab 9 / Schedule 1 / p. 2.

balances and Other Amounts.⁶³⁴ The OEB also notes that the OEB has previously approved the disposition of unaudited forecast balances.

The OEB directs Toronto Hydro, in its draft rate order, to update the forecast 2019 Group 2 DVA and Other Amount balances to reflect its most up-to-date forecast for 2019. Any variance between the approved forecast 2019 Group 2 DVA balances and Other Amounts and the actual 2019 Group 2 DVA balances and Other Amounts is to be recorded in Account 1595. The balance in Account 1595 will be reviewed as part of Toronto Hydro's 2021 Custom IR update application.

The OEB also accepts Toronto Hydro's requested disposition of Account 1533 – Renewable Generation Connection Funding Adder Deferral Account, Sub-Account Provincial Rate Protection Payment Variances of \$6.3 million by the end of 2019. This account tracks the difference between the revenue requirement associated with the REI that is funded through the Provincial Rate Protection program and collected through payments from the IESO and revenue requirement based on actual REI investments.⁶³⁵ This account is refunded to the IESO, not ratepayers.

Given that rates will not be implemented until March 2020, the OEB directs Toronto Hydro to dispose of the Group 2 DVA balances and Other Amounts over a 58-month period (March 2020 to the end of the Custom IR term) instead of the proposed five-year disposition.

While the OEB is approving disposition of the Group 2 DVA balances and Other Amounts over a 58-month period (starting March 2020), as discussed under Issue 1.3, the OEB wants to consider options for smoothing bill impacts throughout the Custom IR term. This could include options for how the disposition of Group 2 DVA balances is spread over the Custom IR term.

⁶³⁴ Toronto Hydro Reply Toronto / p. 227.

⁶³⁵ Exhibit 9 / Tab 1 / Schedule 1 / pp. 34-35.

Impact for USGAAP Deferral Account**Background**

Toronto Hydro proposed to dispose of Account 1508 - Impact for USGAAP. This account captures actuarial gains and losses realized on Toronto Hydro's OPEB costs.⁶³⁶ Under IFRS, these gains and losses are presented as a component of other comprehensive income (in equity) and therefore never enter rates (as they never form part of the OPEB costs that are recognized as an expense in the income statement). As a result, some utilities sought approval to establish a deferral account to capture these actuarial gains and losses.⁶³⁷

In the OEB Pension and OPEB Report, the OEB addresses its expectation with respect to utilities who have been tracking balances within this account:

Utilities may propose disposition of the account in future cost based rate proceedings if the gains and losses that are tracked in this account do not substantially offset over time.⁶³⁸

As part of the original evidence filed in this proceeding, Toronto Hydro was seeking disposition of a balance of \$85.3 million in this account. On April 30, 2019, Toronto Hydro filed an update to its pre-filed evidence. The changes included an update to DVA balances in order to reflect the December 31, 2018 audit by Toronto Hydro's external auditors. As a result of the update, the balance in this DVA declined from the initial \$85.3 million to \$48.1 million (a reduction of \$37.2 million). This decline stemmed from an updated OPEB actuarial valuation that was done as of December 31, 2018 and resulted in the recognition of an actuarial gain of \$37.2 that was recorded against the DVA balance.⁶³⁹

In response to interrogatories on the updated evidence, Toronto Hydro further amended its disposition request related to this account. Rather than seeking the immediate disposition of the entire account balance over the 2020-2024 Custom IR term, it

⁶³⁶ Exhibit 9 / Tab 1 / Schedule 1 / p. 7.

⁶³⁷ OEB Report on the Regulatory Treatment of Pension and OPEB Costs / September 14, 2017 / p. 13. Seven utilities have received OEB approval to establish this type of account. Only one utility has since disposed of this account balance, which was done through a settlement agreement.

⁶³⁸ OEB Report on the Regulatory Treatment of Pension and OPEB Costs / September 14, 2017 / p. 13.

⁶³⁹ Exhibit U / Tab 9 / Schedule 1 / pp. 2, 4.

proposed to use an alternate disposition methodology known as the employee average remaining service life (EARSL) method.⁶⁴⁰ Under this approach, the account balance is amortized to rates over the employee average remaining service life of 14 years. This results in a total disposition of \$17.2 million over the Custom IR term, or \$3.44 million per year. Toronto Hydro proposed that the EARSL method continue to underpin the disposition of the DVA balance for future rate applications.⁶⁴¹

OEB staff submitted that the balance in this account should not be disposed of at this time. OEB staff noted that the significant decline in the account balance (\$85.3 million to \$48.1 million) as a result of the recent OPEB actuarial valuation supports OEB staff's position (and the position set out in the OEB Pension and OPEB Report) that there is a recognition that the balance in this account may substantively offset over time. Given the significant movement in the account balance that can occur as a result of one actuarial valuation, it would be premature to conclude otherwise.⁶⁴²

In its reply argument, Toronto Hydro submitted that OEB staff's position appears to be entirely based on the fact that there was a significant decline in the account balance in one-year (from 2017 to 2018). Toronto Hydro submitted that this is too narrow of a view to evaluate the request and the OEB should place limited weight on this isolated timeframe.

OEB staff submitted that, alternatively, if the OEB saw merit in Toronto Hydro's arguments to dispose of this account balance starting in 2020, the disposition methodology should be based on the corridor approach instead of the EARSL method that Toronto Hydro proposed. Under the corridor approach, actuarial gains and losses, to the extent that they fall outside a corridor of 10% of the higher of the plan asset or liability value, would get amortized to rates over a period not exceeding EARSL. Based on the calculations provided by Toronto Hydro, this methodology would result in the recovery of approximately \$6.4 million of the DVA balance over the 2020-2024 plan period.⁶⁴³

OEB staff submitted that the use of corridor approach is appropriate for purposes of recovering the balance in the Impact for USGAAP deferral account on the basis that:

⁶⁴⁰ U-Staff-193.

⁶⁴¹ U-Staff-193 / pp. 2-5.

⁶⁴² OEB Staff Submission / pp. 139-140.

⁶⁴³ Undertaking JTC4.10.

- It is consistent with how Toronto Hydro previously recognized these costs when the balance in this account was being amortized into rates under USGAAP.⁶⁴⁴
- It provides for a greater opportunity for the gains and losses tracked in the account to offset overtime, but also recognizes that amounts should be disposed of from the account when the balance grows too large.⁶⁴⁵
- It will satisfy any concerns related to the continued presentation of this balance as a regulatory asset as it allows for the recovery of the account balance through rates.⁶⁴⁶

In its reply argument, Toronto Hydro submitted that the EARSL method is more appropriate as it protects the principles of intergenerational equity. Toronto Hydro referred to the KPMG Report to the Ontario Energy Board on Pension and OPEB Costs.⁶⁴⁷ Toronto Hydro stated that KPMG acknowledged both the corridor and the EARSL method. However, with respect to the corridor method, KPMG flagged important considerations regarding intergenerational equity and cost comparability between utilities.

Toronto Hydro further argued that, while it believes that the OEB should approve the EARSL approach, either the EARSL or corridor approach is acceptable to Toronto Hydro from the perspective of avoiding a potential impairment of the balance in the Impact for USGAAP deferral account.⁶⁴⁸

Findings

The OEB notes that there has been significant volatility in the Impact for USGAAP deferral account during this proceeding. Concern over volatility and the potential that the balance in the account will offset over time resulted in OEB staff's recommendation to

⁶⁴⁴ Technical Conference Transcripts / Vol. 4 / p. 60.

⁶⁴⁵ Amounts can only be disposed (amortized) if the balance of the gains and losses tracked in the account exceed the calculated corridor, which essentially acts as a threshold, and the calculation is revisited annually. Therefore, in years where this threshold is not exceeded, no amount is recognized in rates. Whereas, Toronto Hydro's proposed approach guarantees that an amount is recognized in rates annually.

⁶⁴⁶ OEB Staff Submission / pp. 140-141.

⁶⁴⁷ KPMG Report to the Ontario Energy Board, Report on Pension and Other Post-Employment Benefit Costs / May 2, 2016.

⁶⁴⁸ Toronto Hydro Reply Submission / pp. 233-236.

delay recovery of the balance in the Impact for USGAAP deferral account. The OEB finds it appropriate to delay the full disposition of the balance in this account.

Both Toronto Hydro and OEB staff offered options to partially clear the balance. The OEB agrees that it is appropriate that amounts should be disposed of when the account balance grows too large. The corridor approach seems to be the most consistent with the objective of managing the size of the balance in the Impact for USGAAP deferral account. The OEB directs Toronto Hydro, in the draft rate order, to use the corridor approach to determine the balance in the account for disposition.

Earnings Sharing Mechanism

Background

Toronto Hydro provided the ESM amounts for the 2015-2018 period (including supporting calculations). Toronto Hydro noted that there were no earnings to be shared for any year during the 2015-2018 period.⁶⁴⁹

OEB staff submitted that the balance in the ESM for the 2015-2018 period was calculated correctly⁶⁵⁰ in accordance with the OEB's decision in Toronto Hydro's 2015-2019 Custom IR proceeding.⁶⁵¹ OEB staff also submitted that the 2019 ESM calculation should be brought forward as part of Toronto Hydro's 2021 Custom IR update application.

Findings

The OEB accepts that there were no earnings to be shared for any year during the 2015 to 2018 period. The 2019 ESM calculation should be filed as part of Toronto Hydro's next rebasing application.

The OEB notes that the issue of the appropriate ESM calculation methodology for the 2020-2024 Custom IR term is discussed under Issue 8.3.

⁶⁴⁹ Exhibit U / Tab 9 / Schedule 1 / p. 14.

⁶⁵⁰ Exhibit U / Tab 9 / Schedule 1 / p. 14.

⁶⁵¹ EB-2014-01116 / Decision and Order / December 29, 2015 / p. 49.

Other Amounts**Background**

Toronto Hydro requested approval to refund balances to ratepayers described as “Other Amounts” in Table 29 as Toronto Hydro does not have OEB-approved DVAs to capture these balances. Specifically, Toronto Hydro is seeking to refund to ratepayers a total of \$23.2 million as a result of excess expansion deposits realized during the 2016-2019 period, a gain on sale of property, and historical accounts receivable credits relating to the period 1997 to 2011 that Toronto Hydro was unable to return to customers.⁶⁵²

OEB staff submitted that disposition of a regulatory balance without an approved deferral account is contrary to standard regulatory procedure. A utility is required to request approval to establish a new deferral account in advance of the occurrence of the related transaction.

However, OEB staff stated that by proposing to refund these credit balances, Toronto Hydro is acting in the best interests of its ratepayers and should be recognized for doing so. OEB staff submitted that it would be unfair to ratepayers to deny them of amounts that a utility seeks to refund in an application due to the absence of approved regulatory accounts, which is something that is ultimately out of ratepayers’ control. As such, OEB staff submitted that the OEB should approve disposition of the Other Amounts noted above. OEB staff further submitted that the disposition amounts approved should be limited to the 2018 balances as part of the current proceeding.⁶⁵³

Findings

The OEB accepts the disposition of the Other Amounts related to excess expansion deposits, the gain on sale of property and historical account receivable credits, totaling \$23.2 million to be refunded to customers. As noted under Issue 8.3, the OEB established a Gain on Sale of Property variance account and an Excess Expansion Deposits variance account for future use. Toronto Hydro’s proposed refund of the Other Amounts is appropriate in the current circumstance, but this does not mean that, in the future, disposition of a regulatory balance without an approved deferral account will be allowed.

⁶⁵² Exhibit 8 / Tab 1 / Schedule 1 / p. 11; and Exhibit U / Tab 9 / Schedule 1 / Appendix E.

⁶⁵³ OEB Staff Submission / p. 137.

10.3 Are Toronto Hydro's proposals for the establishment of new accounts, closing of existing accounts or continuation of existing accounts appropriate (Issue 8.3)?

The OEB's findings with respect to Toronto Hydro's proposals for the establishment of new accounts, continuation of existing accounts and closure of existing accounts are set out in the sections that follow.

New Accounts

Toronto Hydro proposed to establish the following new DVAs:

- Excess Expansion Deposits variance account
- Account 1522 - Pension and OPEB Forecast Accrual versus Actual Cash Payments Differential Tracking Account

A number of parties also argued for the establishment of an additional new deferral account described as the Carillion Insolvency Payments Receivable Account.

These proposals are discussed in detail in the sub-sections that follow.

Excess Expansion Deposits Variance Account

Background

Toronto Hydro noted that, pursuant to the DSC, it may collect an expansion deposit from a customer that wants to connect to Toronto Hydro's distribution system if Toronto Hydro must expand its system to connect the customer. During the Customer Connection Horizon specified in the Offer-to-Connect contract, the utility has an obligation to annually return the expansion deposit to the customer in proportion to the actual connections or actual demand that materializes in the year. If the forecast connections / demand do not materialize during the Customer Connection Horizon, utilities are allowed to retain the excess portion of the expansion deposit. Toronto Hydro proposed the establishment of the Excess Expansion Deposits variance account to record any excess expansion deposits as a credit to be refunded to ratepayers.⁶⁵⁴

⁶⁵⁴ Exhibit 9 / Tab 1 / Schedule 1 / pp. 40-41.

OEB staff submitted that it has no concerns with the establishment of the Excess Expansion Deposits variance account.⁶⁵⁵ Energy Probe and CCC supported OEB staff's submission.⁶⁵⁶

Findings

The OEB approves the establishment of an Excess Expansion Deposits variance account. The OEB notes that as indicated under issue 8.2, Toronto Hydro proposed to refund to customers \$8.0 million in excess expansion deposits related to the 2016 to 2019 period despite not having an approved regulatory account. Recent Toronto Hydro experience confirms that this account is appropriate.

Account 1522 - Pension and OPEB Forecast Accrual versus Actual Cash Payments Differential Tracking Account

Background

Account 1522 - Pension and OPEB Forecast Accrual versus Actual Cash Payments Differential Tracking Account will track the differences between the forecast accrual amounts recovered in rates and the actual cash payments made for Toronto Hydro's OPEB costs. It will provide ratepayers with an asymmetrical carrying charge on the cumulative differential balance in the account when the cumulative forecast accrual amount exceeds cash payments (i.e. the tracking account is in a credit position).⁶⁵⁷

OEB staff submitted that Account 1522 is already established on a generic basis for all distributors and the OEB is not required to approve the establishment of this account as part of rate applications.⁶⁵⁸

However, Toronto Hydro is also seeking OEB approval to use an alternate approach with respect to determining the forecast accrual amount in rates compared to the default methodology that is prescribed in the OEB Pension and OPEB Report.⁶⁵⁹ Specifically, Toronto Hydro is proposing an alternate methodology that determines the forecast accrual amount in rates as the sum of the OM&A expense portion of its forecast annual

⁶⁵⁵ OEB Staff Submission / p. 143.

⁶⁵⁶ Energy Probe Submission / p. 40; and CCC Submission / p. 16.

⁶⁵⁷ Exhibit 9 / Tab 1 / Schedule 1 / pp. 42-43.

⁶⁵⁸ OEB Staff Submission / p. 144.

⁶⁵⁹ OEB Report on the Regulatory Treatment of Pension and OPEB Costs / September 14, 2017.

OPEB accrual cost and the cumulative depreciation on its OPEB costs that are capitalized starting in 2020.⁶⁶⁰

OEB staff submitted that an alternate approach for determining the forecast accrual amount in rates is not warranted in this case as the associated dollars are not material enough to justify the added complexity that an alternate methodology will introduce to the regulatory process.⁶⁶¹ Energy Probe and CCC supported OEB staff's submission.⁶⁶² OEB staff further submitted that if an alternate methodology is approved by the OEB, the calculation of the forecast accrual amount should be based on the total cumulative depreciation of OPEB costs that have been recognized in the rates of a given year.

In its reply argument, Toronto Hydro submitted that the OEB's guidance in the OEB Pension and OPEB Report⁶⁶³ does not specify that materiality is the test for justifying a different approach. The test is incremental value, which Toronto Hydro submitted is not limited to monetary impacts. Toronto Hydro submitted that fairness and consistency are the incremental values that warrant the use of an alternate approach in this case. Toronto Hydro's proposed methodology ensures that the calculation of the accrual amount is representative and reflective of how Toronto Hydro collects funding for OPEBs through rates.⁶⁶⁴

Findings

The OEB typically takes a common approach to issues that impact most utilities. With Account 1522 - Pension and OPEB Forecast Accrual versus Actual Cash Payments Differential Tracking Account, the OEB established a treatment that recognized the carrying charge impact on customers. However, the OEB Pension and OPEB Report allows for an alternative approach if the utility capitalizes a significant portion of the OPEB costs, as is the case with Toronto Hydro.⁶⁶⁵ The OEB agrees with the alternate methodology proposed by Toronto Hydro that determines the forecast accrual amount in rates as the sum of the OM&A expense portion of its forecast annual OPEB accrual cost and the cumulative depreciation on its OPEB costs that are capitalized starting in

⁶⁶⁰ U-Staff-196 / p. 4.

⁶⁶¹ OEB Staff Submission / p. 144.

⁶⁶² Energy Probe Submission / p. 40; and CCC Submission / p. 16.

⁶⁶³ OEB Report on the Regulatory Treatment of Pension and OPEB Costs / September 14, 2017.

⁶⁶⁴ Toronto Hydro Reply Submission / p. 236.

⁶⁶⁵ OEB Report on the Regulatory Treatment of Pension and OPEB Costs / September 14, 2017.

2020. The OEB notes that Toronto Hydro's alternate methodology has an impact on only the capital portion of OPEBs, which is approximately 45%⁶⁶⁶ of the total OPEBs.

The OEB requires Toronto Hydro to commence gathering the necessary information going forward to calculate the accrual OPEB amount based on the annual depreciation associated with its cumulative undepreciated capitalized OPEB costs in rate base.

Carillion Insolvency Payments Receivable Account

Background

OEB staff, BOMA, Energy Probe, VECC and CCC submitted that an additional new deferral account described as the Carillion Insolvency Payments Receivable Account should be approved by the OEB.⁶⁶⁷

OEB staff submitted that there is ongoing litigation with respect to the Carillion insolvency.⁶⁶⁸ OEB staff submitted that a potential outcome of that process is that Carillion is required to make a payment to Toronto Hydro. If that were to occur, OEB staff submitted that the payment should be considered an offset to rate base. During the Custom IR period, the revenue requirement impact of the reduction to rate base (associated with the payment amount) should be recorded in the Carillion Insolvency Payments Receivable Account. At the time of the next rebasing, Toronto Hydro should remove the amount related to the litigation payment from rate base on a permanent basis and the account can be closed.⁶⁶⁹

In its reply argument, Toronto Hydro submitted that the DVA proposed by parties is duplicative as any payment will effectively flow through PP&E and will be credited or debited from rate base accordingly. Nonetheless, Toronto Hydro submitted that it supports the establishment of the Carillion Insolvency Payments Receivable Account with one modification. Toronto Hydro submitted that the scope of the account must include the ability for Toronto Hydro to record and seek recovery of any prudently

⁶⁶⁶ Exhibit U / Tab 4 / Schedule 3 / p. 4.

⁶⁶⁷ OEB Staff Submission / pp. 61, 146; BOMA Submission / p. 20; Energy Probe Submission / p. 19; VECC Submission / p. 27; and CCC Submission / p. 16.

⁶⁶⁸ Oral Hearing Transcripts / Vol. 1 / p. 165.

⁶⁶⁹ OEB Staff Submission / p. 61.

incurred expenses with respect to the litigation and the recovery of any amount awarded pursuant to that litigation since those expenses will be to the benefit of ratepayers.⁶⁷⁰

Findings

The OEB agrees with the establishment of the Carillion Insolvency Payments Receivable Account with the modification proposed by Toronto Hydro to record and seek recovery of any prudently incurred expenses with respect to the litigation and the recovery of any amount awarded.

Gain on Sale of Property Variance Account

Background

The OEB noted under Issues 4.2 and 8.2 that Toronto Hydro has historically experienced gains on the disposal of property. Under Issue 4.2, the OEB directed that an incremental \$1 million be added to the other revenue forecast for 2020.

Toronto Hydro submitted, with respect to its other revenue forecast, that no amount should be added to its other revenue forecast related to the gain on sale of property. However, if the OEB has any concern in this regard, a DVA could be created to track any additional revenue from property sales in 2020 and future years.⁶⁷¹

Findings

As noted under Issue 8.2, Toronto Hydro proposed to refund to customers \$11.8 million related to the sale of property despite not having an approved regulatory account. The OEB commends Toronto Hydro's customer-centric approach on this issue.

The OEB directs Toronto Hydro to establish the Gain on Sale of Property variance account as there is considerable variability in the gain on disposal of property. Toronto Hydro is expected to seek disposition of this symmetrical variance account in its next rebasing application.

⁶⁷⁰ Toronto Hydro Reply Submission / pp. 84-85.

⁶⁷¹ Toronto Hydro Reply Submission / pp. 191-193.

Continuation of Existing Accounts**Background**

Toronto Hydro proposed to continue or discontinue its existing DVAs as set out in the following table.⁶⁷²

**Table 30
Proposed Continuation and Closure of Existing Group 2 DVAs**

Group 2 DVAs	Proposed Status
Stranded meter costs	Close
IFRS USGAAP Transitional PP&E amounts	Close
Impact for USGAAP Deferral	Open
Capital Related Revenue Requirement (CRRRVA)	Open
Externally Driven Capital	Open
Derecognition	Open
Wireless Attachments	Open
Monthly Billing	Close
Operating Centers Consolidation Program (OCCP)	Close
Other Post-Employment Benefits (OPEB) Cash vs Accrual ⁶⁷³	Close
Earnings Sharing Mechanism	Open
Renewable Generation Connection Funding Adder Deferral Account	Open

Parties made arguments with respect to the ESM account, the CRRRVA, the Derecognition variance account and the Externally Driven Capital variance account. The submissions argued for various changes with respect to the treatment of the noted accounts.

⁶⁷² Undertaking JTC4.7. The OEB removed the Excess Expansion Deposit deferral account from the table as it was not in place during the 2015-2019 period and is discussed in the sub-section on the proposed new accounts. The OEB also updated the status of the OPEB Cash vs. Accrual variance account to close based on the Argument-in-Chief / p. 78. The OEB also added the ESM account to the table as Toronto Hydro has sought approval to continue the ESM account using the same methodology as previously approved by the OEB as noted in the Argument-in-Chief / p. 16.

⁶⁷³ The OEB notes that this is a different account than the proposed new Account 1522 - Pension and OPEB Forecast Accrual versus Actual Cash Payments Differential Tracking Account discussed previously.

In its reply argument, Toronto Hydro submitted that all of the arguments made by parties should be rejected and the OEB should approve the Group 2 DVAs as proposed.⁶⁷⁴

Findings

The OEB accepts the continuation of the Group 2 DVAs as proposed, except as discussed in the following sub-sections.

Earnings Sharing Mechanism Account

Background

Toronto Hydro's proposed Custom IR framework includes an ESM. The proposed ESM is based on the same methodology that was approved as part of Toronto Hydro's 2015-2019 Custom IR application.⁶⁷⁵ The ESM, as proposed, tracks the variance between the actual non-capital related revenue requirement (OM&A and revenue offsets) and the non-capital revenue requirement recovered through rates. The account is symmetrical, non-cumulative and incorporates a 100 basis point deadband.⁶⁷⁶

OEB staff, SEC, BOMA, VECC, CCC, AMPCO and Energy Probe all agreed that the ESM should remain in place during the 2020-2024 Custom IR term. However, these parties argued for adjustments to the methodology used to calculate the earnings sharing amount.⁶⁷⁷

OEB staff submitted that, as was agreed to by Toronto Hydro, the proposed ESM essentially operates as a true-up of non-capital related revenue requirement.⁶⁷⁸ Therefore, in a hypothetical scenario, whereby Toronto Hydro had higher OM&A expenses than were approved in rates, and the 100 basis point deadband was breached, Toronto Hydro would seek recovery of those incremental costs from

⁶⁷⁴ Toronto Hydro Reply Submission / p. 236.

⁶⁷⁵ EB-2014-0116 / Decision and Order / December 29, 2015 / p. 49.

⁶⁷⁶ Exhibit 1B / Tab 4 / Schedule 1 / p. 14; and 1B-Staff-25.

⁶⁷⁷ OEB Staff Submission / pp. 147-148; SEC Submission / pp. 19-21; BOMA Submission / p. 18; VECC Submission / p. 8; CCC Submission / pp. 12-13; AMPCO Submission / p. 28; and Energy Probe Submission / p. 6.

⁶⁷⁸ Technical Conference Transcripts / Vol. 4 / pp. 32-33.

ratepayers.⁶⁷⁹ SEC submitted that it is not aware of any other utilities for which the OEB has approved a symmetrical ESM.⁶⁸⁰

The above noted parties argued that the ESM methodology should be re-designed. These parties argued that the ESM should be asymmetrical to ensure that it operates only to share overearnings with ratepayers. In addition, the methodology for determining whether there are earnings to share with ratepayers should result from a comparison of actual to deemed ROE. This will ensure that it adequately refunds ratepayers overearnings that are caused by changes in both costs and revenues (including changes in load relative to forecast amounts).⁶⁸¹

Several parties submitted that the OEB should establish an ESM that is consistent with the recent ESMs that have been approved by the OEB. This included, Hydro One Distribution Inc.⁶⁸², Horizon Utilities⁶⁸³, Hydro Ottawa⁶⁸⁴, Kingston Utilities⁶⁸⁵ and Enbridge Gas Distribution Inc.⁶⁸⁶ These ESMs are based on a comparison between approved ROE and actual ROE calculated on an annual basis. SEC noted that Hydro One's, Kingston Hydro's and Horizon Utilities' approved Custom IR frameworks also included CRRVA (or similar-type accounts), yet these were easily backed out of the calculation of ESMs to ensure there was no double counting.

Most parties argued that the deadband for earnings sharing should continue to be 100 basis points (with 50% of any overearnings shared with ratepayers). However, VECC argued that there should be no deadband applied to the ESM as Toronto Hydro's proposed Custom IR plan does not have sufficient existing incentives to justify a deadband.⁶⁸⁷

In its reply argument, Toronto Hydro submitted that it disagrees with the proposed adjustments to the ESM. Toronto Hydro submitted that its current (and proposed) ESM achieves an appropriate balance between customer protection and safeguarding its

⁶⁷⁹ OEB Staff Submission / p. 49.

⁶⁸⁰ SEC Submission / p. 20.

⁶⁸¹ OEB Staff Submission / p. 50; SEC Submission / p. 20; BOMA Submission / p. 18; VECC Submission / p. 8; CCC Submission / pp. 12-13; AMPCO Submission / p. 28; and Energy Probe Submission / p. 6.

⁶⁸² EB-2017-0049.

⁶⁸³ EB-2014-0002.

⁶⁸⁴ EB-2015-0004.

⁶⁸⁵ EB-2015-0083.

⁶⁸⁶ EB-2012-0459.

⁶⁸⁷ VECC Submission / p. 8.

incentive to improve productivity. It does so by offering a symmetrical sharing of risks and benefits, as was previously approved by the OEB. Toronto Hydro submitted that the OEB should reject the proposal to turn the ESM into an asymmetrical account.

Toronto Hydro further argued that it does not agree with the ROE-based methodology proposed by the parties. Toronto Hydro submitted that the ROE method introduces unnecessary complexity in the calculation of the ESM as numerous adjustments have to be made to account for out-of-period items and the effect of DVA. Toronto Hydro also rejected the ROE method as it captures the effect of load and customer count variances, which tend to be outside of its control.

Toronto Hydro submitted that, if the OEB is inclined to approve the ROE-based methodology for calculating the ESM, the account should be cumulative in order to normalize the effects of weather-related load forecasting differences. Toronto Hydro also stated that a cumulative ESM is consistent with the OEB's guidance in the Utility Rate Handbook.⁶⁸⁸

Findings

The ESM will continue for the 2020-2024 Custom IR term. However, the OEB agrees that the current ESM is effectively a true-up of OM&A and other revenue and requires modification.

The OEB acknowledges that the ESM account previously approved for Toronto Hydro was not consistent with typical ESM accounts. The primary purpose of the ESM is to protect customers from overearnings of the utility. Toronto Hydro has the ability to forecast its risks and budget accordingly. Furthermore, there is a Z-factor mechanism to address material unforeseen events. The customers have no equivalent mechanisms. Accordingly, the OEB will change the ESM for Toronto Hydro to an asymmetrical account to ensure that it operates only to share overearnings with ratepayers. The account will be cumulative to smooth out annual fluctuations not in Toronto Hydro's

⁶⁸⁸ Toronto Hydro Reply Submission / pp. 237-239.

control, such as weather.⁶⁸⁹ This treatment is consistent with the OEB Rate Handbook which states that ESMs “should be based on overall earnings at the end of the term”.⁶⁹⁰

The current ESM only reflects changes in non-capital related revenue requirement (OM&A and revenue offsets). The OEB accepts the submission by intervenors that changes in both costs and revenues (including changes in load relative to forecast amounts) should be added to the ESM definition.

As noted by several parties, ESMs are typically based on a comparison of approved to actual ROE including the impacts of load forecast as well as cost deviations from approved levels. The OEB recognizes that certain adjustments will be required for a ROE-based ESM calculation in order to account for out-of-period items and to ensure there is no double counting.

The OEB approves a cumulative, asymmetrical ESM using an ROE-based calculation with all earnings in excess of 100 basis points over the approved ROE shared 50:50 with ratepayers.

Capital-Related Revenue Requirement Variance Account

Background

The CRRRVA records the variance between the capital-related revenue requirement included in rates and the actual capital-related revenue requirement (excluding balances captured in the Externally Driven Capital and Derecognition variance accounts).⁶⁹¹

OEB staff and CCC supported the continuation of the CRRRVA as proposed.⁶⁹² However, VECC and BOMA challenged how the account operates and proposed various adjustments.⁶⁹³

⁶⁸⁹ A cumulative treatment for the ESM account means that overearnings in a given year can be offset by under-earnings in another year of the Custom IR term. However, as the account is asymmetrical, only overearnings are to be disposed of to ratepayers at the end of the term (assuming the utility has over-earned on a cumulative basis).

⁶⁹⁰ OEB Handbook to Utility Rate Applications / p. 28.

⁶⁹¹ Exhibit 9 / Tab 1 / Schedule 1 / p. 10.

⁶⁹² OEB Staff Submission / p. 51; and CCC Submission / pp. 11-12.

⁶⁹³ VECC Submission / p. 27; and BOMA Submission / pp. 15-17.

VECC argued that as the CRRRVA only tracks gross capital spending and is not project specific, it operates as a “slush” mechanism. VECC noted that projects that run over budget are offset by those projects that are completed under budget or eliminated in their entirety. VECC submitted that there is no specific accountability and the CRRRVA should be organized by the categories of the DSP.⁶⁹⁴

BOMA submitted that the cumulative tracking features of the account are inappropriate because it allows the utility to offset underspending in earlier years with overspending in the later years. BOMA proposed that the CRRRVA be re-designed to capture annual capital underspends, which should be returned to ratepayers through the annual rate adjustment process.⁶⁹⁵

In its reply argument, Toronto Hydro submitted that the proposals of VECC and BOMA are not in accordance with the proposed Custom IR framework and the integrated nature of the DSP. Toronto Hydro submitted that a key feature of the proposed Custom IR framework is that utility must not come in for rebasing or incremental funding for the Custom IR term. In exchange, for five years of rate certainty and price protection for customers, Custom IR provides utilities an envelope of funding that they must manage within. Toronto Hydro submitted that the CRRRVA provides an additional insurance mechanism whereby any cumulative underspend is returned to ratepayers, while any cumulative overspend is absorbed by the utility.

Toronto Hydro further argued that the DSP is an integrated five-year plan. Toronto Hydro stated that the DSP is not five one-year capital plans as suggested by BOMA nor is it four ring-fenced capital plans as suggested by VECC. Toronto Hydro submitted that the OEB previously acknowledged that the account must operate on a cumulative basis so that the utility can maintain the required flexibility to plan and execute its capital investment strategy.

Toronto Hydro submitted that VECC and BOMA’s arguments and proposals with respect to the CRRRVA should be rejected. However, in the alternative that the OEB sees merit in these submissions, Toronto Hydro stated that the more appropriate way to address these concerns would be to require Toronto Hydro to report on in-service

⁶⁹⁴ VECC Submission / p. 27.

⁶⁹⁵ BOMA Submission / p. 16.

additions by investment category for the 2020-2024 period at the time of its next rebasing.⁶⁹⁶

Findings

The OEB finds merit in better understanding the program level details that cause variances in overall capital spending as proposed by VECC. The approach offered by Toronto Hydro to require it to report on in-service additions by investment category for the 2020-2024 period at the time of its next rebasing is approved. While this additional information will be reported, the CRRRVA will continue to be trued-up on an aggregate basis and operate on a cumulative basis, given the integrated nature of the DSP. The additional information will assist in reassessing the account in the next rebasing application.

Derecognition Variance Account

Background

The Derecognition variance account records the variance between the amount included in rates for derecognition expense and the actual derecognition expense incurred.⁶⁹⁷

OEB staff submitted that the derecognition variance account should stop recording new principal activity as of December 31, 2019 (and should be closed after the 2019 balance in the account is disposed). OEB staff noted that the account was originally established as there was expected to be large variances between actual and forecast derecognition expense. 2015 was the first year that Toronto Hydro had to incur derecognition expense in accordance with IFRS, and as such, had no experience in forecasting derecognition expense at that time.

OEB staff submitted that the account is symmetrical in nature and records both positive and negative variances between actual and forecast derecognition expense. Toronto Hydro now has five years of experience with forecasting derecognition expense and stated that it is more comfortable with its 2020-2024 forecasts.⁶⁹⁸ OEB staff submitted that Toronto Hydro should be required to take the risk associated with derecognition

⁶⁹⁶ Toronto Hydro Reply Submission / pp. 239-243.

⁶⁹⁷ Exhibit 9 / Tab 1 / Schedule 1 / p. 17.

⁶⁹⁸ Oral Hearing Transcripts / Vol. 4 / p. 146.

expense if its forecast is lower than the actual derecognition expense that is incurred. OEB staff submitted that any variances in derecognition expense should be recorded in the CRRRVA, which is the same treatment that is applied to depreciation expense.⁶⁹⁹ BOMA, CCC, and Energy Probe supported OEB staff's submission.⁷⁰⁰

In its reply argument, Toronto Hydro submitted that OEB staff's submission should be rejected as there is an ongoing operational need for the Derecognition variance account because there is a significant amount of volatility that is experienced in the derecognition process due to things like asset age and the dynamic nature of Toronto Hydro's capital program. Toronto Hydro submitted that OEB staff's argument fails to consider the many practical challenges and considerations that affect Toronto Hydro's ability to accurately forecast and manage derecognition.

Toronto Hydro submitted that it requires a symmetrical Derecognition variance account. However, if the OEB is inclined to discontinue the account, Toronto Hydro proposed that derecognition expenses related to externally initiated plant relocations and expansion should be tracked in the Externally Driven Capital variance account.⁷⁰¹

Findings

The OEB notes that the Derecognition variance account was established in 2015 when Toronto Hydro had no experience with forecasting derecognition costs. The arguments presented by OEB staff and supported by BOMA, CCC, and Energy Probe are compelling. The OEB orders the discontinuation of the Derecognition variance account. The definition of the Externally Driven Capital variance account should be modified to include derecognition expense variances as suggested by Toronto Hydro.

⁶⁹⁹ OEB Staff Submission / p. 117.

⁷⁰⁰ BOMA Submission / p. 50; CCC Submission / pp. 11-12; and Energy Probe Submission / p. 38.

⁷⁰¹ Toronto Hydro Reply Submission / pp. 243-244.

Externally Driven Capital Variance Account**Background**

The Externally Driven Capital variance account captures the revenue requirement impact of the variance between approved externally driven capital spending and actual externally driven capital spending.⁷⁰²

OEB staff and CCC supported the continuation of the Externally Driven Capital variance account as proposed.⁷⁰³ However, SEC provided some comments regarding the operation of the account and BOMA suggested certain amendments to the account.⁷⁰⁴

SEC submitted that the Externally Driven Capital variance account shifts the risk from Toronto Hydro to ratepayers with respect to externally driven capital work. Specifically, SEC submitted that Toronto Hydro is protected against the risk of both more externally driven work requests than it had forecast, and cost overruns on those relocations that eventually need to be completed.⁷⁰⁵

In response, Toronto Hydro submitted that SEC's characterization of the Externally Driven Capital variance account is incorrect. Toronto Hydro submitted that, as the account is symmetrical, it protects both Toronto Hydro and ratepayers with respect to the effect of capital work that is outside of the utility's control. Toronto Hydro further noted that the account served its purpose of protecting customers from the risk of overpaying for work that ultimately did not materialize due to circumstances beyond Toronto Hydro's control over the 2015-2019 period.⁷⁰⁶

BOMA submitted that Toronto Hydro should not be allowed to include capital variances related to expansion projects that are caused by relocation requests in the Externally Driven Capital variance account.⁷⁰⁷

In its reply argument, Toronto Hydro submitted that combining relocation and expansion work can maximize efficiencies and reduce costs. Toronto Hydro noted that this feature

⁷⁰² Exhibit 9 / Tab 1 / Schedule 1 / p. 14.

⁷⁰³ OEB Staff Submission / p. 51; and CCC Submission / pp. 11-12.

⁷⁰⁴ BOMA Submission / p. 17; and SEC Submission / p. 12.

⁷⁰⁵ SEC Submission / p. 12.

⁷⁰⁶ Toronto Hydro Reply Submission / pp. 244-245.

⁷⁰⁷ BOMA Submission / pp. 17-18.

of the account was tested and approved by the OEB in the 2015-2019 Custom IR proceeding.⁷⁰⁸

BOMA also submitted that Toronto Hydro should absorb 50% of any relocation-related capital expenditures, above the amount included in rates, through the reduction of other, lower priority projects.⁷⁰⁹

Toronto Hydro responded that there is no basis for imposing BOMA's suggested arbitrary and punitive threshold.⁷¹⁰

Toronto Hydro further submitted that BOMA and SEC's arguments regarding the Externally Driven Capital Variance Account should be dismissed. Toronto Hydro stated that the evidence demonstrates that this account continues to be necessary and appropriate to protect customers and the utility with respect to third-party initiated relocation projects for which the timing and scope are uncertain and outside of management's control. Furthermore, Toronto Hydro submitted that there are a number of major projects on the horizon for the upcoming Custom IR term, which have not been included in the capital forecast on the basis that the costs (if and when they materialize) will be tracked in the Externally Driven Capital variance account. Toronto Hydro submitted that if the account is not approved as requested, the OEB should allow Toronto Hydro to include these projects in its forecasts at the draft rate order stage of the proceeding.⁷¹¹

Findings

The OEB finds that the continuation of the Externally Driven Capital variance account is appropriate. Toronto Hydro must respond to these requests and has limited ability to forecast this work. Toronto Hydro should add the derecognition expense variance related to externally driven capital work to this account.

⁷⁰⁸ Toronto Hydro Reply Submission / p. 246.

⁷⁰⁹ BOMA Submission / pp. 17-18.

⁷¹⁰ Toronto Hydro Reply Submission / p. 246.

⁷¹¹ Toronto Hydro Reply Submission / p. 247.

Discontinuance of Existing Accounts

Background

In Table 30, the accounts for which Toronto Hydro seeks closure are listed. These accounts are:

- Stranded Meter Costs deferral account
- IFRS USGAAP Transitional PP&E Amounts deferral account
- Monthly Billing variance account
- Operating Centres Consolidation Program deferral account
- OPEB Cash vs. Accrual variance account.⁷¹²

OEB staff submitted that no accounts should be closed as part of the current proceeding. OEB staff submitted that the disposition of the projected 2019 principal activity related to Group 2 DVAs should be deferred until Toronto Hydro's 2021 Custom IR update application. Therefore, it would be inappropriate to close any of the above noted accounts at this time as they contain balances that will form part of the disposition request in the 2021 Custom IR update application.

In the alternative, if the OEB approves the disposition of the projected 2019 Group 2 DVA principal activity as part of the current proceeding, OEB staff submitted that the above noted accounts should still not be closed at this time. Given that the 2019 principal activity is based on forecasts, OEB staff submitted that the related accounts should remain open in order to capture the difference between these forecasts and actuals. The residual balances tracked in these accounts should then be brought forward for disposition as part of the 2021 Custom IR update application.

OEB staff submitted that, while no accounts should be closed as part of the current proceeding, it supports the closure of the above noted accounts (plus the Derecognition variance account) after the 2019 audited balances are disposed of as part of the 2021 Custom IR update application (and stated that these accounts should not record any 2020 principal activity).⁷¹³

⁷¹² Toronto Hydro Argument-in-Chief / p. 78.

⁷¹³ OEB Staff Submission / p. 149.

Energy Probe and CCC supported OEB staff's submission.⁷¹⁴ No other parties provided submissions on this issue.

Findings

The OEB finds that it is appropriate that the accounts identified to be closed by Toronto Hydro should be closed at the end of 2019. To the extent that the balance at December 31, 2019 is different than the forecast approved in this application, the difference should be recorded in Account 1595 and brought forward for consideration as part of the 2021 Custom IR update application as discussed under Issue 8.2.

⁷¹⁴ Energy Probe Submission / p. 40; and CCC Submission / p. 16.

11 IMPLEMENTATION

In accordance with the findings set out under Issue 1.2, the approved effective date for new rates is January 1, 2020 with an implementation date of March 1, 2020.

The OEB expects Toronto Hydro to file a detailed draft rate order that reflects the findings set out in the Decision. The draft rate order shall, at a minimum, include the following (along with any other evidence that Toronto Hydro believes is necessary to support rates):

- Evidence supporting the implementation of required changes to rate base (including the change to the manner in which rate base is calculated⁷¹⁵), capital expenditures, cost of capital and PILs⁷¹⁶ and the impact on capital-related revenue requirement for the Custom IR term.
- Evidence supporting the implementation of required changes to OM&A and other revenue and the impact on non capital-related revenue requirement for the Custom IR term.
- Evidence presenting the updated CPCI calculations for the Custom IR term.⁷¹⁷
- Evidence supporting updated cost allocation⁷¹⁸ and rate design.
- Evidence supporting an updated calculation for REI funding based on assets in-service (historical actual and forecast) and a reconciliation of the opening balance for the REI funding calculation with the balance in Account 1533 as of December 31, 2019.
- Updated Revenue Requirement Workforms and certain Chapter 2 appendices⁷¹⁹ (and excel models) for the Custom IR term.

⁷¹⁵ The rate base calculation using monthly information should include evidence similar to Undertaking J1.9.

⁷¹⁶ The PILs update should include evidence similar to that provided in U-Staff-188 with respect to the impact of CCA tax rule changes resulting from Bill C-97 and an updated PILs model.

⁷¹⁷ The updated CPCI calculations should include evidence similar to that provided in Exhibit 1B / Tab 4 / Schedule 1 and Undertaking J1.8.

⁷¹⁸ This should include an updated cost allocation model.

⁷¹⁹ Appendices 2AB / 2BA / 2FA / 2FB / 2H / 2JA / 2K.

-
- Evidence supporting updated RTSRs.⁷²⁰
 - The incorporation in the draft Tariff of Rates and Charges for 2020 of updated retailer service charges, regulatory charges and specific service charges, as appropriate.
 - Evidence presenting the language for the status quo vault access policy.
 - Evidence supporting updated deferral and variance account balances and associated rate riders⁷²¹ (including a consideration of the OEB's findings with respect to rate smoothing set out under Issue 1.3 and the implementation date for DVA disposition set out under Issue 1.2).
 - Evidence supporting foregone revenue calculations for the period January 1, 2020 to February 29, 2020 including a proposal for the disposition period (considering the OEB's findings with respect to rate smoothing set out under Issue 1.3).
 - Draft Accounting Orders for the new deferral and variance accounts and the existing accounts that are adjusted.
 - Evidence presenting updated bill impacts for the Custom IR term (including for any rate smoothing proposals made in accordance with the findings under Issue 1.3).
 - The proposed Tariff of Rates and Charges for 2020 (including rate smoothing proposals made in accordance with the findings under Issue 1.3).

The deadlines associated with the draft rate order process are set out in the Order section of the Decision.

⁷²⁰ The updated RTSRs should be supported by updated RTSR workforms.

⁷²¹ The updated DVA balances and associated rate riders should be supported by updated DVA continuity schedules and rate rider tables.

12 ORDER

THE ONTARIO ENERGY BOARD ORDERS THAT:

1. Toronto Hydro's current Tariff of Rates and Charges shall be made interim as of January 1, 2020 and until such time as a final rate order is issued by the OEB.
2. Toronto Hydro shall file with the OEB, and forward to intervenors, a draft rate order and draft accounting orders reflecting the OEB's findings in the Decision by **January 21, 2020**.
3. OEB staff and intervenors shall file any comments on the draft rate order with the OEB, and forward the comments to Toronto Hydro, by **February 3, 2020**.
4. Toronto Hydro shall file with the OEB, and forward to intervenors, responses to any comments on its draft rate order by **February 10, 2020**.

All filings to the OEB must quote the file number, **EB-2018-0165**, be made in searchable / unrestricted PDF format electronically through the OEB's web portal at <https://pes.ontarioenergyboard.ca/eservice>. Two paper copies must also be filed at the OEB's address provided below. Filings must clearly state the sender's name, postal address and telephone number, fax number and email address. Parties must use the document naming conventions and document submission standards outlined in the RESS Document Guideline found at <https://www.oeb.ca/industry>. If the web portal is not available parties may email their documents to the address below. Those who do not have computer access are required to file seven paper copies.

All communications should be directed to the attention of the Board Secretary at the address below, and be received no later than 4:45 p.m. on the required date.

With respect to distribution lists for all electronic correspondence and materials related to this proceeding, parties must include the Case Manager, Lawrie Gluck at lawrie.gluck@oeb.ca and OEB Counsel, Michael Millar at michael.millar@oeb.ca.

ADDRESS

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DATED at Toronto **December 19, 2019**

ONTARIO ENERGY BOARD

Original Signed By

Christine E. Long
Registrar and Board Secretary