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BY EMAIL

April 12, 2019

Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: Hydro One Sault Ste. Marie LP
2019 Electricity Transmission Rate Application
OEB Staff Submission
OEB File No. EB-2018-0218**

In accordance with Procedural Order No. 5, please find attached OEB staff's submission in the above noted proceeding. Hydro One Sault Ste. Marie LP (Hydro One SSM) and all intervenors have been copied on this filing.

Yours truly,

Original Signed By

Fiona O'Connell
Project Advisor, Major Applications

Encl.

2019 ELECTRICITY TRANSMISSION RATES

HYDRO ONE SAULT STE. MARIE LP

EB-2018-0218

OEB STAFF SUBMISSION

April 12, 2019

Table of Contents

1	SUMMARY	3
1.1	Overview	3
1.2	Procedural Steps.....	4
2	DISCUSSION OF ISSUES	6
A.	GENERAL.....	6
2.1	Issue #A1 – Has Hydro One SSM responded appropriately to all relevant OEB directions from previous proceedings?	6
2.2	Issue #A2 – Has the 2019 revenue requirement been calculated appropriately, in accordance with OEB policies and practices?.....	7
2.3	Issue #A3 – Are the associated 2019 total bill impacts reasonable?.....	12
B.	REVENUE CAP PROPOSAL	13
2.4	Issue #B4 - Are the elements of Hydro One SSM’s revenue cap framework proposal reasonable and in accordance with prior decisions and with OEB policy, including its proposed future earnings sharing mechanism, incremental capital funding options, Z-factors, and any other mechanisms?	13
2.5	Issue #B5 – Are the parameters of Hydro One SSM’s proposed revenue cap plan, and more specifically, the inflation factor with transmission sector-specific weightings, and the proposed base productivity and stretch factors, as supported by Power System Engineering’s Total Cost Benchmarking and Total Factor Productivity Study reasonable?	17
2.6	Issue #B6 – Is the Power System Engineering’s sample of comparator utilities for Total Cost Benchmarking and Total Factor Productivity appropriate for Hydro One SSM?32	
2.7	Issue #B7. Is Hydro One SSM’s proposal to maintain the current approved load forecast and resulting charge determinants for the purposes of setting Uniform Transmission Rates over the entirety of the deferred rebasing period appropriate?..	35
C.	TRANSMISSION SYSTEM PLAN	37
2.8	Issue #C8 – Does the Transmission System Plan adequately address the OEB’s Renewed Regulatory Framework objectives?.....	37
2.9	Issue #C9 – Is the level of planned 2019 to 2026 expenditures appropriate and is the rationale for planning and pacing choices appropriate and adequately explained in the Transmission System Plan? Is Hydro One SSM’s asset management process	

reasonable and has it been adequately supported by its Transmission System Plan?

39

2.10 Issue #C10 – Do the proposed expenditures include the consideration of factors such as customer preferences, system reliability and asset condition? 51

2.11 Issue #C11 – Has Hydro One SSM adequately addressed operational synergies and savings in the Transmission System Plan, including with respect to its operational integration with Hydro One Networks Inc.? Is Hydro One SSM’s continuous improvement adequate? 54

2.12 Issue #C12. – Were Hydro One SSM’s customer engagement activities adequate to enable customer needs and preferences to be considered in the formulation of its proposed spending? 59

D. PERFORMANCE SCORECARD 60

2.13 Issue #D13. – Are Hydro One SSM’s proposed key performance indicators and scorecard complete, including adequate performance measure metrics, each with specific performance outcomes and implementation timelines? Do the outcomes adequately reflect customer expectations? Does Hydro One SSM’s proposed scorecard reflect the OEB’s requirements?..... 60

E. ACCOUNTING 63

2.14 Issue #E14. – Have all impacts of any changes in accounting standards, policies, estimates and adjustments been properly identified and recorded, and is the rate-making treatment of each of these impacts appropriate? 63

2.15 Issue #E15. –Are Hydro One SSM’s proposals for deferral and variance accounts, including the balances in the existing accounts and their disposition, and the continuation of existing accounts appropriate? 64

2.16 Issue#E16. – Is the proposed new deferral account to capture revenue deficiencies appropriate? 66

F. COST ALLOCATION 67

2.17 Issue #F17. –Is the transmission cost allocation proposed by Hydro One SSM appropriate?..... 67

G. EFFECTIVE DATE 69

2.18 Issue #G18 – Is the proposed effective date of January 1, 2019 for Hydro One SSM’s 2019 revenue requirement appropriate?..... 69

Appendix A – Suggested Options Regarding the TSP 71

1 SUMMARY

1.1 Overview

Hydro One Sault Ste. Marie LP (Hydro One SSM) filed an application with the Ontario Energy Board (OEB) on July 26, 2018 under section 78 of the *Ontario Energy Board Act, 1998* (OEB Act), and under the OEB's *Filing Requirements for Electricity Transmission Applications* (Filing Requirements).¹ Hydro One SSM is seeking approval for changes to its electricity transmission revenue requirement to be effective January 1, 2019 and related matters.

The OEB sets rates for rate-regulated electricity transmitters in Ontario by setting a revenue requirement for each transmitter. These individual revenue requirements are incorporated into the Uniform Transmission Rates (UTRs) that recover the revenue requirements uniformly from ratepayers across the province.

On October 13, 2016, the OEB approved an application by Hydro One Inc. to purchase all of the issued and outstanding voting securities of GLPT's general partner, Great Lakes Power Transmission Inc. (the MAADs decision).² The OEB accepted Hydro One Inc.'s proposal to defer rebasing of the new company, Hydro One SSM, for a ten-year period. Hydro One SSM was permitted to continue with GLPT's existing revenue requirement and to bring forward a subsequent rate application, proposing a revenue cap index framework for the deferral period.

Hydro One SSM's 2017 revenue requirement application was denied by the OEB.³ The OEB found that the application was deficient as it did not meet the guidance provided in the MAADs decision and the Filing Requirements. The OEB determined that Hydro One SSM's approved 2016 revenue requirement and charge determinants were to remain in effect in 2017.

Hydro One SSM did not file an application for a 2018 revenue requirement.

This revenue cap index application is an incentive-based revenue index plan from 2019 to 2026, comprising of the base revenue requirement that was approved in the 2016

¹ February 11, 2016

² EB-2016-0050 October 13, 2016 Decision and Order, pages 24 and 25; MAADs refers to mergers, acquisitions, amalgamations and divestitures

³ EB-2016-0356, Decision and Order, September 28, 2017

revenue requirement proceeding,⁴ followed by incentive-based and indexed adjustments to revenue requirement for the balance of the term.

Hydro One SSM's proposed 2019 revenue requirement of \$40,160,548 represents the combination of the following items and is based on a revenue cap index framework:⁵

- An increase relating to its proposed revenue cap index of 1.20% from its 2016 base revenue requirement of \$39,778,120
- A reduction of \$94,909 relating to the disposition of a credit balance in its deferral and variance accounts

Hydro One SSM updated⁶ its proposed revenue cap index from 1.20% to 1.40% in its argument-in-chief, while maintaining its proposed productivity factor of 0% and stretch factor of 0%.

In its Decision and Interim Rate Order,⁷ the OEB declared Hydro One SSM's current base revenue requirement of \$39,778,120⁸ interim, effective January 1, 2019, until such time as the final 2019 revenue requirement will be established by the OEB. The OEB directed Hydro One SSM to remove the \$787,816 in deferral and variance account (DVA) balances included in its total revenue requirement, as this amount was already collected.

Hydro One SSM's proposed 2019 bill impacts generated from its requested 2019 transmission revenue requirement are 0% for certain rate classes of Hydro One Networks Inc. Distribution (Hydro One Networks Distribution). These bill impacts are discussed in more detail below in section 2.3 of this document.

1.2 Procedural Steps

Each of Association of Major Power Consumers in Ontario (AMPCO), Energy Probe Research Foundation (Energy Probe), Independent Electricity System Operator, Power Workers' Union, School Energy Coalition (SEC), and Vulnerable Energy Consumers

⁴ EB-2015-0337

⁵ Exhibit D, Tab 2, Schedule 1, Page 4

⁶ Argument-in-Chief, Page 8, March 29, 2019

⁷ Decision and Interim Rate Order, December 6, 2018

⁸ In the EB-2016-0356 September 28, 2017 decision and order relating to Hydro One SSM's 2017 revenue requirement, the OEB denied an increase in Hydro One SSM's base revenue requirement for 2017. However, the OEB determined that another \$787,816 of DVA balances would be collected in 2017, consistent with the OEB's previous decision.

Coalition (VECC) were granted intervenor status. AMPCO, Energy Probe, SEC, and VECC also were granted eligibility for cost awards.

In Procedural Order No. 1, the OEB set dates for Hydro One SSM to deliver un-redacted versions of material for which it had requested confidential treatment. OEB staff and those individuals who had executed the OEB's form of Declaration and Undertaking with respect to confidentiality could receive the working papers prepared by Power Systems Engineering Inc. (PSE) for Hydro One SSM (PSE Working Papers). The PSE Working Papers pertained to the total factor productivity and total cost benchmarking analyses for Hydro One Networks Inc.'s transmission (Hydro One Networks Transmission) operations, on which studies Hydro One SSM based its proposed revenue cap plan.

The OEB issued its Decision on Confidentiality and Procedural Order No. 2, in which it determined that the PSE Working Papers would be treated as confidential.

The OEB's Decision on Confidentiality and Procedural Order No. 3 set out a timetable for a transcribed technical conference and the filing of expert evidence, including a provision for interrogatories and responses to interrogatories. OEB staff filed its expert evidence prepared by Pacific Economics Group Research LLC (PEG) entitled "*Empirical Research for Incentive Regulation of Transmission*" (Report) on February 4, 2019.

The OEB's Procedural Order No. 4 granted confidential treatment to the PEG Working Papers that supported the Report. Procedural Order No. 4 also granted an extension to the filing of interrogatories and interrogatory response related to the Report.

The OEB's Procedural Order No. 5 set out a timetable for an argument-in-chief, submissions, and a reply submission.

In accordance with Procedural Order No. 5, OEB staff has structured its submission in line with the approved Issues List⁹ for this proceeding.

⁹ January 10, 2019 Issues List Decision, Schedule A

2 DISCUSSION OF ISSUES

A. GENERAL

2.1 Issue #A1 – Has Hydro One SSM responded appropriately to all relevant OEB directions from previous proceedings?

Background

Hydro One SSM indicated how in its view it had complied with past OEB decisions,¹⁰ specifically with respect to Hydro One SSM's:

- 2015 and 2016 cost of service proceeding¹¹
- MAADs decision involving its acquisition by Hydro One Inc.¹²
- 2017 revenue requirement proceeding¹³

Hydro One SSM also indicated how in its view it had complied with the OEB's filing requirements.¹⁴

Submission

OEB staff submits that Hydro One SSM has generally complied with past OEB decisions and the OEB's Filing Requirements. Although Hydro One SSM has not specifically followed all of the past OEB decisions and the Filing Requirements, OEB staff takes no issue with Hydro One SSM's approach. OEB staff is of the view that Hydro One SSM has provided an adequate explanation when not adhering to some of

¹⁰ Exhibit A, Tab 2, Schedule 2

¹¹ EB-2014-0238; EB-2015-0337

¹² EB-2016-0050

¹³ EB-2016-0356

¹⁴ Exhibit A, Tab 2, Schedule 3 which describes: Filing Requirements for Electricity Transmission Applications Chapter 2, Revenue Requirement Applications, February 11, 2016; Filing Requirements for Electricity Transmission and Distribution Applications Chapter 5, Consolidated Distribution System Plan Filing Requirements, March 28, 2013; *Handbook to Electricity Distributor and Transmitter Consolidations*, January 19, 2016; EB-2016-0050 Decision and Order, Application for the acquisition of Great Lakes Power Transmission Inc. by Hydro One Inc., October 13, 2016; EB-2016-0356 Decision and Order, Hydro One SSM 2017 revenue requirement application, September 28, 2017

the past OEB decisions¹⁵ and observes that some of the Filing Requirements were not applicable to this proceeding.¹⁶

2.2 Issue #A2 – Has the 2019 revenue requirement been calculated appropriately, in accordance with OEB policies and practices?

Hydro One SSM has demonstrated the calculation of its proposed 2019 revenue requirement of \$40,160,548.¹⁷ However, Hydro One SSM's evidence filed to date does not address either the Ontario provincial government's Bill 2¹⁸ or the February 21, 2019 Directive. Bill 2 and the February 21, 2019 Directive are described in more detail below.

a) Bill 2 / Hydro One Accountability Act

Background

Schedule 1 of Bill 2 is the *Hydro One Accountability Act, 2018* (Hydro One Accountability Act or HOAA). Among other things, the HOAA amended section 78 of the OEB Act by adding the following new subsection (5.0.2) effective August 15, 2018:

In approving or fixing just and reasonable rates for Hydro One Limited or any of its subsidiaries, the Board shall not include any amount in respect of compensation paid to the Chief Executive Officer and executives, within the meaning of the *Hydro One Accountability Act, 2018*, of Hydro One Limited.

OEB staff notes that in the Hydro One Networks Transmission 2019 revenue requirement application,¹⁹ Hydro One Networks Transmission proposed that its Bill 2 adjustment in its application be performed on the same basis as Hydro One Networks Distribution 2018-2022 Custom Incentive Rate-setting (Custom IR) proposal.²⁰ Hydro One Networks Transmission proposed to adopt the OEB's direction in the Hydro One

¹⁵ For example, at Exhibit A, Tab 2, Schedule 2, Page 2, Hydro One SSM explained that the current proceeding is not a cost-of-service application that does not contain a component related to working capital, and as a result, an updated lead lag study was not filed

¹⁶ For example, section 2.8.11 Taxes or Payments In Lieu of Taxes (PILs) and Property Taxes of the February 11, 2016 Electricity Transmission Applications Filing Requirements

¹⁷ Exhibit D, Tab 2, Schedule 1, Page 4, Table 3

¹⁸ *The Urgent Priorities Act, 2018*

¹⁹ EB-2018-0130

²⁰ EB-2018-0130, Exhibit A, Tab 5, Schedule 1

Networks Distribution rate case to ensure consistency between its transmission and distribution businesses.

Hydro One Networks Transmission stated that in the Hydro One Networks Distribution proceeding,²¹ the OEB established a process to review and test Hydro One Networks Distribution's submission. Hydro One Networks Transmission stated that it did not intend to revisit the issue in its application. Instead, Hydro One Networks Transmission proposed to adopt the outcome of that proceeding and remove the relevant amounts of compensation from its transmission revenue requirement for those same employee positions determined in that proceeding to be subject to Bill 2.²²

Hydro One Networks Transmission proposed that an adjustment be made to remove executive compensation before the revenue cap index is applied for the 2019 revenue requirement.²³

In the decision issued on March 7, 2019 in the Hydro One Networks Distribution proceeding,²⁴ the OEB accepted Hydro One Networks Distribution's proposal to exclude all of its Executive Leadership Team (ELT) costs from the revenue requirement, instead of restricting it to only the executives of Hydro One Limited. The OEB also found that the rationale provided by Hydro One Networks Distribution regarding the methodology used to determine the breakdown of the cost reduction between OM&A and capital is reasonable.

OEB staff is uncertain, upon review of the service level agreement²⁵ between Hydro One Networks and Hydro One SSM whether any executive compensation is allocated to Hydro One SSM through the service level agreement or in any other way. OEB staff notes that the service level agreement has not been tested thoroughly in this proceeding as it was only introduced as a response to a technical conference undertaking.²⁶ Hydro One SSM also stated that it has zero employees,²⁷ as its employees transitioned to Hydro One Networks Transmission as of October 1, 2018 as a result of the operational integration.

OEB staff is also unclear whether any executive compensation amounts are embedded in Hydro One SSM's 2016 base revenue requirement that was approved in its 2016

²¹ EB-2017-0049

²² EB-2018-0130, Exhibit A, Tab 5, Schedule 1

²³ EB-2018-0130, Exhibit A, Tab 5, Schedule 1

²⁴ EB-2017-0049

²⁵ Undertaking – JT 1.1

²⁶ Undertaking – JT 1.1

²⁷ Technical Conference Transcript, January 14, 2019, pages 19-20

revenue requirement proceeding,²⁸ upon which Hydro One SSM's proposed 2019 revenue cap index is based.

In Hydro One Networks Transmission's reply argument,²⁹ it confirmed that its application and underlying revenue requirement are consistent with the company's approach in the Hydro One Networks Distribution proceeding³⁰ in respect of the HOAA and section 78(5.0.2) of the OEB Act. Hydro One Networks Transmission stated that no modifications were required to its proposed revenue requirement.

Submission

OEB staff notes that Hydro One SSM has not yet addressed the HOAA.

OEB staff notes that Hydro One Networks Transmission stated that it did not intend to revisit the HOAA issue in its application. OEB staff is of the view that this issue should also not be revisited in the current Hydro One SSM application. Hydro One Networks Transmission stated³¹ that it proposed to adopt the OEB's direction from its Hydro One Networks Distribution proceeding,³² as applicable to the circumstances of the Hydro One Networks Transmission application, to ensure consistency between its transmission and distribution businesses.

b) February 21, 2019 Directive

Background

On February 21, 2019, the Management Board of Cabinet issued a Directive under the authority of the HOAA (the Directive). According to its Outline, the Directive sets out certain compensation-related requirements for the Chief Executive Officer (CEO), other executives and boards of directors of Hydro One Limited and its subsidiaries, which Hydro One Limited must follow when developing its board and executive compensation framework (Compensation Framework) under the HOAA. The Directive requires Hydro One Limited to establish caps on executive compensation in the Compensation Framework – not only for CEO compensation, but also for executives in Hydro One Limited and its subsidiaries, and for the members of the boards of directors. The

²⁸ EB-2015-0337

²⁹ EB-2018-0130, March 28, 2018, pages 11-12

³⁰ EB-2017-0049

³¹ EB-2018-0130, Exhibit A, Tab 3, Schedule 1, Page 4

³² EB-2017-0049

Compensation Framework was to be filed by February 28, 2019, and received Management Board of Cabinet approval on March 8, 2019.³³

As also noted above regarding Bill 2 and executive compensation, OEB staff is unclear from reviewing the service level agreement³⁴ between Hydro One Networks and Hydro One SSM whether any director compensation is allocated to Hydro One SSM from this service level agreement or any other type of transfer of executive compensation to Hydro One SSM.

OEB staff is also unclear whether any director compensation amounts are embedded in Hydro One SSM's 2016 base revenue requirement that was approved in its 2016 revenue requirement proceeding,³⁵ upon which Hydro One SSM's proposed 2019 revenue cap index is based.

In Hydro One Networks Transmission's reply argument,³⁶ it indicated that the Directive limited executive and director compensation.³⁷

Hydro One Networks Transmission also confirmed in its reply argument that very minor modifications were made to its proposed revenue requirement to reflect the Directive.³⁸

Submission

OEB staff submits that given that the Directive makes the cap compensation applicable to executives and directors of Hydro One Limited and its subsidiaries, there may be a need for reductions in compensation costs in the final OEB-approved Hydro One SSM

³³ Ministry of Energy, Northern Development and Mines News Release, March 8, 2019

³⁴ Undertaking – JT 1.1

³⁵ EB-2015-0337

³⁶ EB-2018-0130, March 28, 2018, page 11 and 12

³⁷ Hydro One Networks Transmission also stated the following regarding compensation: the compensation was limited for Hydro One's CEO, limited compensation for other executives to 75% of the CEO's maximum direct compensation, capped annual increases to executive salaries at the Ontario CPI, and limited the compensation of Board members to \$80,000 annually and the Chair of the Board to \$120,000 annually.

³⁸ Hydro One Networks Transmission also stated that it has adopted a new executive compensation framework which is consistent with the Directive and is reflected in the modifications made to the Hydro One Networks' Transmission proposed 2019 revenue requirement, as follows:

- No other executive's total compensation will exceed 75% of the CEO's compensation
- Compensation factors will be adjusted in future years at the revenue cap index rate
- Compensation for the Board of Directors has been decreased to the levels indicated in the Directive

2019 revenue requirement to ensure compliance with the Directive and consistency with the Hydro One Networks Distribution decision and order.³⁹

Overall Submission – the HOAA and the February 21, 2019 Directive

OEB staff submits that Hydro One SSM should describe and quantify in its reply submission whether any reductions (e.g. executive and director compensation) to its 2019 proposed revenue requirement are needed. These reductions may be made to address the requirements of the HOAA and the February 21, 2019 Directive, and to ensure consistency with the Hydro One Networks Distribution decision and order,⁴⁰ as well as the Hydro One Networks Distribution draft rate order process. OEB staff notes that Hydro One SSM should also describe and quantify whether and how any executive and director compensation is allocated to Hydro One SSM – for example, whether the allocation is made through the service level agreement or from any other type of transfer of executive and director compensation to Hydro One SSM.

Hydro One should also address whether any executive and director compensation amounts are embedded in Hydro One SSM's 2016 base revenue requirement that was approved in its 2016 revenue requirement proceeding,⁴¹ upon which Hydro One SSM's proposed 2019 revenue cap index is based. Any such embedded executive and director compensation should be quantified and removed.

In its reply submission, Hydro One SSM should provide a table showing the reductions to executive compensation, separating the CEO and CFO from the Other ELT Members, as well as showing board of directors' costs. The table should also distinguish between amounts allocated to OM&A and capital. Hydro One SSM should also show the calculation of the impact of these executive and director compensation amounts on Hydro One SSM's 2019 revenue requirement.

OEB staff submits that an adjustment should be made to remove executive and director compensation before the revenue cap index is applied for the 2019 revenue requirement.

OEB staff suggests that it and intervenors be allowed to make submissions in response to Hydro One SSM's HOAA and Directive-related filing in conjunction with their

³⁹ EB-2017-0049

⁴⁰ EB-2017-0049

⁴¹ EB-2015-0337

comments on Hydro One SSM's draft rate order, and Hydro One SSM may then reply to those submissions.

Given that the OEB issued its Hydro One Networks Distribution⁴² decision and order on March 7, 2019, OEB staff submits that the OEB should direct Hydro One SSM to update the HOAA and February 21, 2019 adjustments in the current application to reflect any impacts resulting from the March 2019 decision. In particular, OEB staff submits that the OEB should direct Hydro One SSM to file its calculations and relevant supporting evidence reflecting any changes in the amount of the adjustments as part of the draft rate order.

2.3 Issue #A3 – Are the associated 2019 total bill impacts reasonable?

Background

Hydro One SSM has shown the calculation of the 2019 total bill impacts from its proposed 2019 transmission revenue requirement.⁴³

Hydro One SSM stated⁴⁴ that when its updated revenue cap adjustment of approximately \$550,000 to its current base revenue requirement is added to the UTRs, this represents an increase in a typical customer's monthly bill of less than 1 cent and is sufficiently immaterial that it does not cause any actual increase in UTRs for 2019. Hydro One SSM estimated that the proposed increase of \$550,000 would impact the UTRs by less than 0.04%.⁴⁵

Submission

OEB staff has no concerns with the manner in which Hydro One SSM has calculated the bill impacts nor with the marginal increase to customer bills for 2019.

⁴² EB-2017-0049

⁴³ Exhibit D, Tab 2, Schedule 2, Table 1 and Table 2

⁴⁴ Argument-in-Chief, Page 9, March 29, 2019

⁴⁵ Argument-in-Chief, Page 22, March 29, 2019

B. REVENUE CAP PROPOSAL

2.4 Issue #B4 - Are the elements of Hydro One SSM's revenue cap framework proposal reasonable and in accordance with prior decisions and with OEB policy, including its proposed future earnings sharing mechanism, incremental capital funding options, Z-factors, and any other mechanisms?

Revenue Cap Proposal Overall

Background

Hydro One SSM has proposed that its revenue requirement (and hence the rates to recover it) be adjusted by a “revenue cap” formula.⁴⁶ The formula takes the form of:

$$RR_t = RR_{t-1} \times (1 + (I_t - (X + stretch) \pm Z))$$

where

RR_t is the revenue (requirement) for year t

I_t is the inflation index for year t

X is the base X-factor

$stretch$ is the stretch-factor

Z is any qualifying and allowed exogenous factor(s).

Submission

Normally, the revenue cap would include a growth term g (i.e., the adjustment would be $(I_t - (X + stretch) + g \pm Z)$). This growth factor is not required for a price cap as the formula adjusts prices and not revenue requirement. Hydro One SSM has proposed, and is supported by its consultant PSE, that the growth factor be omitted ($g = 0$) as it is not proposing any change to its load forecast and billing determinants. From a practical perspective, based on the assessment of Hydro One SSM's load forecast (discussed under Issue 7), OEB staff is not opposed to the proposal of a “0” growth factor.

As is discussed later, the Incremental Capital Module (ICM) could be another adjustment, and the Earnings Sharing Mechanism (ESM) would be a further adjustment, if either of these is realized during the plan term.

⁴⁶ Exhibit D, Tab 1, Schedule 1, pp. 1-2

In its argument-in-chief, Hydro One SSM submits that its revenue cap proposal “is consistent with the requirements outlined on page 5 of Chapter 2 of the Filing Requirements namely: (i) the inclusion of an inflation measure; and (ii) the inclusion of both a productivity and stretch factor informed by benchmarking.”⁴⁷ Hydro One SSM also notes that it has proposed Z-factor, ICM and ESM treatment as part of its revenue cap plan. These are consistent with the requirements of the OEB’s *Handbook for Utility Rate Applications*⁴⁸ (Rate Handbook), while the proposed ESM was approved by the OEB in the MAADs proceeding.⁴⁹

The OEB’s Rate Handbook identifies the revenue cap as a rate-setting option that may be appropriate for electricity transmitters, on the basis that costs for capital investments and the operations of these are, to a great extent, invariant to the level of demand and usage of transmitters’ high voltage systems.

OEB staff also notes the method by which transmitters recover their costs (or, more correctly, their revenue requirements) through the UTR process. The OEB establishes system-wide transmission rates to recover the aggregate revenue requirement of all transmitters, and then establishes distributor-specific Retail Transmission Service Rates (RTSRs) paid by the distributor’s customers for the transmission charges paid by the distributor. Unlike in a traditional revenue cap, where each year’s adjusted revenue (or revenue requirement) cap must be translated into rates to recover it, Ontario does not establish transmitter-specific rates. It is only the annual revenue requirement, whether set by a cost of service approach, a rate adjustment, or held frozen, which is needed to calculate the aggregate transmission system revenue requirement on which that year’s UTRs (and, by extension, RTSRs) are derived.

OEB staff thus submits that Hydro One SSM’s revenue cap proposal, as a general rate-setting approach, is consistent with OEB policy, and is appropriate given the OEB’s established approach for setting and recovering the costs of electricity transmitters. However, OEB staff does have comments and concerns on some of the proposals for specific parameters and other factors of Hydro One SSM’s revenue cap proposal, and discusses these in the following sections.

⁴⁷ Argument-in-Chief, March 29, 2019, p. 10

⁴⁸ [Handbook for Utility Rate Applications](#), October 13, 2016, p. 24

⁴⁹ Argument-in-Chief, March 29, 2019, p. 7 referred to EB-2016-0050

Incremental Capital Module

Background

Hydro One SSM has proposed that the OEB's ICM be available to it, if necessary during the term of the proposed revenue cap plan.⁵⁰ In response to an interrogatory, Hydro One SSM noted that it has not identified any specific capital projects in its Transmission System Plan which would qualify for ICM treatment at this time.⁵¹

Submission

OEB staff submits that Hydro One SSM's proposal for the availability of the ICM is appropriate for its revenue cap proposal, and is consistent with OEB policy as outlined in the Rate Handbook and in the Transmission Filing Requirements. OEB staff submits that no major alterations from the current ACM/ICM policies as documented in OEB documents for the electricity distribution sector are necessary; any application made by Hydro One SSM should be as consistent with the policy and its existing application in the electricity distribution sector as is possible. In its response to an OEB staff interrogatory, Hydro One SSM stated the omission of the growth factor should also be allowed in the materiality threshold calculation, since it has not proposed a growth factor g in its revenue cap proposal. Hydro One SSM also stated that all capital expenditures on multi-year projects should be allowed, since transmission projects tend to be larger and multi-year, in contrast to many distribution capital projects.⁵²

OEB staff submits that neither proposal is a departure from current policy and practice. If Hydro One SSM's approved growth factor is 0, then OEB staff concurs that this is what should be used in the materiality threshold calculation. On multi-year projects, OEB staff notes that applications for ICM treatment involving multiple years of capital expenditures have been considered and approved, based on the specific circumstances of the cases for some distributors; thus, Hydro One SSM's proposal is not a deviation from current policy and practice in OEB staff's view.⁵³ That being said, Hydro One SSM does not foresee any ICM-qualifying projects now, and OEB staff concurs that the need for an ICM appears unlikely during the plan term based on the evidence (e.g., Hydro One SSM's TSP).

⁵⁰ Exhibit A, Tab 2, Schedule 1, p. 4

⁵¹ Exhibit I, Tab 4, Schedule 1

⁵² Exhibit I, Tab 1, Schedule 3

⁵³ This was further discussed during the Technical Conference. Technical Conference Transcript, January 14, 2019, p. 22/l. 11 to p. 25/l. 8

That said, subject to any findings the OEB may make on Hydro One SSM's TSP and its capital budgets going forward, Hydro One SSM should explain any variances from its budget as identified in this current TSP, for a year in which it may seek an ICM, as this is the starting point of the available incremental capital envelope calculation,

Earnings Sharing Mechanism

Background

Hydro One SSM has proposed that an ESM be part of its revenue cap plan, beginning in 2022.⁵⁴ The absence of an ESM prior to then is in alignment with the OEB's rate-setting policies related to Mergers, Acquisitions, Amalgamations and Divestitures, and with the OEB's decision approving Hydro One Inc.'s acquisition of GLPL.^{55,56}

Submission

OEB staff sought further information on Hydro One SSM's proposed ESM through an interrogatory.⁵⁷ OEB staff is satisfied that Hydro One SSM's proposed ESM is consistent with the OEB's findings in the MAADs proceeding⁵⁸ and with the OEB's policies for ESMs generally. As such, OEB staff submits that Hydro One's proposed ESM for 2022-2026 is reasonable.

Z-factors

Background

Hydro One SSM has stated the following in its Application:⁵⁹

13. HOSSM will seek to establish a new Z-factor deferral Account 1572 to recover the material costs, associated with any unforeseen event that is outside the control of HOSSM, and which meets the defined

⁵⁴ Exhibit B1, Tab 1, Schedule 1, p. 6. Also, Exhibit A, Tab 2, Schedule 1, p. 4:

15. As approved by the Board in EB-2016-0050, HOSSM will implement an Earnings Sharing Mechanism ("ESM") that will take effect during the last five years of the rebasing deferral period (2022 to 2026 inclusive).

⁵⁵ EB-2016-0050

⁵⁶ Exhibit A, Tab 1, Schedule 1, p. 1

⁵⁷ Exhibit I, Tab 1, Schedule 56 (OEB Staff Interrogatory #56), specifically b) i. and b) ii.

⁵⁸ EB-2016-0050

⁵⁹ Exhibit A, Tab 2, Schedule 1, p. 4. Exhibit E, Tab 1, Schedule 1, pp. 1-2 provides few other details to augment this.

causation, materiality and prudence criteria in accordance with the OEB's Chapter 2, Filing Requirements for Electricity Transmission Applications dated February 11, 2016.

Submission

OEB staff notes that the Rate Handbook provides for Z-factors, in accordance with the OEB's established methodology specifically with respect to the qualifying criteria and regulatory accounting treatment, for rate-setting options, including Custom IR.⁶⁰ As has been the policy and practice regarding Z-factor applications in the natural gas and electricity distribution sectors, Z-factors are for rare events that involve material costs to be recovered and are exogenous (i.e., out of the control of and beyond the ability of the management to plan for).

OEB staff submits that Hydro One SSM's proposal for Z-factor treatment is reasonable. In the situation where Z-factor treatment is necessary, OEB staff submits that any incremental revenue requirement impact should be dealt with as an adjustment to the revenue requirement in the year that the application is made, in a manner akin to that by which ICM and ESM impacts would be factored into Hydro One SSM's revenue requirement used for calculation of annual UTRs. Hydro One SSM should be expected to follow the OEB's requirements for informing the OEB within established timelines following an event for which Z-factor treatment may be sought. Per Sections 2.1.1 and 2.8.12 of Chapter 2 of the Transmission Filing Requirements, for Hydro One SSM the Z-factor materiality threshold would be 0.5% of the annual revenue requirement.

2.5 Issue #B5 – Are the parameters of Hydro One SSM's proposed revenue cap plan, and more specifically, the inflation factor with transmission sector-specific weightings, and the proposed base productivity and stretch factors, as supported by Power System Engineering's Total Cost Benchmarking and Total Factor Productivity Study reasonable?

Hydro One SSM, as a stand-alone entity, has an approximate 2.5% share of the provincial transmission revenue requirement. Ordinarily, a revenue cap application would warrant proportional discussion and testing for a utility of this size. However, this is the first complete application for an adjustment to Hydro One SSM's revenue requirement under a revenue cap framework, and the framework approved by the OEB

⁶⁰ Rate Handbook, *op. cit.*, p. 27

in this proceeding will establish the parameters for adjustments to Hydro One SSM's revenue requirement for the remainder of its rebasing deferral period. This has necessitated the filing of additional evidence, including expert evidence related to productivity, and OEB staff has provided a detailed assessment of Hydro One SSM's evidence and proposals in this submission.

OEB staff also expects that, given the similar and updated studies filed in the recently submitted 2020-2022 Hydro One Transmission rate application, the detailed assessment performed by OEB staff and the parties in this Hydro One SSM proceeding will be of assistance to OEB staff in their review of the Hydro One Transmission exhibits, and that may potentially reduce the time needed for review and testing of the studies in the Hydro One Transmission proceeding.

In its decision approving the acquisition of GLPL by Hydro One, the OEB stated the following:⁶¹

The OEB recognizes that the Handbook better defines the rate-setting framework for the deferred rebasing period for distributor consolidations. However, the deferral period is predicated on maintaining existing rates that are already in a rate order.

Consolidating distributors are permitted to move to an IRM rate-setting methodology once their existing rate terms expire. The OEB also recognizes that the incentive regulation framework for transmitters is not as well defined as it is for distributors, whose stretch factors are established through benchmarking by the OEB. Nevertheless, the OEB has put in place its expectations for revenue cap index frameworks, as defined in the Transmission Filing Requirements.

The OEB notes that a cost of service application was filed by GLPT on August 26, 2016. However, the OEB finds that GLPT can continue with its existing revenue requirement[,] and may bring forward a separate rate application to seek approval for the elements of a specific revenue cap index framework, for the deferral period. Such an application would be expected to encompass the following components as required by the Transmission Filing Requirements: the annual adjustment (expected inflation, productivity, stretch factors) and proposed performance reporting and monitoring (draft scorecard, RRR filings, etc).

⁶¹ Decision and Order, EB-2016-0050, October 13, 2016, pp. 18-19

PSE has made proposals for all of the elements for the revenue requirement adjustment formula in its application. In its argument-in-chief, Hydro One SSM submits that all of its proposed parameters for inflation, base productivity and stretch factors, as supported by the evidence of PSE, be approved.⁶² OEB staff makes submissions on each of these revenue cap formula parameters in the following sections.

Inflation Index

Background

Hydro One SSM has proposed a 2-factor Input Price Index (IPI) to measure inflation for the annual revenue cap adjustment. The general methodology for the 2-factor IPI is the same as that which the OEB has adopted for electricity distribution⁶³ and for, more recently, a five-year price cap plan for Ontario Power Generation Inc.'s prescribed hydroelectric generation assets.^{64,65} However, Hydro One SSM has proposed different weights for the labour and non-labour components, representative of the electricity transmission sector specifically, in compliance with the OEB's expectations from the decision in the 2017 revenue requirement decision.⁶⁶

Hydro One SSM's consultant, PSE, did the analysis which it documented and recommended in its evidence,⁶⁷ and which Hydro One SSM has proposed in its application.

Submission

The following table documents the weights currently used in IPI's adopted by the OEB for different sectors:⁶⁸

⁶² Argument-in-Chief, March 29, 2019, p. 10-12

⁶³ EB-2010-0373

⁶⁴ EB-2016-0152

⁶⁵ Also, for Hydro Ottawa's current Custom IR plan (EB-2015-0004), operating, maintenance and administrative costs are inflated by a similar 2-factor IPI with OM&A-specific weights.

⁶⁶ Decision and Order EB-2016-0356, September 28, 2017, p. 5

⁶⁷ Exhibit D, Tab 1, Schedule 1, Attachment 1, pp. 12,49

⁶⁸ From the preamble to Exhibit I, Tab 1, Schedule 57 (OEB Staff Interrogatory #57)

Table 1 – Weights Currently Used in IPI’s Adopted by the OEB

			Component	
			Labour	Non-labour (capital and materials)
Data Series			AWE	GDP-IPI (FDD)
Firm/Sector	IPI measure	Regulatory Filing Reference No.	Weight	
<i>Electricity Distribution</i>	<i>IPI^{Dx}</i>	EB-2010-0379	30%	70%
<i>Ontario Power Generation (prescribed hydroelectric generation)</i>	<i>IPI^{OPG}</i>	EB-2016-0152	12%	88%
<i>Enbridge/Union Gas merger – Natural Gas</i>	<i>IPI^{NG}</i>	EB-2017-0306/-0307		100%
<i>Hydro One SSM – Electricity Transmission (proposed)</i>	<i>IPI^{Tx}</i>	EB-2018-0218	14%	86%

The labour and non-labour weights are based on a simple average of the individual utility weights, for the transmission utilities in PSE’s sample; the size of each utility was not taken into account. OEB staff questioned this during the technical conference with PSE’s witness, on the basis that larger utilities may have opportunities for economies of scale (affecting labour, capital and material proportions of costs) relative to smaller utilities. Hydro One SSM responded to an undertaking to provide labour and non-labour weights calculated as averages of the utility data, weighted by the sizes of the utilities in the sample (i.e., for the sector in aggregate). The labour and non-labour weights would shift slightly, to 14.8% labour (rounded to 15%) and 85.2% non-labour (rounded to 85%).⁶⁹

In its argument-in-chief, Hydro One SSM proposed that the 2-factor transmission IPI with weights of 14% labour and 86% non-labour be approved.⁷⁰

In OEB staff’s submission, the weighted labour and non-labour proportions are more representative of the transmission sector as a whole, in comparison to the proposed (unweighted) proportions. OEB staff supports the adoption of a 2-factor IPI as it has for

⁶⁹ Technical Conference Transcript, January 14, 2019, p. 58/l. 3-18

⁷⁰ Argument-in-Chief, March 29, 2019, p. 11

electricity distribution and for OPG. OEB staff submits that an IPI using the weighted labour and non-labour weights of 15% labour and 85% non-labour for electricity transmission as documented the response to Undertaking JT1.2 would be preferred, as, due to the weighting, it is a more accurate representation of the transmission sector as a whole.

OEB staff notes the proliferation of a number of different IPIs for use in the different sectors. With the electricity transmission IPI proposal, there would be five different IPIs in use for Ontario energy rate-setting. These five indices all rely on the same two data series reported by Statistics Canada, and only differ by the weights for the non-labour components. For the most part, the index values in any given year will only differ by ± 0.1 or ± 0.2 percentage points, which will depend on the relative changes in the Statistics Canada data series (Average Weekly Earnings, Ontario – all business except unclassified, including Overtime, for labor, and the Implicit Price Index for Canadian Gross Domestic Product (Final Domestic Demand) (commonly referred to as GDP-IPI) for non-labour),⁷¹ and the sector-specific weights.

In OEB staff's view, while the intention of having sector-specific weights has merit, the current approach of having several IPIs which all rely on the same one or two data series, but differ only by weighting factors (themselves estimates) ascribes more precision than perhaps is warranted. This was also considered in the recent MAADs and rate-setting proceeding for Enbridge Gas Distribution Inc. and Union Gas Limited.⁷² In an undertaking filed by the applicants to a question from the OEB during the oral hearing, the applicants demonstrated that, in the long run, there was little difference between their proposed GDP-IPI inflation index and a sector-weighted 2-factor IPI.⁷³ In its decision in that case, the OEB approved the proposed GDP-IPI inflation index.

OEB staff submits that the simplicity of a single index such as GDP-IPI is attractive. It is not fully clear that the sector-specific 2-factor IPI indices are accurately measuring differences in input price inflation for the sectors, as the labour and non-labour price index series themselves are macroeconomic in nature (as they should be). Further, as GDP is a measure of outputs (the products made and services provided by businesses), GDP-IPI is really a reflection of output price inflation. As a result, it proxies the impact also of inflation of all inputs – materials, capital, labour and even changes in the cost of capital – used to produce the output products and services. Firms, of course, will pass on inflation in the prices of inputs to production, but their ability to do so is subject to

⁷¹ Non-labour is the aggregate of material and capital

⁷² EB-2017-0306/EB-2017-0307

⁷³ Exhibit J5.2, EB-2017-0306/0307, May 23, 2018. This exhibit is referenced in the preamble to Exhibit I, Tab 1, Schedule 57 (OEB Staff Interrogatory #57).

market forces.⁷⁴ Thus, GDP-IPI, as a measure of inflation of output prices (GDP), is also a proxy for input price inflation.

A further argument for the suitability of GDP-IPI is that many of the inputs for utilities are also outputs of other businesses; this would include vehicles, poles, transformers, wire, computer hardware and software, external consulting and contract work. Thus GDP-IPI also serves as a proxy for input price inflation for many businesses, including utilities.

While OEB staff supports the two-factor IPI proposed by Hydro One SSM but with the variation in weightings discussed earlier in this section, OEB staff is of the view that GDP-IPI is a reasonable option as a single-factor IPI for simplicity while maintaining the accuracy of the inflation index; this is a variation on the two-factor IPI methodology, with weights of 0% for labour and 100% for non-labour.

OEB staff notes that adoption of any of the proposals would have no material impact, as the IPI based solely on GDP-IPI or either 2-factor weighting approach, would be 1.4% for 2019.⁷⁵

X-factor and Stretch Factor

Base X-factor

Background

PSE, in its analysis, has estimated a -1.71% average annual TFP trend for the electricity transmission sector, based on a sample period from 2004 to 2016 and for a set of 43 U.S. investor-owned utilities with transmission assets and operations, and Hydro One Networks Transmission.⁷⁶ However, PSE recommended, and Hydro One SSM has proposed a base X-productivity factor of 0%, recognizing that the OEB, in previous decisions, has not accepted negative base productivity factors.⁷⁷

⁷⁴ Competing firms may face similar inflation on the prices of inputs, but one firm could gain a competitive advantage if it finds productivity gains to help offset inflation in the cost of production relative to its competitors. In other words, firms in competitive markets face inflation less productivity (I – X) pressures similar to the standard price cap formula.

⁷⁵ Given that GDP-IPI has the largest weight in any of the proposed IPIs, this relationship would be expected to hold, with differences being no more than ± 0.2 percentage points.

⁷⁶ Exhibit D, Tab 1, Schedule 1, Attachment 1, p. 10

⁷⁷ Exhibit D, Tab 1, Schedule 1, p. 4, Exhibit D, Tab 1, Schedule 1, Attachment 1, p. 12. In response to Exhibit I, Tab 1, Schedule 58 (OEB Staff Interrogatory #58), PSE clarified that its recommendations would also hold for Hydro One SSM's proposed revenue cap plan.

OEB staff retained its own expert, PEG, to provide an assessment of PSE's evidence and recommendations, and of Hydro One SSM's revenue cap proposal generally. PEG also undertook its own analysis and documented alternative TFP and total cost benchmarking models. PEG participated in the technical conference, seeking clarification from the PSE consultant. PEG's evidence is filed on the record,⁷⁸ and PEG also filed responses to interrogatories from parties.⁷⁹

PEG's analysis provided a different transmission sector TFP trend of -0.34% for the sample of U.S. utilities and Hydro One Networks Transmission. Combined with the results of its alternative total cost benchmarking analysis of 0.34% (discussed below), PEG recommended a combined X-plus-stretch factor of 0%.

PEG's analysis started from PSE's dataset, but adjusted certain data items, and also added data. PEG extended the data from 1996 to 2016 for the U.S. transmission utilities. PEG estimated a TFP trend of -1.82% for the 2005-2016 range used by PSE, but -0.31% over the 1995-2016 period. PEG noted that there was significant changes in U.S. energy policy that transmitters were reacting to during the period from 2005 to the early 2010s, and submitted that PSE's approaches did not handle the impacts of structural changes on capital and OM&A well over this period.⁸⁰

Submission

While OEB staff notes, and generally agrees with, PEG's critiques of details of PSE's analysis, OEB staff also acknowledges that there are limitations with the evidence of both experts. In the final steps prior to the submission phase, PEG filed interrogatory responses on its evidence. Hydro One SSM and PSE asked a number of interrogatories on certain details of PEG's evidence. OEB staff acknowledges that both analyses have limitations; this is due more to the newness of the application of these sophisticated econometric analyses in this (electricity transmission) sector. The lack of precedential studies has been noted by both consultants.

As mentioned later in this submission, OEB staff considers that the TFP and total cost benchmarking analyses are in their infancy in this sector, in a way similar to 1st and 2nd Generation PBR/IRM for electricity distribution in 1999 and 2006. The analyses are informative, but OEB staff submits that the OEB should consider the weight it gives to these. The OEB should also give consideration to the knowledge and experience that it

⁷⁸ Exhibit M1, February 4, 2019

⁷⁹ Exhibit L1, filed March 18, 2019

⁸⁰ Exhibit M1, pp. 2-4, 7-14

has gained with nearly two decades of experience of PBR/IRM for natural gas and electricity distribution, and more recently with hydro-electric generation.

OEB staff notes that both PSE and PEG have recommended base productivity factors of “0”, and this is what Hydro One SSM has also proposed. There is thus no disagreement on the proposed base X-factor.

OEB staff concurs with this. However, OEB staff submits that PEG’s long-run TFP trend around -0.3% per annum is more plausible. OEB staff does not view as being credible PSE’s estimate of a -1.71% TFP trend for the sector, which is then used to support the argument that there is a big stretch factor of +1.71% implicitly in the proposed “0” base X-factor, and hence no need for a separate stretch factor.

Compounded over the 12 years of PSE’s sample, a -1.71% annual TFP this would imply nearly a 20% reduction in transmission sector productivity from 2005 to 2017.⁸¹ Electricity is integral to our modern society and economy in North America. While generation and distribution are larger, and more variable, components of electricity production and delivery, high voltage transmission is not insignificant. A 20% reduction in productivity would be a drag on many North American businesses. OEB staff acknowledges that matters such as system reliability, conservation, and distributed generation do impact on construction and operation of the grid and on its utilization, but question that productivity would be so low on a sustained and widespread basis in Ontario and much of the United States.

In OEB staff’s view, PEG’s analysis of the transmission sector results in a more reasonable estimate of -0.34%. OEB staff acknowledges that there are many factors that, quite plausibly, contribute to a lower productivity trend in the last decade or so, both in Ontario (and the rest of Canada) and in the U.S. For example, energy conservation, both promoted and “natural”, can lead to lower utilization of the “sunk” HV system assets. The general transition from manufacturing to service-based economies seen in North America – and in other developed economies around the world – is a driver. More distributed generation, including wind and solar, and smaller gas-turbine generators are being connected to the network, requiring a more complicated design and more protection and controls to manage flows on the system. Standards for reliability, safety, and environmental matters have increased. There are added costs for these. However, in some instances, there are also added revenues. For instance, generators are required to pay for incremental costs to connect them to the grid.

⁸¹ In other words, the same inputs in 2016 would result in only 80% of the same outputs in that year, compared to production in 2004.

These are additional outputs, which are not included in or well proxied by the single output measured of system demand (or “ratcheted” system demand). While the costs are all there, and converted into indices of “inputs” for the TFP analysis, there is only one measure of output. OEB staff concurs that this is the most important output, but it is not the only one. Omission of other outputs, whose importance is likely increasing over time with growth of technology, smart grid and distributed and “green” energy, would thus be a factor explaining, in part, the negative TFP trend of PSE’s analysis. We know the rate of change of inputs, but we do not know the rate of change of all outputs since some are missing.⁸²

In OEB staff’s view, “0” is a plausible estimate of the long-run TFP annual growth trend, similar to what the OEB has also found as being reasonable for Ontario electricity distribution in the current IRM plan design.⁸³

Stretch factor (and overall X-factor)

Background

Hydro One SSM has proposed a stretch factor of 0%. This proposal is based on the total cost benchmarking analysis in PSE’s evidence, and which PSE recommends for Hydro One Networks and, in response to an OEB staff interrogatory, also for Hydro One SSM.⁸⁴

In its total cost benchmarking analysis, PSE found that Hydro One Networks was a superior cost performer relative to the predicted benchmark from its total cost model. In other words, based on the model estimated from the sample of U.S. utilities and Hydro One Networks Transmission for the period 2004-2016, Hydro One Networks’ actual cost performance of its transmission operations is materially superior to (i.e., lower than) the expected cost performance after adjusting for Hydro One Networks Transmission’s business conditions. PSE also estimated that Hydro One Networks Transmission’s superior cost performance would continue for 2017 to 2022 for the then-expected Custom IR plan.⁸⁵

⁸² In its response to Exhibit I, Tab 1, Schedule 63 (OEB Staff Interrogatory #63), PSE documents that transmission line length, reliability and some other measures were used as additional outputs in a 2016 study filed in a proceeding before the Australian Energy Regulator,

⁸³ [Report of the Board on Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario’s Electricity Distributors, \(EB-2010-0379\)](#), November 21, 2013 and corrected on December 4, 2013, pp. 17-18

⁸⁴ Exhibit I, Tab 1, Schedule 58

⁸⁵ PSE’s study was originally intended to be filed for a Hydro One Networks Transmission Custom IR plan

PEG conducted an alternative cost benchmarking study which it documented in its evidence. Its analysis was for the same time period, and started from the PSE's data, augmented with some changes in data and variable construction. PEG noted that Hydro One Networks Transmission's cost performance was better than average in the initial period, but that it was declining over time.⁸⁶ PEG noted a -17.43% cost performance relative to benchmark for 2004-2016, but this was -9.43% for the last years of actuals (2014 to 2016) and -1.23% for the forecasted 2017-2022 period.⁸⁷ PEG concluded that Hydro One Networks Transmission had, in the long run, "normal" cost performance relative to the sample of U.S. transmitters, and recommended a stretch factor of +0.3%.⁸⁸

Finally, as used in Ontario energy incentive regulation, the X-factor of the rate-adjustment form is the sum of the base X-factor, representing the sector productivity trend, and the stretch factor, representing the stretch that is expected of firms, in part due to the flexibility in managing operations, and the opportunities to earn additional returns to benefit shareholders.

Hydro One SSM has proposed an overall X-factor of 0%, calculated as the sum of 0% base X and a 0% stretch factor. PSE has supported Hydro One SSM's proposal. They have argued that the 0% proposed base X-factor implicitly includes a significant 1.72% stretch factor based on PSE's historical TFP trend result for the transmission sector.

OEB staff's consultant, PEG, proposed a 0% overall X-factor, composed of a -0.34% base X-factor and an offsetting stretch-factor (i.e., +0.34%) based on its analysis in its evidence.⁸⁹

Submission

While accepting of the general approach of PSE for its cost benchmarking analysis, OEB staff has reservations about certain elements of the approach. Two, in particular, are important, in OEB staff's view:

- 1) The absence of other Canadian utilities from the sample

for 2019-2022. This was not filed, but Hydro One Networks Transmission has filed a 2020-2022 Custom IR plan, with an updated PSE study; this application is being considered under EB-2019-0082.

⁸⁶ Exhibit M1, p. 24 of 55

⁸⁷ *Ibid.*, p. 26 of 55, Table 4

⁸⁸ *Ibid.*, p. 27 of 55

⁸⁹ Exhibit M1, page 27 of 55

- 2) The construction of the new infrastructure “hardening” variable, particularly with the estimation of the value for Hydro One Networks Transmission

First, OEB staff is concerned that PSE’s sample is restricted solely to U.S. utilities and Hydro One Networks Transmission. In response to an interrogatory from OEB staff, PSE stated:⁹⁰

PSE is not aware of all the necessary data being available for other Canadian utilities. We are not aware of any Canadian transmission utilities that publicly file the necessary output and input data and file transmission lines by voltages, number of substations by capacity, and the characteristic of transmission lines (overhead or underground).

OEB staff is also not aware of a central filing of Canada electricity transmitter data analogous to FERC Form 1, which provides a single repository of generally consistent data for U.S. utilities. However, this is not to say that data on Canadian transmitters is not available. The Alberta Utilities Commission has a comprehensive incentive-based regulatory regime which applies, in general design, to all of the investor-owned natural gas and electricity utilities, including transmitters. Hydro Québec had an application for incentive regulation for its electricity transmission operations which was being reviewed at roughly the same time as Hydro One SSM’s application. OEB staff’s consultant, PEG, was active in that proceeding. Other provincial regulators in British Columbia, Newfoundland and Labrador, and Nova Scotia are active in oversight of their utilities, including their transmission operations.

This is not to say that all of the relevant data for some other Canadian transmitters would be available; however, in this form of econometrics work, it is often the case that imperfect data is used or less ideal proxies are substituted. It may not be the ideal situation, but it can be informative. However, there is no indication that PSE or Hydro One SSM even attempted this.

OEB staff is not disagreeing with the fact that, in large part, U.S. utilities can, and should, form at least part of a comparator sample for benchmarking the performance of Ontario utilities. However, this application has few precedents to point to on the application of these TFP and total cost benchmarking for electricity transmission, a point acknowledged by both PSE and PEG. OEB staff thus does suggest that there be some skepticism and reservations on the exact comparability of the U.S.-only sample with

⁹⁰ Exhibit I, Tab 1, Schedule 64 (OEB Staff interrogatory #64)

Hydro One Networks Transmission using PSE's methodology,⁹¹ and the OEB may wish to consider this in the weight it gives to this evidence, as discussed further below.

Second, OEB staff has concerns over what it will term the infrastructure "hardening" variable constructed by PSE. This is a new variable introduced in PSE's total cost benchmarking, and is intended to replace weather condition variables previously used to reflect the climactic hardships that distributors and transmitters have to deal with in designing, constructing and maintaining their networks in the territories in which they are located. The concept is that the costs incurred, largely for the capital investment in the infrastructure, are based on the engineering standard that the system is designed for (e.g., one-per-50-years, once-per-century), not on what is the actual weather variability. Further, the higher the "hardening" value, the more costly is the capital cost, all else being equal. This approach seems reasonable from a conceptual basis.

This "hardening" variable does not exist elsewhere – it is PSE's own new construct, and PSE describes the approach in its evidence.⁹² PSE's approach is to use U.S. and Canadian (Ontario) weather zones, and NESC and CSA standards, and the GIS maps, obtained from a third-party source, Platts, to construct a hardening variable value for each utility in the sample, including Hydro One Networks. A utility's value is based on the NESC/CSA standard for the weather zone its service territory lies within; where the service territory lies in more than one zone, the area (sq. km.) of the service territory in each zone is used for weighting the zonal engineering standards.

OEB staff considers this problematic with respect to Hydro One Networks – the utility we are most concerned about. The concern is with respect to the Hydro One Networks service territory from the Platts' GIS mapping, which defines it as being the whole of the Province of Ontario except for the area served by other investor-owned or municipally-owned Local Distribution Companies. However, there are large areas of Ontario, particularly in Remote Northern Ontario, where Hydro One Networks has few, if any, transmission (or distribution) assets. (This concern with Platts data defining Hydro One's service territory as largely corresponding to the whole Province, while actual served territory is less than half of that, was raised in Hydro One Networks' recent

⁹¹ While there are many commonalities of American and Canadian utilities, due to interconnection, design and electrical standards and organizations (e.g., NERC), there are also differences in history, legislative and ownership. Tax and accounting practices are also different. While many of the differences are national in nature, there are also differences at state and provincial levels. It is not clear if or how these have been addressed, or whether they are material.

⁹² Exhibit D, Tab 1, Schedule 1, Attachment 1, pp. 26-27 and Appendix A. See also response to Exhibit I, Tab 1, Schedule 59 (OEB Staff Interrogatory #59).

distribution rate application,⁹³ and was commented on by the OEB in its decision.⁹⁴ This concern also largely applies to other provincial utilities like SaskPower, Manitoba Hydro and Hydro-Québec, where the service territory corresponds to the province. It is not a concern for U.S. utilities, as there is not a 1:1 correspondence between a utility and a state, and the Platts GIS data correspond closer to each utility's actual service territory.)

This becomes problematic for the hardening variable estimation for Hydro One Networks Transmission. OEB staff asked about this in an interrogatory.⁹⁵ The CSA standards are highest in northern Ontario, where Hydro One Networks has few transmission assets and in southern Ontario, where most assets are. The location of transmission assets has no correspondence with the size of the zones on a square kilometre basis, which is the weighting variable used. OEB staff has little confidence that the value of the "hardening" variable for Hydro One Networks Transmission represents the real value. With weighting by area for significant portions of northern Ontario where there are few assets, OEB staff suspects that the "hardening" value may be overstated. This would then give a higher cost for Hydro One Networks Transmission from the estimated total cost model. If Hydro One Networks Transmission's costs are lower because its real, aggregate hardening standard is lower than the constructed value, its performance would look better based on PSE's total cost benchmarking approach. Unfortunately, we don't have any analysis of alternative weather-related variables to assess the accuracy of the hardening variable, or whether it introduces any material bias for Hydro One Networks Transmission's cost benchmarking.

OEB staff also notes that its consultant, PEG, has identified a number of concerns with PSE's cost benchmarking, such as on the use of (U.S.-based) Handy-Whitman Indexes versus alternative Canadian measures, since Statistics Canada suspended the publication of Electric Utility Construction Price Indexes in 2014.⁹⁶

These are normal, but real, issues in these types of econometric analyses. They may be considered more academic, and there is no single "right" answer. This is the nature of these sophisticated econometric analyses – we are trying to model real-world phenomena, but all models are approximations of what occurs, using limited data and various assumptions about what are the drivers and the relationships amongst factors. Some models may prove to be better than others.

⁹³ EB-2017-0049. See OEB staff submission, August 3, 2018, pp. 23-26

⁹⁴ EB-2017-0049, Decision and Order, March 7, 2019, p. 29

⁹⁵ Exhibit I, Tab 1, Schedule 39 (OEB Staff Interrogatory #39)

⁹⁶ Exhibit M1, pp. 11-14 of 55. See also PEG's response to Hydro One SSM Interrogatory # 11 on PEG's evidence (Exhibit L1, Tab 1, Schedule 11).

A further complication is that, with TFP and total cost benchmarking results and trends, experts like PSE and PEG are attempting to identify trends and variances of a few percentage points from quantity and cost data that can be in the millions or billions of units and dollars. Results can vary widely based on the assumptions of each economist and on the availability and quality of data.

The challenge is that TFP and total cost benchmarking are new to electricity transmission in Ontario, and there is little precedential evidence elsewhere. PSE and PEG have made legitimate attempts to adapt sophisticated analytical methodologies to a new sector. They have added to our overall knowledge. However, OEB staff submits that these approaches are not fully tested over time.

In many ways, this is similar to the initial generations of PBR/IRM in electricity distribution. Data quality and analytical approaches were also of concern for the econometric analyses to establish the price cap parameters (inflation, X-factor, stretch-factor) in these first plans, similar to what is being faced here. There was greater understanding and comfort with even more sophistication in data and models, by the time of 3rd and the current 4th Generation IRM plans. There has been a similar evolution and maturation for natural gas distribution. We are still in the infancy here for electricity transmission. OEB staff has considered the analyses of PSE and PEG, but has also considered the nearly two decades of experience with PBR/IRM plans and parameters that the OEB has for natural gas and electricity distribution and for OPG's regulated hydroelectric generation, and which the OEB has often referred to in its decisions and directions for extension of PBR/IRM to other sectors.⁹⁷

Finally, OEB staff notes that this application by Hydro One SSM is the first of its kind in Ontario, for a multi-year incentive regulatory rate-setting plan for electricity transmission. The OEB has nearly two decades of experience with PBR/IRM for electricity and natural gas distribution, and has even adopted a multi-year IRM (price cap) plan for OPG's regulated hydro-electric generation,⁹⁸ but electricity transmission has generally been under cost-of-service or, as has been applied for by Hydro One Networks Transmission

⁹⁷ In the case of Ontario Power Generation Inc., the OEB signaled that it considered hydroelectric generation as a candidate for incentive-based forms of rate-setting from when it assumed rate regulation of prescribed generation assets; see Decision with Reasons EB-2007-0905, November 3, 2008, p. 7 and EB-2006-0064, *Board Report: A Regulatory Methodology for Setting Payment Amounts for the Prescribed Generation Assets of Ontario Power Generation Inc.*, November 30, 2006. The OEB made much reference to incentive rate-setting policies established for the electricity distribution sector as guidance to Hydro One SSM for a revenue cap proposal in the Decision and Order EB-2016-0356, November 8, 2017; see pp. 3-8.

⁹⁸ EB-2016-0152

in a concurrent application,⁹⁹ a one-year formulaic “Inflation-less-productivity” adjustment of the allowed revenue requirement (i.e., a revenue cap but for only a single year).

As the OEB has noted in previous decisions, adoption of PBR/IRM provides increased flexibility for adapting its operations, and hence capital and operating costs, to real-world changes in demand. PBR/IRM also provides incentives for the firm, as the utility’s shareholders may benefit from higher earnings if the firm can outperform the targets in the rate (or revenue) adjustment formula, and, conversely may face pressure to improve operational and cost performance in instances of under-performance.¹⁰⁰

One of the roles of the stretch factor, sometimes referred to as a “consumer productivity dividend”, is to provide a sharing of the benefits of transitioning to a more flexible and lighter-handed form of PBR/IRM rate regulation from cost of service. This role has been identified in previous cases, and the OEB has discussed this in several decisions.¹⁰¹

OEB staff raises this in the context of the TFP and total cost benchmarking analyses of PSE and PEG, as the U.S. utilities and Hydro One Networks were not under PBR/IRM for the historical period analyzed; nor was Hydro One SSM or its predecessor, GLPL. As noted, since restructuring under Bill 35 in 1999, Ontario electricity transmitters have largely been under cost of service rate setting. U.S. utilities, for transmission pricing, were under cost of service, or, more recently, under FERC’s formula rate-setting approach. FERC’s formula-rate setting is formulaic, but largely with updates of categorized costs (similar to cost of service),¹⁰² and does not provide the flexibility and incentives of PBR/IRM.

As such, the TFP and total cost benchmarking results of PSE’s and PEG’s analyses reflect real-world performance under more traditional, cost of service-based regulation. Hydro One SSM is proposing to go to a more flexible IRM form of rate regulation, where it will have opportunities and incentives to improve its performance. OEB staff submits that this transition to IRM for the proposed multi-year revenue cap plan also supports the use of a higher stretch factor than the “0” proposed by Hydro One SSM and supported by PSE.

⁹⁹ EB-2018-0130

¹⁰⁰ More background on this, and the discussion that follows, is provided in the preamble to Exhibit I, Tab 1, Schedule 62 (OEB Staff Interrogatory #62)

¹⁰¹ A recent example was in the OEB’s decision on the merger and multi-year price cap plan for Enbridge Gas Distribution Inc. and Union Gas Limited, Decision and Order EB-2017-0306/-0307, August 30, 2018, pp. 26-28. This decision is quoted from in the preamble to Exhibit I, Tab 1, Schedule 62, p. 2 (OEB Staff Interrogatory #62).

¹⁰² Exhibit I, Tab 1, Schedule 61 (OEB Staff Interrogatory # 61)

The OEB has found, for electricity distribution, natural gas distribution, and OPG's regulated hydro-electric generation, that 0.3% is a reasonable stretch factor for "normal" performance under incentive rate-setting plans in Ontario.¹⁰³ OEB staff submits that it is also reasonable to apply this 0.3% stretch factor for Hydro One SSM's revenue cap proposal for electricity transmission, taking into account the available evidence but also considering concerns on the quality of the evidence.

Taking OEB staff's submissions on the base X-factor and stretch factors above into account, OEB staff submits that an aggregate X-factor of 0.3%, as the sum of a base X-factor of 0% and a stretch factor of 0.3%, is reasonable for Hydro One SSM for the revenue cap formulaic adjustment of the annual revenue requirement over the proposed plan term. In other words, the RCI would be:

$$IPI_{Tx} - 0.3\%$$

2.6 Issue #B6 – Is the Power System Engineering's sample of comparator utilities for Total Cost Benchmarking and Total Factor Productivity appropriate for Hydro One SSM?

Background

As conducted, PSE's study is about Hydro One Networks Transmission, not about Hydro One SSM. Hydro One Networks Transmission is included in the dataset with the U.S. transmission utilities. Hydro One SSM's (or its predecessor, GLPL transmission's) data were not used in the analysis. Even PSE's recommendations in its evidence were with respect to the proposed X-factor and stretch factor (and some other revenue cap parameters) for Hydro One Networks Transmission.¹⁰⁴

However, in response to an interrogatory from OEB staff, PSE clarified that its proposals for the X-factor and stretch factor should also apply to Hydro One SSM.¹⁰⁵

¹⁰³ As discussed in the preamble to Exhibit I, Tab 1, Schedule 62 (OEB Staff Interrogatory # 62)

¹⁰⁴ Exhibit D, Tab 1, Schedule 1, Attachment 1, pp. 51-52

¹⁰⁵ Exhibit I, Tab 1, Schedule 58

Submission

OEB staff accepts this, and submits that it is reasonable to accept the results of PSE's study as being applicable to Hydro One SSM. There are several reasons for this.

First, and particularly with respect to the base X-factor, the TFP is a trend of a sector (or a sample of firms in the industry), not for the individual firm. Basing the X-factor just on the performance of a single firm raises the risk of perpetuating poor historical productivity performance of that utility. It is the general trend of what all similar firms are achieving and capable of that is important. In that sense, the results of the analyses conducted by PSE and PEG, subject to the OEB's determinations on the correctness and weight that should be given to each, should generally be applicable to Hydro One Networks Transmission, Hydro One SSM, and to most other Ontario electricity transmitters.¹⁰⁶ (Notwithstanding that OEB staff have expressed concerns about the restriction of the sample to U.S. utilities and Hydro One Networks Transmission and omitting any other Canadian transmitters, discussed under Issue 5 above, OEB staff still submits that this point is valid, based on the available evidence.)

As a second point, and one which augments that above, we should consider Hydro One Networks' dominance in the Ontario electricity transmission sector. It represents around 95% of all transmission assets and operations. For nearly all customers, electricity flows through the Hydro One Networks transmission grid at some point in going from generation to the customer's residence or business. For all practical purposes, the productivity of Hydro One Networks Transmission is the productivity of the Ontario electricity transmission sector.

Third, OEB staff considers that the relationship between Hydro One Networks and Hydro One SSM post-merger is pertinent. Prior to the approval and completion of the acquisition of GLPL (transmission) by Hydro One Networks in 2016, the two utilities were separately owned and operated. However, Hydro One Networks, in its current form (and previously as Ontario Hydro), is the main electric "wires" (transmission and distribution) utility in the province. GLPL was an investor-owned distribution and transmission utility that operated in the area surrounding Sault Ste. Marie, Ontario (but excluding electricity distribution within the city itself). GLPL's network engineering and

¹⁰⁶ Some adjustments may have to be considered in applying the results to some transmitters such as Five Nations Energy Inc. and the Watay transmission line (under construction) due to the unique business characteristics of these utilities and their operating conditions, but these would have to be addressed in the individual applications of these transmitters.

operations were highly coordinated to interact seamlessly with Hydro One Networks' transmission network and the distribution networks of GLPL¹⁰⁷ and PUC Inc.

Post-acquisition, Hydro One Networks is integrating Hydro One SSM's network and operations into its own. At this time, Hydro One SSM is a separate corporation, with its own assets, and is separately licensed and rate-regulated by the OEB. This must continue for a period due, in part, to existing debt instruments and covenants that expire in a few years. It also makes sense for Hydro One Networks to accomplish the integration in an orderly manner post-merger.

As noted in the Application, this integration is already underway. At the Technical Conference, Mr. Lewis was introduced as the "managing director of Hydro One Sault Ste. Marie",¹⁰⁸ although it was clarified later that he is an employee of Hydro One Networks.¹⁰⁹ Hydro One SSM has no employees, and while Hydro One SSM's operations and capital planning are focused on its own network and the utilities and customers served from it, its direction and approval comes from Hydro One Networks.¹¹⁰

This integration will continue until completion (i.e., financial and operational integration), between 2023 and 2026. Increasingly, there is little to distinguish between Hydro One Networks Transmission and Hydro One SSM. Corporate head office functions, and other functions such as human resources, finance, procurement, are or will become common/shared. Hydro One SSM's performance and productivity will be that of Hydro One Networks Transmission.

From this perspective, OEB staff submits that the X-factor and stretch-factor, as determined by the OEB in this proceeding based on PSE's and PEG's analyses, and the OEB's own knowledge and experience with PBR/IRM, would apply to Hydro One SSM for the proposed revenue cap plan.

¹⁰⁷ Now Algoma Power Inc. (API)

¹⁰⁸ Technical Conference Transcript, January 14, 2019, p. 5/l. 9-11

¹⁰⁹ Technical Conference Transcript, January 14, 2019, p. 19/l. 7 to p. 20/l. 2

¹¹⁰ The oversight of Hydro One SSM by Hydro One Networks during this post-MAADs integration was explained during the Technical Conference Transcript, January 14, 2019, p. 11/l. 23 to p. 15/l. 2. Discussion that former Hydro One SSM staff to continue to perform work after transitioning to become Hydro One Networks staff on October 1, 2018 was further discussed up to p. 22 of this Technical Conference transcript.

2.7 Issue #B7. Is Hydro One SSM's proposal to maintain the current approved load forecast and resulting charge determinants for the purposes of setting Uniform Transmission Rates over the entirety of the deferred rebasing period appropriate?

Load Forecast

Background

In its Application, Hydro One SSM did not provide an updated load forecast. Its reason for not doing so was that this application did not entail a rebasing of its revenue requirement (and the rates to recover it) from a cost of service perspective, but instead was to establish a multi-year revenue requirement (i.e., revenue cap) adjustment plan, using the approved 2016 revenue requirement as the base amount.

Hydro One SSM acknowledged that the OEB, in a previous decision accepting a settlement agreement,¹¹¹ had required GLPL to file a new bottom-up load forecast in its next application. Hydro One SSM had not done so in its 2017 application,¹¹² as it was not applying to rebase rates and the OEB had accepted a 10-year deferred rebasing in the MAADs decision¹¹³ approving Hydro One Inc.'s acquisition of GLPL. Hydro One SSM submitted that not filing a load forecast was similarly appropriate in this application, as it was not proposing to rebase rates (or revenue requirement) with its revenue cap proposal and is still under the 10-year deferred rebasing period approved in the MAADs decision.¹¹⁴

In response to an interrogatory from OEB staff,¹¹⁵ Hydro One SSM filed its load forecast. The load forecast documentation was filed in public (redacted) and confidential forms. The confidential treatment of certain information in the load forecast was approved by the OEB. Hydro One SSM's revised load forecast (based on the redacted public filing) is as follows:

¹¹¹ EB-2014-0140

¹¹² EB-2016-0356

¹¹³ EB-2016-0050

¹¹⁴ Exhibit A, Tab 2, Schedule 2, pp. 2-3

¹¹⁵ Exhibit I, Tab 1, Schedule 4, Attachment 1 (OEB Staff Interrogatory #4)

Table 2 - Summarized CDM Adjusted Load Forecast¹¹⁶

Summarized CDM Adjusted Load Forecast		
Charge Determinant	2017 CDM Adjusted Forecast	2018 CDM Adjusted Forecast
NW	3,096,353	3,047,365
CN	2,615,596	2,614,135
TRN	478,611	475,663

Table 10 2017-2018 CDM Adjusted Charge Determinant Forecast

While Hydro One SSM has filed this load forecast in response to an interrogatory, it maintains its proposal to use the last OEB-approved load forecast (shown in the following table), and not to update it. It also refers to this updated forecast in support of its proposal for omitting the growth factor, *g*, from its revenue cap proposal, or from the calculation of the materiality threshold of any ICM proposal applied for.

Table 3 – Current OEB-Approved Charge Determinants¹¹⁷

Current Approved Charge Determinants	MW
Network	3,498.236
Line Connection	2,734.624
Transformation Connection	635.252

Submission

OEB staff is satisfied with the load forecast material in evidence, with respect to its proposal to retain existing billing determinants, and in support of the capital and operating plan and budget in the TSP.

The updated load forecast, and the resulting forecasted transmission billing determinants, are lower than the current approved charge determinants. This means that UTRs, if anything, will be lower than they would be with the updated forecasts. In other words, Hydro One SSM’s proposal to not update the load forecast is not expected to be biased in favour of the utility. Further, given that Hydro One SSM represents only a fraction (around 2.5%) of the total system demand and revenue requirement, and

¹¹⁶ *Ibid.*, p. 4

¹¹⁷ Exhibit D, Tab 2, Schedule 1, p. 4, Table 2

considering that Hydro One SSM's revenue requirement and load forecast, in the form of billing determinants, does not determine Hydro One SSM-specific rates but is instead aggregated with those of other Ontario transmitters to determine UTRs, OEB staff submits that not updating the load forecast is unlikely to have any material impact. Thus from a practical perspective, OEB staff is not opposed to Hydro One SSM's proposal.

The forecast information however is useful for other purposes and in OEB staff's view, should continue to be filed in multi-year plans, whether price or revenue cap or Custom IR, or as a forecasting methodology for updating the demand Provision of load forecasts would be informative for the OEB, OEB staff and other stakeholders to assess the appropriateness of a transmitter's operating and capital plans and budgets in cases such as this one where a system plan is assessed. Changes in demand would also be important information that should be provided in support of adjustments to the revenue requirement, such as for an ICM during the IRM plan term.

C. TRANSMISSION SYSTEM PLAN

2.8 Issue #C8 – Does the Transmission System Plan adequately address the OEB's Renewed Regulatory Framework objectives?

Background

The OEB's Renewed Regulatory Framework (RRF) is a comprehensive performance-based approach to regulation that promotes the achievement of four performance outcomes to the benefit of existing and future customers: customer focus, operational effectiveness, public policy responsiveness, and financial performance. The framework aims to align customer and utility interests, continues to support the achievement of important public policy objectives, and places a greater focus on delivering long term value for money.¹¹⁸

Hydro One SSM stated¹¹⁹ that it has developed the Transmission System Plan (TSP) in accordance with the key principles underlying the OEB's RRF principles.

¹¹⁸ EB-2010-0379, *Report of the Board Performance Measurement for Electricity Distributors: A Scorecard Approach*, March 5, 2014, page i

¹¹⁹ Exhibit B1, Tab 1, Schedule 1, Page 4

Hydro One SSM noted¹²⁰ that throughout its asset management processes, the above-noted objectives manifest themselves in the form of practical considerations that inform multiple dimensions of the Investment Planning Process (IPP). Hydro One SSM stated that as an example, Customer Focus, Operational Effectiveness and Public Policy Responsiveness outcomes correspond to specific risk quantification and calibration parameters (both quantitative and qualitative) underlying the risk trade-off analysis inherent in Hydro One's Asset Risk Assessment (ARA) and IPP frameworks.

Hydro One SSM indicated¹²¹ that while it does not run a specific cost-benefit analysis in relation to RRF outcomes, many of the steps comprising the ARA and the IPP¹²² processes explore the project's relative value propositions across the dimensions that the RRF outcomes cover.

Submission

OEB staff is of the view that Hydro One SSM's asset management processes generally incorporate the above-noted RRF objectives in the form of practical considerations used to evaluate the value of projects. However, OEB staff submits that in the future Hydro One SSM should run specific cost-benefit analyses in relation to RRF outcomes, in order to greater align its TSP to the RRF.

OEB staff notes that the review of a TSP is normally done in the context of a rebasing or custom IR proceeding. A requirement of the Rate Handbook¹²³ is that a TSP is to be filed every five years, regardless of the rate-setting method chosen. Given that an asset management plan was an outstanding commitment made in the settlement proposal in the 2015 and 2016 cost of service proceeding,¹²⁴ and given that the OEB articulated in the 2017 revenue requirement decision that outstanding commitments needed to be addressed by Hydro One SSM,¹²⁵ OEB staff is satisfied that the filing of a TSP in this proceeding is appropriate. OEB staff also submits that the TSP may be useful for the OEB if Hydro One SSM chooses to come forward with an ICM during the deferral period.

¹²⁰ Exhibit B1, Tab 1, Schedule 1, Page 46

¹²¹ Exhibit I, Tab 1, Schedule 35 (OEB Staff Interrogatory #35)

¹²² Hydro One SSM included the word "SPP" instead of "IPP"

¹²³ Rate Handbook, page 13

¹²⁴ EB-2014-0238, Settlement Proposal, Originally Filed: November 12, 2014, Corrected: December 3, 2014, Page 7

¹²⁵ EB-2016-0356, Decision and Order, September 28, 2017, page 10

2.9 Issue #C9 – Is the level of planned 2019 to 2026 expenditures appropriate and is the rationale for planning and pacing choices appropriate and adequately explained in the Transmission System Plan? Is Hydro One SSM’s asset management process reasonable and has it been adequately supported by its Transmission System Plan?

OEB staff has provided below a submission on the three components of the above noted issue:

- a) Planned 2019 to 2026 Expenditures
- b) Planning and Pacing Choices
- c) Asset Management Process

a) Planned 2019 to 2026 Expenditures

Although Issue #C9 refers to “expenditures” in a general fashion, rather than specifically referring to “capital” and “OM&A” expenditures, this section of the submission is further broken down into three additional sub-components of the above noted issue:

- i. Funding Envelopes
- ii. Capital
- iii. Operations, Maintenance and Administration (OM&A)

i) *Funding Envelopes*

Background

Hydro One SSM stated¹²⁶ that its TSP was not submitted to support a funding request related to a capital plan. Rather in Hydro One SSM’s view regarding its filed capital forecast, the submission of the TSP is to support the capital plan insofar as to demonstrate the feasibility, the outcomes, and the value for customers.

Hydro One SSM stated that¹²⁷ the TSP is not directly in support of any changes or relief related to its revenue requirement. Hydro One SSM stated that it has the full and genuine intention of implementing the plan described in this filing, but it is not explicitly

¹²⁶ Exhibit I, Tab 1, Schedule 7 (OEB Staff Interrogatory # 7)

¹²⁷ Exhibit I, Tab 5, Schedule 4 (SEC Interrogatory # 4)

requesting approval to do so, as is consistent with the OEB's approach to decisions made by utilities' management in the years between rebasing applications.

Hydro One SSM is also of the view¹²⁸ that its capital plan in the TSP is robust and appropriate. Hydro One SSM stated that its plan was built using the improved investment planning processes developed by Hydro One Networks. Hydro One SSM indicated that its proposed spending levels are in line with the needs of the asset base as demonstrated by its Asset Condition Assessment (ACA).

Hydro One SSM stated¹²⁹ that for the 2018-2026 Plan period, it plans to manage capital expenditures within the funding envelope provided by the depreciation funding embedded in the last (2016) rebasing proceeding, adjusted through application of the annual revenue cap index.

Hydro One SSM also stated¹³⁰ that it expects to manage its total annual OM&A expenditures within the envelope commensurate with historical levels.

A depreciation funding envelope of \$9,771,300 was agreed to by parties in the settlement agreement¹³¹ for Hydro One SSM's 2016 rates. In the technical conference, Hydro One SSM confirmed that \$9.8 million is the depreciation expense embedded in its base rates.¹³²

OEB staff also notes that Hydro One SSM was asked to confirm that \$11.3 million was included in base rates for OM&A which would form the basis of the OM&A funding envelope,¹³³ but it remained unclear whether \$11.3 million is the correct amount to be included as a funding envelope for OM&A. Upon further review of the previous settlement agreement for 2016 rates, OEB staff notes that \$11.1 million was included in 2016 base rates for OM&A and not \$11.3 million.¹³⁴

VECC noted that Hydro One SSM's proposal does not require review of its OM&A because of the nature of its revenue cap index proposal.¹³⁵

¹²⁸ Argument-in-Chief, Page 15, March 29, 2019

¹²⁹ Exhibit B1, Tab 1, Schedule 1, Page 10

¹³⁰ Exhibit B1, Tab 1, Schedule 1, Page 109

¹³¹ EB-2014-0238 Settlement Proposal, Originally Filed: November 12, 2014, Corrected: December 3, 2014, Page 24

¹³² Technical Conference Transcript, January 14, 2019, page 37 and 38

¹³³ Technical Conference Transcript, January 14, 2019, page 38, 39, 58, 59

¹³⁴ EB-2014-0238, Settlement Proposal, Originally Filed: November 12, 2014, Corrected: December 3, 2014, Page 6 and 20. \$11.1 million was the settled 2016 OM&A, whereas \$11.3 million was the applied for 2016 OM&A.

¹³⁵ Technical Conference Transcript, January 14, 2019, page 40

Submission

OEB staff submits that in its reply submission, Hydro One SSM should confirm that \$11.1 million (and not \$11.3 million) is the correct amount to be included as a funding envelope for OM&A.

The OEB stated that a transmitter seeking approval of revenue requirements under custom IR or revenue cap will be expected to demonstrate that its planning has been sufficiently robust that the utility will be able to manage within the previous OEB-approved revenue, given that actual costs and revenues will vary from forecast.¹³⁶ OEB staff notes that Hydro One SSM's base revenue requirement, including the underlying OEB-approved¹³⁷ capital additions and OM&A expenditures supporting the base revenue requirement, will not change¹³⁸ in the plan period 2018 to 2026. However, OEB staff has reviewed the TSP and it appears that Hydro One SSM's planning has been sufficiently robust that the utility will be able to manage within the previous OEB-approved revenue.

Given the content of the OEB-approved Issues List¹³⁹ in this proceeding, OEB staff is of the view that an assessment of the TSP by the OEB may have consequences for Hydro One SSM, as there are some shortcomings of the TSP. Appendix A of this submission outlines four options that the OEB may consider when reviewing the TSP. Option #2 is OEB staff's preferred option. In this option, OEB staff is not recommending cuts¹⁴⁰ to the funding envelopes relating to the underlying capital additions and OM&A expenditures supporting this revenue cap application, as this is not a cost of service or custom IR proceeding. However, OEB staff alerts the OEB that certain capital and OM&A elements of the TSP may not be required or may need to be further addressed to adequately deliver service levels that Hydro One SSM's customers value. For example, Hydro One SSM has included \$24.8 million in its TSP for investments in composite poles, which may not be completely warranted.¹⁴¹ Composite poles, on average, cost more than

¹³⁶ Filing Requirements For Electricity Transmission Applications Chapter 2 Revenue Requirement Applications, February 11, 2016, page 2 & 3, section 2.0

¹³⁷ EB-2014-0238

¹³⁸ An exception to this statement is the executive compensation and directors costs that are required to be removed from Hydro One SSM's 2019 revenue requirement relating to Bill 2 and the February 21, 2019 Directive

¹³⁹ January 10, 2019

¹⁴⁰ An exception to this statement is the executive compensation and directors costs that are required to be removed from Hydro One SSM's 2019 revenue requirement relating to Bill 2 and the February 21, 2019 Directive

¹⁴¹ Exhibit B1, Tab 1, Schedule 1, Page 120

twice as much as wood poles, but a supporting cost/benefit analysis¹⁴² has not been provided by Hydro One SSM.

As outlined in Option #2 of Appendix A, OEB staff submits that its proposal earlier in this submission to set Hydro One SSM's proposed stretch factor in this proceeding to 0.30%, is also supported by considering items such as the potential overinvestment in composite poles included in the TSP. Increasing the stretch factor at this time would also give Hydro One SSM the incentive to be more efficient and reduce costs going forward.

OEB staff also alerts the OEB that certain capital elements of the TSP may require further scrutiny should Hydro One SSM request a capital module in the future.

ii) Capital

Background

Hydro One SSM's historic and proposed capital addition and capital expenditure levels, including percentage changes, are summarized in Table 4 below.

¹⁴² As per the Technical Conference Transcript, January 14, 2019, pages 54-56, Hydro One SSM referred to the Pole Care Report and stated that the report took into account the economics. OEB staff notes that the referenced report is being used as the justification for moving to the use of composite poles, however, the report does not include an economic analysis or appropriate justification. Hydro One SSM further stated that there are no other reports or justifications for the move to composite poles beyond what is in the Pole Care Report.

**Table 4 – Summary of Historic and Proposed Capital Additions
and Capital Expenditures**

Capital Expenditures / Capital Additions									
	Plan	Actual	Actual versus Plan Difference \$	Actual versus Plan Difference %	References				
2013 Capital Addition	4,486,658	4,457,071	(29,587)	-0.7%	Plan and Actual as per July 31, 2018 Excel App 2-AB, AMPCO Interrogatory #22				
2014 Capital Addition	4,344,774	4,311,669	(33,105)	-0.8%	Plan and Actual as per July 31, 2018 Excel App 2-AB, AMPCO Interrogatory #22				
2015 Capital Addition	9,459,997	8,743,578	(716,419)	-7.6%	Plan and Actual as per July 31, 2018 Excel App 2-AB, AMPCO Interrogatory #22				
2016 Capital Addition	9,768,684	9,557,937	(210,747)	-2.2%	Plan and Actual as per July 31, 2018 Excel App 2-AB, AMPCO Interrogatory #22				
2017 Capital Addition	10,291,102	14,488,177	4,197,075	40.8%	Plan and Actual as per July 31, 2018 Excel App 2-AB, AMPCO Interrogatory #22				
2018 Capital Expenditure	6,500,000				Plan/Actual per Undertaking JT1.3 & JT1.4				
2019 Capital Expenditure	7,100,000				Plan per Undertaking JT1.4				
2020 Capital Expenditure	10,700,000				Plan per Undertaking JT1.4				
2021 Capital Expenditure	10,700,000				Plan per Undertaking JT1.4				
2022 Capital Expenditure	11,500,000				Plan per Undertaking JT1.4				
2023 Capital Expenditure	9,400,000				Plan per Undertaking JT1.4				
2024 Capital Expenditure	10,800,000				Plan per Undertaking JT1.4				
2025 Capital Expenditure	10,400,000				Plan per Undertaking JT1.4				
2026 Capital Expenditure	8,500,000				Plan per Undertaking JT1.4				
Average Capital Expenditures 2018 to 2026	9,511,111								
Capital Funding Envelope	9,771,300								
Difference	(260,189)								
Average Actual Capital Additions 2013 to 2017	8,311,686								

It is OEB staff’s understanding that Table 4 reflects capital additions for the period 2013 to 2017 and capital expenditures¹⁴³ for the period 2018 to 2026. Hydro One SSM stated that it has not developed a schedule for forecasted in-service additions over the period 2018 to 2026 for several reasons.¹⁴⁴

¹⁴³ In Exhibit I, Tab 1, Schedule 6 (OEB Staff Interrogatory #6), Hydro One SSM confirmed that capital expenditures, for accounting purposes, are classified as work-in-progress until the project is complete and the asset is placed into service. Hydro One SSM stated that when a project extends over multiple years, the capital expenditure estimates for the years prior to completion are, by definition, treated as work-in-progress. Hydro One SSM indicated that this is the case for all forecasts where multi-year projects exist.

¹⁴⁴ Exhibit I, Tab 4, Schedule 25 (AMPCO Interrogatory # 25) The reasons provided by Hydro One SSM

Hydro One SSM was asked again to provide the actual in-service additions for 2018 and forecast for 2019.¹⁴⁵

Hydro One SSM indicated that from a rates perspective, in-service capital additions would be relevant if Hydro One SSM was rebasing.¹⁴⁶ Hydro One SSM noted that it is currently in an incentive rate-setting period, and as a result the actual relief sought in the application is a formulaic adjustment to the existing revenue requirement. Hydro One SSM stated that it is not building up a new rate base, so although capital expenditures are relevant as they are within the scope of the TSP, in-service additions only really matter from the perspective of setting rate base.

Hydro One SSM indicated that the reason for 2015 and 2016 total capital expenditures being lower than plan is due to some capital projects that were not completed on schedule. This completion was deferred into 2017.¹⁴⁷

Hydro One SSM stated that the reason for the increase in capital for 2017 compared to 2016 was due to \$3.3 million in spending related to Batchewana First Nation land rights acquisition/negotiation that was not in Hydro One SSM's budget. The increase was also due to some capital project carryover from 2015 and 2016 that was ultimately deferred into 2017 and was not in the 2017 budget.¹⁴⁸

OEB staff also notes that when Hydro One SSM evaluates projects, no costs are considered in the business cases. Hydro One SSM confirmed that when looking at alternatives to projects, the alternatives are "screened-out" before looking at the cost of alternatives (i.e. to see whether it could be done more cost effectively.) Hydro One SSM stated that a cost estimate is only generated when it chooses the final option of a project.¹⁴⁹

are as follows:

- In-service additions are calculated in order to establish the magnitude of the impact of capital work on rates in a given year
- The projects comprising Hydro One SSM's TSP will not be added to rate base until the next rebasing
- Hydro One SSM is not requesting any incremental capital funding to finance this plan

¹⁴⁵ Technical Conference Transcript, January 14, 2019, page 145 and 146

¹⁴⁶ Technical Conference Transcript, January 14, 2019, page 146

¹⁴⁷ Exhibit B2, Tab 1, Schedule 1, Page 2

¹⁴⁸ Exhibit B2, Tab 1, Schedule 1, Page 1

¹⁴⁹ Technical Conference Transcript, January 14, 2019, page 123 & 124 & 128

Hydro One SSM’s proposed capital expenditure levels over the plan period including the percentage changes, year over year, are summarized in Table 5 below.

Table 5 – Summary of Proposed Capital Expenditures Changes Year over Year

Capital Expenditures - Year over Year Increases over the 2018-2026 Plan Period					
	Plan	Year over Year Difference \$	Year over Year Difference %		
2018	6,500,000				
2019	7,100,000	600,000	9.2%		
2020	10,700,000	3,600,000	50.7%		
2021	10,700,000	-	0.0%		
2022	11,500,000	800,000	7.5%		
2023	9,400,000	(2,100,000)	-18.3%		
2024	10,800,000	1,400,000	14.9%		
2025	10,400,000	(400,000)	-3.7%		
2026	8,500,000	(1,900,000)	-18.3%		

OEB staff notes that a breakdown of each annual amount by component and by year is shown in an undertaking response,¹⁵⁰ summarizing the capital plan.

Submission

Given the large variances between actual capital expenditures and planned capital expenditures for the years 2015 through 2017, as noted in Table 4, OEB staff submits that Hydro One SSM’s capital funding envelope of \$9.8 million may not be accurate and realistic. OEB staff is of the view that historical performance is a good indicator of the robustness of Hydro One SSM’s planning and execution processes going forward. However, as noted above, OEB staff is not proposing any cuts¹⁵¹ to the capital funding envelope.

OEB staff submits that, going forward, Hydro One SSM should provide a comprehensive cost evaluation of alternatives for material projects, including business cases with an evaluation of life cycle costs and economic alternatives. OEB staff submits that the OEB may consider that when Hydro One SSM or Hydro One Networks next rebases or undertakes a custom IR proceeding, only projects that have undergone

¹⁵⁰ Undertaking JT 2.1

¹⁵¹ An exception to this statement is the executive compensation and directors costs that are required to be removed from Hydro One SSM’s 2019 revenue requirement relating to Bill 2 and the February 21, 2019 Directive.

a comprehensive cost evaluation and have associated business cases should be considered for inclusion in rate base.

iii) OM&A

Background

Hydro One SSM’s historic and proposed OM&A levels, including percentage changes¹⁵² are summarized in Table 6 below.

Table 6 – Summary of Historic and Proposed OM&A

OM&A Expenses									
	Plan	Actual	Actual versus Plan Difference \$	Actual versus Plan Difference %	References				
2013	10,100,000	10,210,900	110,900	1.1%	Plan and Actual as per July 31, 2018 Excel App 2-AB				
2014	10,305,535	10,304,457	(1,078)	0.0%	Plan and Actual as per July 31, 2018 Excel App 2-AB				
2015	10,821,095	10,424,380	(396,715)	-3.7%	Plan and Actual as per July 31, 2018 Excel App 2-AB				
2016	11,121,876	10,941,448	(180,428)	-1.6%	Plan and Actual as per July 31, 2018 Excel App 2-AB				
2017	11,121,876	9,492,621	(1,629,255)	-14.6%	Plan and Actual as per July 31, 2018 Excel App 2-AB				
2018	9,400,000				Plan/Actual per Undertaking JT1.3 & JT1.4				
2019	10,700,000				Plan per Undertaking JT1.4				
2020	11,000,000				Plan per Undertaking JT1.4				
2021	11,200,000				Plan per Undertaking JT1.4				
2022	11,400,000				Plan per Undertaking JT1.4				
2023	11,600,000				Plan per Undertaking JT1.4				
2024	11,800,000				Plan per Undertaking JT1.4				
2025	12,000,000				Plan per Undertaking JT1.4				
2026	12,200,000				Plan per Undertaking JT1.4				
Average OM&A 2018 to 2026	11,255,556								
OM&A Funding Envelope Difference	11,121,876								
	133,680								
Average Actual OM&A 2013 to 2017	10,274,761								

Hydro One SSM stated that the drop in OM&A in 2017 is primarily due to employee attrition and some minor efficiencies leveraging Hydro One Networks’ resources.¹⁵³

OEB staff notes that a similar OM&A amount was generated in 2018. Hydro One SSM also indicated that the subsequent increase in 2019 from 2017 is due to improvements to the maintenance program to align with Hydro One Networks’ standards plus

¹⁵² As per Technical Conference Transcript, January 14, 2019, page 43, Hydro One SSM confirmed that a description label of “Total OM&A” is more appropriate than “System O&M”.

¹⁵³ Exhibit I, Tab 1, Schedule 40 (OEB Staff Interrogatory # 40)

inflation.¹⁵⁴ Hydro One SSM also stated that from 2020 onwards, OM&A is expected to increase by \$200,000 annually, largely due to inflation.¹⁵⁵

Hydro One SSM’s proposed OM&A levels over the plan period, including percentage changes, are summarized in Table 7 below.

Table 7 – Summary of Proposed OM&A Changes Year over Year

OM&A Expenses - Year over Year Increases over the 2018-2026 Plan Period					
		Year over Year Difference \$	Year over Year Difference %		
	Plan				
2018	9,400,000				
2019	10,700,000	1,300,000	13.8%		
2020	11,000,000	300,000	2.8%		
2021	11,200,000	200,000	1.8%		
2022	11,400,000	200,000	1.8%		
2023	11,600,000	200,000	1.8%		
2024	11,800,000	200,000	1.7%		
2025	12,000,000	200,000	1.7%		
2026	12,200,000	200,000	1.7%		

In the above noted Table 7, OEB staff has calculated the proposed changes in OM&A on a year-over-year basis. OEB staff notes that Hydro One SSM has stated that most of its year over year increases in OM&A are largely due to inflation. The inflation rate is currently 1.5%.¹⁵⁶ OEB staff’s recommended revenue cap proposal methodology generates a revenue cap index of 1.10% (i.e. an inflation rate of 1.40%, adjusted for a productivity factor of 0% and a stretch factor of 0.30%). As a result, Hydro One SSM’s rates going forward would not be simply escalated by an inflation factor. Under the revenue cap plan, Hydro One SSM’s rates would be increased by an inflation factor less the productivity and stretch factors.

¹⁵⁴ Exhibit I, Tab 1, Schedule 40 (OEB Staff Interrogatory # 40)

¹⁵⁵ Exhibit I, Tab 1, Schedule 40 (OEB Staff Interrogatory # 40)

¹⁵⁶ <https://www.oeb.ca/industry/applications-oeb/electricity-distribution-rates/2019-electricity-distribution-rate> OEB 2019 EDR web page November 23, 2018 Reference – “...the OEB has calculated the value of the inflation factor for incentive rate setting under the Price Cap IR and Annual Index plans, for rate changes effective in 2019, to be 1.5%...”

Submission

Given the large variances between actual OM&A and planned OM&A for the years 2015 and 2017, as noted in Table 6, OEB staff submits that Hydro One SSM's OM&A funding envelope of \$11.1 million may not be accurate and realistic. As also articulated in the Capital section of this submission, OEB staff submits that historical performance is a good indicator of the robustness of Hydro One SSM's planning and execution processes going forward. However, as noted above, OEB staff is not proposing any cuts¹⁵⁷ to the OM&A funding envelope.

OEB staff submits that many of the proposed changes in OM&A on a year-over-year basis may be reasonable, considering the current rate of inflation of 1.5%, but may be unreasonable given OEB staff's recommended revenue cap index methodology that generates a revenue cap index of 1.10%.

b) Planning and Pacing Choices

Background

Hydro One SSM stated¹⁵⁸ that by adopting Hydro One's risk-based IPP approach for pacing and prioritization of its planned capital work program, Hydro One SSM has significantly enhanced the rigour applied in the area of risk-based asset intervention planning in respect to its assets, as in the past, equipment-related risk assessments were conducted in a more informal manner only. Hydro One SSM noted that Section 3.1.3.3 of the TSP shows that the current approach adopted from Hydro One is grounded in evidence-based assessment of each project's risk mitigation potential on the basis of three core risk dimensions – reliability, safety and environment.

Hydro One SSM stated¹⁵⁹ that Hydro One SSM and Hydro One Networks intend to implement the investment plan submitted as part of this application, regardless of how the planning processes are amalgamated. Hydro One SSM further noted that the intent is that the TSP, as it currently is in the filing, would be executed.¹⁶⁰ However, Hydro One SSM stated that through annual evaluations and review of the existing plan, and factoring in the potential efficiencies, changes to the plan could occur.

¹⁵⁷ An exception to this statement is the executive compensation and directors costs that are required to be removed from Hydro One SSM's 2019 revenue requirement relating to Bill 2 and the February 21, 2019 Directive.

¹⁵⁸ Exhibit B1, Tab 1, Schedule 1, Page 92 of 188

¹⁵⁹ Exhibit I, Tab 5, Schedule 11 (SEC Interrogatory #11)

¹⁶⁰ Technical Conference Transcript, January 14, 2019, page 116

Hydro One SSM indicated that it could not “speculate” regarding the integration with Hydro One Networks and how the level of spending for Hydro One SSM in its TSP will have the same level of spending actually implemented, as well as the actual proposed projects. Hydro One SSM reiterated its intention to move forward with the investment plan as per the TSP.¹⁶¹

Submission

OEB staff submits that even though Hydro One SSM may be adopting Hydro One’s risk-based IPP approach for pacing and prioritization of its planned capital work program, it is not clear whether this will result in overall better reliability performance for Hydro One SSM. Hydro One SSM should provide better evidence and explanation in its TSP that supports the claim that Hydro One SSM’s reliability will improve as a result of adopting Hydro One Networks’ methodologies in relation to planning and prioritization. Section 2.10 of this document discusses Hydro One SSM’s reliability in more detail.

OEB staff submits that Hydro One SSM or Hydro One Networks should file a comprehensive report with the next rebasing or custom IR application. This report should detail actual performance in the execution of the capital program relative to plan, specifically showing expenditures and in-service additions compared to plan at the program level. OEB staff submits that the robustness of Hydro One SSM’s planning and the execution of its capital plan would be demonstrated by such a report that would outline the status of major¹⁶² projects or programs that appear in this current TSP. In addition, the next TSP should discuss the status of major projects that appeared in the previous application, and an explanation of any variances regarding scope, cost or schedule. If a project or program was not completed, or if money was redirected to a different project, the report should provide the reasons for the change.

OEB staff recognizes that circumstances change and Hydro One SSM may have to adjust its plans to meet unexpected difficulties or opportunities. A report on the status of major projects would assist the OEB, stakeholders and customers to understand how and why certain capital expenditures were made over the plan period spanning 2018 to 2026.

¹⁶¹ Technical Conference Transcript, January 14, 2019, page 117

¹⁶² Projects exceeding Hydro One SSM’s materiality threshold of \$200k

c) Asset Management Process

Background

Hydro One SSM stated¹⁶³ that while the ongoing integration with Hydro One creates opportunities to realize a number of potential operating and capital synergies discussed in Section 2.2.3 of the TSP, Hydro One SSM expects that the gradual adoption of Hydro One's asset management policies and practices may result in the need for incremental increases to its current maintenance expenditures in particular, as Hydro One asset management processes include a number of equipment maintenance and inspection procedures that Hydro One SSM does not currently undertake on a regular basis. Hydro One SSM noted that these incremental expenditures, along with the implementation costs of other integration projects may offset some of the benefits anticipated from synergies in the early years.

However, when Hydro One SSM was asked to provide the business cases demonstrating that there will be a net benefit to customers prior to undertaking these investments, Hydro One SSM responded that no business cases exist.¹⁶⁴

Hydro One SSM stated¹⁶⁵ that the investment planning process has been improved upon since the previous Hydro One Networks Transmission and Distribution applications.^{166, 167}

Submission

OEB staff acknowledges Hydro One SSM's efforts to improve its investment planning process, but notes that further improvements may be required.

¹⁶³ Exhibit B1, Tab 1, Schedule 1, Page 109

¹⁶⁴ Exhibit I, Tab 1, Schedule 34 (OEB Staff Interrogatory #34)

¹⁶⁵ Exhibit I, Tab 4, Schedule 7 (AMPCO Interrogatory # 7)

¹⁶⁶ EB-2016-0160 and EB-2017-0049

¹⁶⁷ Hydro One SSM stated that the following key improvements were included in its current application:

- Condition Data: comprehensive condition data in B1-1-1 section 2.2.2
- Customer Feedback: outcomes of the engagement with Hydro One SSM's customers in B1-1-1 section 3.1.3.2
- Deficiencies in Prioritization: Hydro One updated its prioritization criteria to focus on Safety, Reliability and the Environment in B1-1-1 section 3.1.3.4

OEB staff submits that, going forward, Hydro One SSM should ensure that there are sufficient business cases that demonstrate that there will be a net benefit to customers prior to undertaking investments regarding asset management practices.

2.10 Issue #C10 – Do the proposed expenditures include the consideration of factors such as customer preferences, system reliability and asset condition?

OEB staff's comments on the three components of this issue are set out below:

- a) Customer Preferences
- b) System Reliability
- c) Asset Condition

a) Customer Preferences

Background

Hydro One SSM stated that it has six customers, consisting of two local distribution company customers and four directly connected customers. Hydro One SSM had a meeting in May 2018 with its four largest directly impacted customers.¹⁶⁸ Hydro One SSM stated¹⁶⁹ that it presented two generic options for approaching capital investments: (1) paced and gradual investments which would involve a larger number of short-duration outages spread over a longer period of time, versus (2) a smaller number of long-duration outages over a shorter period of time. Hydro One SSM stated that from these discussions, it concluded that customers preferred more short-duration outages, as this presented a lesser impact on their operations.

Submission

Although Hydro One SSM referred¹⁷⁰ to one specific input¹⁷¹ to its proposed capital plan that resulted from its May 2018 meeting, OEB staff submits that it is unclear whether all of the material outcomes of this meeting were incorporated by Hydro One SSM into its

¹⁶⁸ Technical Conference Transcript, January 14, 2019, page 108

¹⁶⁹ Exhibit I, Tab 1, Schedule 33 (OEB Staff Interrogatory # 33)

¹⁷⁰ Technical Conference Transcript, January 14, 2019, page 109

¹⁷¹ Hydro One SSM stated that the Echo River TS spare transformer that was built into the current capital plan was the direct result of the customer meeting.

pre-filed evidence filed July 26, 2018. In fact, OEB staff notes that it is not clear if Hydro One SSM's overall customer consultation process was completed in a timely manner such that customer feedback could be appropriately included in the investment planning and optimization process. If this is indeed the case, going forward, Hydro One SSM should factor in more lead-time when preparing applications and meeting with customers.

Although Hydro One SSM's application has its shortcomings, OEB staff acknowledges that Hydro One SSM has attempted to present to its customers alternatives regarding the pacing and planning of capital investments. OEB staff does not take issue with Hydro One SSM's conclusion that its customers prefer more short-duration outages, however OEB staff is of the view that more enhanced customer engagement should occur going forward. For example, Hydro One SSM should set up more frequent formal meetings with its customers. This matter is discussed further under Issue #C12 below.

b) System Reliability

Background

Hydro One SSM has indicated that significant enhancements have materialized by adopting Hydro One's evidence-based approach. A table provided by Hydro One SSM showed¹⁷² that over the 2010 to 2015 period, Hydro One Networks had better regional reliability numbers for a specific subsystem¹⁷³ than Hydro One SSM for all years, except for 2014. However, Hydro One SSM did not provide a comparison related to the overall reliability performance of Hydro One SSM and Hydro One Networks. Information on reliability related to the performance of the overall Hydro One Networks system exclusive of major weather events was requested in an undertaking but was not provided.¹⁷⁴

OEB staff notes that reliability indices that normalize for major weather events are important to evaluate. These normalized statistics indicate what a utility can control with respect to its asset management and risk evaluation practices, versus what it cannot control such as impacts due to weather events.

Hydro One SSM stated that the assessment in any changes in performance would happen at the time of integration, when a combined application with the two utilities is

¹⁷² Exhibit I, Tab 1, Schedule 31 (OEB Staff Interrogatory #31)

¹⁷³ Mississagi TS to Martindale TS Subsystem

¹⁷⁴ Undertaking JT1.7

filed.¹⁷⁵ Hydro One SSM indicated that when the OEB approved its MAADs transaction with Hydro One Networks, it determined that there would be no negative impact to Hydro One SSM's customers from a reliability perspective.

Submission

OEB staff notes that generally Hydro One Networks has had better reliability statistics for a specific subsystem, when compared to Hydro One SSM over the period 2010 to 2018. However, OEB staff submits that as Hydro One SSM is integrated within Hydro One Networks, the utilities should strive to generate better reliability performance.

Hydro One SSM declined to show the performance of the overall Hydro One Networks' system, exclusive of major weather events. It is difficult for OEB staff to conclude that Hydro One Networks' reliability performance is better than those of Hydro One SSM, in particular regarding reliability impacts that it can control versus not control, such as weather impacts. OEB staff is unable to determine whether the significantly enhanced rigour applied in the area of risk-based intervention actually results in the reliability improvements that are alluded to by Hydro One SSM, as no overall comparison of reliability between Hydro One Networks and Hydro One SSM has been provided.

In its next rebasing application, Hydro One SSM should demonstrate impacts to Hydro One SSM's customers from a reliability perspective, considering that when the OEB approved its MAADs transaction, it determined that there would be no negative impact to Hydro One SSM's customers.

c) Asset Condition

Background

Hydro One SSM stated¹⁷⁶ that to better understand the asset and system requirements, asset health condition and risk and value to customers, and to ensure its investment plan was developed using sufficient rigour, Hydro One SSM hired METSCO Energy Solutions to perform an in-depth ACA on Hydro One SSM's assets. The ACA report dated July 6, 2018 was included in the pre-filed evidence.¹⁷⁷

¹⁷⁵ Technical Conference Transcript, January 14, 2019, page 81 & 82

¹⁷⁶ Exhibit A, Tab 3, Schedule 1, Page 4

¹⁷⁷ Exhibit B1, Tab 1, Schedule 1, Appendix B, ACA Report

Hydro One SSM stated¹⁷⁸ that it considered the ACA to be a generally positive report and that there were no reasons for the OEB to be concerned with this report.

Hydro One SSM stated that the ACA report's Figure 7.1: Asset Condition Findings by Asset Class provides a high-level overview of the assessed condition distribution for each asset class.¹⁷⁹ The ACA report also indicated¹⁸⁰ that as per Figure 7.1, the vast majority of Hydro One SSM's assets across all asset classes analyzed is in Fair condition or better, with a significant portion of asset populations in Good or Very Good condition.

However, Hydro One SSM stated¹⁸¹ that METSCO's approach to ACAs does not include recommending specific timeframes for replacement depending solely on condition results. Hydro One SSM is of the view that doing so would ignore other important factors beyond condition that utilities must consider before undertaking a decision to replace an asset.

Submission

OEB staff acknowledges that Hydro One SSM is striving to implement good management practices, and is moving in the right direction by moving to adopt a more condition-based asset management strategy. This strategy should help the utility to prioritize the order in which assets should be replaced and direct its capital spending to the most pressing concerns.

2.11 Issue #C11 – Has Hydro One SSM adequately addressed operational synergies and savings in the Transmission System Plan, including with respect to its operational integration with Hydro One Networks Inc.? Is Hydro One SSM's continuous improvement adequate?

OEB staff provides a submission on three components of the above noted issue:

- a) Operational Integration
- b) Operational Synergies and Savings
- c) Continuous Improvement

¹⁷⁸ Exhibit I, Tab 3, Schedule 19 (Energy Probe Interrogatory # 19)

¹⁷⁹ Exhibit I, Tab 1, Schedule 13 (OEB Staff Interrogatory # 13)

¹⁸⁰ Exhibit B1, Tab 1, Schedule 1, Appendix B, ACA Report, Page 78 of 96

¹⁸¹ Exhibit I, Tab 4, Schedule 19 (AMPCO Interrogatory # 19)

a) Operational Integration

Background

Hydro One SSM confirmed¹⁸² that effective October 1, 2018, its assets were operationally integrated into Hydro One Networks, and Phase 1 of the three integration phases is complete. Hydro One SSM stated that Hydro One Networks has taken over duties for capital and maintenance planning and execution on behalf of Hydro One SSM via service level agreements. Hydro One SSM also stated that Hydro One Networks' grid control centre is now responsible for monitoring, control and compliance of Hydro One SSM's power system. Hydro One SSM indicated that it expects a full integration to be completed in the "next two or three years or so," in advance of its next rebasing application for 2027 rates.¹⁸³

OEB staff notes that Hydro One SSM may be a virtual utility as Hydro One Networks has taken over duties for capital and maintenance planning and execution on behalf of Hydro One SSM. As noted earlier in this submission, Hydro One SSM stated that it has zero employees,¹⁸⁴ as its employees transitioned to Hydro One Networks as of October 1, 2018. The service level agreement between these two entities has been put on the record in an undertaking,¹⁸⁵ but has not been fully tested.

Hydro One SSM confirmed that financial integration would not occur any earlier than 2023, as GLPT debt will retire in 2023, but could not speculate on the exact timing of the financial integration.¹⁸⁶ Hydro One SSM also confirmed that there would be no impact on the revenue cap plan in place to 2026 from the financial integration. Hydro One SSM stated that rates would be set separately in the approved deferred rebasing period until it next rebases.

Submission

OEB staff submits that the three phase integration proposed by Hydro One SSM appears to be reasonable. However, OEB staff is of the view that at this time it is hard to completely assess Hydro One SSM's progress, as the integration only began recently on October 1, 2018.

¹⁸² Exhibit I, Tab 1, Schedule 8 (OEB Staff Interrogatory # 8)

¹⁸³ Technical Conference Transcript, January 14, 2019, page 85

¹⁸⁴ Technical Conference Transcript, January 14, 2019, page 19 & 20

¹⁸⁵ Undertaking – JT 1.1

¹⁸⁶ Technical Conference Transcript, January 14, 2019, page 96 and 97

OEB staff submits that the service level agreement between Hydro One SSM and Hydro One Networks should be thoroughly examined in the next cost of service proceeding.

OEB staff submits that although Hydro One SSM could not speculate on the exact timing of the financial integration, Hydro One SSM should keep the OEB updated going forward in its subsequent rate applications regarding the timing of completing both its operational and financial integration.

b) Operational Synergies and Savings

Background

Hydro One SSM has included in its Capital Plan Evolution section of its application projected savings of over \$76 million over the 2017-2025 period relative to GLPT's draft capital plans.¹⁸⁷

Hydro One SSM indicated¹⁸⁸ that some information¹⁸⁹ related to projected savings was included in the MAADs application for reference purposes, but was never presented to the OEB for approval. Hydro One SSM is of the view that its projected savings are a realistic representation of what will ultimately accrue to ratepayers as a result of the integration with Hydro One Networks.¹⁹⁰ However, this statement may be contradictory to further statements made by Hydro One SSM in the technical conference, as noted below.

Hydro One SSM stated that when the projected savings from the integration are realized, they will be passed onto ratepayers when Hydro One SSM rebases in 2027, on the basis of a lower capital spend,¹⁹¹ as well as from an ESM over the latter five years of the deferred rebasing period.¹⁹² Hydro One SSM indicated that realized savings to date are quantified in its pre-filed evidence.¹⁹³ Hydro One SSM declined¹⁹⁴ to

¹⁸⁷ Exhibit I, Tab 1, Schedule 41 (OEB Staff Interrogatory #41)

¹⁸⁸ Exhibit I, Tab 1, Schedule 41 (OEB Staff Interrogatory # 41)

¹⁸⁹ Exhibit B2, Tab 2, Schedule 1, Page 1, Table 1 - GLPT's "Without Transaction" Forecast of Capital Expenditures

¹⁹⁰ Exhibit I, Tab 1, Schedule 41 (OEB Staff Interrogatory # 41)

¹⁹¹ Technical Conference Transcript, January 14, 2019, page 95

¹⁹² Technical Conference Transcript, January 14, 2019, page 101

¹⁹³ Exhibit B2, Tab 2, Schedule 1

¹⁹⁴ Technical Conference Transcript, January 14, 2019, page 96

provide an updated table of forecasted savings from 2017 to 2026, but stated that the best, most up-to-date information is provided in an interrogatory response.¹⁹⁵

OEB staff also notes that there is no clear link between different sections of its evidence regarding potential savings from integration. For example, Hydro One SSM declined to map Table 1-5 – Summary of Anticipated Sources of Efficiencies of the pre-filed evidence to the Capital Plan Evolution pre-filed evidence.¹⁹⁶ Hydro One SSM indicated that because it is in the early stages of integration, only high level areas where the optimization of integration will be achieved can be provided. Hydro One SSM further clarified that the quality of the estimates would be so poor at this point that there would be no benefit, in particular in the later years.

Hydro One SSM also stated that ratepayers will be able to see its scorecard and that the trends would demonstrate the outcomes that are being achieved from the performance of the utility. Hydro One SSM also indicated that by aligning the metrics between the two utilities and the way performance is evaluated, synergies would be expected to be achieved, as integration occurs.¹⁹⁷

Hydro One SSM indicated that forecasted capital savings as articulated in the MAADs application were understated based on the capital expenditures as submitted in the current TSP,¹⁹⁸ primarily due to a change in strategic and management direction. Hydro One SSM noted that the original GLPT filing was based on a completely different strategy, based on a growing rate base and more investment into capital assets. Hydro One SSM stated that the Capital Plan Evolution as filed in this application also includes redundancies with Hydro One Networks and other efficiencies.

Submission

Although Hydro One SSM stated that the best, most up-to-date information regarding savings from the integration is provided in an interrogatory response,¹⁹⁹ OEB staff submits that it is not clear whether this information can be relied upon. OEB staff notes that Hydro One SSM indicated that this data was of low quality.

OEB staff submits that synergies from integration cannot be simply achieved by aligning scorecard metrics.

¹⁹⁵ Exhibit I, Tab 5, Schedule 8 (SEC Interrogatory #8)

¹⁹⁶ Technical Conference Transcript, January 14, 2019, page 99 and 100

¹⁹⁷ Technical Conference Transcript, January 14, 2019, page 105

¹⁹⁸ Technical Conference Transcript, January 14, 2019, page 120

¹⁹⁹ Exhibit I, Tab 5, Schedule 8 (SEC Interrogatory #8)

OEB staff submits that since the calculated savings are not based on an OEB-approved capital budget, any actual savings cannot be supported, as the benchmark was never approved by the OEB. OEB staff is unclear regarding the basis for considering the cited forecast deltas as being equivalent to real savings to the benefit of ratepayers. OEB staff is of the view that if the projected savings materialize, these savings should be passed onto ratepayers, including when the ESM will be introduced in years 2022 to 2026 of the revenue cap index plan. OEB staff submits that there is no justification as to why Hydro One SSM still believes that the savings are still realistic.

OEB staff submits that in Hydro One SSM's next revenue requirement application, it should file a report showing the status of its anticipated savings listed in the Capital Plan Evolution section of its evidence, including actual savings, with a discussion of any deviation from plan. OEB staff submits that this report should also be updated at the time of the filing of a cost of service or custom IR application.

c) Continuous Improvement

Background

Hydro One SSM was asked more detail²⁰⁰ as to how it is addressing the requirements of the *Report of the Board Performance Measurement for Electricity Distributors: A Scorecard Approach* (Scorecard Report)²⁰¹ with respect to continuous improvement, as well as the findings of Hydro One SSM's 2017 revenue requirement decision.²⁰² In particular, OEB staff asked how Hydro One SSM's evidence demonstrates how cost efficiencies will be achieved at a level of service that customers value.

Hydro One SSM is of the view²⁰³ that the benchmarking study included in this proceeding relates to continuous improvement with respect to cost performance. Hydro One SSM stated that its improved capital planning process has resulted in the reduction of capital planning expenditures. Hydro One SSM also noted that the scorecard shows to customers that the outcomes are being achieved, as well as communicates the actual performance of the utility.

²⁰⁰ Technical Conference Transcript, January 14, 2019, page 105 and 106

²⁰¹ EB-2010-0379, *Report of the Board Performance Measurement for Electricity Distributors: A Scorecard Approach*, March 5, 2014

²⁰² EB-2016-0356

²⁰³ Technical Conference Transcript, January 14, 2019, page 105 and 106

Hydro One SSM also confirmed that it is making ongoing efforts to achieve continuous improvement and is not waiting until integration is complete to make these efforts.²⁰⁴

Submission

OEB staff acknowledges Hydro One SSM's efforts to achieve continuous improvement. However, OEB staff notes that Hydro One SSM's statement that its improved capital planning process has resulted in the reduction of capital expenditures may not be accurate. OEB staff notes that the average capital expenditures forecasted from 2019 to 2026 of \$9.9 million are generally in-line with the capital funding envelope of \$9.8 million, and do not represent a reduction of capital expenditures.

2.12 Issue #C12. – Were Hydro One SSM's customer engagement activities adequate to enable customer needs and preferences to be considered in the formulation of its proposed spending?

Background

Hydro One SSM was asked how customer engagement was linked to its operational and capital spending outlined in the TSP.²⁰⁵ Hydro One SSM described one output from the May 2018 customer engagement session which was built into the current capital plan.

Hydro One SSM was asked why no customer surveys were done in the past, considering the prominence of these surveys in the Scorecard Report.²⁰⁶ Hydro One SSM indicated that the outcome of its regular informal communications with its customers would meet the same purpose as customer surveys. Going forward, Hydro One SSM's customers will participate in Hydro One Networks' customer surveys.

During the technical conference, Hydro One SSM was asked²⁰⁷ about its response to an interrogatory.²⁰⁸ Given the prominence of customer focus in the OEB's RRF, OEB staff was surprised by this interrogatory response, as described below. When asked to provide more information about specific customer engagement that was performed that

²⁰⁴ Technical Conference Transcript, January 14, 2019, page 108

²⁰⁵ Technical Conference Transcript, January 14, 2019, page 109

²⁰⁶ Technical Conference Transcript, January 14, 2019, page 109 and 110

²⁰⁷ Technical Conference Transcript, January 14, 2019, page 110 and 111

²⁰⁸ Exhibit I, Tab 1, Schedule 38 (OEB Staff Interrogatory # 38)

might have affected the preparation of this application, Hydro One SSM just referred to a May 2018 meeting with Hydro One SSM's largest customers.

Submission

OEB staff submits that given the prominence of customer focus in the OEB's RRF, more detail should be provided by Hydro One SSM about planned customer engagement activities in future revenue requirement applications.

D. PERFORMANCE SCORECARD

2.13 Issue #D13. – Are Hydro One SSM's proposed key performance indicators and scorecard complete, including adequate performance measure metrics, each with specific performance outcomes and implementation timelines? Do the outcomes adequately reflect customer expectations? Does Hydro One SSM's proposed scorecard reflect the OEB's requirements?

One of the expected components of this revenue cap index application specified by the OEB was a proposed scorecard, which Hydro One SSM has provided. OEB staff has provided below a submission on the three components of the above noted issue relating to the performance scorecard:

- a) Complete Key Performance Indicators
- b) Complete Scorecard Reflecting the OEB's Requirements
- c) Outcomes and Customer Expectations

a) Complete Key Performance Indicators

Background

Hydro One SSM confirmed that its key performance indicators (KPIs) were replaced by the use of its dashboard and scorecard.²⁰⁹ Hydro One SSM stated that going forward the scorecard is its performance management tool and reflects the best measures of its performance. Hydro One SSM indicated that there is now a more regular review of performance to ensure that items can be changed and realigned throughout the year.

²⁰⁹ Technical Conference Transcript, January 15, 2019, page 178 and 179

Submission

OEB staff submits that it is difficult to determine whether the switch to a monthly performance management system, from an annual system, has been beneficial without the inclusion of a cost-benefit analysis.

b) Complete Scorecard Reflecting the OEB's Requirements

Background

Hydro One SSM filed an updated scorecard as part of an interrogatory response.²¹⁰ Hydro One SSM advised that its updated scorecard addressed OEB concerns.^{211 212}

OEB staff observes that for the purposes of Hydro One SSM's scorecard, no benchmarking was performed versus its peers and no industry targets were set, even after considering its integration with Hydro One Networks. Hydro One SSM stated that the OEB has created its own sector-specific scorecard for electricity distributors, but there is no corollary in the transmission sector to rely on.²¹³

OEB staff has also reviewed the concerns of the OEB in its 2017 Hydro One SSM revenue requirement decision,²¹⁴ regarding performance metrics, including specific performance outcomes and implementation timelines, and notes that this finding has not been completely addressed by Hydro One SSM.

²¹⁰ Exhibit I, Tab 5, Schedule 14 (SEC Interrogatory #14)

²¹¹ Technical Conference Transcript, January 15, 2019, page 165 & 166

²¹² Technical Conference Transcript, January 15, 2019, page 165 & 166 – Specifically Hydro One SSM stated the following with respect to its scorecard:

- Addresses the concerns of the OEB in its 2017 revenue requirement decision regarding performance metrics, including specific performance outcomes and implementation timelines
- Includes targets along with metrics that are aligned with the OEB's RRF
- Addresses the Handbook, in particular page 17, which describes the OEB's considerations, specifically measures that capture key factors of utility performance
- Includes metrics related to customer satisfaction, reliability, cost performance, and execution
- Enables assessments over time, as it includes five years' worth of data
- Enables an appropriate comparisons with other utilities, as it is aligned with that of Hydro One Networks
- Enables the setting of reasonable targets for its performance metrics, as improvements in performance are shown in virtually all measures

²¹³ Technical Conference Transcript, January 15, 2019, page 164

²¹⁴ EB-2016-0356

OEB staff noted that Hydro One SSM has not met all of the OEB's requirements. Some of Hydro One SSM's implementation timelines for metrics were not described (e.g. customer satisfaction survey) in the scorecard.²¹⁵ Hydro One declined to revise its scorecard to include a separate Management Discussion and Analysis (MD&A) section which would also include implementation timelines.²¹⁶ Hydro One SSM also declined²¹⁷ to update its scorecard with 2018 values,²¹⁸ nor did it include targets for 2017.²¹⁹

Hydro One SSM also confirmed that its scorecard is aligned with the objectives of the Scorecard Report, which is to provide a reasonable level of service for customers at reasonable rates.²²⁰

OEB staff notes that Hydro One SSM has achieved improvements in performance in most measures in its scorecard.

Submission

OEB staff submits that scorecard deficiencies in relation to OEB requirements are still present and should be addressed by Hydro One SSM.

OEB staff notes that Hydro One SSM's targets may not have been stringent enough, as it has achieved improvements in performance in most measures. Hydro One SSM should demonstrate that its targets represent sufficiently challenging targets relative to past performance and other benchmarks in the spirit of continuous improvement. OEB staff submits that Hydro One SSM should carefully review its targets and determine the appropriateness of these targets, including the consideration of including industry targets.

OEB staff submits that in its next revenue requirement application, a revised scorecard should be included that meets the OEB's requirements. Proposed performance targets should be set for each measure and each year, and should ensure that they represent an improvement relative to past performance and other benchmarks. OEB staff submits that Hydro One SSM is to provide detailed reasons for any gaps or exceptions.

²¹⁵ Technical Conference Transcript, January 15, 2019, page 167, 168, 169

²¹⁶ Hydro One SSM stated that its MD&A explanations are included in another part of the pre-filed evidence.

²¹⁷ Technical Conference Transcript, January 15, 2019, page 169 & 177

²¹⁸ Hydro One SSM stated that it would be too onerous to update with 2018 values and of questionable value.

²¹⁹ OEB staff notes that for the scorecard to have meaning, targets should have been set for the year that metric results have been reported.

²²⁰ Technical Conference Transcript, January 15, 2019, page 175

c) Outcomes and Customer Expectations

Background

OEB staff notes that no customers or external stakeholders were consulted regarding the production of Hydro One SSM's scorecard, even considering the prominence of customers' needs and preferences in the Scorecard Report. Hydro One SSM stated that the intent of its scorecard was to align to the extent possible with that of Hydro One Networks.²²¹

Hydro One SSM was of the view that Hydro One Networks performed some customer engagement in the original development of its scorecard for its recent application. Hydro One SSM also indicated that Hydro One Networks' customer engagement informed the work done at Hydro One SSM, but no details were provided.

Submission

It is not clear how Hydro One Networks' customer engagement informed the work done at Hydro One SSM with respect to its scorecard. OEB staff submits that going forward Hydro One SSM should consult its customers and external stakeholders in the production of its scorecard, considering the prominence of customers' needs and preferences in the Scorecard Report. When Hydro One SSM is at a point that its scorecard will be integrated with Hydro One Networks, it should also ensure that this type of engagement is performed.

E. ACCOUNTING

2.14 Issue #E14. – Have all impacts of any changes in accounting standards, policies, estimates and adjustments been properly identified and recorded, and is the rate-making treatment of each of these impacts appropriate?

²²¹ Technical Conference Transcript, January 15, 2019, page 162 and 163

Background

There have been no changes in accounting standards or policies for Hydro One SSM. In its argument-in-chief, Hydro One SSM stated²²² that it will continue with the MIFRS accounting standard throughout most or all of the deferral period as a stand-alone entity from a financial perspective. Hydro One SSM also stated that there is no change envisioned in the accounting standards currently in use.

Submission

OEB staff submits that since there have been no changes in Hydro One SSM's accounting standards and policies, there is no impact on these policies and standards used for rate-making purposes.

2.15 Issue #E15. –Are Hydro One SSM's proposals for deferral and variance accounts, including the balances in the existing accounts and their disposition, and the continuation of existing accounts appropriate?

a) Balances for Disposition

Background

Hydro One SSM has proposed to dispose of a credit balance of \$94,909²²³ in its various sub-accounts of Account 1508, Other Regulatory Assets forecasted as of December 31, 2018. This amount includes forecasted carrying charges to December 31, 2018.

In the 2015 and 2016 cost of service proceeding decision and order,²²⁴ the OEB approved recovery of a deferral and variance account debit balance of \$787,816 in each of 2015, 2016 and 2017. The pre-filed evidence indicates that Hydro One SSM continued to recover approximately \$787,816 for an additional year in 2018 regarding deferral and variance account recovery approved in its 2015 and 2016 cost of service proceeding. The forecasted over-recovery as of December 31, 2018, including carrying charges was \$1,115,593,²²⁵ was recorded in Account 1595, Disposition and Recovery/Refund of Regulatory Balances account.

²²² Argument-in-Chief, Page 18, March 29, 2019

²²³ Exhibit E, Tab 1, Schedule 3, Page 5, Table 5

²²⁴ EB-2014-0238, December 18, 2014

²²⁵ Exhibit E, Tab 1, Schedule 3, Page 1

Hydro One SSM is not seeking the OEB's approval to dispose of the amount that was over-collected in 2018. Hydro One SSM's rationale was that the amount had not been audited, and that it would be "most prudent to wait for the year to conclude and financial statements audited before determining the final amount to be refunded".²²⁶ During the course of this proceeding, and in response to the OEB staff interrogatories,²²⁷ Hydro One SSM provided the forecast revenue requirement for 2019 including the additional credit forecast to December 31, 2018.²²⁸ However, Hydro One SSM's argument-in-chief indicates its proposal to dispose of a credit balance of only \$94,909, but no disposition of the 2018 over-recovery discussed above.

Submission

OEB staff submits that given that Hydro One SSM's parent is a reporting issuer, the 2018 audit is likely complete. OEB staff submits that Hydro One SSM should return the over-collection to customers in the amount of a credit balance of \$1,210,502 or the audited number, if different from this number, over one year.

b) Continuance and Discontinuance of Deferral and Variance Accounts

Background

Hydro One SSM has applied to continue the following Sub-accounts of Account 1508:²²⁹

- Infrastructure Investment, Green Energy Initiatives and Preliminary Planning Costs
- Property Tax and Use and Occupation Permit Fee Variances – Batchewana First Nations
- IFRS Gains and Losses
- OEB Cost Assessment Variances

In addition, Hydro One SSM has applied to continue to use the existing Disposition and Recovery/Refund of Regulatory Balances account (Account 1595).²³⁰

Hydro One has applied to discontinue the following Sub-accounts of Account 1508:

²²⁶ Exhibit E, Tab 1, Schedule 3, Page 2

²²⁷ Exhibit I, Tab 1, Schedule 79 (OEB Staff Interrogatory #79); Undertaking JT 2.18, Table 1

²²⁸ Undertaking JT 2.18, Table 1

²²⁹ Exhibit E, Tab 1, Schedule 1, Page 1

²³⁰ Exhibit E, Tab 1, Schedule 1, Page 1

- Comstock Claim
- Incremental costs related to addressing an upcoming change to the definition of the Bulk Electric System (BES)
- In-service Addition Net Cumulative Asymmetrical Variance Account.

Submission

OEB staff takes no issue with the proposed continuance and discontinuance of accounts, except of Account 1595, where a large credit balance of \$1,115,593 has built up due to over-collection in 2018. OEB staff submits that this amount should be returned to the customers in 2019.

2.16 Issue #E16. – Is the proposed new deferral account to capture revenue deficiencies appropriate?

Background

Hydro One SSM has requested an accounting order to establish a sub-account within deferral account 1574 to record revenue deficiencies incurred from January 1, 2019 until Hydro One SSM's proposed 2019 revenue requirement and rates are implemented.

Hydro One provided a draft accounting order reflecting its request.²³¹

Submission

OEB staff submits that Hydro One SSM's request to establish the deferral account is reasonable for the following precedents:

- In its Decision and Order in GLPT's 2015 and 2016 cost of service application,²³² the OEB allowed GLPT to record certain forgone revenue in sub-accounts of Account 1574

²³¹ Exhibit I, Tab 1, Schedule 2 (OEB Staff Interrogatory # 2)

²³² EB-2014-0238 GLPT December 18, 2014, page 3

- The OEB approved a deferral account for forgone revenue in the 2017 Hydro One Networks Transmission proceeding²³³

OEB staff also submits that the deferral account should not incorporate Hydro One SSM's "proposed" rates, but should incorporate "actual" OEB-approved rates. OEB staff is also of the view that if the OEB approves a later effective date than January 1, 2019, the deferral account should only capture the revenue deficiencies from the OEB-approved effective date until its rates are implemented.

F. COST ALLOCATION

2.17 Issue #F17. –Is the transmission cost allocation proposed by Hydro One SSM appropriate?

Background

Hydro One SSM indicated²³⁴ that the approved revenue requirement for each transmitter²³⁵ is split across the Network, Line Connection, and Transformation Connection rate pools using the same proportion of revenue requirement allocated to those pools by Hydro One Networks. The costs are then divided by forecast consumption (charge determinants) of each transmitter to establish the UTRs.²³⁶

OEB staff noted²³⁷ that in the Hydro One Networks Transmission interim decision and rate order²³⁸ for 2019 rates, there were some adjustments made to the allocations previously determined for Hydro One Networks Transmission. For example, 2017 forgone revenue was backed out, which changed the allocations to the pools.

However, Hydro One SSM did not agree²³⁹ that the final allocations approved for Hydro One Networks Transmission in its 2019 revenue requirement proceeding²⁴⁰ should be

²³³ EB-2016-0160 Hydro One Networks Inc. Transmission, Decision and Order, November 9, 2017, page 21

²³⁴ Exhibit I, Tab 1, Schedule 73 (OEB Staff Interrogatory # 73)

²³⁵ Hydro One SSM noted that the exception is B2M Limited Partnership whose costs are 100% allocated to the Network pool as the assets only provide Network services.

²³⁶ Exhibit D, Tab 2, Schedule 1

²³⁷ Technical Conference Transcript, January 15, 2019, page 181

²³⁸ EB-2018-0130 December 20, 2018

²³⁹ Technical Conference Transcript, January 15, 2019, page 181 & 182

²⁴⁰ EB-2018-0130

used to allocate Hydro One SSM's revenue requirement to each pool. Hydro One SSM stated that its current proceeding is a revenue cap index proceeding, so Hydro One SSM is not proposing changes to the allocations. Hydro One SSM also stated that Hydro One Networks Transmission is not proposing a change to the allocation in its 2019 revenue requirement proceeding²⁴¹ and that the allocations should be based on Hydro One Networks Transmission prior cost of service proceeding.²⁴²

However, subsequent to the Hydro One SSM technical conference, OEB staff issued a submission related to the 2019 Hydro One Networks Transmission revenue requirement proceeding.²⁴³ This submission described interrogatory responses regarding cost allocation.²⁴⁴ Hydro One Networks Transmission agreed in both its interrogatory responses and reply submission to revise its revenue requirement allocation by rate pool to be consistent with the approved rate order from Hydro One Networks Transmission's 2017-2018 transmission revenue requirement application.

Hydro One SSM further updated²⁴⁵ its position stating that it has employed the same cost allocation parameters as those proposed and approved for GLPT in its 2015 and 2016 cost of service proceeding.²⁴⁶ Hydro One SSM stated that given that the approved base revenue is taken from this proceeding, it is appropriate to adopt the same cost allocation methodology. However, no additional evidence was filed by Hydro One SSM as to how the cost allocation parameters used in its 2015 and 2016 cost of service proceeding would impact the allocation to rate pools in the current proceeding.

Submission

OEB staff finds it difficult to reconcile Hydro One SSM's statement that it has used the same cost allocation parameters as those approved in its 2015 and 2016 cost of service proceeding, against its other statement that its allocations should be based on Hydro One Networks Transmission's prior cost of service proceeding. OEB staff submits that in its reply submission, Hydro One SSM should show how the cost allocation parameters used in its 2015 and 2016 cost of service proceeding would impact the allocation to rate pools in the current proceeding.

²⁴¹ EB-2018-0130

²⁴² EB-2016-0160

²⁴³ March 14, 2019 EB-2018-0130

²⁴⁴ EB-2018-0130

²⁴⁵ Argument-in-Chief, Page 20, March 29, 2019

²⁴⁶ EB-2014-0238

OEB staff submits that the revised revenue requirement allocation by rate pool will be determined in Hydro One Networks Transmission's 2019 transmission revenue requirement decision.²⁴⁷ OEB staff submits that these allocations should be used for allocating Hydro One SSM's 2019 revenue requirement to the rate pools, and can also be calculated at the time of the draft rate order process for this proceeding.

G. EFFECTIVE DATE

2.18 Issue #G18 – Is the proposed effective date of January 1, 2019 for Hydro One SSM's 2019 revenue requirement appropriate?

Background

Hydro One SSM was asked²⁴⁸ to explain why Hydro One SSM did not file its application until July 26, 2018 and why a January 1, 2019 effective date is appropriate. In its response, Hydro One SSM stated that its application was filed according to the availability of certain evidence.²⁴⁹ Hydro One SSM also indicated that the proposed January 1, 2019 effective date is aligned with the annual reset of the UTRs charged by the IESO. Hydro One SSM submitted that changes by the IESO on other dates during the year are generally not possible. Hydro One SSM further stated²⁵⁰ that it believed that a five-month turnaround was reasonable, given that in its view, the request for relief is simply for an adjustment and the formula is constructed according to the OEB guidelines and policies.

OEB staff observes that this case includes Hydro One Networks' total factor productivity and total cost benchmarking analyses for its transmission operations on which Hydro One SSM has based its proposed revenue cap increase. This case addresses the first transmission TFP study received by the OEB and therefore requires extensive review.

Submission

Contrary to Hydro One SSM's above noted statements, OEB staff notes that:

- Changes by the IESO on dates other than January 1 are possible

²⁴⁷ EB-2018-0130

²⁴⁸ Exhibit I, Tab 5, Schedule 2 (SEC Interrogatory #2)

²⁴⁹ For example the METSCO Asset Condition Assessment report and a finalized Investment Plan

²⁵⁰ Argument-in-Chief, Page 21, March 29, 2019

- The OEB has approved the implementation of UTRs at a different date than the start of a calendar year²⁵¹

A significant amount of lead time was required for this application as it contained the first transmission TFP study received by the OEB. OEB staff submits that the filing date of July 26, 2018 of this application may not have provided enough lead time.

Considering the above noted points, OEB staff submits that a later effective date (i.e. March 1, 2019) may be considered by the OEB. OEB staff notes that there is an argument to support an effective date of the first date of the month following the issuance of the decision in this proceeding, which is an approach that the OEB has taken in the past. But, OEB staff acknowledges that there may have been some uncertainty as to how much effort the OEB would apply to this proceeding given that it is not a cost-based application. Therefore, on balance OEB staff is satisfied that a March 1 effective date is fair.

All of which is respectfully submitted

²⁵¹ For example: EB-2017-0280, November 23, 2017, Decision and Rate Order, 2017 Uniform Transmission Rates

Hydro One Sault Ste. Marie LP

EB-2018-0218

OEB Staff Submission

April 12, 2019

Appendix A – Suggested Options Regarding the TSP

Appendix A – Suggested Options Regarding the TSP

Summary

OEB staff notes that the role of the OEB is not to approve or deny the TSP, but the OEB will consider whether its components support anticipated spending levels. When the OEB reviews the TSP, OEB staff submits that the following four options are reasonable options that may be considered by the OEB. OEB staff's recommended alternative is Option #2.

- Option #1 – No Changes to the TSP as Filed, Including the Funding Envelopes
- Option #2 – No Changes to the TSP as Filed, Including the Funding Envelopes, But Increase the Stretch Factor
- Option #3 – No Changes to the TSP as Filed, Including the Funding Envelopes, But Expand the Use of the ESM
- Option #4 – No Changes to the TSP as Filed, Including the Funding Envelopes, But Approve the Use of an In-service Addition Net Cumulative Asymmetrical Variance Account and an OM&A Net Cumulative Asymmetrical Variance Account

Description of Each Option

Option #1 – No Changes to the TSP as Filed, Including the Funding Envelopes

The OEB may consider that no changes to the TSP are required and not make any cuts²⁵² to the funding envelopes relating to the underlying capital additions and OM&A expenditures supporting this revenue cap application.

This option may be chosen, as this is a revenue cap index proceeding and not a cost of service or custom IR proceeding, where certain components of the base revenue requirement may be specifically examined. The Filing Requirements also state that a transmitter seeking approval of revenue requirements under custom IR or revenue cap will be expected to demonstrate that its planning has been sufficiently robust that the utility will be able to manage within the revenue set, given that actual costs and revenues will vary from forecast.²⁵³ OEB staff has reviewed the TSP and it appears that

²⁵² An exception to this statement is the executive compensation and directors costs that are required to be removed from Hydro One SSM's 2019 revenue requirement relating to Bill 2 and the February 21, 2019 Directive

²⁵³ Filing Requirements For Electricity Transmission Applications Chapter 2 Revenue Requirement Applications, February 11, 2016, page 2 & 3, section 2.0

Hydro One SSM's planning has been sufficiently robust and that the utility will be able to manage within the revenue set.

Option #2 – No Changes to the TSP as Filed, Including the Funding Envelopes, But Increase the Stretch Factor

Building on Option #1, the OEB may consider that no changes to the TSP are required and not make any cuts²⁵⁴ to the funding envelopes relating to the underlying capital additions and OM&A expenditures supporting this revenue cap application. However, the OEB may consider increasing Hydro One SSM's proposed stretch factor to 0.30%. If the OEB approves a stretch factor of 0.30% at this time, versus Hydro One SSM's proposed stretch factor of 0%, the higher stretch factor would also give Hydro One SSM the incentive to be more efficient and reduce costs going forward.

Applying a 0.30% stretch factor to Hydro One SSM's base revenue requirement of \$39,778,120 would effectively reduce its proposed 2019 revenue requirement by \$119,334.

This is OEB staff's recommended option as it balances the fact that this is a revenue cap index application where specific components of the base revenue requirement may not be typically tested, against the new information that has been provided to the OEB upon Hydro One SSM filing its TSP.

Option #3 – No Changes to the TSP as Filed, Including the Funding Envelopes, But Expand the Use of the ESM

Building on Option #1, the OEB may consider that no changes to the TSP are required and not make any cuts²⁵⁵ to the funding envelopes relating to the underlying capital additions and OM&A expenditures supporting this revenue cap application. However, the OEB may consider expanding the use of the ESM.

In the 2016 MAADs proceeding,²⁵⁶ the OEB accepted the proposed ESM to be in effect from 2022. The OEB could override the prior MAADs decision and allow for an ESM to be in place earlier than 2022. Allowing an ESM to take effect earlier than 2022 would protect ratepayers from any overearning that may be achieved by Hydro One SSM as a

²⁵⁴ Please see above footnote for an exception to this statement

²⁵⁵ Please see above footnote for an exception to this statement

²⁵⁶ EB-2016-0050

result of underspending its capital and OM&A funding envelopes currently included in base rates.

Option #4 – No Changes to the TSP as Filed, Including the Funding Envelopes, But Approve the Use of an In-service Addition Net Cumulative Asymmetrical Variance Account and an OM&A Net Cumulative Asymmetrical Variance Account

Building on Option #1, the OEB may consider that no changes to the TSP are required and not make any cuts²⁵⁷ to the funding envelopes relating to the underlying capital additions and OM&A expenditures supporting this revenue cap application. However, the OEB may consider approving the use of variance accounts.

Two new variance accounts could be approved by the OEB to true-up actual spending from 2019 to 2026 to the funding envelopes relating to the underlying capital additions and OM&A expenditures supporting this revenue cap application. These variance accounts would protect ratepayers from any overearning that may be achieved by Hydro One SSM as a result of underspending (but not overspending) its capital and OM&A funding envelopes currently included in base rates. These two new variance accounts are listed below.

1. In-service Addition Net Cumulative Asymmetrical Variance Account
2. OM&A Net Cumulative Asymmetrical Variance Account.

A similar capital additions variance account was agreed to by parties in Hydro One SSM's (or rather GLPT's) 2015 and 2016 cost of service proceeding.²⁵⁸

²⁵⁷ Please see above footnote for an exception to this statement

²⁵⁸ EB-2014-0238 Settlement Proposal Originally Filed: November 12, 2014 Corrected: December 3, 2014
Page 11