Hydro One Networks Inc.

EB-2019-0082

OEB Staff Compendium

Panel 2

October 28, 2019

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Frank D'Andrea
Vice President, Regulatory Affairs & Chief Risk Officer

BY RESS, EMAIL AND COURIER

October 17, 2019

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
P.O. Box 2319
Toronto, ON M4P 1E4

Dear Ms. Walli,

EB-2019-0082 – Application for Transmission Revenue Requirement for 2020-2022 – Updated Interrogatory and Undertaking Responses

Hydro One Networks Inc. ("Hydro One") is filing updated undertaking responses and one updated interrogatory response for its application for transmission revenue requirement for 2020 to 2022.

Hydro One has filed an updated pension valuation as of December 31, 2018. The following interrogatory and undertakings have been updated as a result and are enclosed : JT-2.09, JT-2.31, JT-2.31-01, JT-2.32 and I-07-SEC-055. The updated pension valuation is provided as an attachment to JT-2.31.

Moreover, an updated JT1.14 is also enclosed which provides the 2018 NATF transmission reliability data.

This filing has been submitted electronically using the OEB's Regulatory Electronic Submission System and two (2) copies will be sent via courier.

Sincerely,

ORIGINAL SIGNED BY KATHLEEN BURKE ON BEHALF OF

Frank D'Andrea
Encls.
cc. EB-2019-0082 parties (electronic)

UNDERTAKING - JT 2.9

Reference:

I-07-SEC-055, part a)

Undertaking:

To produce a table similar to the one at SEC IR No. 55(a) to show capital reductions.

Response:

The following table outlines the capital reductions related to the Net Mercer Median table and is consistent with how the OM&A table was produced in SEC IR No. 55 (a).

Net Mercer Median Reductions Allocated to Capital ($M)	2020
Mercer Median - Tx Capital	28.5
Pension Reduction Capital	(3.0)
OPEB Increase Capital	1.7
Executive Comp. Reduction	(2.6)
The Directive	(0.3)
Total Net Mercer Capital Reductions	**24.3**
Updated Valuation Pension Reduction Capital	(4.2)
Updated Total Net Mercer Capital Reductions	**20.1**

- Mercer Median (+$28.5 million) is the Capital component of the transmission allocated portion of $38.6 million as stated above;

- The current revenue requirement reflects the reduced pension capital costs (-$3.0 million) due to the actuarial valuation of pension expenses completed by Willis Towers Watson (Exhibit F, Tab 5, Schedule 1 Attachment 1);

- The current revenue requirement reflects the updated OPEB capital costs, the allocation to Tx Capital results in an increase of (+$1.7 million) as a result of the latest valuation which is provided in Exhibit I, Tab 1, Schedule OEB-205;

- The current revenue requirement reflects the reduced executive compensation capital costs (-$2.6 million) identified in EB-2018-0130, Exhibit I, tab 7, schedule 3, page 2 to be in compliance with Bill 2; and

- As part of the blue-page update Hydro One further reduced its capital (-$0.3 million) by factoring the Ontario Government Directive issued on February 21, 2019 ("the Directive"), as discussed in Exhibit F, Tab 4, Schedule 1, page 35 and also identified in Exhibit F, Tab 1, Schedule 1, page 3.

- As a result of the updated pension valuation as of December 31, 2018, which Hydro One provided in the updated response to JT 2.31, pension capital costs are further reduced by (-$4.2 million).

UNDERTAKING - JT 2.31

Reference:

I-02-EnergyProbe-020
F-04-01, Appendix A

Undertaking:

To consider whether Hydro One can reasonably provide responsive information that's relevant in respect of the amount of the service cost ratio that Hydro One is contributing to the pension plan, to provide such further information, or if no such information exists, to advise.

Response:

The following is the difference between a 1:1 service cost ratio and the current (as per the updated valuation) service cost ratio for the period of 2020 – 2022 for the PWU plan.

	2020	2021	2022
PWU Difference between 1:1 and current Service Cost Ratio	$ 4.70M	$ 5.05M	$ 5.00M

Hydro One's significant gains in reducing pension costs are set out in Exhibit F, Tab 4, Schedule 1 pages 38 – 39.

Based on a market scan, Hydro One contribution costs are lower relative to other utilities. Hydro One filed an updated pension valuation report as of December 31, 2018 with FSRA on September 30, 2019 which is provided as Attachment 1 to this undertaking.

Hydro One intends to reflect the impact on revenue requirement as a result of the updated pension valuation.

Hydro One has updated the following evidence based on the updated pension valuation.

- Exhibit I, Tab 07, Schedule SEC-55
- Exhibit JT 2.9

Witness: Sabrin Lila

HYDRO ONE INC.

HYDRO ONE PENSION PLAN

Actuarial Valuation as at December 31, 2018

September 19, 2019

Registration Number: 1059104

DISCLAIMERS

This document is an actuarial valuation report of a pension plan. It is technical in nature and the reader should seek expert advice to fully understand it. The actuarial results presented here are based on numerous economic and demographic assumptions as to future events. Emerging experience, differing from the assumptions, will result in gains or losses that will be revealed in future actuarial valuations.

This report is based on the terms of engagement listed in Appendix A.

This report is based on the premise that all the plan's assets, including any letters of credit, are available to meet the plan's liabilities included in this valuation.

This report is based on the premise that the plan remains a going concern. This report does not address the disposition of any surplus assets remaining in the event of plan windup. If an applicable pension regulator or other entity with jurisdiction directs otherwise, certain financial measures contained in this report, including contribution requirements, may be affected.

The results presented in this report have been developed using a particular set of actuarial assumptions. Other results could have been developed by selecting different actuarial assumptions. The results presented in this report are reasonable actuarial results based on actuarial assumptions reflecting our expectation of future events.

Future contribution levels may change as a result of future changes in the actuarial methods and assumptions, the membership data, the plan provisions and the legislative rules, or as a result of future experience gains or losses, none of which have been anticipated at this time.

The results were developed with various data as at the valuation date that were provided to us: plan membership data, plan assets data, plan provisions and statement of investment policy. Towers Watson Canada Inc. (“Willis Towers Watson”) has relied on these data after verifying them and assessing their reasonableness. However, Willis Towers Watson has not independently audited these data.

The information contained in this report was prepared for Hydro One Inc., for its internal use and for filing with the Pension Authorities, in connection with the actuarial valuation of the plan prepared by Willis Towers Watson. This report is not intended, nor necessarily suitable, for other parties or for other purposes. Furthermore, some results in this report are based on assumptions mandated by legislation. These results may not be appropriate for purposes other than those for which they were prepared. Willis Towers Watson is available to provide additional information with respect to this report to the above-mentioned intended users upon request.

The numbers in this report are not rounded. The fact that numbers are not rounded does not imply a greater level of precision than if the numbers had been rounded.

Definitions:

Pension Authorities means the Financial Services Commission of Ontario and the Canada Revenue Agency ("CRA").

Pension Legislation means the *Pension Benefits Act (Ontario)* and Regulation thereto and the *Income Tax Act (Canada)* and Regulations thereto ("ITA").

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Introduction

Purpose

This report with respect to the Hydro One Pension Plan has been prepared for Hydro One Inc., the plan administrator, and presents the results of the actuarial valuation of the plan as at December 31, 2018.

The principal purposes of the report are:

- to present information on the financial position of the plan on going concern, solvency and hypothetical windup bases;
- to provide the basis for employer contributions.

Significant Events since Previous Actuarial Valuation (December 31, 2017)

Effective May 14, 2018, a new policy asset mix was adopted by Hydro One. This policy will be implemented over the next several years, when the appropriate investment opportunities are available. Notably this includes a shift towards real-estate and infrastructure and the removal of specific regional equity and fixed income mandates. This report reflects the new policy asset mix.

In November 2018, an asset transfer application in respect of Customer Service Operations (CSO) employees who transferred from Inergi LP to Hydro One was filed with the Pension Authorities. At the time this report is being prepared, the application has not yet been approved by the Pension Authorities and therefore, the impact of the past service transfer of assets and liabilities has not been reflected in this report. A financial update as of December 31, 2018 in respect of the asset transfer, as required under section 12 of the Ontario Regulation 310/13, is included as an Addendum to this report.

There have been no changes to the plan provisions and actuarial standards having an impact on the valuation results. Changes to the going concern basis are described in Appendix C. Changes to the solvency basis are described in Appendix D.

Subsequent Events

We completed this actuarial valuation on July 30, 2019.

On May 21, 2019, amendments to the Pension legislation were released. These amendments are intended to clarify certain details related to the new funding framework that took effect on May 1, 2018. The impact of these amendments, notably as it relates to the definition of “open” plan in the calculation of the Provision for Adverse Deviations, has been reflected in this report.

In June 2019, a cost certificate effective January 1, 2019 was filed with the Financial Services Regulatory Authority of Ontario. The present report takes precedence over the January 1, 2019 cost certificate.

Except as noted above, to the best of our knowledge and on the basis of our discussions with Hydro One Inc., no events which would have a material financial effect on the actuarial valuation occurred between the actuarial valuation date and the date this actuarial valuation was completed.

Next Valuation

The next actuarial valuation of the plan must be performed with an effective date not later than December 31, 2021.

Section 1: Going Concern Financial Position

1.1 Statement of Financial Position

	December 31, 2018	December 31, 2017
Going Concern Value of Assets	$ 7,202,478,000	$ 6,932,459,000
Actuarial Liability		
Active and disabled members	$ 1,662,138,096	$ 1,894,495,063
Retired members and beneficiaries	4,083,736,181	4,188,945,730
Terminated vested members	31,732,267	37,189,476
Total actuarial liability	$ 5,777,606,544	$ 6,120,630,269
Actuarial Surplus (Unfunded Actuarial Liability)	$ 1,424,871,456	$ 811,828,731
Prior Year Credit Balance	(48,000,000)	(48,000,000)
Actuarial Surplus (Unfunded Actuarial Liability) After Prior Year Credit Balance	$ 1,376,871,456	$ 763,828,731
Funded Ratio[1]	124%	112%
Provision for Adverse Deviations (PfAD)	$ 350,805,224	N/A
Actuarial Surplus (Unfunded Actuarial Liability) After Prior Year Credit Balance and PfAD	$ 1,026,066,232	763,828,731
Excess Actuarial Surplus[2]	$ 0	$ 0

Notes:

[1] After reflecting prior year credit balance.
[2] Considered to be nil if there is a hypothetical windup or solvency deficit.

Comment:

- The prior year credit balance is employer contributions made prior to the actuarial valuation date that are in excess of the minimum required and are set aside as a reserve for application towards future contribution requirements.

1.2 Reconciliation of Financial Position

Actuarial surplus (unfunded actuarial liability) as at December 31, 2017 before reflecting the Prior Year Credit Balance			$	811,828,731
Net special payments				0
Application of:				
■ Actuarial surplus	$	0		
■ Prior year credit balance		0		0
Expected interest on:				
■ Actuarial surplus (unfunded actuarial liability)	$	43,838,751		
■ Net special payments		0		
■ Application of actuarial surplus		0		
■ Application of prior year credit balance		0		43,838,751
Plan experience:				
■ Investment gains (losses)	$	132,768,855		
■ Salary and YMPE gains (losses)		9,968,737		
■ Retirement gains (losses)		(14,059,141)		
■ Withdrawal gains (losses)		(6,623,303)		
■ Mortality gains (losses)		(7,702,027)		
■ Gains (losses) from contractual pension increases		(16,001,483)		
■ Miscellaneous liability gains (losses)		(14,211,650)		84,139,988
Change in actuarial basis				485,063,986
Actuarial surplus (unfunded actuarial liability) as at December 31, 2018 before reflecting the Prior Year Credit Balance and PfAD			$	1,424,871,456

1.3 Contributions (Ensuing Year)

	December 31, 2018	December 31, 2017
Employer Normal Actuarial Cost		
Normal actuarial cost in respect of benefits	$ 113,346,619	$ 120,445,195
Provision for Adverse Deviations (PfAD)	6,671,594	N/A
Estimated member contributions	(53,554,752)	(49,552,747)
Employer normal actuarial cost	$ 66,463,461	$ 70,892,448
Estimated payroll	584,820,060	533,584,509
Employer normal actuarial cost as % of payroll	11.4%	13.3%

Reconciliation of Employer Normal Actuarial Cost Rule

Employer normal actuarial cost as a % of payroll at December 31, 2017	13.3 %
■ Changes in membership profile	(0.1)%
■ Changes in actuarial basis	(3.0)%
■ Change in the PfAD level	1.2 %
Employer normal actuarial cost as a % of payroll at December 31, 2018	11.4 %

1.4 Reconciliation of Prior Year Credit Balance (cash basis)

Prior year credit balance as at December 31, 2017			$	48,000,000
Actual employer contributions:				
■ Employer normal actuarial cost	$	75,042,000		
■ Going concern amortization payments		0		
■ Solvency amortization payments		0		
■ Transfer deficiency payments		0		
■ Prior year credit balance		0		
■ Other contributions		0		75,042,000
Minimum employer contributions required:				
■ Employer normal actuarial cost	$	(75,042,000)		
■ Going concern amortization payments		0		
■ Solvency amortization payments		0		
■ Transfer deficiency payments		0		
■ Other contributions		0		(75,042,000)
Application against unfunded actuarial liability				0
Prior year credit balance as at December 31, 2018			$	48,000,000

Section 2: Solvency and Hypothetical Windup Financial Position

2.1 Statement of Solvency and Hypothetical Windup Financial Position

	December 31, 2018	December 31, 2017
Solvency Value of Assets		
Market value of assets	$ 7,208,634,000	$ 7,305,522,000
Provision for plan windup expenses	(7,000,000)	(7,000,000)
Total solvency value of assets	$ 7,201,634,000	$ 7,298,522,000
Solvency Liability		
Active and disabled members	$ 2,068,058,939	$ 2,172,760,741
Retired members and beneficiaries	4,433,823,741	4,334,621,102
Terminated vested members	37,708,259	40,324,067
Total solvency liability	$ 6,539,590,939	$ 6,547,705,910
Solvency Surplus (Unfunded Solvency Liability)	$ 662,043,061	$ 750,816,090
Prior Year Credit Balance	$ 48,000,000	$ 48,000,000
Solvency ratio	Not less than 100%	Not less than 100%
Value of excluded benefits	$ 3,256,931,443	$ 3,482,126,137
Total hypothetical windup liability	9,796,522,382	10,029,832,047
Hypothetical Windup Surplus (Unfunded Hypothetical Windup Liability)	$ (2,594,888,382)	$ (2,731,331,047)
Lesser of estimated employer contributions for the period until the next actuarial valuation and the prior year credit balance	48,000,000	48,000,000
Transfer ratio	73%	73%

	December 31, 2018	December 31, 2017
PBGF Information		
Ontario PBGF liability	$ 6,539,590,939	$ 6,547,705,910
Ontario asset ratio	Not less than 100%	Not less than 100%
Ontario portion of the fund	$ 7,208,634,000	$ 7,305,522,000
PBGF assessment base	$ 0	$ 0
Ontario additional PBGF liability	$ 0	$ 0

Comments:

- The solvency actuarial valuation results presented in this report are determined under a scenario where, following a plan windup, the employer continues its operations.
- The hypothetical windup valuation results presented in this report are determined under a scenario where, following a plan windup, the employer continues its operations.
- As the transfer ratio is less than 1.00, transfer deficiencies must be paid over a maximum period of five years unless the cumulative transfer deficiencies are within the limits prescribed by the Pension Legislation or the employer remits additional contributions in respect of the transfer deficiencies. Pursuant to Regulations 19(4) or 19(5) to the Pension Legislation, approval of the Chief Executive Officer will be required to make commuted value transfers if there has been a significant decline in the transfer ratio after the actuarial valuation date.

2.2 Determination of the Statutory Solvency Excess (Deficiency)

In calculating the statutory solvency excess (deficiency), various adjustments can be made to the solvency financial position.

	December 31, 2018	December 31, 2017
Solvency surplus (unfunded solvency liability)	$ 662,043,061	$ 750,816,090
Adjustments to solvency position:		
■ Present value of existing amortization payments	$ 0	$ 0
■ Smoothing of asset value	(6,156,000)	(373,063,000)
■ Adjustment to reflect reduced solvency deficiency[1]	991,252,410	N/A
■ Averaging of liability discount rate	(68,758,462)	201,718,938
■ Prior year credit balance	(48,000,000)	(48,000,000)
■ Total	$ 868,337,948	$ (219,344,062)
Statutory solvency excess (deficiency)	$ 1,530,381,009	$ 531,472,028

Note:

[1] Reflects 15% of the solvency liabilities based on the discount rates after averaging.

Section 3: Contributions

3.1 Estimated Minimum Employer Contribution (Ensuing Years)

Year	2019	2020	2021
Employer Normal Actuarial Cost (including the PfAD)	$ 66,463,461	$ 65,993,735	$ 65,248,200
Amortization Payments			
■ Going concern	0	0	0
■ Solvency	0	0	0
■ Sub-total	$ 0	$ 0	$ 0
Application of Prior Year Credit Balance [1]	0	0	0
Application of available actuarial surplus	0	0	0
Estimated Minimum Employer Contribution	$ 66,463,461	$ 65,993,735	$ 65,248,200

Note:

[1] As at the actuarial valuation date a $48,000,000 Prior Year Credit Balance exists, which may be applied to reduce Employer contributions in 2019, 2020 or 2021.

3.2 Estimated Maximum Employer Contribution (Ensuing Year)

	December 31, 2018
Employer Normal Actuarial Cost	$ 66,463,461
Greater of the Unfunded Actuarial Liability and the Unfunded Hypothetical Windup Liability	2,594,888,382
Estimated Maximum Employer Contribution	$ 2,661,351,843

3.3 Timing of Contributions

Employer normal cost and member contributions: monthly and within 30 days of the month to which they pertain.

Amortization payments: monthly before the end of the month to which they pertain (or replaced by an equivalent letter of credit), if applicable.

Adjustment to contributions made since the valuation date: within 60 days from the date that this report is filed with the Pension Authorities.

Section 4: Actuarial Opinion

In our opinion, for the purposes of the going concern, solvency and hypothetical windup valuations:

- the membership data on which the actuarial valuations are based are sufficient and reliable,
- the assumptions are appropriate, and
- the methods employed in the actuarial valuations are appropriate.

This report has been prepared, and our opinion has been given, in accordance with accepted actuarial practice in Canada. The actuarial valuations have been conducted in accordance with our understanding of the funding and solvency standards prescribed by the Pension Legislation.

Towers Watson Canada Inc.

Davis Gonsalves
Fellow of the Canadian Institute of Actuaries

Suzanne Jacques
Fellow of the Canadian Institute of Actuaries

Toronto, Ontario
September 19, 2019

Appendix A: Significant Terms of Engagement and Certificate of the Plan Administrator

A.1 Significant Terms of Engagement

For purposes of preparing this actuarial valuation report, the plan administrator has directed that:

- The actuarial valuation is to be prepared as at December 31, 2018.
- No margins for adverse deviations are to be used.
- For the purpose of determining the going concern discount rate, the investment policy dated May 14, 2018, which is the most up-to-date version, should be considered. There are no expectations that the target asset class distribution will be modified in the future.
- For purposes of determining the Provision for Adverse Deviations level as at December 31, 2018, the actual asset allocation based on the December 31, 2018 audited financial statements and additional information related to the investment categories provided directly by the plan administrator should be used.
- For purposes of determining the Provision for Adverse Deviations level, the plan is to be considered open to new entrants, as defined in the Pension legislation.
- The going concern value of assets is to be determined using the averaging technique described in the Asset Valuation Method section in Appendix C.
- The going concern valuation should use the projected unit credit actuarial cost method.
- For purposes of determining the solvency liabilities of the plan, certain benefits are to be excluded without requiring an election from the employer.
- The solvency and hypothetical windup valuation results are to be determined under a scenario where the employer continues to operate and certain expenses are paid from the pension fund (consistent with past practice) while the employer pays other plan expenses.
- This report is to be prepared on the basis that the employer is entitled to apply the available actuarial surplus, if any, to meet its contribution requirements under the plan.

Should these directions from the plan administrator be amended or withdrawn, Willis Towers Watson reserves the right to amend or withdraw this report.

A.2 Certificate of the Plan Administrator

I hereby certify that to the best of my knowledge and belief:

- the significant terms of engagement contained in Appendix A of this report are accurate and reflect the plan administrator's judgement of the plan provisions and/or an appropriate basis for the actuarial valuation of the plan;
- the information on plan assets, including the information on the investment policy and intended changes to the asset mix distribution after the valuation date, if any, forwarded to Towers Watson Canada Inc. and summarized in Appendix B of this report is complete and accurate;
- the data forwarded to Towers Watson Canada Inc. and summarized in Appendix E of this report are a complete and accurate description of all persons who are members of the plan, including beneficiaries who are in receipt of a retirement income, in respect of service up to the date of the actuarial valuation;
- the summary of plan provisions contained in Appendix F of this report is accurate;
- for purposes of determining the Provision for Adverse Deviations level, the fixed income allocation for each asset class shown in Appendix G is appropriate; and
- except as noted in the Introduction of the report, there have been no events which occurred between the actuarial valuation date and the date this actuarial valuation was completed that may have a material financial effect on the actuarial valuation.

Signature	Date
	September 24, 2019

Name	Title
Robert Cultraro	SVP, Chief Investment and Pension Officer

Appendix B: Assets

B.1 Statement of Market Value

	December 31, 2018	December 31, 2017
■ Total invested assets	$ 7,208,634,000	$ 7,305,522,000
Net outstanding amounts:		
■ Contributions receivable		
- Employer normal cost	$ 0	$ 0
- Members contributions	0	0
- Amortization payments	0	0
- Others	0	0
■ Benefits payable	0	0
■ Expenses and other payables	0	0
■ Total net outstanding amounts	$ 0	$ 0
Total Assets	$ 7,208,634,000	$ 7,305,522,000

Comment:

- The data relating to the invested assets are based on the financial statements issued by KPMG. The data relating to net outstanding amounts were furnished by Hydro One Inc.

B.2 Asset Class Distribution

The following table shows the target asset allocation stipulated by the plan's investment policy in respect of major asset classes and the actual asset allocation as at December 31, 2018.

	Target asset allocation	Actual asset allocation as at December 31, 2018
Global equities	40.0%	47.8%
Private equities	5.0%	2.7%
Real estate and infrastructure	20.0%	9.2%
Bonds and debentures	33.0%	38.3%
Cash and short-term investments	2.0%	2.0%
Total	100.0%	100.0%

B.3 Reconciliation of Invested Assets (Market Value)

Assets as at January 1, 2018		$ 7,305,522,000
Receipts:		
■ Contributions:		
- Employer normal actuarial cost	$ 75,042,000	
- Employer amortization payments	0	
- Member required contributions	52,525,000	
- Past service contributions	451,000	
- Provision for non-investment expenses	0	$ 128,018,000
■ Investment return, net of investment expenses		161,011,000
■ Total receipts		$ 289,029,000
Disbursements:		
■ Benefit payments:		
- Pension payments	$ (324,564,000)	
- Lump sum settlements	(34,403,000)	
- Other benefit payments	0	$ (358,967,000)
■ Non-investment expenses		(26,950,000)
■ Total disbursements		$ (385,917,000)
Assets as at December 31, 2018		$ 7,208,634,000

Comments:

- This reconciliation is based on the financial statements issued by KPMG.
- The rate of return earned on the market value of assets, net of all expenses, from December 31, 2017 to December 31, 2018 is approximately 1.9% per annum.

B.4 Development of the Going Concern Value of Assets

	Adjusted Market Value Beginning from:				
	December 31, 2014	December 31, 2015	December 31, 2016	December 31, 2017	December 31, 2018
Adjusted market value as at December 31, 2014	$ 6,311,204,000				
Net cash flow for 2015	(117,373,000)				
Assumed investment return	362,695,000				
Adjusted market value as at December 31, 2015	6,556,526,000	$ 6,745,869,000			
Net cash flow for 2016	(182,014,000)	(182,014,000)			
Assumed investment return	349,203,000	359,427,000			
Adjusted market value as at December 31, 2016	6,723,715,000	6,923,282,000	$ 6,909,437,000		
Net cash flow for 2017	(235,047,000)	(235,047,000)	(235,047,000)		
Assumed investment return	350,209,000	360,786,000	360,052,000		
Adjusted market value as at December 31, 2017	6,838,877,000	7,049,021,000	7,034,442,000	$ 7,305,522,000	
Net cash flow for 2018	(230,949,000)	(230,949,000)	(230,949,000)	(230,949,000)	
Assumed investment return	363,146,000	374,493,000	373,706,000	388,345,000	
Adjusted market value as at December 31, 2018	$ 6,971,074,000	$ 7,192,565,000	$ 7,177,199,000	$ 7,462,918,000	$ 7,208,634,000
Going Concern Value of Assets					
Average of the five adjusted market values as at December 31, 2018					$ 7,202,478,000
Net outstanding amounts					0
Going concern value of assets as at December 31, 2018					$ 7,202,478,000

Comment:

- The rate of return earned on the going concern value of assets, net of all expenses, from December 31, 2017 to December 31, 2018 is approximately 7.4% per annum.

Appendix C: Actuarial Basis - Going Concern Valuation

C.1 Methods

Asset Valuation Method

The going concern value of assets was calculated as the average of the market value of invested assets at the valuation date and the four previous years' adjusted market values. The market values at December 31 of each of the four preceding years were accumulated to the valuation date with net cash flow (i.e., contributions less benefit payments) and assumed investment return. Net cash flow was assumed to occur uniformly throughout each year. Assumed investment return for a year was calculated assuming that each year, the assets earned interest at the going concern discount rate in effect for that year. Finally, this 5-year average of adjusted market values was then adjusted for net outstanding amounts.

The objective of the asset valuation method is to produce a smoother pattern of going-concern surplus (deficit) and hence a smoother pattern of contributions, consistent with the long-term nature of a going concern valuation.

Such smoothing is achieved by use of an averaging process which systematically recognizes investment returns different from expectations over a 5-year period, with 20% recognized at the valuation date and the remainder at a rate of 20% per year. This method will be expected to average periods of outperformance with periods of underperformance.

The expected return of the going concern discount rate has been selected to equal the expected return on the assets over long periods of time, with a margin for adverse deviations. As such, it is anticipated that, on average, the asset valuation method will tend to produce a result that is somewhat less than the market value of assets.

Actuarial Cost Method

The actuarial liability and the normal actuarial cost were calculated using the projected unit credit cost method (benefit accrual).

C.2 Actuarial Assumptions

	December 31, 2018	December 31, 2017
Economic Assumptions (per annum)		
Liability discount rate	6.00%	5.40%
Rate of inflation	2.00%	Same
Rate of salary increase	2.50% plus Merit and Promotion (see Table 1)[1]	2.50% plus Merit and Promotion (see Table 1)[2]
Escalation of YMPE under Canada/Québec Pension Plan[3]	3.00%	Same
Escalation of *Income Tax Act (Canada)* maximum pension limit[4]	3.00%	Same
Interest on members' contributions	2.00%	Same
Demographic Assumptions		
Mortality	95% of the 2014 Private Sector Canadian Pensioners' Mortality Table, projected generationally using Scale CPM-B	Same
Retirement from active membership	Age and service related rates (see Table 2)	Same
Pension commencement after termination of employment	Age 65	Same
Withdrawal	Age-related rates (see Table 3)	Same
Disability incidence/recovery	Age-related rates (see Table 4)	Same
Other		
Percentage of members with an eligible spouse at pension commencement and electing joint and survivor pension form	90%	Same
Years male spouse older than female spouse	3	Same
Provision for non-investment expenses	None; return on plan assets is net of all expenses	Same

Notes:

[1] For PWU members for 2019 and 2020, 1.5% p.a. increase plus merit and promotion (per applicable collective bargaining agreement).

[2] For Society for 2018, 0.5% increase plus merit and promotion (per applicable collective bargaining agreement).

[3] The YMPE of $57,400 for 2019 is the starting value for the YMPE projection as at the current actuarial valuation and is indexed starting in 2020.

[4] The *Income Tax Act (Canada)* maximum pension limit of $3,025.56 per year of service in 2019 is the starting value for maximum pension limit projection as at the current valuation and is indexed starting in 2020.

Table 1 — Merit and Promotion Scale

Age	First 4 Years of Employment	Subsequent Years
Under 25	7.5%	2.0%
25 - 29	5.5%	2.0%
30 - 34	3.5%	2.0%
35 - 39	3.5%	1.5%
40 – 44	3.5%	1.5%
45 - 49	2.0%	1.0%
50 - 54	2.0%	1.0%
55 - 59	1.0%	0.5%
60 & over	1.0%	0.0%

Table 2 — Retirement Rates

	Eligible for Unreduced Retirement		
Age	Based on points (82 or 85)	35 years of service and over	Not Eligible for Unreduced Retirement
Under 55	10%	30%	0%
55 to 59	15%	30%	5%
60 to 64	12%	30%	7%
65	50%	30%	20%
66 to 69	25%	30%	15%
70 and over	100%	100%	100%

Table 3 — Withdrawal Rates

Service (years)	Male & Female
Under 20	1%
20 and over	0%

Table 4 — Sample Disability Rates

Age	Male & Female
Under 25	0.100%
25	0.100%
30	0.105%
35	0.110%
40	0.115%
45	0.120%
50	0.295%
55	1.000%
60 and above	1.878%

C.3 Rationale for Actuarial Assumptions

The rationale for the material actuarial assumptions used in the going concern valuation is summarized below.

The going concern assumptions do not include margins for adverse deviations as a separate Provision for Adverse Deviations has been applied to the actuarial liability and normal actuarial cost.

Liability discount rate

The assumption is an estimate of the expected long-term return on plan assets adjusted as follows:

■ Expected long-term return on plan assets before adjustments	6.06 %
■ Investment management fees	(0.04)%
■ Adjustment for non-investment expenses paid by the plan	(0.07)%
■ Rounding effect	0.05 %
■ Expected long-term return on plan assets after adjustments and margin	6.00 %

Rate of inflation

Estimate of future rates of inflation considering economic and financial market conditions at the valuation date.

Rate of salary increase

■ Assumed rate of inflation per annum	2.00%
■ Effect of real economic growth and productivity gains in the economy	0.50%
■ Individual employee merit and promotion based on a scale which varies by age and service	
■ Total rate of salary increase	2.50% plus Merit and Promotion (see Table 1)

Escalation of YMPE under C/QPP and ITA limit

Indexed annually based on increases in the Industrial Aggregate Wage index for Canada, assumed to be a rate of inflation of 2.00% per annum, plus 1.00% per annum for the effect of real economic growth and productivity gains in the economy.

Mortality

Base mortality rates from the CPM2014Priv table, with a multiplier of 95% based on a review of the experience of the plan's actual mortality experience over the period 2007-2015 are considered reasonable for the actuarial valuation. Applying improvement scale CPM-B generationally provides allowance for improvements in mortality after 2014 and is considered reasonable for projecting mortality experience into the future.

Retirement from active membership

The rates of retirement were developed based on a review of plan experience for the years 2007 to 2015 and an assessment of future expectations. All members are assumed to commence their pension at retirement date.

Pension commencement after termination of employment

All terminated members are assumed to commence their pension at the age that produces the highest liability.

Withdrawal

The rates of withdrawal were developed based on a review of plan experience for the years 2007 to 2015 and an assessment of future expectations.

Percentage of involuntary terminations of employment

No allowance has been made for involuntary terminations of employment since assuming otherwise would not have a material impact on the actuarial valuation results.

Disability incidence/recovery

The rates of disability incidence/recovery are based on a prior assessment performed by Mercer (Canada) Limited. The use of a different assumption would not have material impact on the actuarial valuation results.

Percentage of members with an eligible spouse at pension commencement and electing joint and survivor pension form

When provided, the actual data for the spouse and form of payment were used for retired members. For other members, the assumed percentage of members with a spouse is based on the percentages for the general population and an assessment of future expectations for members of the plan.

Years male spouse older than female spouse

When provided, the actual data for the spouse were used for retired members. For other members, the assumption is based on surveys of the age difference in the general population, a review of plan data for the years 2007 to 2015, and an assessment of future expectations for members of the plan.

Provision for non-investment expenses

The liability discount rate is net of all expenses. The assumed level of expenses reflected in the liability discount rate is based on recent experience of the plan and an assessment of future expectations.

Appendix D: Actuarial Basis - Solvency and Hypothetical Windup Valuations

D.1 Methods

Asset Valuation Method

The market value of assets, adjusted for net outstanding amounts, has been used for the solvency and windup valuations. The resulting value has been reduced by a provision for plan windup expenses.

The adjustment in respect of the smoothing of solvency assets for purposes of determining the statutory solvency deficiency was calculated as the difference between the going concern value of assets used for the going concern valuation and the market value of assets.

Liability Calculation Method

The solvency and hypothetical windup liabilities for members were calculated using the traditional unit credit cost method.

Other Considerations

The solvency and hypothetical windup valuations have been prepared on a hypothetical basis. In the event of an actual plan windup, the plan assets may have to be allocated between various classes of plan members or beneficiaries as required by applicable Pension Legislation. Such potential allocation has not been performed as part of these solvency and hypothetical windup valuations.

D.2 Solvency Incremental Cost Actuarial Method

To calculate the Solvency Incremental Cost ("SIC"), we used the same method as for the solvency valuation.

No new entrants have been considered on the basis that such assumptions would not have a material impact on the SIC. The benefits and members' contributions were projected using the going concern valuation assumptions and the plan provisions.

We adjusted the expected settlement method at the end of the projection period to reflect demographic evolution. Regardless of that change, we used the discount rate applicable to the settlement method at the valuation date for each member.

The liability discount rates (before averaging) are assumed to remain at their current level over the projection period.

D.3 Actuarial Assumptions

	December 31, 2018	December 31, 2017
Economic Assumptions (per annum)		
Liability discount rate		
■ Annuity purchase (non-indexed)	3.20%	3.10%
■ Annuity purchase (fully-indexed)	0.08%	-0.13%
■ Annuity purchase (partially-indexed)[1]	0.85%	0.68%
■ Commuted value transfer (non-indexed)	3.20% for 10 years, 3.40% thereafter	2.60% for 10 years, 3.40% thereafter
■ Commuted value transfer (fully-indexed)	1.70% for 10 years, 1.80% thereafter	1.40% for 10 years, 1.60% thereafter
■ Commuted value transfer (partially-indexed)[1]	2.07% for 10 years, 2.17% thereafter	1.70% for 10 years, 2.00% thereafter
Liability discount rate (after averaging for solvency)		
■ Annuity purchase	3.14%	3.37%
■ Commuted value transfer	2.52% for 10 years, 3.56% thereafter	2.48% for 10 years, 3.80% thereafter
Discount rate for determining amortization payments	N/A	Same
Escalation of *Income Tax Act* (Canada) maximum pension limitation [2]	1.14% for 10 years, 1.91% thereafter	1.10% for 10 years, 2.04% thereafter
Demographic Assumptions		
Mortality	CPM2014 Canadian Pensioners' Mortality Table, projected generationally using Scale CPM-B	Same
Retirement/pension commencement	Described in section D.4	Same

	December 31, 2018	December 31, 2017
Other		
Percentage of members with an eligible spouse at pension commencement and electing joint and survivor pension form	90%	Same
Years male spouse older than female spouse	3	Same
Percentage of members receiving settlement by commuted value transfer [3]	Retired members and beneficiaries: 0% Other members: ■ Not eligible for retirement: 60% ■ Eligible for retirement: 20%	Same
Provision for expenses		
■ Solvency and Hypothetical windup	$7,000,000	Same

Notes:

[1] Applicable to New Society and New Management members only.

[2] The *Income Tax Act (Canada)* maximum pension limit is $3,025.56 per year of service in 2019 and is indexed starting in 2020.

[3] The balance are assumed to receive settlement by annuity purchase.

D.4 Rationale for Actuarial Assumptions

The rationale for the material actuarial assumptions used in the solvency and hypothetical windup valuations is summarized below.

The actuarial assumptions used in the solvency and hypothetical windup valuations do not include margins for adverse deviations.

Liability discount rate

Portion of the solvency and hypothetical windup liabilities expected to be settled by a group annuity purchase: based on the CIA annuity purchase guidance applicable at the valuation date which corresponds to an approximation of the annuity purchase rate. The duration of the liabilities assumed to be settled through the purchase of non-indexed annuities is 11.9.

Portion of the solvency and hypothetical windup liabilities expected to be settled by commuted value transfer: determined in accordance with the *Standards of Practice for Pension Commuted Values* in effect at the valuation date.

Liability discount rate for solvency (after averaging)

The average discount rates for calculation of the statutory solvency deficiency are based on the following:

- Benefits that are expected to be settled by a group annuity purchase, the average of the annualized approximate annuity purchase rates at December 31, 2018 and the four previous year-ends[1], determined as follows:

December 31, 2014	3.18%
December 31, 2015	3.10%
December 31, 2016	3.10%
December 31, 2017	3.10%
December 31, 2018	3.20%
Average	3.14%

Note:

[1] The approximate annuity purchase interest rates prior to October 1, 2015 have been adjusted to reflect the change in the mortality table assumption applicable to the determination of liabilities settled by group annuity purchase.

- Benefits that are expected to be settled by commuted value transfers, the average of the interest rates determined under the *Standards of Practice for Pension Commuted Values,* published by the Canadian Institute of Actuaries, at December 31, 2018 and the four previous year-ends[1], determined as follows:

	Rate for 10 years	Rate after 10 years
December 31, 2014	2.50%	3.80%
December 31, 2015	2.10%	3.70%
December 31, 2016	2.20%	3.50%
December 31, 2017	2.60%	3.40%
December 31, 2018	3.20%	3.40%
Average	2.52%	3.56%

Note:

[1] The *Standards of Practice for Pension Commuted Values* effective on December 31, 2018 are assumed to have always been in effect when determining the interest rates prior to October 1, 2015.

Escalation of *Income Tax Act (Canada)* maximum pension limitation

The maximum pension limitation under the Income Tax Act (Canada) is scheduled to be indexed annually based on assumed increases in the Industrial Aggregate Wage index. This assumption has been determined as the underlying inflation rates from the rates applicable to benefits expected to be settled by commuted value transfers (after averaging for solvency). For simplicity, this assumption has also been used for the benefits that are expected to be settled by a group annuity purchase.

Pre-retirement and Post-retirement pension increases

For the solvency valuation, as permitted under the Pension Legislation, post-retirement pension increases are assumed to be nil. For the hypothetical windup valuation, the assumption has been determined by applying the post-retirement increase provision specified in the plan to the inflation assumption.

Mortality

For the benefits that are expected to be settled by a group annuity purchase: based on CIA annuity purchase guidance.

For benefits that are expected to be settled by commuted value transfer: prescribed table. No pre-retirement mortality has been assumed in order to approximate the value of pre-retirement death benefits.

Retirement/pension commencement

For active and disabled members:

- Members eligible to retire: pension commences at the age that produces the highest actuarial value (including statutory grow-in rights).
- Members with age plus continuous service greater than or equal to 55 years: pension commences at the age that produces the highest actuarial value of pension (including statutory grow-in rights).
- Other members: age that produces the highest actuarial value.

For deferred vested members:

- Members are assumed to retire at the earliest age at which they qualify for an unreduced pension.

For the benefits that are expected to be settled by a group annuity purchase, this is consistent with the expected assumption that will be used by insurers to price the group annuity. For benefits that are expected to be settled by commuted value transfers, this assumption is in accordance with the Canadian Institute of Actuaries' Standards of Practice for Pension Commuted Values.

Percentage of members with an eligible spouse at pension commencement and electing joint and survivor pension form

See rationale for going concern assumptions in Appendix C.

Years male spouse older than female spouse

See rationale for going concern assumptions in Appendix C.

Percentage of members receiving settlement by commuted value transfer

This assumption has been determined by considering the benefit provisions of the plan, legislative requirements to offer specific settlement options to various classes of members, and, in particular, the options to be provided to members upon plan windup.

The assumption also reflects the expectation that members further from retirement are more likely to elect to settle their pension benefit by a commuted value transfer, while members closer to retirement are more likely to elect to settle their pension benefit through a group annuity purchase where this option is available. In addition, the assumption reflects past plan experience for terminating and retiring members.

Provision for expenses

Allowance was made for normal administrative, actuarial, legal and other costs which would be incurred if the plan were to be wound up (excluding costs relating to the resolution of surplus or deficit issues). The actuarial valuation is premised on a scenario in which the employer continues to operate after the windup date. In establishing the allowance for plan windup costs, certain administrative costs were assumed to be paid from the pension fund (consistent with past practice) while other costs were assumed to be borne directly by the employer.

Appendix E: Membership Data

	December 31, 2018	December 31, 2017
Active members		
■ Number	5,417	5,165
■ Average age	43.8	43.7
■ Average service	11.9	12.6
■ Annual payroll	$ 573,175,762	$ 548,752,740
■ Average salary	$ 105,811	$ 106,244
■ Accumulated contributions with interest	$ 400,687,906	$ 381,013,270
Disabled members		
■ Number	182	143
■ Average age	53.3	54.2
■ Average service	18.7	22.3
■ Annual payroll	$ 16,744,522	$ 12,955,921
■ Average salary	$ 92,003	$ 90,601
■ Accumulated contributions with interest	$ 11,946,420	$ 9,899,469
Retired members		
■ Number	5,775	5,698
■ Average age	71.9	71.6
■ Total annual pension	$ 261,518,671	$ 250,806,450
■ Average annual pension[1]	$ 45,285	$ 44,017
■ Total temporary annual pension	$ 21,738,013	$ 21,816,672
Beneficiaries and Survivors		
■ Number	1,717	1,751
■ Average age	81.1	81.4
■ Total annual pension	$ 46,592,190	$ 46,336,455
■ Average annual pension[1]	$ 27,136	$ 26,463
■ Total temporary annual pension	$ 344,094	$ 351,395

	December 31, 2018	December 31, 2017
Terminated vested members		
■ Number	302	305
■ Average age	53.7	54.2
■ Total annual pension[2]	$ 3,038,183	$ 3,080,065
■ Average annual pension	$ 10,060	$ 10,099

Notes:

[1] Excluding temporary annual pension.

[2] Prior to application of Income Tax Act maximum pension limits.

The following distribution relates to active and disabled members. The following meanings have been assigned to:

- Age: Age as at December 31, 2018
- Credited Service: Credited service as at December 31, 2018
- Earnings: Pensionable earnings for the year beginning January 1, 2019

		Credited Service								
Age		*0 - 4*	*5 - 9*	*10 - 14*	*15 - 19*	*20 - 24*	*25 - 29*	*30 - 34*	*35 +*	*Total*
< 25	Number	42								42
	Average Earnings	84,431								84,431
25 - 29	Number	339	59							398
	Average Earnings	91,997	97,185							92,766
30 - 34	Number	355	561	127						1,043
	Average Earnings	91,068	104,178	109,839						100,405
35 - 39	Number	207	359	356	22					944
	Average Earnings	92,228	104,701	111,347	121,683					104,868
40 - 44	Number	151	185	213	116	1				666
	Average Earnings	86,011	111,479	109,575	116,637	*				*
45 - 49	Number	117	116	177	68	8	49	1		536
	Average Earnings	93,056	109,799	114,077	118,620	125,441	112,855	*		*
50 - 54	Number	95	94	153	91	12	210	161		816
	Average Earnings	89,642	105,980	109,810	114,431	126,092	117,518	110,849		109,964
55 - 59	Number	75	80	121	91	11	114	223	31	746
	Average Earnings	89,170	115,637	105,968	113,125	135,158	109,903	114,558	116,391	110,222
60 - 64	Number	36	39	64	44	6	43	48	47	327
	Average Earnings	90,734	108,265	107,969	110,287	*	108,463	108,201	118,425	*
65 +	Number	5	8	18	11		4	17	18	81
	Average Earnings	83,518	106,951	111,716	100,185		125,881	123,168	111,647	111,026
Total	Number	1,422	1,501	1,229	443	38	420	450	96	5,599
	Average Earnings	90,659	106,207	110,386	114,978	133,883	114,060	112,913	116,498	105,362

Average Age = 44.1 Average Credited Service = 12.1

Review of Membership Data

The membership data were supplied by Hydro One Inc's third-party administrator, Morneau Shepell, as at December 31, 2018.

Elements of the data review included the following:

- ensuring that the data were intelligible (i.e., that an appropriate number of records was obtained, that the appropriate data fields were provided and that the data fields contained valid information);
- preparation and review of membership reconciliations to ascertain whether the complete membership of the plan appeared to be accounted for;
- review of consistency of individual data items and statistical summaries between the current actuarial valuation and the previous actuarial valuation;
- review of reasonableness of individual data items, statistical summaries and changes in such information since the previous actuarial valuation date; and
- comparison of the membership data and the plan's financial statements for consistency.

However, the tests conducted as part of the membership data review may not have captured certain deficiencies in the data. We have also relied on the certification of the plan administrator as to the quality of the data.

Membership Reconciliation

	Actives	Disabled	Terminated vested	Retired	Beneficiaries and survivors	Total
As at December 31, 2017	5,165	143	305	5,698	1,751	13,062
■ New entrants (including re-employed)	299	0	0	0	0	299
■ Transfers from Inergi LP	242	30	0	0	0	272
■ From disabled	6	(6)	0	0	0	0
■ To disabled	(31)	31	0	0	0	0
■ Terminated (with lump sum payment)	(43)	0	(10)	0	0	(53)
■ Termination (with vested pension entitlement)	(32)	0	32	0	0	0
■ Retirement	(186)	(14)	(23)	223	0	0
■ Deceased (without beneficiary)	(1)	(2)	0	(57)	(132)	(192)
■ Deceased (with beneficiary)	(2)	0	(1)	(89)	92	0
■ New ex-spouse	0	0	0	0	3	3
■ Data corrections	0	0	(1)	0	3	2
■ Net change	252	39	(3)	77	(34)	331
As at December 31, 2018	5,417	182	302	5,775	1,717	13,393

Appendix F: Summary of Plan Provisions

The following is an outline of the principal features of the plan which are of financial significance to valuing the plan benefits. This summary is based on the plan document as at November 7, 2016 and amendments up to and including the valuation date, as provided by Hydro One Inc. It is not a complete description of the plan terms and should not be relied upon for administration or interpretation of benefits. For a detailed description of the benefits, please refer to the plan document.

F.1 DB Provisions

Membership

The following categories of employees are members of the Pension Plan:

a) All regular employees (see Note 1a and Note 1b);

b) Employees for whom the Office and Professional Employees International Union was the bargaining agent prior to July 30, 1982;

c) Continuing construction employees who were members admitted to the Ontario Electricity Financial Corporation Pension Plan and its predecessors;

d) Employees who became continuing construction clerical employees after July 29,1982 and before August 8, 1984;

e) Employees who have completed three months of continuous employment as a probationary employee (see Note 1a and Note 1b).

Note 1a: Management employees hired on or after January 1, 2004 and Society represented employees hired on or after November 17, 2005 are eligible after completing three months of continuous employment but are not required to join the Pension Plan.

Note 1b: Management employees who were not eligible to elect to become a member of the Pension Plan on or after September 30, 2015 are no longer eligible to join the Pension Plan.

Any other employee who has completed twenty-four months of continuous employment and who has at least 700 hours of employment or earnings of 35% of the Year's Maximum Pensionable Earnings ("YMPE"), as defined under the Canada Pension Plan in each of the two previous consecutive calendar years, may elect to become a member of the Pension Plan.

Normal Retirement Date

a) Female members whose continuous employment commenced prior to January 1, 1976: The first day of the month when she in fact retires, coincident with or next following the attainment of age 60 or any subsequent month up to the month coincident with or next following her 65th birthday.

b) All other members: The first day of the month coincident with or next following the attainment of age 65.

Amount of Accrued Pension

Life Pension

a) 2% of the member's "high three-year average" (see Note 6) for each year of credited service, subject to a maximum of 35 years (see Note 2 and Note 3).

Note 2: For Management employees hired on or after January 1, 2004, and Society represented employees hired on or after November 17, 2005 the reference to "high three-year average" is changed to "high five-year average" for pensionable service while a Management or Society-represented employee.

Note 3: For members represented by PWU and the Society, for service accrued after March 31, 2025 for current employees and new hires, the benefit calculated will be determined using "high five-year average" (updated from "high three-year average" used for service accrued until March 31, 2025) as outlined in the respective collective agreements.

LESS

b) 0.625% of the member's "high five-year average" up to the "average YMPE" (see Note 6) for each year of credited service included in (a) above subsequent to December 31, 1965, subject to a maximum of 35 years – see Note 4.

Note 4: Effective July 1, 2001, for members of the PWU, and effective January 1, 2004, for Society represented members hired before November 17, 2005; the factor is reduced from 0.625% to 0.50%.

Bridge Pension (see Note 5)

0.625% of the member's "high five-year average" up to the "average YMPE" (see Note 6) for each year of credited service included in (a) above, subject to a maximum of 30 years, multiplied by 35, and divided by 30. This is generally payable until age 65.

The bridge benefit is reduced for early retirement in accordance with the same early retirement reduction provision applicable to the early retirement life pension described below.

Note 5: For Management employees hired on or after January 1, 2004 and Society represented employees hired on or after November 17, 2005, no bridge pension is payable for pensionable service while a Management or Society-represented employee. Effective January 1, 2018, Society represented employees hired on or after November 17, 2005 will be entitled to a bridge benefit equal to 0.625% up to the average YMPE for each year of service from January 1, 2018 onward while the member is earning a benefit under the basic formula.

Note 6: "High three-year average"/ "high five-year average" is the average of the member's base annual earnings plus bonuses up to a set percentage during the 36/60 consecutive months when the base earnings were highest. For earnings after 1999, the percentage of bonus under the performance achievement plan included in pensionable earnings is 50%. The "average YMPE" is the average of the YMPE's during the 60 consecutive months when the base earnings were highest.

Early Retirement

Age Plus Service (See Note 7 and Note 8)

A member may retire prior to the normal retirement date without any reduction in the accrued pension, if the sum of the member's age and years of continuous employment is equal to or greater than 82 or the member has 35 years of continuous employment, whichever occurs first (see Note 7).

Note 7: For Management employees hired on or after January 1, 2004 and Society represented employees hired on or after November 17, 2005, retirement without reduction is available when the sum of the employee's age and years of pensionable service is equal to or greater than 85 or the employee has 35 years of pensionable service, whichever occurs first.

Note 8: For members represented by PWU, for service accrued after March 31, 2025, the early retirement criteria for an unreduced pension will be changed from the sum of the employee's age and years of pensionable service is equal to or greater than 82 to the 85 as outlined in the collective agreement.

25 or More Years of Continuous Employment (see Note 9)

A member who does not qualify for the early retirement provisions above who is at least age 55 and has 25 or more years of continuous employment may retire prior to age 60, in which case the member's accrued pension is reduced by 3% for each year by which early retirement precedes age 60. These reductions also apply to members who elected a deferred pension when they left the Pension Plan and had 25 or more years of continuous employment.

Female Members with More Than 15 Years or Other Members with 15 or More Years but Less than 25 Years of Continuous Employment (see Note 9)

A female member whose continuous employment commenced prior to 1976 with at least 15 years of continuous employment, or any other member with 15 or more years but less than 25 years of continuous employment, who does not qualify for any of the previously mentioned early retirement provisions, may

retire within 10 years of normal retirement date. In such a case the member's accrued pension is reduced by 2% for each year up to five years and 3% for each additional year by which the early retirement date precedes the member's normal retirement date.

These reductions apply with respect to a female member whose employment commenced prior to 1976 and who has a deferred pension and at least 25 years of continuous employment at retirement. For any other members who have a deferred vested pension and have fewer than 25 years of continuous employment and are at least age 55 when they request that the pension payments begin, the deferred vested pension will be actuarially reduced (unless the member was eligible for an unreduced early retirement provision in effect when the member terminated active employment).

Other Members

A member, who does not qualify under any of the previously mentioned early retirement provisions, may retire within 10 years of normal retirement date. If the retirement occurred prior to July 1, 2012, the member is also required to have at least two years of Pension Plan membership. In such a case, the pension is the actuarial equivalent of the member's deferred pension provided that the reduction shall not be less than the minimum early retirement reduction required under the *Income Tax Act* (Canada).

Terminated Members with Deferred Pensions

A terminated member with a deferred pension may retire under any of the previously mentioned provisions for early retirement without reduction provided that such provision was in effect on the date of termination. In addition, if the member's employment is terminated on or after July 1, 2012, the member may be eligible for grow-in benefits under the *Pension Benefits Act* (Ontario) ("PBA"), resulting in the member being entitled to early retirement benefits under the Pension Plan that the member would not otherwise be eligible to receive on the date of termination.

Note 9: For Management employees hired on or after January 1, 2004 and Society represented employees hired on or after November 17, 2005 all references to "continuous employment" are to be replaced with "pensionable service" for service while a Management or Society-represented employee.

Postponed Retirement

Members who work past their normal retirement date shall continue to accrue benefits until December 1st of the calendar year they reach age 71 (or the Income Tax Act age limit, if different), they reach the 35 year service limit, or they terminate employment, whichever occurs first. If a member reaches 35 years of service and ceases contributions to the Pension Plan, service after 35 years is not counted in the calculation of the member's pension, but the pension is calculated using the member's base earnings up to the date of postponed retirement. If the member works past age 71, the member's pension will commence to be paid not later than December 1st of the year in which the member turns age 71.

Pension Increases

Pension increases of 100% (see Note 10) of the increase in the Consumer Product Index ("CPI") (Ontario), for the 12-month period ending in June of the previous year , will be given every January 1 to pensioners, beneficiaries and terminated employees with deferred pensions to an annual maximum of 8% each year after 1999. Any excess will be carried forward to use in future years up to the 8% limit.

Note 10: For Management employees hired on or after January 1, 2004 and Society represented employees hired on or after November 17, 2005, pension increases of 75% CPI (Ontario) for the 12-month period ending in June of the previous year will be given every January 1, to an annual maximum increase of 6%, with no carry forward.

Disability

A totally disabled employee receives benefits from an income replacement plan and ceases to contribute to the Pension Fund, but continues to accrue credited service. For this member, the base annual earnings for pension purposes are deemed to be increased by the same percentage increases described for pensions above.

Employee Contributions

Members represented by the Management hired on or after January 1, 2004 contribute at the following rates until they complete 35 years of credited service (see Note 11):

Up to and including March 31, 2018,

i. 7.75% of base annual earnings up to the YMPE; and

ii. 9.75% of base annual earnings in excess of the YMPE;

On and after April 1, 2018,

i. 8.25% of base annual earnings up to the YMPE; and

ii. 10.75% of base annual earnings in excess of the YMPE;

up to the limits established by the Income Tax Act.

Members represented by the Management hired before January 1, 2004 contribute at the following rates until they complete 35 years of credited service (see Note 11):

Up to and including March 31, 2018,

iii. 8.00% of base annual earnings up to the YMPE; and

iv. 10.00% of base annual earnings in excess of the YMPE;

On and after April 1, 2018,

iii. 8.75% of base annual earnings up to the YMPE; and

iv. 11.25% of base annual earnings in excess of the YMPE;

up to the limits established by the Income Tax Act.

Members represented by the Society hired on or after November 17, 2005 contribute at the following rates until they complete 35 years of credited service (see Note 11):

Up to and including March 31, 2018,

v. 7.75% of base annual earnings up to the YMPE; and

vi. 9.75% of base annual earnings in excess of the YMPE;

On and after April 1, 2018,

v. 8.25% of base annual earnings up to the YMPE; and

vi. 10.75% of base annual earnings in excess of the YMPE;

up to the limits established by the Income Tax Act.

Members represented by the Society hired before November 17, 2005 contribute at the following rates until they complete 35 years of credited service (see Note 11):

Up to and including March 31, 2018,

vii. 8.25% of base annual earnings up to the YMPE; and

viii. 10.25% of base annual earnings in excess of the YMPE;

On and after April 1, 2018,

vii. 8.75% of base annual earnings up to the YMPE; and

viii. 11.25% of base annual earnings in excess of the YMPE;

up to the limits established by the Income Tax Act.

Note 11: For Society represented members hired before November 17, 2005, contributions increase by 0.5% in the event that after January 1, 2004 a valuation report reveals that the solvency assets are lower than 106% of the solvency liabilities. Effective April 1, 2018 this clause is no longer applicable.

Members represented by the PWU contribute at the following rates until they complete 35 years of credited service:

On and after December 31, 2017,

ix. 8.75% of base annual earnings up to the YMPE; and

x. 11.25% of base annual earnings in excess of the YMPE;

up to the limits established by the Income Tax Act.

Death Before Retirement

No Surviving Spouse or Eligible Dependent Children

Fewer than two years of Pension Plan membership (Deaths prior to July 1, 2012)

The member's beneficiary or estate receives a cash refund of the member's contributions plus interest.

Two or more years of Pension Plan membership

The beneficiary or estate will receive the following:

- For pre-1987 service: a cash refund of the member's contributions plus interest.
- For post-1986 service: a lump sum equal to the commuted value of the member's pension earned since 1986, plus a refund of any excess contributions.

For deaths occurring on or after July 1, 2012, the beneficiary or estate will be entitled to the death benefits described above regardless of the member's length of service.

Surviving Spouse (see Note 12)

Fewer than two years of Pension Plan membership and less than 10 years of continuous employment

The beneficiary or estate receives a cash refund of the member's contributions plus interest.

Fewer than two years of Pension Plan membership and more than 10 years of continuous employment

The surviving spouse receives an immediate pension of 66.67% of the member's accrued pension earned to the date of death.

More than two years of Pension Plan membership, but less than 10 years of continuous employment

For pre-1987 service: The beneficiary or estate receives a cash refund of the member's contributions plus interest.

For post-1986 service:

- The beneficiary or estate receives a refund of any excess member contributions; and
- The surviving spouse chooses either:
    a. a lump-sum payment equal to the commuted value of the pension earned after 1986, or
    b. an immediate or deferred pension with a commuted value equal to pension earned after 1986.

More than two years of Pension Plan membership, and more than 10 years of continuous employment

For pre-1987 service: The surviving spouse receives an immediate pension of 66.67% of the member's accrued pension earned prior to 1987.

For post-1986 service:

- The beneficiary or estate receives a refund of any excess member contributions; and
- The surviving spouse chooses either:
- a lump-sum payment equal to the commuted value of the pension earned after 1986, or
- an immediate or deferred pension with a commuted value equal to pension earned after 1986. The immediate pension will not be less than 66.67% of the pension earned after 1986.

Note 12: For deaths occurring on or after July 1, 2012, the surviving spouse's entitlement to death benefits for post-1986 service shall be determined without reference to whether the member had more or less than two years of Pension Plan membership. In addition, for deaths occurring on or after July 1, 2012, if the surviving spouse is entitled to the death benefits in respect of the member's post-1986 service, the surviving spouse is also entitled to an amount equal to the member's contributions, with interest, in respect of pre-1987 service, rather than the designated beneficiary or estate.

Dependent Children, No Surviving Spouse

If the member completed 10 years of continuous employment, the survivor's pension is payable to the surviving spouse until death or, if there is no eligible spouse, to the dependent children until age 18 (longer if disabled or in full-time attendance at a school or university). The total benefits paid are subject to a minimum of the member's contributions with interest. A payment of the commuted value of the member's deferred pension less the commuted value of the pension payable to any dependent children is made to the beneficiary or estate.

Death After Retirement

A survivor's pension, being an amount equal to 66.67% of the pension to which the member would have been entitled, is payable on death after retirement to the surviving spouse, subject to other options chosen at the time of retirement. If the survivor spouse subsequently dies and is survived by the dependent children, or the member does not have a surviving spouse and is survived only by dependent children, the 66.67% survivor pension is split among the dependent children and is payable to age 18 (longer if disabled or in full-time attendance at a school or university).

If the member does not have a surviving spouse at retirement, the normal form of pension is a pension payable for life with a guarantee of 60 payments.

Optional forms of pension are available on an actuarially equivalent basis.

Termination of Employment (see Note 14)

Less Than One Year of Pension Plan Membership

A cash refund of the member's contributions plus interest.

More Than One Year But Fewer Than Two Years of Pension Plan Membership

The member is entitled to elect a cash refund of the member's contributions plus interest, or may leave the earned pension benefit in the Pension Plan to be paid upon retirement.

More Than Two Years but fewer than 10 Years of Pension Plan Membership and, either under Age 45, or Fewer Than 10 Years of Continuous Employment

For pre-1987 service: the member is entitled to a cash refund of the member's contributions plus interest, or may leave all of the earned pension benefit in the Pension Plan until retirement.

For post-1986 service: the member is entitled to leave all of the earned pension benefit in the Pension Plan until retirement; or to transfer (see Note 13) the commuted value of the earned pension.

More Than Two Years but fewer than 10 Years of Pension Plan Membership, and Age 45 or Older with More Than 10 Years of Continuous Employment

For pre-1987 service: the member is entitled to leave all of the earned pension benefit in the Pension Plan until retirement; or to transfer (see Note 13) 75% of the commuted value of the pension and receive a refund of 25% of the commuted value of your earned pension; or to leave 75% of the earned pension benefit in the Pension Plan until retirement, and receive a refund of 25% of the commuted value of the earned pension.

For post-1986 service: the member is entitled to leave all of the earned pension benefit in the Pension Plan until retirement; or to transfer (see Note 13) the commuted value of the earned pension.

More Than 10 Years of Pension Plan Membership, But Younger Than Age 45

For service from 1965 to 1986: the member is entitled to a cash refund of the member's contributions plus interest; or to leave all of the earned pension benefit in the Pension Plan until retirement; or to leave 75% of the earned pension benefit in the Pension Plan until retirement and receive a refund of 25% of the commuted value of the earned pension.

For post-1986 service: the member is entitled to leave all of the earned pension benefit in the Pension Plan until retirement; or to transfer (see Note 13) the commuted value of the earned pension.

More than 10 Years of Pension Plan Membership and Age 45 or Older

For pre-1965 service: the member is entitled to a cash refund of the member's contributions plus interest; or to leave all of the earned pension benefit in the Pension Plan until retirement; or to leave 75% of the earned pension benefit in the Pension Plan until retirement and receive a refund of 25% of the commuted value.

For service from 1965 to 1986: the member is entitled to leave all of the earned pension benefit in the Pension Plan until retirement; or to leave 75% of the earned pension benefit in the Pension Plan until retirement and receive a refund of 25% of the commuted value; or to transfer (see Note 13) the greater of the commuted value of 75% of the earned pension or the member's contributions with interest and receive a refund of 25% of the commuted value of the earned pension.

For post 1986 service: the member is entitled to leave all of the earned pension benefit in the Pension Plan until retirement; or to transfer the commuted value of the earned pension.

If a member is terminated on or after July 1, 2012, the member may be eligible for grow-in benefits under the PBA, which could result in the member being entitled to early retirement benefits under the Pension Plan that the member would not otherwise be eligible to receive on the date of termination. If grow-in benefits apply, this may affect the value of the benefits the member is entitled to receive on termination of employment or retirement.

Note 13: Amounts must be transferred to a pension fund related to another pension plan, a prescribed retirement savings arrangement, or a life annuity which does not commence before the earliest date on which the member would have been entitled to retire.

Note 14: In respect of terminations occurring on or after July 1, 2012, a member is entitled to the earned pension benefits for all service regardless of length of Pension Plan membership, continuous employment or age.

Excess Contributions

Upon the earliest of termination of employment, death or retirement, the amount by which the member's post-1986 contributions with interest exceed 50% of the commuted value of the vested deferred pension accrued after 1986 is refunded to the member (or to the spouse, beneficiary or estate, as applicable in the case of death before retirement).

Upon termination of employment, if a member who has attained age 45 and completed 10 or more years of continuous employment elects to fully divest the pension accrued prior to 1987, the member is entitled to receive the amount by which the contributions with interest made after 1964 but prior to 1987 exceeds the commuted value of the pension accrued after 1964 but prior to 1987. (See Note 15)

Note 15: For terminations occurring on or after July 1, 2012, entitlement to excess contributions in respect of pre-1987 service shall be determined without reference to age or years of continuous employment.

Maximum Benefits

The benefits in respect of continuous employment after 1991 are limited to the maximum allowable under the Income Tax Act (Canada).

Appendix G: Sensitivity Analysis and Other Disclosures

G.1 Sensitivity Information

Amounts determined with a discount rate 1% lower:

Going concern actuarial liability	$ 6,604,180,023
■ As percent increase	14.3%
Solvency actuarial liability	$ 7,463,167,347
■ As percent increase	14.1%
Total normal actuarial cost in respect of benefits	$ 148,002,361
■ As percent increase	30.6%
Employer normal actuarial cost as a percentage of payroll	16.3%

G.2 Solvency Incremental Cost

Solvency Incremental Cost (up to next valuation date)	$ 587,004,649

G.3 Provision for Adverse Deviations Level

Actual Asset Allocation for Fixed Income Assets

The information below as at December 31, 2018 has been used to determine the Provision for Adverse Deviation level.

	Actual asset allocation	Fixed income allocation	Non-fixed income allocation	Fixed income weight
Asset classes				
- Global Equities	47.78%	0%	47.78%	0%
- Private Equities	1.93%	0.965%	0.965%	50%
- Venture Capital	0.73%	0.365%	0.365%	50%
- Real estate and Infrastructure	9.23%	4.615%	4.615%	50%
- Bonds and debentures (below minimum rating)	0.01%	0.005%	0.005%	50%
- Bonds and debentures	38.31%	38.31%	0%	100%
- Cash & short-term investments	2.01%	2.01%	0%	100%
Total	100%	46.27%	53.73%	

Benchmark Discount Rate

Components	Rate
CANSIM V39056	2.18%
Risk Premium on Non-Fixed Income Assets[1]	2.69%
Risk Premium on Fixed Income Assets[2]	0.69%
Diversification Allowance	0.50%
Benchmark Discount Rate	6.06%

Note:

[1] 5.00% of the non-fixed proportion of the assets.

[2] 1.50% of the fixed proportion of the assets.

Provision for Adverse Deviations Level

Components	Provision for Adverse Deviation level
Fixed	4.00%
Asset mix based	3.37%
Benchmark discount rate based[1]	0.00%
Provision for Adverse Deviations Level[2]	7.37%

Notes:

[1] Reflects going concern discount rate less benchmark discount rate (subject to a minimum of zero), multiplied by the going concern liabilities duration (refer to sub-section G.1)

[2] The Provision for Adverse Deviations is applied to the going concern actuarial liability and total normal cost, excluding any portion for future indexation.

Hydro One Inc.

Hydro One Pension Plan

Addendum to the Actuarial Valuation as at December 31, 2018

Registration Number: 1059104

This addendum has been prepared in conjuction with the actuarial valuation of the Plan as at December 31, 2018 and is intended to satisfy the requirements of section 12 of the Ontario Regulation 310/13 to the *Pension Benefits Act (Ontario)* in connection with the application as of March 1, 2018 for the transfer of assets and liabilities of the following pension plans to the Plan:

- Inergi LP Customer Service Operations Pension Plan ("Inergi CSO Plan"), Registration Number 1285733; and
- the Vertex Customer Management (Canada) Limited Pension Plan ("Vertex Plan"), Registration Number 1099993.

As of the date of filing this valuation report regulatory approval from the Chief Executive Officer of the Financial Services Regulatory Authority of Ontario of the transfer of assets and liabilities described above is pending. As such, the purpose of this addendum is to provide a financial update of the transfer of assets and liabilities as of December 31, 2018 on a going concern and solvency valuation basis.

Methods and Assumptions

A summary of the methods and assumptions used to develop the amounts herein, can be found in Appendicies C and D of this actuarial valuation report.

Assets

Information relating to the Plan assets can be found in Appendix B of this actuarial valuation report. Information relating to the assets for the Inergi CSO Plan and Vertex Plan was provided by Aon Consulting Inc. on August 14, 2019 and August 20, 2019, respectively.

Membership Data

A summary of the data for the Plan can be found in Appendix E of this actuarial valuation report. For the Inergi CSO Plan and Vertex Plan, the data was provided by AON Consulting Inc. for the purposes of preparing the March 1, 2018 asset transfer valuation report and was adjusted to reflect known retirements and terminations between March 1, 2018 and December 31, 2018. A summary of the membership data can be found on page 3 of this addendum.

Plan Provisions

A summary of the plan provisions can be found in the March 1, 2018 asset transfer actuarial valuation report.

December 31, 2018 Financial Update

The going concern and solvency results at December 31, 2018 are provided below.

	December 31, 2018		
	Inergi CSO Plan	**Vertex Plan**	**Hydro One Pension Plan (Post Transfer)[2]**
Going Concern Position			
Going concern value of assets	$ 19,614,791	$ 85,582,264	$7,307,675,055
Going concern liability	$ 12,641,339	$ 75,483,106	$5,865,730,989
Actuarial Surplus (Unfunded Actuarial Liability)	$ 6,973,452	$ 10,099,158	$1,441,944,066
Funded Ratio	155%	113%	125%
Provison for Adverse Deviation (PfAD)	$ 737,161	$ 4,201,742	$ 355,744,127
Prior Year Credit Balance (PYCB)	0	0	(48,000,000)
Actuarial Surplus (Unfunded Actuarial Liability) After PYCB and PfAD	$ 6,236,291	$ 5,897,416	$1,038,199,940
Solvency Financial Position			
Solvency value of assets	$ 19,614,791	$ 85,582,264	$7,306,831,055[1]
Solvency liability	$ 17,136,299	$ 92,647,303	$ 6,649,374,541
Solvency Surplus (Unfunded Solvency Liability)	$ 2,478,492	$ (7,065,039)	$ 657,456,514
Prior Year Credit Balance	$ 0	$ 0	$ (48,000,000)
Solvency ratio	Not less than 100%	92%	Not less than 100%

Notes:

1 Reflects $7,000,000 of assumed windup expenses.

2 For convience, the going concern and solvency position of the Plan post transfer is also shown.

Summary of Membership Data

	Inergi CSO Plan	Vertex Plan
Active Members		
Number	240	223
Average Age (years)	46.3	46.7
Average Credited Service (years)	2.5	9.8
Average Salary	$ 70,526	$ 72,587
Disabled Members		
Number	23	16
Average Age (years)	54.1	54.2
Average Credited Service (years)	9.0	11.4
Average Salary	$ 72,956	$ 75,411
Deferred Vested Members		
Number	9	22
Average Age (years)	47.3	48.2
Average Annual Accrued Pension	$ 2,991	$ 7,667
Retired Members		
Number	17	49
Average Age (years)	61.2	64.3
Average Annual Pension In Pay	$ 2,894	$ 33,817
Outstanding Commuted Values		
Number	N/A	26
Total outstanding commuted values	N/A	$ 4,237,246

Actuarial Information Summary

See the instructions for completing this form. If an item does not apply, enter N/A.

Part I – Plan Information and Contributions

A. 001. Name of registered pension plan
Hydro One Pension Plan

B. 002. Registration number
Canada Revenue Agency: 1059104 Other:

C. 003. Is this plan a designated plan?	D. 004. Valuation date of report	E. 005. End date of period covered by report
☐ Yes ☑ No	Year Month Day: 2018 12 31	Year Month Day: 2021 12 30

F. 006. Purpose of the report (indicate all reasons for which the report was prepared)

☐ Initial report for a newly established plan ☑ Regular (triennial or annual) report for an ongoing plan ☐ Interim report in respect of an amendment to an ongoing plan ☐ Partial termination
☐ Termination ☐ Conversion ☐ Other (explain) _____

G. Contributions (prior to application of any credits or surplus) for covered period

Periods (see instructions)	Period 1	Period 2	Period 3	Period 4
007. Period start date (YYYY-MM-DD)	2019-01-01	2020-01-01	2021-01-01	
008. Period end date (YYYY-MM-DD)	2019-12-31	2020-12-31	2021-12-30	
Normal cost (defined benefit provision) 009. Members	53,554,752	52,850,402	51,617,771	
010. Employer	66,463,461	65,993,735	65,248,200	
010a. Explicit expense allowance included in employer normal cost above				
Normal cost (money purchase provision) 011. Members				
012. Employer				
Special payments Special payments for going-concern unfunded liability and solvency deficiency 013. Employer	0	0	0	
013a. Members	0	0	0	
Fixed contributions 014. Estimated dollar amounts of fixed employer and, if applicable, member contributions (defined benefit provision)				
014a. Estimated dollar amounts of fixed employer and, if applicable, member contributions (money purchase provision)				

Part II – Membership and Actuarial Information

H. Membership information	Number	Average age	Average pensionable service	Average salary	Average annual pension
015. Active members	5,599	44.10	12.10	105,362	N/A
016. Retired members	7,492	74.00	N/A	N/A	41,125
017. Other participants	302	53.70	N/A	N/A	10,060

I. Actuarial basis for going-concern valuation (see instructions)

020. Asset valuation method

☐ Market ☑ Smoothed Market ☐ Book ☐ Book and Market combination ☐ Other (specify) _____

021. Liability valuation method

☑ Accrued benefit (unit credit) ☐ Entry age normal ☐ Individual level premium ☐ Aggregate ☐ Attained Age

☐ Other (specify) _____

I. Actuarial basis for going-concern valuation (continued)

Selected actuarial assumptions

Where a flat rate is used, enter the rate under Ultimate rate and N/A under Initial rate and Number of years.

Valuation interest rate	Initial rate (%)	Number of years	Ultimate rate (%)
025. Active members	N/A	N/A	6.00
026. Retired members	N/A	N/A	6.00
027. Rate of indexation	N/A	N/A	2.00
028. Rate of general wage and salary increase	N/A	N/A	2.50
029. YMPE escalation rate	N/A	N/A	3.00
030. Income Tax Regulations' maximum pension limit escalation	N/A	N/A	3.00
031. Rate of CPI increase	N/A	N/A	2.00

032. Components of going-concern valuation interest rate on line **025** and/or **026**

a) Expected investment return on plan assets, excluding additional return from active investment management ..... 6.06 %

b) Expected additional return from active investment management ..... 0.00 %

c) Expected expenses paid from the fund for active investment management ..... 0.00 %

d) Expected investment expenses other than those reported on line **032 (c)** ..... -0.04 %

e) Other expected expenses including administrative expenses ..... -0.07 %

f) Effect of rebalancing and diversification, if any ..... 0.00 %

g) Margins for adverse deviations ..... 0.00 %

h) Other components ..... 0.05 %

i) Net going concern valuation interest rate ..... 6.00 %

035. Year Income Tax Regulations' maximum pension limit escalation commences 2019

036. Mortality table

☐ 1994 GAM Static ☐ 1994 Group Annuity Reserving (GAR) ☐ 1994 UP ☐ 80% of 1983 GAM ☐ CPM2014

☐ CPM2014Publ ☑ CPM2014Priv ☐ Other (specify) _____

036a. Improvement scale

Has a projection of mortality improvement been made? ..... ☑ Yes ☐ No

i) Has an assumption of generational mortality improvements been made? ..... ☑ Yes ☐ No

ii) If applicable, what is the year in which the mortality improvements have been projected? .....

iii) Which scale have you used?

☐ Scale AA ☑ Scale CPM-B ☐ Scale CPM-B1D2014 ☐ Other (specify) _____

036b. Adjustment to the mortality table

i) Has an adjustment to the mortality table been made? ..... ☑ Yes ☐ No

ii) If yes, which percentage did you apply to ..... Male 0.95 Female 0.95

037. Allowance for promotion, seniority, and merit increases

☐ Included in (line **028**) above ☑ Separate scale based on age or service ☐ No allowance

038. Allowance for expenses

038a. Allowance for investment expenses

☑ Implicit ☐ Explicit ☐ Both explicit and implicit

038b. Allowance for administrative expenses

☑ Implicit ☐ Explicit ☐ Both explicit and implicit

039. If a multi-employer plan, number of hours of work per member per plan year .....

040. Was a withdrawal scale used? ..... ☑ Yes ☐ No

041. Were variable retirement rates used? ..... ☑ Yes ☐ No

042. If no, what is the assumed retirement age? .....

J. Actuarial basis for solvency valuation

Valuation interest rate	Initial rate (%)	Select period	Ultimate rate (%)
045. Benefits to be settled by lump sum transfer	3.20	10	3.40
046. Benefits to be settled by purchase of deferred annuity	N/A	N/A	3.20
047. Benefits to be settled by purchase of immediate annuity	N/A	N/A	3.20
048. Rate of indexation	N/A	N/A	N/A

049. Mortality table

Lump sum: ☐ 1994 UP Generational ☐ CPM2014Priv ☑ CPM2014 ☐ CPM2014Publ ☐ Other (specify) _____

Annuity Purchase: ☐ 1994 UP Generational ☐ CPM2014Priv ☑ CPM2014 ☐ CPM2014Publ ☐ Other (specify) _____

049a. Improvement scale used

Lump sum: ☐ Scale AA ☑ Scale CPM-B ☐ Scale CPM-B1D2014 ☐ Other (specify) _____ ☐ None

Annuity Purchase: ☐ Scale AA ☑ Scale CPM-B ☐ Scale CPM-B1D2014 ☐ Other (specify) _____ ☐ None

K. Balance sheet information (DB provisions, see instructions)

050. Market value of assets, adjusted for receivables and payables	7,208,634,000
051. Amount of contributions receivable included in market value above	0
Going-concern valuation	
052. Going-concern assets	7,202,478,000
053. Optional ancillary contributions account balance included in going-concern assets above for a flexible pension plan (if applicable)	0
Going-concern liabilities	
060. For active members	1,662,138,096
061. For retired members	4,083,736,181
062. For other participants	31,732,267
063. For optional ancillary benefits to be provided under a flexible pension plan (if applicable)	0
064. Reserves	
064a. Expenses	0
064b. Ad-hoc indexing	0
064c. Provision for adverse deviation	350,805,224
064d. Other (Specify) _____	
070. Net funded position—surplus/deficit	1,074,066,232
071. Additional voluntary contributions	0
072. Money purchase assets (if applicable)	0
Solvency valuation	
Complete lines **080** to **100** only if the report contains an explicit solvency valuation	
Solvency assets	
080. Solvency assets with adjustment for expense provision, if any	7,201,634,000
081. Amount of wind-up expense provision reflected in line **080**	7,000,000
082. Optional ancillary contributions account balance included in solvency assets above for a flexible pension plan (if applicable)	
Solvency liabilities	
090. For active members	2,068,058,939
091. For retired members	4,433,823,741
092. For other participants	37,708,259
093. For optional ancillary benefits to be provided under a flexible pension plan (if applicable)	0
094. Reserves	
094a. Expenses	0
094b. Other (Specify) _____	
100. Net solvency position—surplus/deficit	662,043,061
101. Incremental cost	587,004,649

If the plan provides benefit increases coming into effect during the period covered by the report but after the valuation date, have those increases been reflected in:

102. The going-concern liabilities in lines **060** to **064**? ☐ Yes ☐ No ☑ N/A

103. The solvency liabilities in lines **090** to **094**? ☐ Yes ☐ No ☑ N/A

Discount rate sensitivity

	Change in percentage using discount rate 1% lower	Change in amount using discount rate 1% lower	Change in amount using discount rate 1% higher
104. Going-concern liabilities	14.30	826,573,479	
105. Normal cost	30.60	34,655,742	
106. Solvency liabilities	14.10	923,576,408	

107. Duration of the portion of the liabilities assumed to be settled through the purchase of annuities 11.90

L. Actuarial gains or losses

110. Was a gain/loss analysis done? ☑ Yes ☐ No

111. If line **110** is **yes**, indicate the date of the last filed funding valuation report and the net funded position as of that date ..... Year 2017 Month 12 Day 31 811,828,731

If line **110** is **yes**, indicate amount of gain or loss due to:

112. interest on surplus (unfunded liability)	43,838,751
113. special payments made	0
114. amount used for contribution holiday	0
115. change in actuarial assumptions	485,063,986
116. change in the asset valuation method	0
117. change in liability valuation method	0
118. plan amendments/changes	0
119. investment experience	132,768,855
120. retirement experience	(14,059,141)
121. mortality experience	(7,702,027)
122. withdrawal experience	(6,623,303)
123. salary increase experience	9,968,737
124. optional ancillary contributions forfeited	

Are there major contributing sources other than lines **112** to **124** above (if **yes**, specify)

125.	contractual pension increases	(16,001,483)
126.	Provision for Adverse Deviation	(350,805,224)
127.	all other sources (combined)	(14,211,650)

M. Subsequent events

135. Are there any subsequent event(s) that have not been reflected in the valuation? (refer to SOP) ☐ Yes ☑ No

N. Statements of opinion

136. Does the report include the statements of opinion required by the SOP (data, assumptions, methods, accepted actuarial practice)? ☑ Yes ☐ No

136a. Are any of the actuary's statements of opinion qualified? ☐ Yes ☑ No

Financial Services Commission of Ontario | Commission des services financiers de l'Ontario

Part III – Information required by the Financial Services Commission of Ontario

O. Additional valuation information

For purposes of Part III, the Regulation refers to the Regulation 909, R.R.O. 1990, as amended except as otherwise provided.

Going-concern valuation

137. Are benefits under the pension plan provided by an annuity purchase? ☐ Yes ☑ No

138. If line **137** is **yes**,

a) Enter the total asset value of the buy-in annuities as reported in the actuarial valuation report

b) Enter the total liabilities related to the buy-in annuities as reported in the actuarial valuation report

c) Enter the total asset value of the non-discharged buy-out annuities as reported in the actuarial valuation report

d) Enter the total liabilities related to the non-discharged buy-out annuities as reported in the actuarial valuation report

e) Have any annuities been discharged under OPBA section 43.1 since last valuation date? ☐ Yes ☐ No

If yes,

i) How many annuity discharge transactions have been made since the last valuation date?

ii) Enter the total premium of the buy-out annuities if the purchase was made since the last valuation date

iii) Enter the going-concern liabilities related to the annuity discharge at the time of purchase.

iv) Enter the top-up contributions required as per section 4 of Ontario Regulation 193/18.

139.1. Is the plan required to report the amount of Available Actuarial Surplus? ☑ Yes ☐ No

i) If **yes**, enter the amount of Available Actuarial Surplus 0

139.2. Breakdown of the total special payyments with respect to the going-concern unfunded liability and plan amendment

Special payments with respect to:	Period 1	Period 2	Period 3	Period 4	Present value of the special payments on the going-concern basis
Going-concern unfunded liability 139.2a Members	0	0	0		0
139.2b Employer	0	0	0		0
Plan amendment 139.2c Members	0	0	0		0
139.2d Employer	0	0	0		0

Provision for Adverse Deviations

139.3. Is the Provision for Adverse Deviations of the plan zero or deemed to be zero? ☐ Yes ☑ No

If **no**, complete lines **139.4** to **139.9**

139.4. Is the plan closed as determined in subsection 11.2(2) component A of the Regulation? ☐ Yes ☑ No

139.5 Combined target asset allocation for fixed income assets as determined in subsection 11.2(4) component J of the Regulation 46.27 %

139.6 Plan's duration of going-concern liabilities in subsection 11.2(5) of the Regulation 15.00

139.7 Total Provision for Adverse Deviation (%) 7.37 %

139.8 Amount of Provision for Adverse Deviation included normal cost (line **9**, **10** and **10a**) 6,671,594.00

139.9. a) Does the plan provide future escalated adjustments? ☑ Yes ☐ No

If **139.9(a)** is **yes**,

b) Are the future costs of escalated adjustments included in the calculation of the Provision for Adverse Deviation amounts on lines **064c** and **139.8**? ☐ Yes ☑ No

If **139.9(b)** is **no**,

c) Enter the going-concern liability related to the future escalated adjustments ,017,698,491

d) Enter the normal cost related t o the future escalated adjustments 22,822,962

Solvency valuation

140.1 If line **137** is **yes**,

a) Enter the total asset value of the buy-in annuities as reported in the actuarial valuation report

b) Enter the total liabilities related to the buy-in annuities as reported in the actuarial valuation report

c) Enter the total asset value of the non-discharged buy-out annuities as reported in the actuarial valuation report

d) Enter the total liabilities related to the non-discharged buy-out annuities as reported in the actuarial valuation report

e) If line **138(e)** is **yes**,
i) Enter the solvency liabilities related to the discharge at the time of purchase

140.2 Enter the total value of any reduced solvency deficiency payments (or solvency deficiency payments if applicable) that are guaranteed by letter(s) of credit

	Year	Month	Day
140.3 Enter the expiry date of the letter of credit, if any			

140.4 Solvency asset adjustment	-6,156,000
140.5 Solvency liability adjustment	-68,758,462
140.6 Reduced solvency deficiency	991,252,410
140.7 Solvency ratio as per the Regulation (express in decimal format)	1.0900

140.8 Components of the solvency special payments on lines **013** and **013a**

Special payments with respect to reduced solvency deficiency	Period 1	Period 2	Period 3	Period 4	Present value of the special payments on the solvency basis
140.8a Members	0	0	0		0
140.8b Employer	0	0	0		0

141. Have any of the excludable benefits been excluded? ☑ Yes ☐ No ☐ N/A

142. If line **141** is **yes**, enter the total amount of liabilities being excluded: 3,256,931,443

144. (i) Has an averaging method been applied to the market value of assets in determining the solvency asset adjustment? ☑ Yes ☐ No

a) If **yes**, indicate the positive or negative amount by which the solvency assets are adjusted as a result of applying the averaging method: (6,156,000)

(ii) Has the averaging method used in determining the solvency asset adjustment changed since the last valuation? ☐ Yes ☑ No

If **yes**, complete **(ii)a** or **(ii)b**, as appropriate:

a) The change in method increases the solvency asset adjustment by the amount of

b) The change in method decreases the solvency asset adjustment by the amount of

P. Miscellaneous

145. Prior year credit balance	48,000,000
146. Transfer ratio (express in decimal format)	0.7300

Guarantee fund assessment

147. PBGF liabilities	6,539,590,939
148. PBGF assessment base	0
149. Amount of additional liability for plant closure and/or permanent layoff benefits as described in E of subsection 37(4) of the Regulation	0
149a. Number of Ontario plan beneficiaries	13,393

Part IV – Information required by the Canada Revenue Agency

R. Additional information

173. Surplus/deficit determined at the valuation date as per the instructions:	
173a. Going-concern basis	1,074,066,232
173b. Wind-up basis	-2,594,888382
173c. For designated plans, maximum funding valuation basis	
174. Excess surplus determined at the valuation date:	
174a. Going-concern basis	
174b. For designated plans, maximum funding valuation basis	
175. For designated plans, employer normal cost determined under the maximum funding valuation basis:	
Period 1	
Period 2	
Period 3	
Period 4	
176. Minimum surplus required under applicable pension benefit legislation before contribution holiday:	
176a. Going-concern basis	
176b. Wind-up basis	
177. Maximum amount that could be claimed as eligible employer contribution(s) – defined benefit provisions – under subsection 147.2(2) of the Income Tax Act:	
177a. Unfunded liability	2,594,888,382
177b. Normal cost:	
Period 1	66,463,461
Period 2	65,993,735
Period 3	65,248,200
Period 4	
178. Do you have any employees contributing over the limit stipulated under paragraph 8503(4) of the Income Tax Regulations?	☑ Yes ☐ No

Part V – Information required by Retraite Québec

S. Additional information

185. Date on which the valuation report was prepared _____

186. Value of additional liabilities arising from an improvement on a funding basis _____

187. Value of additional liabilities arising from an improvement on a solvency basis _____

188. Surplus assets that can be allocated to fund contributions _____

189. Special payments _____

190. Total of the letters of credit taken into account in the assets on a funding basis _____

191. Insured annuities from an insurer taken into account in the actuarial valuation on a solvency basis _____

T. Additional information for plans whose employer is a municipality, a municipal housing bureau, or an educational institution at the university level

For service prior to the establishment of the stabilization fund

192. Reserve on a funding basis _____

	Present value	Amortization payments			
		Period 1	Period 2	Period 3	Period 4
193. Deficiency attributable to the employer					
194. Funding deficiency					
194a. Payable by the members					
194b. Payable by the employer					

For service following the establishment of the stabilization fund

195. Stabilization fund value _____

	Stabilization contributions			
	Period 1	Period 2	Period 3	Period 4
196. Members				
197. Employer				

	Present value	Amortization payments			
		Period 1	Period 2	Period 3	Period 4
198. Technical funding deficiency					
198a. Payable by the members					
198b. Payable by the employer					

U. Additional information for pension plans other than those mentioned in Section T, and for which solvency funding does not apply.

199. Target level (as a percentage) of the required stabilization provision .....

	Current service stabilization contributions			
	Period 1	Period 2	Period 3	Period 4
200. Members				
201. Employer				

	Present Value	Amortization payments			
		Period 1	Period 2	Period 3	Period 4
202. Technical funding deficiency					
202a. Payable by the members					
202b. Payable by the employer					
203. Stabilization funding deficiency					
203a. Payable by the members					
203b. Payable by the employer					
204. Improvement funding deficiency					
204a. Payable by the members					
204b. Payable by the employer					

Part VI – Certification by Actuary

As the actuary who signed the funding valuation report (the report), I certify that this completed form accurately reflects the information provided in the report.

Dated this 30 (day) day of September (month), 2019 (year)

Signature of actuary

Suzanne Jacques

Print or type name of actuary

Towers Watson Canada Inc.

Name of firm

(416)960-7460

Telephone

suzanne.jacques@willistowerswatson.com

Email*

*** Optional information. The Canada Revenue Agency will not communicate on plan specific matters with clients by email, since we cannot guarantee the confidentiality of emailed information.**

Personal information is collected under the authority of section 147.2 of the Income Tax Act and is used for the administration of a registered pension plan. It may also be used for any purpose related to the administration or enforcement of the Act such as audit and compliance. Information may also be shared or verified under information-sharing agreements to the extent authorized by law. Under the Privacy Act, individuals have the right to access their personal information and request correction if there are errors or omissions. Refer to Info Source canada.ca/cra-info-source, Personal Information Bank CRA PPU 226.

UNDERTAKING - JT 2.32

Reference:

Undertaking:

To provide a similar response as JT 2.31 related to the Society of United Professionals.

Response:

The following table summarizes the difference between a 1:1 service cost ratio and the current service cost ratio (as per the updated valuation) for the period of 2020 – 2022 for the Society plans.

	2020	2021	2022
Society Difference between 1:1 and current Service Cost Ratio	$1.30M	$1.20M	$1.20M

Hydro One's significant gains in reducing pension costs are set out in Exhibit F, Tab 4, Schedule 1 pages 38 – 39.

The updated pension valuation is provided in Exhibit JT 2.31.

SEC INTERROGATORY #55

Reference:

F-04-01-02

Interrogatory:

With respect to the Mercer Compensation Cost Benchmarking Study:

a) Please provide an estimate of the dollar difference between the weighted average total compensation for Hydro One's employees allocated to its transmission business and the P50 median used in the study. Please provide the amount in 2017 (the year the study was completed) and for each year between 2020 and 2022. Please provide a step-by-step explanation of how the estimate was reached and include the supporting calculations so that calculations can be verified.

b) Please provide a list of all types of compensation (i.e. salary, overtime, share grant, LTIP etc.) that were paid in 2017 that: i) were included in the study, and ii) were not included in the study.

c) Please provide the percentage of total compensation in each year between 2020 and 2022 that if of a type not types not included in the study.

d) Are there any additional types of compensation that will be paid in 2020 through 2022 that were not in 2017?

Response:

a) An estimate of the dollar difference between the weighted average total compensation for Hydro One's employees allocated to its transmission business and the market median used in the study is as follows:

	Study Year	2020	2021	2022
Estimated Dollar Difference (Hydro One to Market Median)	$34,485,965	$38,566,291	$40,010,087	$39,079,490

Witness: Sabrin Lila, Iain Morris, Joel Jodoin

This value was calculated based on the results of the Compensation Cost Benchmarking Study (F-04-01-02), based on the following set of assumptions:

- Estimates are based on the differential between the average salary and the market median rate for the corresponding level, multiplied by the number of incumbents in the relevant level.
- Projections assume external market increases and Hydro One salary increases as per the information below:
    - Market (MCP roles): CPI + 0.6%,
    - Market (represented roles): Increase at rate of CPI
    - CPI Assumptions: 2017: 2.3%, 2018: 2.3%, 2019: 2.0%, 2020: 2.0% , 2021: 1.9%, 2022: 2.0%

- Assumes that headcount increases occur as per the business plan (F-04-01 Table 2) and the proportion of MCP incumbents in each level remains consistent.

- The allocation of compensation to Transmission related activities is based on the following percentages 2020: 48.22%, 2021: 49.68% and 2022: 48.35%.

Hydro One has reduced the amount of compensation for recovery in revenue requirement since the Mercer Study was conducted. The above Mercer median should be updated to reflect the further offsetting reductions as consistent with OEB approved decision in EB-2017-0049. The variance between the Mercer study market median and Hydro One compensation as well as the reductions included in this application related to OM&A are set out in the table below:

Net Mercer Median Reductions Allocated to OM&A ($M)	**2020**
Mercer Median - Tx OM&A	10.1
Pension Reduction OM&A	(5.5)
OPEB Reduction OM&A	(2.4)
Executive Comp. Reduction	(1.5)
The Directive	(0.1)
Total Net Mercer OM&A Reductions	**0.5**

Updated Pension Reduction OM&A	(1.7)
Total Net Mercer OM&A Reductions	**(1.2)**

- Mercer Median (+$10.1 million) is the OM&A component of the transmission allocated portion of $38.6 million as stated above;

- The current revenue requirement reflects the reduced pension OM&A costs (-$5.5 million) due to the actuarial valuation of pension expenses completed by Willis Towers Watson (Exhibit F, Tab 5, Schedule 1 Attachment 1);

- The current revenue requirement reflects the reduced OPEB OM&A costs (-$2.4 million) as a result of the latest valuation which is provided in Exhibit I, Tab 1, Schedule OEB-205;

- The current revenue requirement reflects the reduced executive compensation OM&A costs (-$1.5 million) identified in EB-2018-0130, Exhibit I, tab 7, schedule 3, page 2 to be in compliance with Bill 2; and

- As part of the blue-page update Hydro One further reduced its OM&A (-$0.1 million) by factoring the Ontario Government Directive issued on January 1, 2019 ("the Directive"), as discussed in Exhibit F, Tab 4, Schedule 1, page 35 and also identified in Exhibit F, Tab 1, Schedule 1, page 3.

- As a result of the updated pension valuation as of December 31, 2018, which Hydro One provided in the updated response to JT 2.31, pension OM&A costs are further reduced by (-$1.7 million).

Hydro One submits that any further reductions contemplated by the OEB to the amount of compensation recovered in rates based on the Mercer benchmark median are not appropriate. As evident from the table above, the current OM&A ask in the application reflects reductions which are larger than the OM&A component representing the Net Mercer Median reduction by $1.2 million.

b) The compensation elements included in the Mercer Compensation Benchmark Study are described in Exhibit F-4-1 Attachment 2, p. 28 of 34 Appendix C – Detailed compensation Benchmark Methodology. The compensation elements are: Base Salary / Wage, Short-term Incentive or Bonus paid/lump sum, Benefits including post

retirement non-pension benefits, Pensions, and long-term incentives (i.e. LTIP, share awards).

c) The study included all relevant compensation elements for both Hydro One and market respondents.

d) There are no planned additional types of compensation that will be paid in 2020 through 2022 that were not in 2017.

UNDERTAKING - JT 1.14

Reference:

I-07-SEC-046

Undertaking:

To provide the 2018 NATF transmission reliability report.

Response:

The 2018 NATF transmission reliability report was made available on October 10, 2019. Below please find a summary of the data.

The 2018 NATF Report replaced the IPII with TRIND (Transmission Index) due to the retirement of the IPII metric. TRIND, similar to IPII, is an index that aggregates key indicators to provide an overall score enabling the comparison of performance over time. Unlike IPII which was a single year score, TRIND provides a score reflecting a 5-year period.

There are nineteen peers in the 2018 data set.[1] Hydro One's ranking is shown below. Hydro One is investigating the factors contributing to the downward performance trend; one possible reason is the inclusion of 115 kV circuit data beginning in 2016. Prior to 2016 only 230 kV and 500 kV data was considered.

TRIND Total 5-year Period	Score*
2014-2018	19/19
2013-2017	17/21
2012-2016	13/21

**Lower score indicates better relative ranking*

The 2018 NATF Report included traditional metrics rankings for both 2018 on a stand-alone basis and for the 2014-2018 5-year period. These metrics are comparable to the traditional metrics in I-7-SEC-46.

[1] One peer didn't submit data and another only submitted partial data.

Traditional Reliability Metrics (200-799 kV) – Single and 5-year Average	**2018***	**2014-2018***
AC Circuit Outage Rate per Hundred Miles per Year	15/19	12/19
AC Circuit Outage Rate per Element per Year	19/19	17/19
AC Circuit Average Outage Rate Duration of Sustained Outages	14/19	13/19
AC Circuit Outage Rate Per Hundred Miles per Year-Momentary	15/19	12/19
AC Circuit Outage Rate per Element per Year Rate-Momentary	18/19	16/19
AC Circuit Outage Rate per Hundred Miles per Year-Sustained	16/19	11/19
AC Circuit Outage Rate per Element per Year-Sustained	17/19	14/19

**Lower score indicates better relative ranking*

OEB INTERROGATORY #171

Reference:

F-01-01 p.3 Table 1, F-04-01 p.13 Table 2,F-01-02-01 p.5

Interrogatory:

At the first reference above, Hydro One's Total Transmission OM&A expenses are shown as decreasing from $385.0 million in 2017 to $375.8 million in the 2020 Test Year, which represents a decrease of over 2%

At the second reference above, Hydro One's Grand Total FTEs are shown as increasing in the same period from 8,146 to 9,146, an increase of over 12%.

At the third noted reference Appendix 2-L "Recoverable OM&A Cost Per Customer and per FTE." is shown.

a) Please update Appendix 2-L to reflect both 2017 and 2018 OEB-approved FTEs. If these numbers are not available, please provide an estimate.

b) In general, OEB staff notes that OM&A is decreasing, while the number of FTEs is increasing. Please confirm and explain the following movements in OM&A and FTEs in the table below:

	2019 forecast over 2018 actual	2020 forecast over 2019 forecast		2020 forecast over 2018 actual	2020 forecast over 2018 OEB approved
OM&A	-14.9%	5.4%		-10.3%	-4.7%
FTEs	9.3%	-0.8%		8.5%	n/a

Response:

a) The OEB process approves Hydro One's overall spending envelope and therefore not the specific labour mix and FTEs.

b) Confirmed, the OM&A calculation analysis is correct. Exhibit F, Tab 1, Schedule 1, and associated sections within outline spending trends and variances at a summary level, however if detailed explanations are required, please refer to:

Witness: Joel Jodoin, Sabrin Lila

Sustainment: Exhibit F, Tab 1, Schedule 3
Development: Exhibit F, Tab 1, Schedule 4
Operations: Exhibit F, Tab 1, Schedule 5
Customer Care and Corporate Affairs: Exhibit F, Tab 1, Schedule 6
Common Corporate Costs and Other OM&A: Exhibit F, Tab 2, Schedule 1

An explanation of the FTE increase is provided in F-04-01 page 13 – 15 and further explained Exhibit I, Tab 01, Schedule OEB-196.

While analyzing FTE changes to OM&A trends is a reasonable comparison, it does not tell the full picture as the full work program is not considered when only focusing on OM&A.

Appendix 2-JA
Summary of Recoverable OM&A Expenses

	2015 Actuals	2016 Actuals	2017 Actual	2017 Board-Approved	2018 Actual	2018 Board-Approved	2019 Bridge Year	2020 Test Year
Reporting Basis	USGAAP	USGAAP	USGAAP	USGAAP	USGAAP	USGAAP	USGAAP	USGAAP
Sustainment	$ 233.6	$ 215.1	$ 218.1	$ 241.2	$ 229.4	$ 238.5	$ 200.6	$ 214.2
Development	$ 6.1	$ 4.6	$ 5.1	$ 4.8	$ 5.2	$ 5.0	$ 6.0	$ 6.9
Operating	$ 59.0	$ 62.5	$ 61.1	$ 61.3	$ 53.4	$ 62.1	$ 46.1	$ 48.9
Planning / Asset Management	$ 31.0	$ 32.9	$ 32.0	$ 36.5	$ 31.0	$ 35.8	$ 25.5	$ 25.0
SubTotal	**$ 329.7**	**$ 315.1**	**$ 316.3**	**$ 343.9**	**$ 319.0**	**$ 341.3**	**$ 278.2**	**$ 295.0**
%Change (year over year)		-4.4%	0.4%	8.7%	-7.2%	7.0%	-18.5%	-13.6%
%Change (Test Year vs Last Rebasing Year - Actual)								-7.5%
Customer Service (Billing, Collecting, Bad Debt, Misc)	$ 5.1	$ 4.5	$ 8.5	$ 4.0	$ 11.0	$ 3.9	$ 7.3	$ 7.5
Corporate Affairs	$ 7.7	$ 7.6	$ 4.1	$ 8.7	$ 4.6	$ 9.9	$ 5.3	$ 5.3
Common Functions and Services (excluding Corporate Affairs)	$ 88.0	$ 85.3	$ 86.1	$ 89.6	$ 91.4	$ 87.7	$ 82.7	$ 87.5
Information Technology (including Cornerstone)	$ 55.1	$ 56.8	$ 58.5	$ 59.8	$ 50.4	$ 57.6	$ 45.6	$ 46.7
Miscellaneous (Other OM&A, Recovery)	-$ 44.1	-$ 61.2	-$ 88.5	-$ 108.3	-$ 57.3	-$ 106.1	-$ 62.6	-$ 66.2
SubTotal	**$ 111.9**	**$ 93.0**	**$ 68.7**	**$ 53.8**	**$ 100.2**	**$ 53.0**	**$ 78.3**	**$ 80.8**
%Change (year over year)		-16.9%	-26.1%	-21.7%	86.1%	-47.1%	47.8%	52.5%
%Change (Test Year vs Last Rebasing Year - Actual)								-27.7%
Total	**$ 441.6**	**$ 408.1**	**$ 385.0**	**$ 397.7**	**$ 419.2**	**$ 394.3**	**$ 356.5**	**$ 375.8**
%Change (year over year)		-7.6%	-5.7%	3.3%	5.4%	-5.9%	-9.6%	5.4%

	2015 Actuals	2016 Actuals	2017 Actual	2017 Board-Approved	2018 Actual	2018 Board-Approved	2019 Bridge Year	2020 Test Year
Sustainment	$ 233.6	$ 215.1	$ 218.1	$ 241.2	$ 229.4	$ 238.5	$ 200.6	$ 214.2
Development	$ 6.1	$ 4.6	$ 5.1	$ 4.8	$ 5.2	$ 5.0	$ 6.0	$ 6.9
Operating	$ 59.0	$ 62.5	$ 61.1	$ 61.3	$ 53.4	$ 62.1	$ 46.1	$ 48.9
Planning / Asset Management	$ 31.0	$ 32.9	$ 32.0	$ 36.5	$ 31.0	$ 35.8	$ 25.5	$ 25.0
Customer Service (Billing, Collecting, Bad Debt, Misc)	$ 5.1	$ 4.5	$ 8.5	$ 4.0	$ 11.0	$ 3.9	$ 7.3	$ 7.5
Corporate Affairs	$ 7.7	$ 7.6	$ 4.1	$ 8.7	$ 4.6	$ 9.9	$ 5.3	$ 5.3
Common Functions and Services (excluding Corporate Affairs)	$ 88.0	$ 85.3	$ 86.1	$ 89.6	$ 91.4	$ 87.7	$ 82.7	$ 87.5
Information Technology (including Cornerstone)	$ 55.1	$ 56.8	$ 58.5	$ 59.8	$ 50.4	$ 57.6	$ 45.6	$ 46.7
Miscellaneous (Other OM&A, Recovery)	-$ 44.1	-$ 61.2	-$ 88.5	-$ 108.3	-$ 57.3	-$ 106.1	-$ 62.6	-$ 66.2
Total	**$ 441.6**	**$ 408.1**	**$ 385.0**	**$ 397.7**	**$ 419.2**	**$ 394.3**	**$ 356.5**	**$ 375.8**
%Change (year over year)		-7.6%	-5.7%	3.3%		-0.9%	-14.9%	-4.7%

	2015 Actuals	2016 Actuals	2017 Actual	2017 Board-Approved	2018 Actual	Variance 2017 Actuals vs 2017 Board Approved	2018 Board-Approved	2019 Bridge Year	Variance 2018 Bridge vs. 2017 Actual	2020 Test Year	Variance 2019 Test vs. 2018 Bridge
Sustainment	$ 233.6	$ 215.1	$ 218.1	$ 241.2	$ 229.4	$ 3.1	$ 238.5	$ 200.6	-$ 2.8	$ 214.2	-$ 24.3
Development	$ 6.1	$ 4.6	$ 5.1	$ 4.8	$ 5.2	-$ 1.0	$ 5.0	$ 6.0	$ 0.2	$ 6.9	$ 1.9
Operating	$ 59.0	$ 62.5	$ 61.1	$ 61.3	$ 53.4	$ 2.1	$ 62.1	$ 46.1	$ 0.8	$ 48.9	-$ 13.2
Planning / Asset Management	$ 31.0	$ 32.9	$ 32.0	$ 36.5	$ 31.0	$ 1.0	$ 35.8	$ 25.5	-$ 0.7	$ 25.0	-$ 10.8
Customer Service (Billing, Collecting, Bad Debt, Misc)	$ 5.1	$ 4.5	$ 8.5	$ 4.0	$ 11.0	$ 3.4	$ 3.9	$ 7.3	-$ 0.1	$ 7.5	$ 3.6
Corporate Affairs	$ 7.7	$ 7.6	$ 4.1	$ 8.7	$ 4.6	-$ 3.6	$ 9.9	$ 5.3	$ 1.2	$ 5.3	-$ 4.6
Common Functions and Services (excluding Corporate Affairs)	$ 88.0	$ 85.3	$ 86.1	$ 89.6	$ 91.4	-$ 1.9	$ 87.7	$ 82.7	-$ 1.9	$ 87.5	-$ 0.1
Information Technology (including Cornerstone)	$ 55.1	$ 56.8	$ 58.5	$ 59.8	$ 50.4	$ 3.4	$ 57.6	$ 45.6	-$ 2.2	$ 46.7	-$ 11.0
Miscellaneous (Other OM&A, Recovery)	-$ 44.1	-$ 61.2	-$ 88.5	-$ 108.3	-$ 57.3	-$ 44.4	-$ 106.1	-$ 62.6	$ 2.1	-$ 66.2	$ 39.9
Total OM&A Expenses	$ 441.6	$ 408.1	$ 385.0	$ 397.7	$ 419.2	-$ 38.0	$ 394.3	$ 356.5	-$ 3.4	$ 375.8	-$ 18.5
Adjustments for Total non-recoverable items (from Appendices 2-JA and 2-JB)											
Total Recoverable OM&A Expenses	$ 441.6	$ 408.1	$ 385.0	$ 397.7	$ 419.2		$ 394.3	$ 356.5		$ 375.8	
Variance from previous year		-$ 33	-$ 23	$ 13			-$ 3			-$ 18	
Percent change (year over year)		-8%	-6%	3%			-1%			-5%	
Percent Change: Test year vs. Most Current Actual											
Simple average of % variance for all years											
Compound Annual Growth Rate for all years											-3.2%
Compound Growth Rate (2015 Actuals vs. 2013 Actuals)											

Note:

1 "BA" = Board-Approved

2 If it has been more than three years since the applicant last filed a cost of service application, additional years of historical actuals should be incorporated into the table, as necessary, to go back to the last cost of service application. If the applicant last filed a cost of service application less than three years ago, a minimum of three years of actual information is required.

3 Recoverable OM&A that is included on these tables should be identical to the recoverable OM&A that is shown for the corresponding periods on Appendix 2-JB.

Appendix 2-L
Recoverable OM&A Cost per Customer and per FTE 1

	2015 Actual	2016 Actuals	2017 Actual	2017 Board Approved	2018 Actual	2018 Board Approved	2019 Bridge Year	2020 Test Year
Reporting Basis	USGAAP	USGAAP	USGAAP	USGAAP	USGAAP	USGAAP	USGAAP	USGAAP
OM&A Costs								
O&M	$ 345,825,164	$ 315,164,734	$ 294,867,835	$ 299,441,726	$ 323,163,750	$ 296,782,572	$ 268,582,022	$ 282,991,054
Admin Expenses (CCFS)	$ 95,749,052	$ 92,925,028	$ 90,164,051	$ 98,271,466	$ 96,008,960	$ 97,547,317	$ 87,948,458	$ 92,840,875
Total Recoverable OM&A from Appendix 2-JB 5	$ 441,574,216	$ 408,089,761	$ 385,038,648	$ 397,713,192	$ 419,172,711	$ 394,329,890	$ 356,530,480	$ 375,831,929
Number of Delivery Points 2,4	669	669	667	667	668	667	667	667
Number of FTEs 3,4	8077	8364	8146	N/A	8429	N/A	9216	9146
Customers/FTEs	0.08	0.08	0.08	-	0.08	-	0.07	0.07
OM&A cost per customer								
O&M per customer	$ 516,928	$ 471,098	$ 442,081	$ 448,938	$ 483,778	$ 444,951	$ 402,672	$ 424,274
Admin per customer	$ 143,123	$ 138,901	$ 135,178	$ 147,334	$ 143,726	$ 146,248	$ 131,857	$ 139,192
Total OM&A per customer	$ 660,051	$ 610,000	$ 577,269	$ 596,272	$ 627,504	$ 591,199	$ 534,528	$ 563,466
OM&A cost per FTE								
O&M per FTE	$ 42,816	$ 37,681	$ 36,198	-	$ 38,340	-	$ 29,143	$ 30,942
Admin per FTE	$ 11,855	$ 11,110	$ 11,069	-	$ 11,390	-	$ 9,543	$ 10,151
Total OM&A per FTE	$ 54,671	$ 48,791	$ 47,267	-	$ 49,730	-	$ 38,686	$ 41,092

Notes:

1 If it has been more than three years since the applicant last filed a cost of service application, additional years of historical actuals should be incorporated into the table, as necessary, to go back to the last cost of service application. If the applicant last filed a cost of service application less than three years ago, a minimum of three years of actual information is required.

2 The method of calculating the number of customers must be identified. Should correspond with data provided in Appendix 2-IB

3 The method of calculating the number of FTEs must be identified. See also Appendix 2-K

4 The number of delivery points is used instead of number of customers for Transmission Application. Number of delivery points as of December each year.

5 For the test year, the applicant should take into account the system O&M (line 22 of Appendix 2-AB) in developing its forecasted OM&A.

Compensation Costs 2014-2022

Transmission Unrepresented	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022 versus 2018	2020 versus 2018
Base Pay	33,396,323	34,508,999	33,641,927	38,772,661	36,544,290	38,524,614	43,137,614	45,511,365	45,048,884		
Burdens	22,435,650	23,448,136	17,666,653	19,961,342	15,690,642	16,363,898	18,603,459	19,927,923	20,043,316		
Other Allowances	3,452,267	2,367,920	3,296,601	3,983,397	5,723,344	3,596,819	4,021,881	4,237,275	4,194,217		
STI	4,055,590	4,414,248	4,555,907	7,257,372	6,297,493	4,618,185	5,308,380	5,674,271	5,630,422		
LTI	-	-	241,898	2,350,267	3,730,541	632,252	984,137	1,070,633	847,416		
ESOP	-	-	774,963	886,803	540,602	1,771,039	1,963,382	2,046,258	1,998,514		
Transmission Unrepresented Total	**63,339,829**	**64,739,302**	**60,177,949**	**73,211,844**	**68,526,913**	**65,506,806**	**74,018,853**	**78,467,725**	**77,762,769**		

Headcount Total / FTE Transmission	**331 / 285**	**313 / 277**	**319 / 275**	**357 / 308**	**360 / 290**	**307**	**334**	**345**	**336**

Distribution Unrepresented	2014	2015	2016	2017	2018	2019	2020	2021	2022
Base Pay	37,601,338	39,909,527	41,751,062	42,861,848	46,685,158	53,165,528	50,517,625	50,137,653	52,495,756
Burdens	25,260,579	27,117,681	21,925,067	22,066,579	20,044,720	22,582,842	21,786,151	21,953,622	23,356,606
Other Allowances	3,886,951	2,738,490	4,091,222	4,403,509	7,119,612	4,963,755	4,709,947	4,668,000	4,887,548
STI	4,578,312	5,117,332	5,712,824	8,142,916	7,564,939	7,819,365	7,464,246	7,442,291	7,839,166
LTI	-	-	249,764	2,535,402	4,764,858	1,870,199	1,374,938	1,140,263	1,210,384
ESOP	-	-	708,363	811,624	677,410	2,290,696	2,128,505	2,075,874	2,153,951
Distribution Unrepresented Total	**71,327,180**	**74,883,031**	**74,438,303**	**80,821,878**	**86,856,697**	**92,692,386**	**87,981,412**	**87,417,704**	**91,943,411**

Headcount Total / FTE Distribution	**372 / 320**	**360 / 320**	**390 / 336**	**378 / 325**	**433 / 348**	**385**	**359**	**349**	**358**

Shareholder Allocated Unrepresented	**3,089,801**	**2,615,254**	**9,597,169**	**9,660,409**	**13,112,786**	**23,748,837**	**24,288,558**	**24,881,971**	**25,490,502**

TOTAL Unrepresented Labour	**137,756,810**	**142,237,587**	**144,213,420**	**163,694,131**	**168,496,396**	**181,948,030**	**186,288,823**	**190,767,400**	**195,196,682**
TOTAL Unrepresented Headcount / FTE/YE	**703 / 605 / 584**	**673 / 597 / 585**	**709 / 611 / 596**	**735 / 633 / 627**	**793 / 638 / 641**	**692**	**693**	**694**	**694**

Transmission Society Represented	2014	2015	2016	2017	2018	2019	2020	2021	2022
Base Pay	67,393,687	66,909,144	65,179,365	72,517,488	70,250,107	83,210,524	91,575,087	96,245,302	95,123,535
Overtime	2,940,988	2,853,433	1,792,765	4,635,127	5,942,030	5,446,164	5,512,817	5,626,666	5,717,210
Lump Sums	-	-	618,063	1,312,146	-	-	-	-	-
Burdens	45,275,079	45,463,351	34,228,158	37,334,202	30,162,557	35,344,898	39,492,527	42,142,638	42,322,714
Share Grants	-	-	-	-	1,243,401	1,142,108	1,127,076	1,086,518	1,041,623
Transmission Society Represented Total	**115,609,754**	**115,225,928**	**101,818,351**	**115,798,964**	**107,598,095**	**125,143,693**	**137,707,506**	**145,101,125**	**144,205,083**

Headcount Total / FTE Transmission	**660 / 608**	**636 / 595**	**624 / 569**	**685 / 627**	**678 / 607**	**699**	**755**	**778**	**754**

Distribution Society Represented	2014	2015	2016	2017	2018	2019	2020	2021	2022
Base Pay	75,689,891	77,185,295	79,896,923	76,588,835	84,388,775	104,483,618	98,355,141	97,474,771	101,619,468
Overtime	4,029,156	3,788,344	5,240,140	3,090,085	3,961,353	3,630,776	3,675,211	3,751,111	3,811,473
Lump Sums	-	-	757,623	1,385,814	-	-	-	-	-
Burdens	50,848,469	52,445,778	41,956,906	39,430,255	36,233,130	44,380,958	42,416,482	42,680,982	45,212,909
Share Grants	-	-	-	-	1,436,756	1,319,711	1,302,342	1,255,478	1,203,601
Distribution Society Represented Total	**130,567,516**	**133,419,417**	**127,851,592**	**120,494,989**	**126,020,015**	**153,815,064**	**145,749,176**	**145,162,341**	**151,847,451**

Headcount Total / FTE Distribution	**741 / 683**	**734 / 687**	**764 / 698**	**724 / 662**	**815 / 730**	**878**	**810**	**788**	**806**

TOTAL Society Represented Labour	**246,177,271**	**248,645,345**	**229,669,943**	**236,293,954**	**233,618,109**	**278,958,757**	**283,456,682**	**290,263,465**	**296,052,535**
TOTAL Society Represented Headcount / FTE/YE	**1401 / 1291 / 1290**	**1370 / 1282 / 1285**	**1388 / 1267 / 1241**	**1409 / 1289 / 1288**	**1493 / 1337 / 1382**	**1,577**	**1,565**	**1,566**	**1,560**

Transmission PWU Represented	2014	2015	2016	2017	2018	2019	2020	2021	2022
Base Pay	148,298,536	146,298,728	145,538,184	158,933,735	154,996,772	165,116,892	185,433,184	196,453,689	196,258,552
Overtime	28,468,143	24,728,915	15,636,038	36,486,246	46,990,537	43,212,279	44,677,729	45,980,102	47,243,112
Lump Sums	-	1,345,306	2,637,844	-	-	-	-	-	-
Burdens	99,626,956	99,406,896	76,427,624	81,823,907	66,549,350	70,135,836	79,969,621	86,020,581	87,320,079
Share Grants	-	-	-	3,778,937	3,382,051	3,283,939	3,254,468	3,156,020	3,007,446
Transmission PWU Represented Total	**276,393,635**	**271,779,845**	**240,239,691**	**281,022,825**	**271,918,710**	**281,748,947**	**313,335,001**	**331,610,392**	**333,829,189**

Headcount Total / FTE Transmission	**1695 / 1574**	**1687 / 1558**	**1687 / 1523**	**1917 / 1645**	**1951 / 1602**	**1,658**	**1,827**	**1,900**	**1,862**

Distribution PWU Represented	2014	2015	2016	2017	2018	2019	2020	2021	2022
Base Pay	166,554,177	168,767,821	178,400,835	167,856,747	186,191,714	207,329,668	199,162,322	198,963,253	209,660,938
Overtime	39,001,377	32,831,201	45,703,166	24,324,164	31,327,025	28,808,186	29,785,152	30,653,401	31,495,408
Lump Sums	-	1,551,922	3,233,471	-	-	-	-	-	-
Burdens	111,891,096	114,674,170	93,685,049	86,417,744	79,943,198	88,066,336	85,890,427	87,119,436	93,283,118
Share Grants	-	-	-	3,991,098	3,907,977	3,794,608	3,760,554	3,646,797	3,475,119
Distribution PWU Represented Total	**317,446,650**	**317,825,115**	**321,022,520**	**282,589,752**	**301,369,913**	**327,998,798**	**318,598,456**	**320,382,887**	**337,914,583**

Headcount Total / FTE Distribution	**1903 / 1768**	**1946 / 1798**	**2068 / 1868**	**2024 / 1737**	**2343 / 1925**	**2,081**	**1,963**	**1,924**	**1,990**

TOTAL PWU Represented Labour	**593,840,285**	**589,604,960**	**561,262,211**	**563,612,577**	**573,288,623**	**609,747,745**	**631,933,457**	**651,993,279**	**671,743,773**
TOTAL PWU Represented Headcount / FTE/YE	**3598 / 3342 / 3271**	**3633 / 3356 / 3350**	**3755 / 3391 / 3411**	**3941 / 3382 / 3330**	**4294 / 3527 / 3529**	**3,739**	**3,790**	**3,824**	**3,852**

Temporary Transmission	2014	2015	2016	2017	2018	2019	2020	2021	2022
Casual Trades	117,432,836	114,683,317	126,561,770	120,254,743	126,691,541	134,172,558	134,088,990	131,778,118	130,179,945
Unrepresented	1,037,380	1,062,954	1,429,735	659,976	839,280	223,899	248,376	261,054	259,128
Society Represented	2,184,967	2,099,278	1,820,954	1,537,491	1,117,826	562,536	580,988	477,407	472,698
PWU Represented	9,810,066	5,736,423	6,145,715	5,764,657	4,887,005	2,944,456	3,233,454	3,394,711	3,365,930
Overtime	10,311,405	8,102,478	4,863,103	10,950,269	18,688,912	13,415,649	13,206,444	13,486,554	13,549,763
Other Allowances	-	-	-	-	-	-	-	-	-
Burdens	8,939,318	8,507,504	9,066,085	8,652,709	9,331,999	9,361,693	9,492,662	9,436,827	9,413,095
Temporary Transmission Total	**149,715,971**	**140,191,954**	**149,887,362**	**147,819,845**	**161,556,564**	**160,680,791**	**160,850,913**	**158,834,670**	**157,240,559**

Headcount Total / FTE Transmission	**2819 / 1836**	**2619 / 1711**	**2701 / 1860**	**2319 / 1724**	**2171 / 1748**	**1,811**	**1,775**	**1,715**	**1,661**

Temporary Distribution	2014	2015	2016	2017	2018	2019	2020	2021	2022
Casual Trades	72,600,869	70,901,026	78,244,679	74,345,466	78,324,908	101,074,235	98,122,007	105,105,675	107,938,200
Unrepresented	1,165,082	1,226,207	1,752,571	697,029	1,008,195	281,140	266,765	264,389	276,824
Society Represented	2,453,938	2,421,692	2,232,127	1,623,810	1,342,802	706,350	624,003	483,506	504,978
PWU Represented	11,017,691	6,617,444	7,533,423	6,088,301	5,870,573	3,697,218	3,472,853	3,438,076	3,595,788
Overtime	14,126,632	10,757,207	14,214,548	7,300,180	12,459,275	8,943,766	8,804,296	8,991,036	9,033,176
Other Allowances	-	-	-	-	-	-	-	-	-
Burdens	6,436,628	5,938,744	6,694,070	5,599,152	6,069,464	7,096,338	6,979,716	7,471,414	7,727,044
Temporary Distribution Total	**107,800,840**	**97,862,320**	**110,671,417**	**95,653,937**	**105,075,217**	**121,799,047**	**118,269,640**	**125,754,096**	**129,076,009**

Headcount Total / FTE Distribution	**1895 / 1234**	**1732 / 1131**	**1794 / 1235**	**1845 / 1118**	**1721 / 1179**	**1,397**	**1,323**	**1,384**	**1,393**

TOTAL Temporary Labour	**257,516,811**	**238,054,274**	**260,558,779**	**243,473,782**	**266,631,781**	**282,479,838**	**279,120,554**	**284,588,766**	**286,316,568**
TOTAL Temporary Headcount / FTE/YE	**4714 / 3070 / 2191**	**4351 / 2842 / 2063**	**4495 / 3095 / 2278**	**4164 / 2842 / 2760**	**3892 / 2927 / 1984**	**3,208**	**3,098**	**3,099**	**3,054**

										2022 versus 2018		**2020 versus 2018**	
	2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**				
Total Capital Transmission Comp	397,892,921	391,130,026	400,633,366	394,177,597	424,531,224	456,985,537	506,498,946	542,636,628	543,823,133				
Total OM&A Transmission Comp	207,166,269	200,807,004	151,489,987	223,675,880	185,069,058	176,094,700	179,413,328	171,377,284	169,214,468				
Total Transmission Compensation	**605,059,190**	**591,937,030**	**552,123,353**	**617,853,477**	**609,600,282**	**633,080,237**	**685,912,274**	**714,013,912**	**713,037,600**	17.0%	4.2%	12.5%	6.3%

	2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**				
Total Capital Distribution Comp	319,056,686	330,163,788	318,482,459	285,834,231	303,991,403	399,601,250	378,225,534	390,700,714	431,538,200				
Total OM&A Distribution Comp	308,085,500	293,826,096	315,501,373	293,726,326	315,330,439	296,704,045	292,373,150	288,016,313	279,243,254				
Total Distribution Compensation	**627,142,186**	**623,989,883**	**633,983,832**	**579,560,557**	**619,321,842**	**696,305,295**	**670,598,684**	**678,717,027**	**710,781,454**	14.8%	3.7%	8.3%	4.1%

	2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**				
Total Capital Transmission + Distribution Comp	716,949,607	721,293,813	719,115,826	680,011,828	728,522,627	856,586,788	884,724,480	933,337,343	975,361,333				
Total OM&A Transmission + Distribution Comp	515,251,769	494,633,100	466,991,359	517,402,206	500,399,497	472,798,745	471,786,477	459,393,597	448,457,722				
Total Shareholder Allocated Comp	3,089,801	2,615,254	9,597,169	9,660,409	13,112,786	23,748,837	24,288,558	24,881,971	25,490,502				
Total Transmission + Distribution Compensation	**1,235,291,177**	**1,218,542,167**	**1,195,704,354**	**1,207,074,444**	**1,242,034,910**	**1,353,134,369**	**1,380,799,515**	**1,417,612,911**	**1,449,309,557**	16.7%	4.2%	11.2%	5.6%

Headcount FTE	2014	2015	2016	2017	2018	2019	2020	2021	2022				
MCP Represented Regular Employees	605	597	611	633	638	692	693	694	694				
Society Represented Regular Employees	1,291	1,282	1,267	1,289	1,337	1,577	1,565	1,566	1,560				
PWU Represented Regular Employees	3,342	3,356	3,391	3,382	3,527	3,739	3,790	3,824	3,852				
Temporary and Casual Employees	3,070	2,842	3,095	2,842	2,927	3,208	3,098	3,099	3,054				
Total	**8,308**	**8,077**	**8,364**	**8,146**	**8,429**	**9,216**	**9,146**	**9,183**	**9,160**	8.7%	2.2%	8.5%	4.3%

Burdens Tx include:	2014	2015	2016	2017	2018	2019	2020	2021	2022				
Pension	77,400,000	76,500,000	49,500,000	41,000,000	35,500,000	34,000,000	38,000,000	40,000,000	39,000,000				
OPEB	59,600,000	52,400,000	57,500,000	61,200,000	55,800,000	50,000,000	55,000,000	58,000,000	59,000,000				
Total	137,000,000	128,900,000	107,000,000	102,200,000	91,300,000	84,000,000	93,000,000	98,000,000	98,000,000	7.3%	1.8%	1.9%	0.9%
Burdens Dx include:	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**				
Pension	90,100,000	94,700,000	54,100,000	43,400,000	37,000,000	36,000,000	35,000,000	34,000,000	34,000,000				
OPEB	69,400,000	64,800,000	62,800,000	64,400,000	58,200,000	53,000,000	53,000,000	52,000,000	56,000,000				
Total	159,500,000	159,500,000	116,900,000	107,800,000	95,200,000	89,000,000	88,000,000	86,000,000	90,000,000	-5.5%	-1.4%	-7.6%	-3.8%

Total Pension & OPEB Burden Tx and Dx	296,500,000	288,400,000	223,900,000	210,000,000	186,500,000	173,000,000	181,000,000	184,000,000	188,000,000
% Burden Tx	46.2%	44.7%	47.8%	48.7%	49.0%	48.6%	51.4%	53.3%	52.1%
% Burden Dx	53.8%	55.3%	52.2%	51.3%	51.0%	51.4%	48.6%	46.7%	47.9%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

FTE Transmission	2014	2015	2016	2017	2018	2019	2020	2021	2022				
MCP Unrepresented Regular Employees	285	277	275	308	290	307	334	345	336				
Society Represented Regular Employees	608	595	569	627	607	699	755	778	754				
PWU Represented Regular Employees	1,574	1,558	1,523	1,645	1,602	1,658	1,827	1,900	1,862				
Temporary and Casual Employees	1,836	1,711	1,860	1,724	1,748	1,811	1,775	1,715	1,661				
Total	**4,303**	**4,141**	**4,227**	**4,304**	**4,247**	**4,474**	**4,691**	**4,738**	**4,613**	8.6%	2.2%	10.5%	5.2%

FTE Distribution	2014	2015	2016	2017	2018	2019	2020	2021	2022				
MCP Unrepresented Regular Employees	320	320	336	325	348	385	359	349	358				
Society Represented Regular Employees	683	687	698	662	730	878	810	788	806				
PWU Represented Regular Employees	1,768	1,798	1,868	1,737	1,925	2,081	1,963	1,924	1,990				
Temporary and Casual Employees	1,234	1,131	1,235	1,118	1,179	1,397	1,323	1,384	1,393				
Total	**4,005**	**3,936**	**4,137**	**3,842**	**4,182**	**4,742**	**4,455**	**4,445**	**4,547**	8.7%	2.2%	6.5%	3.3%

FTE Total	2014	2015	2016	2017	2018	2019	2020	2021	2022				
MCP Unrepresented Regular Employees	605	597	611	633	638	692	693	694	694				
Society Represented Regular Employees	1,291	1,282	1,267	1,289	1,337	1,577	1,565	1,566	1,560				
PWU Represented Regular Employees	3,342	3,356	3,391	3,382	3,527	3,739	3,790	3,824	3,852				
Temporary and Casual Employees	3,070	2,842	3,095	2,842	2,927	3,208	3,098	3,099	3,054				
Total	**8,308**	**8,077**	**8,364**	**8,146**	**8,429**	**9,216**	**9,146**	**9,183**	**9,160**	8.7%	2.2%	8.5%	4.3%

Compensation Total	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Transmission	605,059,190	591,937,030	552,123,353	617,853,477	609,600,282	633,080,237	685,912,274	714,013,912	713,037,600
Total Distribution	627,142,186	623,989,883	633,983,832	579,560,557	619,321,842	696,305,295	670,598,684	678,717,027	710,781,454
Total Shareholder Allocated	3,089,801	2,615,254	9,597,169	9,660,409	13,112,786	23,748,837	24,288,558	24,881,971	25,490,502
Grand Total	**1,235,291,177**	**1,218,542,167**	**1,195,704,354**	**1,207,074,444**	**1,242,034,910**	**1,353,134,369**	**1,380,799,515**	**1,417,612,911**	**1,449,309,557**	16.7%	4.2%	11.2%	5.6%

Transmission Compensation - Breakdown between Capital and OM&A	2014	2015	2016	2017	2018	2019	2020	2021	2022
% Capital	65.8%	66.1%	72.6%	63.8%	69.6%	72.2%	73.8%	76.0%	76.3%
% OM&A	34.2%	33.9%	27.4%	36.2%	30.4%	27.8%	26.2%	24.0%	23.7%
% Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Distribution Compensation - Breakdown between Capital and OM&A	2014	2015	2016	2017	2018	2019	2020	2021	2022
% Capital	50.9%	52.9%	50.2%	49.3%	49.1%	57.4%	56.4%	57.6%	60.7%
% OM&A	49.1%	47.1%	49.8%	50.7%	50.9%	42.6%	43.6%	42.4%	39.3%
% Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Burden Transmission	2014	2015	2016	2017	2018	2019	2020	2021	2022				
MCP Unrepresented Regular Employees	22,435,650	23,448,136	17,666,653	19,961,342	15,690,642	16,363,898	18,603,459	19,927,923	20,043,316				
Society Represented Regular Employees	45,275,079	45,463,351	34,228,158	37,334,202	30,162,557	35,344,898	39,492,527	42,142,638	42,322,714				
PWU Represented Regular Employees	99,626,956	99,406,896	76,427,624	81,823,907	66,549,350	70,135,836	79,969,621	86,020,581	87,320,079				
Temporary and Casual Employees	8,939,318	8,507,504	9,066,085	8,652,709	9,331,999	9,361,693	9,492,662	9,436,827	9,413,095				
Total	176,277,003	176,825,887	137,388,520	147,772,160	121,734,548	131,206,325	147,558,268	157,527,969	159,099,204	30.7%	7.7%	21.2%	10.6%

Burden Distribution	2014	2015	2016	2017	2018	2019	2020	2021	2022				
MCP Unrepresented Regular Employees	25,260,579	27,117,681	21,925,067	22,066,579	20,044,720	22,582,842	21,786,151	21,953,622	23,356,606				
Society Represented Regular Employees	50,848,469	52,445,778	41,956,906	39,430,255	36,233,130	44,380,958	42,416,482	42,680,982	45,212,909				
PWU Represented Regular Employees	111,891,096	114,674,170	93,685,049	86,417,744	79,943,198	88,066,336	85,890,427	87,119,436	93,283,118				
Temporary and Casual Employees	6,436,628	5,938,744	6,694,070	5,599,152	6,069,464	7,096,338	6,979,716	7,471,414	7,727,044				
Total	194,436,772	200,176,373	164,261,092	153,513,730	142,290,512	162,126,475	157,072,776	159,225,454	169,579,677	19.2%	4.8%	10.4%	5.2%

Compensation Total	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Transmission	49.0%	48.6%	46.2%	51.2%	49.1%	46.8%	49.7%	50.4%	49.2%
Total Distribution	50.8%	51.2%	53.0%	48.0%	49.9%	51.5%	48.6%	47.9%	49.0%
Total Shareholder Allocated	0.3%	0.2%	0.8%	0.8%	1.1%	1.8%	1.8%	1.8%	1.8%
Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Transmission Compensation Total / FTE	140,613	142,945	130,618	143,553	143,537	141,489	146,211	150,694	154,570
Distribution Compensation Total / FTE	156,590	158,534	153,247	150,849	148,092	146,851	150,536	152,698	156,320
Transmission Compensation Total / FTE Year over Year Change		1.7%	-8.6%	9.9%	0.0%	-1.4%	3.3%	3.1%	2.6%
Distribution Compensation Total / FTE Year over Year Change		1.2%	-3.3%	-1.6%	-1.8%	-0.8%	2.5%	1.4%	2.4%
Transmission % Burden over Total Compensation	29.1%	29.9%	24.9%	23.9%	20.0%	20.7%	21.5%	22.1%	22.3%
Distribution % Burden over Total Compensation	31.0%	32.1%	25.9%	26.5%	23.0%	23.3%	23.4%	23.5%	23.9%

Table 1 - Unexplained Differences in Hydro One Dx Compensation

	2019	2020	2021	2022
HONI Dx Compensation as per SEC IRR #58 (EB-2019-0082)	696,305,295	670,598,684	678,717,027	710,781,454
HONI Dx Compensation as per Exh C1/Tab 2/Sch 1/p. 48 Appendix B (EB-2017-0049)	642,530,718	631,275,350	616,248,742	622,009,219
Unexplained Difference	53,774,577	39,323,334	62,468,285	88,772,235

Table 2 - Unexplained Differences in Hydro One Tx & Dx FTEs

	2019	2020	2021	2022
HONI Total FTEs (Tx + Dx) as per SEC IRR #58 (EB-2019-0082)	9,216	9,146	9,183	9,160
HONI Total FTEs (Tx + Dx) as per Exh C1/Tab 2/Sch 1/p. 9, Table 1 (EB-2017-0049)	8,505	8,488	8,474	8,467
Unexplained Difference	711	658	709	693

Table 1 - Historical Capital Expenditure Summary

OEB Category	Historical (Previous Plan and Actual)											
	2015			2016			2017			2018		
	Actual	Plan	Var	Actual	Plan	Var	Actual	Plan	Var	Actual	Plan	Var
	$M	$M	%	$M	$M	%	$M	$M	%	$M	$M	%
System Access	7.6	19.7	-61%	17.0	31.9	-47%	42.7	33.3	28%	33.7	24.3	39%
System Renewal	688.9	573.6	20%	733.9	539.9	36%	740.7	733.7	1%	776.2	780.4	-1%
System Service	157.9	189.9	-17%	140.9	180.0	-22%	93.5	97.0	-4%	73.9	75.6	-2%
General Plant	88.6	116.3	-24%	94.8	114.6	-17%	76.9	86.0	-11%	83.6	119.7	-30%
Total	**943.0**	**899.4**	**5%**	**986.7**	**866.3**	**14%**	**953.9**	**950.0**	0%	**967.3**	**1,000.0**	-3%
System OM&A[1]	441.6	431.2	2%	408.1	436.8	-7%	385.0	397.7	-3%	419.2	394.3	6%

[1] System OM&A includes Operations, Maintenance and Administration expenses. System OM&A for 2021 to 2022 is determined based on the Revenue Cap Index identified in Exhibit A, Tab 4, Schedule 1.

Table 2 - Bridge Year and Test Year Capital Expenditure Summary

OEB Category	Bridge	Forecast				
	2019	2020	2021	2022	2023	2024
	F/Cast	Test	Test	Test	Plan	Plan
	$M	$M	$M	$M	$M	$M
System Access	45.1	24.8	11.3	11.7	12.7	4.1
System Renewal	773.3	865.2	1,103.1	1,172.8	1,177.4	1,193.8
System Service	103.8	204.1	148.2	151.8	174.3	204.2
General Plant	116.3	115.4	94.4	94.7	83.6	58.9
Progressive Productivity Placeholder	0.0	-17.0	-39.0	-61.0	-78.0	-91.0
Directive[2]	**-0.3**	**-0.3**	**-0.3**	**-0.4**	**-0.4**	**-0.4**
Total	**1,038.2**	**1,192.2**	**1,317.7**	**1,369.6**	**1,369.6**	**1,369.6**
System OM&A[1,3]	**356.5**	**375.8**	*	*	**N/A**	**N/A**

For explanatory notes on Forecast Trends vs. Historical Budgets by Category, please see Section 3.3.2.

For explanatory notes on Plan vs. Actual Variance Trends by Category, please see Section 3.3.3.

For explanatory notes on System OM&A, please see Exhibit F.

[2] The Directive adjustment reflects the impact of the directive issued by Ontario's Management Board of Cabinet on February 21, 2019 and the associated framework they approved on March 7, 2019. Refer to Exhibit F, Tab 4, Schedule 1 for further details.

[3] Includes the Directive adjustment. Refer to Exhibit F, Tab 1, Schedule 1 for further details.

UNDERTAKING J1.1

Reference:

Undertaking:

To provide an update to page 11 of the SEC compendium.

Response:

As indicated during Hydro One's Oral Hearing Presentation on Monday October 21, 2019, the following undertaking response provides the updated revenue requirement table and other relevant tables from evidence, including:

1. Revenue Requirement
2. Summary of Revenue Requirement Components
3. Custom Cap Index (RCI) by Component
4. Revenue Requirement by Year
5. Summary of Transmission OM&A Expenditures
6. Bridge Year and Planning Year Capital Expenditure Summary
7. In-Service Capital Additions 2014 – 2022
8. Average Bill Impacts on Transmission and Distribution-connected Customers
9. Typical General Service Energy less than 50 kW (GSe < 50 kW) Customer Bill Impacts
10. Typical General Service Energy less than 50 kW (GSe < 50 kW) Customer Bill Impacts

Table 1: Revenue Requirement ($ Millions)
Revised from Exhibit E, Tab 1, Schedule 1 – Table 1

Components	2018[1]	2019[2]	2020 Blue Page	2020 Accelerated CCA[4]	2020 Actual Debt Issuances[5]	2020 Updated Pension Valuation[6]	2020 OPEB ISA Assumptions[7]	2020 Oral Hearing Update
OM&A	394.3		375.8			(1.7)		374.1
Depreciation and Amortization	468.6		474.6			(0.1)	0.0	474.5
Income Taxes	57.2		48.3	(23.6)	0.1	1.3	0.1	26.3
Return on Capital	703.6		775.0		(8.3)	(0.2)	0.6	767.1
Total Revenue Requirement	**1,623.8**	**1,644.4**	**1,673.8**	**(23.6)**	**(8.2)**	**(0.7)**	**0.7**	**1,642.0**
Deduct External Revenues and Other [3]	(54.7)	(54.5)	(52.6)					(52.6)
Rates Revenue Requirement	**1,569.1**	**1,589.9**	**1,621.2**					**1,589.4**
Regulatory Deferral and Variance Accounts Disposition / Foregone Revenue	(58.4)	(37.6)	6.8					6.8
Rates Revenue Requirement (with Deferral and Variance Accounts)	**1,510.7**	**1,552.3**	**1,628.0**					**1,596.2**

Note 1: Represents OEB approved 2018 revenue requirement from Hydro One Transmission's 2017 to 2018 rate application in EB-2016-0160
Note 2: Represents OEB approved 2019 revenue requirement in EB-2018-0130
Note 3: External Revenue and Other includes External Revenue, MSP Revenue, Export Tx Service Revenue and Low Voltage Switch Gear Credit
Note 4: As quantified in I-1-OEB-208
Note 5: I-04-LPMA-019 reflected a lower cost of debt for 2020 of 4.45% based on 2019 actual issuances relative to 4.57% presented in the blue-page update
Note 6: Updated JT-2.31 Attachment 1 (October 17, 2019) provided the updated pension valuation as of December 31, 2018
Note 7: As quantified in I-01-OEB-206 the revenue requirement impact related to OPEB ISA assumptions

Table 2: Summary of Revenue Requirement Components ($ Million)

Revised from Exhibit A, Tab 4, Schedule 1 – Table 2

Line		Reference	2020	2021	2022
1	Rate Base	C-1-1	12,407.0	13,130.2	13,951.7
2	Return on Debt	E1-1-1	322.5	342.1	363.5
3	Return on Equity	E1-1-1	444.6	471.6	501.2
4	Depreciation	F-6-1	474.5	503.4	528.9
5	Income Taxes	F-7-2	26.3	27.2	40.4
6	Capital Related Revenue Requirement		1,267.9	1,344.4	1,434.0
7	Less Productivity Factor (0.0%)			-	-
8	**Total Capital Related Revenue Requirement**		**1,267.9**	**1,344.4**	**1,434.0**
9	OM&A	F-1-1	374.1	379.4	384.7
10	**Total Revenue Requirement**		**1,642.0**	**1,723.7**	**1,818.7**
11	Increase in Capital Related Revenue Requirement			76.5	89.6
12	Increase in Capital Related Revenue Requirement as a percentage of Previous Year Total Revenue Requirement			4.66%	5.20%
13	Less Capital Related Revenue Requirement in I-X			1.08%	1.09%
14	**Capital Factor**			**3.58%**	**4.11%**

Table 3: Custom Cap Index (RCI) by Component (%)

Revised from Exhibit A, Tab 4, Schedule 1 – Table 3

Custom Revenue Cap Index by Component	2021	2022
Inflation Factor (I)	1.40	1.40
Productivity Factor (X)	0.00	0.00
Capital Factor (C)	3.58	4.11
Custom Revenue Cap Index Total	4.98	5.51

Table 4: Revenue Requirement by Year

Revised from Exhibit A, Tab 4, Schedule 1 – Table 4

Year	Formula	Revenue Requirement
2020	Cost of Service	$1,642.0 million
2021	2020 Revenue Requirement x 1.0498	$1,723.7 million
2022	2021 Revenue Requirement x 1.0551	$1,818.7 million

** Calculations assume that Inflation Factor remains at 1.4% through term.*

Table 5: Summary of Transmission OM&A Expenditures ($ Millions) Revised from Exhibit F, Schedule 1, Tab 1 – Table 1

	Historical								Bridge	Test
	2015		2016		2017		2018		2019	2020
	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Forecast	Forecast
Category Level										
Sustainment	233.6	238.7	215.1	241.1	218.1	241.2	229.4	238.5	200.6	214.2
Development	6.1	12.9	4.6	13.4	5.1	4.8	5.2	5.0	6.0	6.9
Operations	59.0	58.5	62.5	59.1	61.1	61.3	53.4	62.1	46.1	48.9
Customer Care	5.1	5.5	4.5	5.5	8.5	4.0	11.0	3.9	7.3	7.5
Common Corporate Costs and Other Costs	73.9	70.2	60.1	71.3	41.5	49.9	54.9	47.5	29.4	30.3
Property Taxes & Rights Payments	63.9	66.3	61.3	67.0	50.7	63.6	65.3	64.3	67.2	68.1
Adjustments										
EB-2014-0140 Settlement Reduction		-20.0		-20.0						
EB-2016-0160 Decision Reduction						-15.0		-15.0		
Removal of B2M Expense		-0.9		-0.7		-0.8		-2.1		
Pension Adjustment						-11.4		-9.9		
Directive[1]									-0.1	-0.1
Envelope Level										
Total Transmission OM&A	**441.6**	**431.2**	**408.1**	**436.8**	**385.0**	**397.7**	**419.2**	**394.3**	**356.5**	**375.8**
Pension Adjustment Dec 31, 2018 Valuation										-1.7
Updated Total Transmission OM&A	**441.6**	**431.2**	**408.1**	**436.8**	**385.0**	**397.7**	**419.2**	**394.3**	**356.5**	**374.1**

1: Directive refers to the Government Directive as detailed and defined in Exhibit F, Tab 4, Schedule 1.

Table 6: Bridge Year and Planning Year Capital Expenditure Summary ($ Millions)

Revised from Exhibit A, Tab 3, Schedule 1 – Table 7

OEB Category	Historical			Bridge	Forecast				
	2018			2019	2020	2021	2022	2023	2024
	OEB Approved	Actual	Var	F/Cast	Test	Test	Test	Plan	Plan
	$M	$M	%	$M	$M	$M	$M	$M	$M
System Access	24.3	33.7	39%	45.1	24.8	11.3	11.7	12.7	4.1
System Renewal	780.4	776.2	-1%	773.3	865.2	1,103.1	1,172.8	1,177.4	1,193.8
System Service	75.6	73.9	-2%	103.8	204.1	148.2	151.8	174.3	204.2
General Plant	119.7	83.6	-30%	116.3	115.4	94.4	94.7	83.6	58.9
Progressive Productivity	0.0	0.0	0%	0.0	-17.0	-39.0	-61.0	-78.0	-91.0
Directive[1]				-0.3	-0.3	-0.3	-0.4	-0.4	-0.4
Total	**1,000.0**	**967.3**		**1,038.2**	**1,192.2**	**1,317.7**	**1,369.6**	**1,369.6**	**1,369.6**
Pension Adjustment Dec 31, 2018 Valuation				-3.2	-4.2	-5.2	-5.4	-5.4	-5.4
Updated Total				**1,035.0**	**1,188.0**	**1,312.5**	**1,364.2**	**1,364.2**	**1,364.2**

1: Directive refers to the Government Directive as detailed and defined in Exhibit F, Tab 4, Schedule 1.

Table 7: In-Service Capital Additions 2014 – 2022 ($ Millions)
Revised from Exhibit C, Tab 2, Schedule 1 – Table 1

	Historical																			
	2014			2015			2016					2017			2018			Bridge	Test		
	Actual	Plan	Variance	Actual	Plan	Variance	Actual	New Plan [1]	Plan	Variance (New Plan)	Variance (Plan)	Actual	Plan	Variance	Actual	Plan	Variance	2019	2020	2021	2022
System Access	34.1	50.4	-32%	8.9	13.9	-36%	10.1	17.7	3.0	-43%	237%	51.2	1.8	2,744%	12.1	68.2	-82%	30.4	59.2	5.3	14.1
System Renewal	649.6	575.8	13%	559.8	563.3	-1%	635.7	595.4	472.0	7%	35%	657.8	717.0	-8%	852.3	761.4	12%	770.5	762.0	998.7	1,138.7
System Service	144.8	129.9	11%	18.7	120.7	-85%	174.2	192.4	116.6	-9%	49%	85.7	70.4	22%	218.0	244.8	-11%	54.5	155.1	175.2	137.7
General Plant	86.0	107.2	-20%	111.7	123.4	-9%	90.2	106.3	81.7	-15%	10%	77.5	78.5	-1%	77.9	104.0	-25%	95.6	76.9	155.1	59.5
Progressive Productivity Placeholder																			(15.8)	(36.3)	(56.7)
Total	**914.5**	**863.3**	**6%**	**699.1**	**821.3**	**-15%**	**910.2**	**911.7**	**673.3**	**-0.2%**	**35%**	**872.2**	**867.7**	**1%**	**1,160.4**	**1,178.4**	**-2%**	**951.0**	**1,037.4**	**1,298.0**	**1,293.3**
Directive [2]																		-0.3	-0.3	-0.3	-0.4
Total																		**950.7**	**1,037.1**	**1,297.7**	**1,293.0**
Pension Adjustment Dec 31, 2018 Valuation																		-3.2	-4.2	-5.2	-5.4
Updated Total																		**947.5**	**1,032.9**	**1,292.5**	**1,287.6**

1: New Plan represents the 2016 Bridge Year forecast from 2017-2018 Transmission Rate Application (EB-2016-0160)
2: Directive refers to the Government Directive as detailed and defined in Exhibit F, Tab 4, Schedule 1.

Table 8: Average Bill Impacts on Transmission and Distribution-connected Customers
Revised from Exhibit I2, Tab 5, Schedule 1 – Table 2

	2019[1]	2020		2021		2022	
		Blue Page	Oral Hearing Update	Blue Page	Oral Hearing Update	Blue Page	Oral Hearing Update
Rates Revenue Requirement ($M)	**$1,552.3**	**$1,628.0**	**$1,596.2**	**$1,719.4**	**$1,677.4**	**$1,808.4**	**$1,773.2**
% Increase in Rates RR over prior year		4.9%	2.8%	5.6%	5.1%	5.2%	5.7%
% Impact of load forecast change		3.8%	3.8%	0.6%	0.6%	0.7%	0.7%
Net Impact on Average Transmission Rates		**8.7%**	**6.6%**	**6.2%**	**5.7%**	**5.9%**	**6.4%**
Transmission as a % of Tx-connected customer's Total Bill		*7.4%*	7.4%	*7.4%*	7.4%	*7.4%*	7.4%
Estimated Average Bill impact		**0.6%**	**0.5%**	**0.5%**	**0.4%**	**0.4%**	**0.5%**
Transmission as a % of Dx-connected customer's Total Bill		*6.2%*	6.2%	*6.2%*	6.2%	*6.2%*	6.2%
Estimated Average Bill impact		**0.5%**	**0.4%**	**0.4%**	**0.4%**	**0.4%**	**0.4%**

1 2019 rates revenue requirement as per the OEB's Decision and Order for Hydro One's 2019 Transmission Revenue Requirement application (EB-2018-0130), issued on 25th April, 2019.

Table 9: Typical Medium Density (R1) Residential Customer Bill Impacts
Revised from Exhibit I2, Tab 5, Schedule 1 – Table 3

	Typical R1 Residential Customer					
	Blue Page	**Oral Hearing Update**	**Blue Page**	**Oral Hearing Update**	**Blue Page**	**Oral Hearing Update**
	400 kWh	**400 kWh**	**750 kWh**	**750 kWh**	**1,800 kWh**	**1,800 kWh**
Total Bill as of May 1, 2018[1]	$83.40	$83.40	$121.75	$121.75	$236.81	$236.81
RTSR included in 2017 R1 Customer's Bill (based on 2016 UTR)	$4.78	$4.78	$8.96	$8.96	$21.50	$21.50
Estimated 2019 Monthly RTSR[2]	$5.10	$5.10	$9.56	$9.56	$22.95	$22.95
2019 increase in Monthly Bill	**$0.13**	**$0.13**	**$0.24**	**$0.24**	**$0.58**	**$0.58**
2019 increase as a % of total bill	*0.2%*	*0.2%*	*0.2%*	*0.2%*	*0.2%*	*0.2%*
Estimated 2020 Monthly RTSR[3]	$5.52	$5.42	$10.35	$10.16	$24.83	$24.39
2020 increase in Monthly Bill	**$0.42**	**$0.32**	**$0.79**	**$0.60**	**$1.89**	**$1.44**
2020 increase as a % of total bill	*0.5%*	*0.4%*	*0.6%*	*0.5%*	*0.8%*	*0.6%*
Estimated 2021 Monthly RTSR[3]	$5.84	$5.71	$10.96	$10.71	$26.29	$25.70
2021 increase in Monthly Bill	**$0.32**	**$0.29**	**$0.61**	**$0.55**	**$1.46**	**$1.31**
2021 increase as a % of total bill	*0.4%*	*0.3%*	*0.5%*	*0.4%*	*0.6%*	*0.5%*
Estimated 2022 Monthly RTSR[3]	$6.17	$6.06	$11.56	$11.36	$27.76	$27.26
2022 increase in Monthly Bill	**$0.32**	**$0.35**	**$0.61**	**$0.65**	**$1.46**	**$1.56**
2022 increase as a % of total bill	*0.4%*	*0.4%*	*0.5%*	*0.5%*	*0.6%*	*0.6%*

[1]Total bill including HST, based on time-of-use commodity prices effective May 1, 2018 and 2017 distribution rates approved per Distribution Rate Order EB-2016-0081 (includes impacts of all components of the Fair Hydro Plan).

[2]2019 Monthly RTSR is an estimated value that incorporates the impacts of changes in UTR in 2017 and 2018 and Hydro One's 2019 rates revenue requirement as shown in Table 8 above.

[3]The impact on RTSR is assumed to be the net impact on average transmission rates, as per Table 8 above, adjusted for Hydro One's revenue disbursement allocator per 2019 Interim UTR Order (EB-2018-0326).

Table 10: Typical General Service Energy less than 50 kW (GSe < 50 kW) Customer Bill Impacts
Revised from Exhibit I2, Tab 5, Schedule 1 – Table 4

	GSe Customer Monthly Bill					
	Blue Page	**Oral Hearing Update**	**Blue Page**	**Oral Hearing Update**	**Blue Page**	**Oral Hearing Update**
	1,000 kWh	**1,000 kWh**	**2,000 kWh**	**2,000 kWh**	**15,000 kWh**	**15,000 kWh**
Total Bill as of May 1, 2018[1]	$198.93	$198.93	$367.73	$367.73	$2,562.20	$2,562.20
RTSR included in 2017 GSe Customer's Bill (based on 2016 UTR)	$10.63	$10.63	$21.26	$21.26	$159.47	$159.47
Estimated 2019 Monthly RTSR[2]	$11.35	$11.35	$22.69	$22.69	$170.21	$170.21
2019 increase in Monthly Bill	**$0.29**	**$0.29**	**$0.58**	**$0.58**	**$4.33**	**$4.32**
2019 increase as a % of total bill	*0.1%*	*0.1%*	*0.2%*	*0.2%*	*0.2%*	*0.2%*
Estimated 2020 Monthly RTSR[3]	$12.28	$12.06	$24.56	$24.12	$184.20	$180.90
2020 increase in Monthly Bill	**$0.93**	**$0.71**	**$1.86**	**$1.43**	**$13.99**	**$10.69**
2020 increase as a % of total bill	*0.5%*	*0.4%*	*0.5%*	*0.4%*	*0.5%*	*0.4%*
Estimated 2021 Monthly RTSR[3]	$13.00	$12.71	$26.00	$25.42	$195.04	$190.63
2021 increase in Monthly Bill	**$0.72**	**$0.65**	**$1.44**	**$1.30**	**$10.84**	**$9.74**
2021 increase as a % of total bill	*0.4%*	*0.3%*	*0.4%*	*0.4%*	*0.4%*	*0.4%*
Estimated 2022 Monthly RTSR[3]	$13.73	$13.48	$27.45	$26.96	$205.88	$202.21
2022 increase in Monthly Bill	**$0.72**	**$0.77**	**$1.45**	**$1.54**	**$10.85**	**$11.58**
2022 increase as a % of total bill	*0.4%*	*0.4%*	*0.4%*	*0.4%*	*0.4%*	*0.4%*

[1]Total bill including HST, based on time-of-use commodity prices effective May 1, 2018 and 2017 distribution rates approved per Distribution Rate Order EB-2016-0081 (includes impacts of all components of the Fair Hydro Plan).
[2]2019 Monthly RTSR is an estimated value that incorporates the impacts of changes in UTR in 2017 and 2018 and Hydro One's 2019 rates revenue requirement as shown in Table 8 above.
[3]The impact on RTSR is assumed to be the net impact on average transmission rates, as per Table 8 above, adjusted for Hydro One's revenue disbursement allocator per 2019 Interim UTR Order (EB-2018-0326).

Table 1 - Productivity Savings Forecast Summary ($Millions)

$mm	2020	2021	2022	2023	2024	Total
Operations	47	52	53	53	54	259
Progressive Operations (Defined Capital)	6	12	12	10	10	49
Corporate	12	11	9	7	6	45
Capital Total	**$65**	**$74**	**$73**	**$70**	**$70**	**$353**
Operations	9	10	9	9	9	45
Information Technology	6	9	10	10	10	44
Corporate	7	6	5	4	3	25
OM&A Total	**$22**	**$25**	**$23**	**$23**	**$22**	**$114**
Total Defined	**$87**	**$99**	**$97**	**$93**	**$92**	**$468**
Progressive Operations (Undefined Capital)	11	27	49	68	81	237
Grand Total	**$98**	**$126**	**$146**	**$161**	**$173**	**$704**
Progressive Productivity						
Progressive Operations (Defined Capital)	6	12	12	10	10	49
Progressive Operations (Undefined Capital)	11	27	49	68	81	237
Progressive Productivity Placeholder	17	39	61	78	91	286

As noted in the table above, Hydro One has identified savings opportunities totalling approximately $704M over the 2020-2024 TSP period. This reflects Tier 1 Productivity savings only. There are $353M in capital productivity savings, $114M in OM&A productivity savings and $237M in undefined capital savings. This latter category of savings falls within "Progressive Productivity". Progressive Productivity is a further reduction in cost that Hydro One has included in the final Transmission Business Plan in response to concerns that were raised in the OEB's decision in the Prior Proceeding regarding the level of investment. It represents a commitment from Hydro One to find further efficiencies over the planning period when executing the necessary planned

investments in its transmission system without reducing work volumes. Progressive Productivity savings total $286 million over the planning period and are included in the Transmission Business Plan in the form of:

1. $49 million in Progressive Operations (Defined Capital) savings associated with initiatives that have been identified but which have not yet been proven and verified through the productivity governance framework; and
2. $237 million in Progressive Operations (Undefined Capital) savings which are included as placeholder in the Business Plan to be allocated to any future initiatives that have not yet been identified.

Approximately $590M of the identified savings opportunities are related to Operations (Operations OM&A, Operations Capital, Progressive Operations (Defined Capital) and Progressive Operations (Undefined Capital), approximately $44M in savings are IT-related (OM&A and Capital) and $70M in savings are related to Corporate Initiatives (OM&A and Capital).

Underlying the savings in Hydro One's productivity plan are specific productivity initiatives that have been identified, reviewed, approved and made subject to tracking and reporting requirements in accordance with the productivity framework and process described in Section 1.6.1, above. The savings arising from each of these initiatives are real reductions from department or program budgets. Additional Tier 2 Productivity savings may be achieved in connection with these and other initiatives, but such additional savings cannot be forecasted and are not accounted for in the planned savings.

By embedding all of the forecast productivity savings - from specific productivity initiatives and progressive productivity (discussed below under progressive productivity section) - into Hydro One's Business Plan, Hydro One bears the risk of not delivering its planned productivity improvements. This creates a strong incentive for Hydro One to follow through on its productivity commitments.

- as described in detail in Exhibit C-09-04 (Costing of Work), in early 2017 Supply Chain set a strategic plan to improve the service and value it delivers to its internal customers. To meet its strategic plan, Supply Chain is transforming its organization to focus on providing exceptional service and centrally aligned category management and operational procurement teams to more effectively manage critical categories of spend. The strategic plan has introduced new best in class technology, process changes and included an organizational transformation which began in 2018. As a result, Supply Chain's strategic direction is to resource roles internally with staggered hiring commencing in 2018 through to the end of 2021 to align with the expiry of the outsourcing contract. Improvements in people, process and technology will enable Hydro One to improve its ability to drive increased savings in operating cost levels.
- supporting a 26% increase in the Transmission work program over the 2019 -2022 period. These resources are required in order to execute the outcomes of the Transmission Business Plan as described in Section 5.1 of exhibit A, tab 3, schedule 1.
- the Distribution Line of Business forecast for increased regular and non-regular FTEs to support a 13% growth in work program in 2019 over the 2018 work program level. Included in this FTE increase are apprentices completing their apprenticeship program, a requirement for increased temporary lines union supervisors, additional Forestry and Meter Technician positions.
- the acquisition of Great Lakes Power Transmission LP resulted in 32 FTEs joining Hydro One Networks in late 2018.
- fleet mechanics completing their apprenticeship program are being hired into regular positions.
- additional resources to build a stronger health and safety focus within the helicopter services division.

as a 3.5/5 on this capability. Additional detail on Hydro One's scores on this capability is included in Exhibit 35.

6

Exhibit 35: Maturity Assessment: Execute plan and track outcomes

Capability	1 3 5	Comments on score
Metrics chosen to align to desired outcomes	3*	• Chosen metrics comprehensive and map to key stakeholder outcomes • Scorecard expected to continue evolving as Hydro One receives regulator feedback and refines its tracking capabilities • Targets defined at 5 year level; opportunity to define targets more granularly for scorecard metrics to ensure progress towards 5 year goals and inform redirection
Executed investments align to finalized investment plan and evidence	3	• Hydro One has historically struggled to fully execute proposed capital budgets • Evidence shared demonstrates improvement in ISAs/budget; however, unclear whether mix of investments aligns to filed evidence • New redirection committee expected to help address alignment to plan
Execution tracked in-year	4*	• Actual vs plan tracked and shared in monthly reporting; initial focus on spending vs. overall performance vs. plan • New redirection committee establishes forum for in-year course correction, with senior participation on committee
Execution data and outcomes tracked and used to inform future planning	4	• Recent effort undertaken to strengthen collection of unit cost data to drive productivity • Information then used to reduce future estimates and drive productivity through budgets • Significant progress made in 2017, though not all types of investments driven by unit cost data yet

Hydro One uses metrics to track performance against key objectives and desired outcomes. Hydro One tracks performance at cascading levels through the organization (e.g. at the overall organizational level, at the operations group level, and for groups within operations), consistent with best practices we have observed.

In revising its performance measures over the past two years, Hydro One has increased its focus on unit cost metrics in an effort to increase its ability to measure productivity and use these

metrics to drive continuous improvement through the business. Hydro One has added unit cost metrics for brush control and forestry and per FTE metrics for project management and construction to its scorecard to increase its focus on productivity and efficiency.

As part of its effort to improve performance tracking, Hydro One has set 5 year targets for improvement over historical average performance on each metric over the full term of the plan. The targets indicate the outcomes Hydro One's investment plan is expected to deliver. Hydro One set these targets through a combination of qualitative and quantitative analysis and is continuing to evolve its predictive analytics to improve its ability to translate planned investments' risk mitigation potential into customer outcomes. In addition to improving its predictive analytics, Hydro One can also continue to improve on this dimension by ensuring that team and division metrics align to the overall goals set by leadership on an annual basis and by setting annual goals for its published metrics to ensure performance is tracking towards the overall outcomes Hydro One is seeking to deliver with its 5 year plan.

Several of Hydro One's performance metrics focus on tracking execution progress, a critical capability in ensuring plans deliver on desired outcomes. Hydro One has demonstrated recent progress on project execution, with metrics indicating its ability to largely meet planned in service additions and planned capex in a given year. Hydro One is now focusing on its processes to monitor how executed investments track to plan, and strengthening its processes to ensure that when capital is being redirected, the drivers and impacts of changes are well understood.

Exhibit 36: Sample Hydro One Execution metrics

Measure	Measure Description

OEB INTERROGATORY #178

Reference:

F-04-01-01

EB-2017-0049 Management and Non-Represented Role Benchmarking and 2018 Compensation Structure Recommendations, C1-02-01-01, C1-02-01-02

Interrogatory:

The first reference above is a compensation study prepared by Willis Towers Watson for the current application.

The second reference lists three compensation studies prepared by either Willis Towers Watson or Towers Watson for Hydro One's recent distribution rates application.

a) Please state how the study in the current application relates to the three studies filed in the previous application.

b) Please provide a table summarizing and comparing the key recommendations of the current study with those in the previous studies. Please include an explanation for any changes between the recommendations in the current study and those in the previous application, particularly with respect to recommended levels of compensation.

c) Please describe how Hydro One's consideration of the above referenced studies impacted the requested 2020 test year revenue requirement, including the impacts on both 2020 OM&A and 2020 capital.

Response:

a) All four studies provide a market competitive assessment of Hydro One's Management remuneration arrangements. Each study assesses different subsets of Hydro One's management employee group, and different components of Hydro One's remuneration programs relative to market. The table below provides a summary of each study as it relates to the area of focus, and management employees included in the analysis. This year's study is most similar in scope to (2) EB-2017-0049 Management and Non-Represented Role Benchmarking and 2018 Compensation Structure Recommendations Filed: 2018-04-20.

Witness: Sabrin Lila, Joel Jodoin

Study Reference	Competitive Assessment Area of Focus	Employee Groups Assessed	
		Executives	Management Employees
Exh F-4-1 Attachment 1	Compensation structure (1)	✓	✓
EB-2017-0049	Compensation structure (1)	✓	✓
Exh C1-2-1 Attachment 1	Total rewards (2)	✓	
Exh C1-2-1 Attachment 2	Total rewards (2)		✓

1. Compensation structure is defined as salary midpoint + target short-term incentives + expected value of long-term incentives
2. Total rewards is defined as salary + target short-term incentives + expected value of long-term incentives + pension & benefits

b) The table below summarizes the key recommendations of the current and previous compensation studies conducted by Willis Towers Watson.

Study Reference	Recommendation Focus	Willis Towers Watson (WTW) recommendations
Exh F-4-1 Attachment 1	Salary Increase Budgets	WTW recommended a 2019 salary increase budget of 2.5%. No adjustments to the salary structure were recommended
EB-2017-0049	Salary Structure	WTW recommended modest salary structure adjustments to align closer to the market 50th percentile
EB-2017-0049	Long-term Incentives	WTW recommended increasing participation levels of Hydro One's long-term incentive program at the Director level, along with adjustments to the mix of incentive vehicles, to better align with typical market practice of similar organizations
Exh C1-2-1 Attachment 1	Executive Compensation Peer Groups	WTW recommended selection criteria to establish a broader secondary executive compensation peer group, and an annual review process, to ensure continued appropriateness of the underlying peer groups
Exh C1-2-1 Attachment 1	Transition / implementation	WTW recommended a transitional approach in managing executive compensation relative to market, i.e. current executive roles may not immediately need to be aligned with the market 50th percentile ,and can be transitioned over time
Exh C1-2-1 Attachment 2	Pre- IPO Considerations	WTW recommended Hydro One consider transition planning timeline as it relates to salary structure development and administrative guidelines, incentive

		programs (both executive and non-executive), salary budget increases and implementation guidelines, which better reflect the new ownership structure
Summary: In each instance, WTW's recommendations included in the four studies reflected Hydro One's current and future desired state. As Hydro One's compensation programs evolved, recommendations were made to also support an evolving compensation program in terms of both design and administration, and align with its peer group as a publicly-traded company to establish good corporate governance. The approach to recommendations associated with levels of compensation were consistently provided to ensure Hydro One remained competitively positioned to market in order to attract and retain talent, while ensuring appropriate cost-control measures were considered.		

c) Management regularly benchmarks compensation with its consultant Willis Towers Watson. These studies are used to inform compensation decisions that may impact in year compensation. For example, Willis Towers Watson's recommendation for merit was 2.5% for management, whereas this Application assumes a 2% escalation, and therefore has no impact on the revenue requirement. Other recommendations may have an on-going impact, which are reflected in the labour burdens for each rate application.

UNDERTAKING - JT 2.15

Reference:

I-07-SEC-055

Undertaking:

Regarding SEC 55, in particular in respect of the global figures as to the differential relative to market median, to advise how the differential was calculated.

Response:

Below, Mercer has provided a summary of the methodology used.

An estimate of the dollar difference between the weighted average total compensation for Hydro One and the market median calculated in response to Exhibit I, Tab 07, Schedule SEC-55 is as follows:

Table 1: Estimated Dollar Differential – Hydro One (Dx and Tx)

	Study Year	2020	2021	2022
Estimated Dollar Difference (Hydro One to Market Median)	$70,915,000	$79,979,865	$80,535,602	$80,826,246

The Study Year value in Table 1 was calculated based on the results of the Mercer 2017 Compensation Cost Benchmarking Study (Exhibit F, Tab 4, Schedule 1 Attachment 2). The dollar differences in subsequent years were estimated based on the following steps and assumptions.

- Update the Hydro One benchmark and market benchmark based on salary/wage increases provided in Table 2 below and the market adjustment assumptions listed below. Results, by year, are provided in Table 3.

Witness: Sabrin Lila

Table 2: Actual and Projected Hydro One Salary/Wage Adjustments: 2018 to 2022

Category	Desc.	2018	2019	2020	2021	2022
MCP	Merit Budget	2.50% (actual)	2.30% (CPI)	2.00% (CPI)	2.50% (est.)	2.50% (est.)
PWU	Negotiated Step Increase	1.80% (Apr. 1, 18)	2.00% (Apr. 1, 19)	2.00% (Jan. 1, 20)*	2.00% (est.)	2.00% (est.)
SOCIETY	Negotiated Step Increase	0.50% (Apr. 1, 18)	2.00% (Apr. 1, 19)	2.00% (Apr. 1, 20)	2.00% (est.)	2.00% (est.)

*Table 2 Notes: *PWU has agreed to a 0.6% wage adjustment on January 1, 2020. A projected annual adjustment of 2.0% was used for 2020 to reflect the opportunity, in 2020, for a wage adjustment associated with the new collective agreement.*

- Projected external market salary/wage increases as per the information below:
  - Market (MCP roles): CPI + 0.6%,
  - Market (represented roles): Increase at rate of CPI
  - CPI Assumptions: 2017: 2.3%, 2018: 2.3%, 2019: 2.0%, 2020: 2.0% , 2021: 1.9%, 2022: 2.0%

Table 3: Updated Benchmark Based on Stated Assumptions: 2018 to 2022

	2017*	2018	2019	2020	2021	2022
Non-Represented		103.5	105.9	108.0	110.7	113.5
Market**		102.9	105.9	108.6	111.4	114.2
Multiple of P50	1.01	1.01	1.00	0.99	0.99	0.99
Energy Professionals		112.6	114.8	117.1	119.4	121.8
Market		102.3	104.7	106.7	108.8	110.9
Multiple of P50	1.12	1.10	1.10	1.10	1.10	1.10
Trades and Technical		114.0	116.3	118.6	121.0	123.4
Market		102.3	104.7	106.7	108.8	110.9
Multiple of P50	1.12	1.11	1.11	1.11	1.11	1.11
Total						
Multiple of P50	**1.12**	**1.11**	**1.10**	**1.10**	**1.10**	**1.10**

*Table 3 Notes:*Mercer Compensation Cost Benchmark Study effective October 1, 2017*

- Estimated Dollar Differentials are based on the differential between the average salary and the market median rate for the corresponding level, multiplied by the number of incumbents in the relevant level based on the FTE forecast found at Exhibit I, Tab 7, Schedule 58 Attachment 1 (Payroll Table).

- The allocation of compensation to Transmission related activities is based on the following percentages 2019: 44.33%, 2020: 48.22%, 2021: 49.68% and 2022: 48.35% to reach the figures provided in Exhibit I, Tab 07, Schedule SEC-55.

In summary, the 2017 estimated total reward dollar differential, based on the Mercer Study, was projected forward to 2022 by adjusting for Hydro One's actual and projected wage/salary adjustments and the expected market wage/salary adjustments during the

period. Further, forecasted increases or decreases in Hydro One employee numbers, by category, were taken into account yielding the figures in Table 1.

ONTARIO ENERGY BOARD

FILE NO.: **EB-2019-0082** **Hydro One Networks Inc.**

VOLUME: **Technical Conference**

DATE: **August 13, 2019**

sounds like it's all about a future application that's not obviously before the Board at this point.

So what do you say the relevance is, if any, to this question?

MS. O'CONNELL: I guess I am trying to get a feeling as to what the strategy is, the overall strategy, and seeing where you're headed going forward, and seeing what could possibly be an impact on ratepayers in a future proceeding.

Although I take your point that it not directly related to this proceeding, but I just wanted to see an overall strategic -- strategic question.

MR. STERNBERG: I think, to the specific question you've just asked which is only about a future application, the witness has already told you he can't speculate in general about any future application years down the road. So on that particular question, we are going to refuse.

If you have got questions along these lines that are about the evidence in this application, and the decisions that were made, and the IR responses that have been provided that are relevant, then we can consider those questions.

MS. O'CONNELL: Okay, thank you. My next question is regarding Staff 171. I asked you to update appendix 2L for OEB-approved FTEs for 2017 and '18 and you said the OEB -- in your response, you said the OEB approves the funding envelope, but not specific FTEs.

I am just curious. When the OEB does approve

envelopes, do you do an exercise to quantify the FTE levels resulting from the compensation amounts approved by the OEB?

MR. JODOIN: I think in the immediate assessment of a decision shortly thereafter, as we're quantifying the revenue requirement, that level of detail is not completed just in the time it takes to actually run through a decision rate order.

However, depending on -- it really does depend on the timing of when we receive a decision, which has fluctuated over the past few decisions at the point in the year. But what I can say is that typically that level of granularity would be encompassed in the next business planning process and investment planning process that kicks off post whenever that decision is rendered.

MS. O'CONNELL: Okay. So I guess what you are saying is that it would be possible to update appendix 2L, then?

MS. LILA: I think in response to your question around fluctuations in FTE following a rate order, we certainly have, as we have commented in our evidence, a flexible workforce that allows us to fluctuate and an on-board and off-board staff, according to decisions that are made.

So that's how we flex our workforce in order to allow us that kind of flexibility to adjust our head count requirements based off of decisions that we receive.

MS. O'CONNELL: But you just said that your business plan incorporates the OEB-approved FTEs. So that's why I am asking you if you can update the appendix 2L.

MR. JODOIN: Just to clarify, I didn't specifically say that the business planning process incorporates OEB-approved FTEs, because I think we stand by our original response in that the OEB doesn't approve FTEs; the approval isn't that granular.

With that being said, we do go through a business planning process and, as my colleague just mentioned, depending on the investments that are being made in that business plan, we leverage the staff that are in-house as well as a flexible workforce to execute the work consistent with the envelopes that are approved from a dollar perspective in an OEB decision.

MS. O'CONNELL: Okay, thank you. My next question is regarding Staff 196. So in Staff 196, you talked about the differences in FTEs between 2017 and 2018, as well as provided a table -- you referenced a table -- yes, there it is right there -- FTE change from 2019 to 2022.

I am just wondering would it be possible to update this table with an extra column for 2020?

MS. LILA: Yes, we can do that.

MS. O'CONNELL: Great, thank you.

MR. SIDLOFSKY: That will be JT2.7.

UNDERTAKING NO. JT2.7: (A) TO UPDATE THE STAFF IR 196 TABLE SHOWING FTE CHANGE FROM 2019 TO 2020, TO INCLUDE 2020; (B) TO QUANTIFY THE IMPACTS ON THE 2020 TEST YEAR REQUIREMENTS FOR OM&A AND CAPITAL; (C) TO EXPLAIN THE CHANGES IN TRANSMISSION FTES IN THE TRANSMISSION WORK PROGRAM ROW OF THE SAME TABLE

SEC INTERROGATORY #58

Reference:
F-04-01-05

Interrogatory:
Please provide the attachment in excel.

Response:
Please refer to Attachment 1 to this Exhibit for the updated Excel file.

In reviewing the excel file for the compensation tables, it came to Hydro One's attention that formula errors affecting both total Transmission and Distribution compensation occurred. These have been corrected in this file. The underlying source data is correct – as such, there is no impact to revenue requirement.

Compensation Costs 2014-2022

Transmission Unrepresented	2014	2015	2016	2017	2018	2019	2020	2021	2022
Base Pay	33,396,323	34,508,999	33,641,927	38,772,661	36,544,290	38,524,614	43,137,614	45,511,365	45,048,884
Burdens	22,435,650	23,448,136	17,666,653	19,961,342	15,690,642	16,363,898	18,603,459	19,927,923	20,043,316
Other Allowances	3,452,267	2,367,920	3,296,601	3,983,397	5,723,344	3,596,819	4,021,881	4,237,275	4,194,217
STI	4,055,590	4,414,248	4,555,907	7,257,372	6,297,493	4,618,185	5,308,380	5,674,271	5,630,422
LTI	-	-	241,898	2,350,267	3,730,541	632,252	984,137	1,070,633	847,416
ESOP	-	-	774,963	886,803	540,602	1,771,039	1,963,382	2,046,258	1,998,514
Transmission Unrepresented Total	**63,339,829**	**64,739,302**	**60,177,949**	**73,211,844**	**68,526,913**	**65,506,806**	**74,018,853**	**78,467,725**	**77,762,769**
Headcount Total / FTE Transmission	**331 / 285**	**313 / 277**	**319 / 275**	**357 / 308**	**360 / 290**	**307**	**334**	**345**	**336**

Distribution Unrepresented	2014	2015	2016	2017	2018	2019	2020	2021	2022
Base Pay	37,601,338	39,909,527	41,751,062	42,861,848	46,685,158	53,165,528	50,517,625	50,137,653	52,495,756
Burdens	25,260,579	27,117,681	21,925,067	22,066,579	20,044,720	22,582,842	21,786,151	21,953,622	23,356,606
Other Allowances	3,886,951	2,738,490	4,091,222	4,403,509	7,119,612	4,963,755	4,709,947	4,668,000	4,887,548
STI	4,578,312	5,117,332	5,712,824	8,142,916	7,564,939	7,819,365	7,464,246	7,442,291	7,839,166
LTI	-	-	249,764	2,535,402	4,764,858	1,870,199	1,374,938	1,140,263	1,210,384
ESOP	-	-	708,363	811,624	677,410	2,290,696	2,128,505	2,075,874	2,153,951
Distribution Unrepresented Total	**71,327,180**	**74,883,031**	**74,438,303**	**80,821,878**	**86,856,697**	**92,692,386**	**87,981,412**	**87,417,704**	**91,943,411**
Headcount Total / FTE Distribution	**372 / 320**	**360 / 320**	**390 / 336**	**378 / 325**	**433 / 348**	**385**	**359**	**349**	**358**
Shareholder Allocated Unrepresented	**3,089,801**	**2,615,254**	**9,597,169**	**9,660,409**	**13,112,786**	**23,748,837**	**24,288,558**	**24,881,971**	**25,490,502**
TOTAL Unrepresented Labour	**137,756,810**	**142,237,587**	**144,213,420**	**163,694,131**	**168,496,396**	**181,948,030**	**186,288,823**	**190,767,400**	**195,196,682**
TOTAL Unrepresented Headcount / FTE/YE	**703 / 605 / 584**	**673 / 597 / 585**	**709 / 611 / 596**	**735 / 633 / 627**	**793 / 638 / 641**	**692**	**693**	**694**	**694**

Transmission Society Represented	2014	2015	2016	2017	2018	2019	2020	2021	2022
Base Pay	67,393,687	66,909,144	65,179,365	72,517,488	70,250,107	83,210,524	91,575,087	96,245,302	95,123,535
Overtime	2,940,988	2,853,433	1,792,765	4,635,127	5,942,030	5,446,164	5,512,817	5,626,666	5,717,210
Lump Sums	-	-	618,063	1,312,146	-	-	-	-	-
Burdens	45,275,079	45,463,351	34,228,158	37,334,202	30,162,557	35,344,898	39,492,527	42,142,638	42,322,714
Share Grants	-	-	-	-	1,243,401	1,142,108	1,127,076	1,086,518	1,041,623
Transmission Society Represented Total	**115,609,754**	**115,225,928**	**101,818,351**	**115,798,964**	**107,598,095**	**125,143,693**	**137,707,506**	**145,101,125**	**144,205,083**
Headcount Total / FTE Transmission	**660 / 608**	**636 / 595**	**624 / 569**	**685 / 627**	**678 / 607**	**699**	**755**	**778**	**754**

Distribution Society Represented	2014	2015	2016	2017	2018	2019	2020	2021	2022
Base Pay	75,689,891	77,185,295	79,896,923	76,588,835	84,388,775	104,483,618	98,355,141	97,474,771	101,619,468
Overtime	4,029,156	3,788,344	5,240,140	3,090,085	3,961,353	3,630,776	3,675,211	3,751,111	3,811,473
Lump Sums	-	-	757,623	1,385,814	-	-	-	-	-
Burdens	50,848,469	52,445,778	41,956,906	39,430,255	36,233,130	44,380,958	42,416,482	42,680,982	45,212,909
Share Grants	-	-	-	-	1,436,756	1,319,711	1,302,342	1,255,478	1,203,601
Distribution Society Represented Total	**130,567,516**	**133,419,417**	**127,851,592**	**120,494,989**	**126,020,015**	**153,815,064**	**145,749,176**	**145,162,341**	**151,847,451**
Headcount Total / FTE Distribution	**741 / 683**	**734 / 687**	**764 / 698**	**724 / 662**	**815 / 730**	**878**	**810**	**788**	**806**
TOTAL Society Represented Labour	**246,177,271**	**248,645,345**	**229,669,943**	**236,293,954**	**233,618,109**	**278,958,757**	**283,456,682**	**290,263,465**	**296,052,535**
TOTAL Society Represented Headcount / FTE/YE	**1401 / 1291 / 1290**	**1370 / 1282 / 1285**	**1388 / 1267 / 1241**	**1409 / 1289 / 1288**	**1493 / 1337 / 1382**	**1,577**	**1,565**	**1,566**	**1,560**

Transmission PWU Represented	2014	2015	2016	2017	2018	2019	2020	2021	2022
Base Pay	148,298,536	146,298,728	145,538,184	158,933,735	154,996,772	165,116,892	185,433,184	196,453,689	196,258,552
Overtime	28,468,143	24,728,915	15,636,038	36,486,246	46,990,537	43,212,279	44,677,729	45,980,102	47,243,112
Lump Sums	-	1,345,306	2,637,844	-	-	-	-	-	-
Burdens	99,626,956	99,406,896	76,427,624	81,823,907	66,549,350	70,135,836	79,969,621	86,020,581	87,320,079
Share Grants	-	-	-	3,778,937	3,382,051	3,283,939	3,254,468	3,156,020	3,007,446
Transmission PWU Represented Total	**276,393,635**	**271,779,845**	**240,239,691**	**281,022,825**	**271,918,710**	**281,748,947**	**313,335,001**	**331,610,392**	**333,829,189**
Headcount Total / FTE Transmission	**1695 / 1574**	**1687 / 1558**	**1687 / 1523**	**1917 / 1645**	**1951 / 1602**	**1,658**	**1,827**	**1,900**	**1,862**
Distribution PWU Represented	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Base Pay	166,554,177	168,767,821	178,400,835	167,856,747	186,191,714	207,329,668	199,162,322	198,963,253	209,660,938
Overtime	39,001,377	32,831,201	45,703,166	24,324,164	31,327,025	28,808,186	29,785,152	30,653,401	31,495,408
Lump Sums	-	1,551,922	3,233,471	-	-	-	-	-	-
Burdens	111,891,096	114,674,170	93,685,049	86,417,744	79,943,198	88,066,336	85,890,427	87,119,436	93,283,118
Share Grants	-	-	-	3,991,098	3,907,977	3,794,608	3,760,554	3,646,797	3,475,119
Distribution PWU Represented Total	**317,446,650**	**317,825,115**	**321,022,520**	**282,589,752**	**301,369,913**	**327,998,798**	**318,598,456**	**320,382,887**	**337,914,583**
Headcount Total / FTE Distribution	**1903 / 1768**	**1946 / 1798**	**2068 / 1868**	**2024 / 1737**	**2343 / 1925**	**2,081**	**1,963**	**1,924**	**1,990**
TOTAL PWU Represented Labour	**593,840,285**	**589,604,960**	**561,262,211**	**563,612,577**	**573,288,623**	**609,747,745**	**631,933,457**	**651,993,279**	**671,743,773**
TOTAL PWU Represented Headcount / FTE/YE	**3598 / 3342 / 3271**	**3633 / 3356 / 3350**	**3755 / 3391 / 3411**	**3941 / 3382 / 3330**	**4294 / 3527 / 3529**	**3,739**	**3,790**	**3,824**	**3,852**

Temporary Transmission	2014	2015	2016	2017	2018	2019	2020	2021	2022
Casual Trades	117,432,836	114,683,317	126,561,770	120,254,743	126,691,541	134,172,558	134,088,990	131,778,118	130,179,945
Unrepresented	1,037,380	1,062,954	1,429,735	659,976	839,280	223,899	248,376	261,054	259,128
Society Represented	2,184,967	2,099,278	1,820,954	1,537,491	1,117,826	562,536	580,988	477,407	472,698
PWU Represented	9,810,066	5,736,423	6,145,715	5,764,657	4,887,005	2,944,456	3,233,454	3,394,711	3,365,930
Overtime	10,311,405	8,102,478	4,863,103	10,950,269	18,688,912	13,415,649	13,206,444	13,486,554	13,549,763
Other Allowances	-	-	-	-	-	-	-	-	-
Burdens	8,939,318	8,507,504	9,066,085	8,652,709	9,331,999	9,361,693	9,492,662	9,436,827	9,413,095
Temporary Transmission Total	**149,715,971**	**140,191,954**	**149,887,362**	**147,819,845**	**161,556,564**	**160,680,791**	**160,850,913**	**158,834,670**	**157,240,559**

Headcount Total / FTE Transmission	**2819 / 1836**	**2619 / 1711**	**2701 / 1860**	**2319 / 1724**	**2171 / 1748**	**1,811**	**1,775**	**1,715**	**1,661**

Temporary Distribution	2014	2015	2016	2017	2018	2019	2020	2021	2022
Casual Trades	72,600,869	70,901,026	78,244,679	74,345,466	78,324,908	101,074,235	98,122,007	105,105,675	107,938,200
Unrepresented	1,165,082	1,226,207	1,752,571	697,029	1,008,195	281,140	266,765	264,389	276,824
Society Represented	2,453,938	2,421,692	2,232,127	1,623,810	1,342,802	706,350	624,003	483,506	504,978
PWU Represented	11,017,691	6,617,444	7,533,423	6,088,301	5,870,573	3,697,218	3,472,853	3,438,076	3,595,788
Overtime	14,126,632	10,757,207	14,214,548	7,300,180	12,459,275	8,943,766	8,804,296	8,991,036	9,033,176
Other Allowances	-	-	-	-	-	-	-	-	-
Burdens	6,436,628	5,938,744	6,694,070	5,599,152	6,069,464	7,096,338	6,979,716	7,471,414	7,727,044
Temporary Distribution Total	**107,800,840**	**97,862,320**	**110,671,417**	**95,653,937**	**105,075,217**	**121,799,047**	**118,269,640**	**125,754,096**	**129,076,009**

Headcount Total / FTE Distribution	**1895 / 1234**	**1732 / 1131**	**1794 / 1235**	**1845 / 1118**	**1721 / 1179**	**1,397**	**1,323**	**1,384**	**1,393**

TOTAL Temporary Labour	**257,516,811**	**238,054,274**	**260,558,779**	**243,473,782**	**266,631,781**	**282,479,838**	**279,120,554**	**284,588,766**	**286,316,568**
TOTAL Temporary Headcount / FTE/YE	**4714 / 3070 / 2191**	**4351 / 2842 / 2063**	**4495 / 3095 / 2278**	**4164 / 2842 / 2760**	**3892 / 2927 / 1984**	**3,208**	**3,098**	**3,099**	**3,054**

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Capital Transmission Comp	397,892,921	391,130,026	400,633,366	394,177,597	424,531,224	456,985,537	506,498,946	542,636,628	543,823,133
Total OM&A Transmission Comp	207,166,269	200,807,004	151,489,987	223,675,880	185,069,058	176,094,700	179,413,328	171,377,284	169,214,468
Total Transmission Compensation	**605,059,190**	**591,937,030**	**552,123,353**	**617,853,477**	**609,600,282**	**633,080,237**	**685,912,274**	**714,013,912**	**713,037,600**

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Capital Distribution Comp	319,056,686	330,163,788	318,482,459	285,834,231	303,991,403	399,601,250	378,225,534	390,700,714	431,538,200
Total OM&A Distribution Comp	308,085,500	293,826,096	315,501,373	293,726,326	315,330,439	296,704,045	292,373,150	288,016,313	279,243,254
Total Distribution Compensation	**627,142,186**	**623,989,883**	**633,983,832**	**579,560,557**	**619,321,842**	**696,305,295**	**670,598,684**	**678,717,027**	**710,781,454**

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Capital Transmission + Distribution Comp	716,949,607	721,293,813	719,115,826	680,011,828	728,522,627	856,586,788	884,724,480	933,337,343	975,361,333
Total OM&A Transmission + Distribution Comp	515,251,769	494,633,100	466,991,359	517,402,206	500,399,497	472,798,745	471,786,477	459,393,597	448,457,722
Total Shareholder Allocated Comp	3,089,801	2,615,254	9,597,169	9,660,409	13,112,786	23,748,837	24,288,558	24,881,971	25,490,502
Total Transmission + Distribution Compensation	**1,235,291,177**	**1,218,542,167**	**1,195,704,354**	**1,207,074,444**	**1,242,034,910**	**1,353,134,369**	**1,380,799,515**	**1,417,612,911**	**1,449,309,557**

Headcount FTE	2014	2015	2016	2017	2018	2019	2020	2021	2022
MCP Represented Regular Employees	605	597	611	633	638	692	693	694	694
Society Represented Regular Employees	1,291	1,282	1,267	1,289	1,337	1,577	1,565	1,566	1,560
PWU Represented Regular Employees	3,342	3,356	3,391	3,382	3,527	3,739	3,790	3,824	3,852
Temporary and Casual Employees	3,070	2,842	3,095	2,842	2,927	3,208	3,098	3,099	3,054
Total	**8,308**	**8,077**	**8,364**	**8,146**	**8,429**	**9,216**	**9,146**	**9,183**	**9,160**

Burdens Tx include:	2014	2015	2016	2017	2018	2019	2020	2021	2022
Pension	77,400,000	76,500,000	49,500,000	41,000,000	35,500,000	34,000,000	38,000,000	40,000,000	39,000,000
OPEB	59,600,000	52,400,000	57,500,000	61,200,000	55,800,000	50,000,000	55,000,000	58,000,000	59,000,000

Burdens Dx include:	2014	2015	2016	2017	2018	2019	2020	2021	2022
Pension	90,100,000	94,700,000	54,100,000	43,400,000	37,000,000	36,000,000	35,000,000	34,000,000	34,000,000
OPEB	69,400,000	64,800,000	62,800,000	64,400,000	58,200,000	53,000,000	53,000,000	52,000,000	56,000,000

OEB INTERROGATORY #172

Reference:

F-04-01 p.13 Table 2
EB-2017-0049 C1-02-01 p.9 Table 1

Interrogatory:

At the first reference above, Hydro One's Full Time Equivalents (FTE), 2017 to 2022 are shown as increasing from 8,146 to 9,146, an increase of over 12%. At the second reference above it is stated that "Table 1 illustrates the forecast FTEs for 2017 to 2022. Total Regular FTEs and total Networks FTEs in 2022 are expected to be 2.0% and 1.3% lower respectively than in 2017." FTE numbers decrease from 8,581 in 2017 to 8,467 in 2022.

a) Please reconcile the FTE numbers in these two tables and explain the shift to a 12% increase in the transmission application from a 2% decrease in the distribution application.

Response:

a) Different business plans underpin rate filings EB-2017-0049 and EB -2019-0082. The 2017-2022 Business Plan was the basis for EB-2017-0049 (and in update Exhibit Q, the 2018-23 Business Plan was used). In the current application, Business Plan 2019-2024 is the basis of the evidence.

It should be clarified that while this question refers to a 12% increase in FTEs over the period 2017 to 2022, the table below shows that Transmission related FTEs increase 7% over the same period.

Transmission FTE		**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Regular	MCP	308	290	307	334	345	336
	Society	627	607	699	755	778	754
	PWU	1,645	1,602	1,658	1,827	1,900	1,862
Total		**2,580**	**2,499**	**2,664**	**2,916**	**3,023**	**2,952**
Non Regular							
		1,724	**1,748**	**1,811**	**1,775**	**1,715**	**1,661**
Total Transmission FTE		**4,304**	**4,247**	**4,475**	**4,691**	**4,738**	**4,613**

Witness: Sabrin Lila

6. FULL TIME EQUIVALENTS (FTES)[2]

Table 2: Full Time Equivalents (FTE), 2017 to 2022

		2017	2018	2019	2020	2021	2022
Regular	MCP	633	638	692	693	694	694
	Society	1,289	1,337	1,577	1,565	1,566	1,560
	PWU	3,382	3,527	3,739	3,790	3,824	3,852
	Total Regular	**5,726**	**5,502**	**6,008**	**6,048**	**6,084**	**6,106**
Temporary	MCP	18	22	6	6	6	6
	Society	36	28	13	12	9	9
	PWU	194	173	99	98	98	98
	Total Temporary	**248**	**223**	**118**	**116**	**113**	**113**
Casual	PWU Hiring Hall	1,230	1,351	1,794	1,717	1,781	1,782
	Casual Trades	1,364	1,353	1,296	1,265	1,205	1,159
	Total Casual	**2,594**	**2,704**	**3,090**	**2,982**	**2,986**	**2,941**
	Grand Total	**8,146**	**8,429**	**9,216**	**9,146**	**9,183**	**9,160**

Table 2 illustrates the historical (2017 and 2018) and forecasted (2019-2022) FTEs. Total regular and non-regular FTEs increase over this period primarily due to:

- in 2018, Hydro One repatriated the Customer Contact Centre resulting in approximately 280 regular employees and 130 non regular employees joining Hydro One. By bringing this work in-house, contact centre agents will be able to better serve customers by providing a more seamless customer experience. Since this work is Distribution focused, none of the compensation related to the contact centre is included in this application.

[2] FTE assumptions: (1) A budgeted regular position is 1 FTE; (2) For non-regular positions, unless budgeted for less than 1 year, a non-regular position is 1 FTE; and (3) For casual (Hiring Hall and Casual Construction), FTE's are determined by "person months"/12

SEC INTERROGATORY #58

Reference:
F-04-01-05

Interrogatory:
Please provide the attachment in excel.

Response:
Please refer to Attachment 1 to this Exhibit for the updated Excel file.

In reviewing the excel file for the compensation tables, it came to Hydro One's attention that formula errors affecting both total Transmission and Distribution compensation occurred. These have been corrected in this file. The underlying source data is correct – as such, there is no impact to revenue requirement.

Compensation Costs 2014-2022

Transmission Unrepresented	2014	2015	2016	2017	2018	2019	2020	2021	2022
Base Pay	33,396,323	34,508,999	33,641,927	38,772,661	36,544,290	38,524,614	43,137,614	45,511,365	45,048,884
Burdens	22,435,650	23,448,136	17,666,653	19,961,342	15,690,642	16,363,898	18,603,459	19,927,923	20,043,316
Other Allowances	3,452,267	2,367,920	3,296,601	3,983,397	5,723,344	3,596,819	4,021,881	4,237,275	4,194,217
STI	4,055,590	4,414,248	4,555,907	7,257,372	6,297,493	4,618,185	5,308,380	5,674,271	5,630,422
LTI	-	-	241,898	2,350,267	3,730,541	632,252	984,137	1,070,633	847,416
ESOP	-	-	774,963	886,803	540,602	1,771,039	1,963,382	2,046,258	1,998,514
Transmission Unrepresented Total	**63,339,829**	**64,739,302**	**60,177,949**	**73,211,844**	**68,526,913**	**65,506,806**	**74,018,853**	**78,467,725**	**77,762,769**
Headcount Total / FTE Transmission	**331 / 285**	**313 / 277**	**319 / 275**	**357 / 308**	**360 / 290**	**307**	**334**	**345**	**336**
Distribution Unrepresented	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Base Pay	37,601,338	39,909,527	41,751,062	42,861,848	46,685,158	53,165,528	50,517,625	50,137,653	52,495,756
Burdens	25,260,579	27,117,681	21,925,067	22,066,579	20,044,720	22,582,842	21,786,151	21,953,622	23,356,606
Other Allowances	3,886,951	2,738,490	4,091,222	4,403,509	7,119,612	4,963,755	4,709,947	4,668,000	4,887,548
STI	4,578,312	5,117,332	5,712,824	8,142,916	7,564,939	7,819,365	7,464,246	7,442,291	7,839,166
LTI	-	-	249,764	2,535,402	4,764,858	1,870,199	1,374,938	1,140,263	1,210,384
ESOP	-	-	708,363	811,624	677,410	2,290,696	2,128,505	2,075,874	2,153,951
Distribution Unrepresented Total	**71,327,180**	**74,883,031**	**74,438,303**	**80,821,878**	**86,856,697**	**92,692,386**	**87,981,412**	**87,417,704**	**91,943,411**
Headcount Total / FTE Distribution	**372 / 320**	**360 / 320**	**390 / 336**	**378 / 325**	**433 / 348**	**385**	**359**	**349**	**358**
Shareholder Allocated Unrepresented	**3,089,801**	**2,615,254**	**9,597,169**	**9,660,409**	**13,112,786**	**23,748,837**	**24,288,558**	**24,881,971**	**25,490,502**
TOTAL Unrepresented Labour	**137,756,810**	**142,237,587**	**144,213,420**	**163,694,131**	**168,496,396**	**181,948,030**	**186,288,823**	**190,767,400**	**195,196,682**
TOTAL Unrepresented Headcount / FTE/YE	**703 / 605 / 584**	**673 / 597 / 585**	**709 / 611 / 596**	**735 / 633 / 627**	**793 / 638 / 641**	**692**	**693**	**694**	**694**
Transmission Society Represented	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Base Pay	67,393,687	66,909,144	65,179,365	72,517,488	70,250,107	83,210,524	91,575,087	96,245,302	95,123,535
Overtime	2,940,988	2,853,433	1,792,765	4,635,127	5,942,030	5,446,164	5,512,817	5,626,666	5,717,210
Lump Sums	-	-	618,063	1,312,146	-	-	-	-	-
Burdens	45,275,079	45,463,351	34,228,158	37,334,202	30,162,557	35,344,898	39,492,527	42,142,638	42,322,714
Share Grants	-	-	-	-	1,243,401	1,142,108	1,127,076	1,086,518	1,041,623
Transmission Society Represented Total	**115,609,754**	**115,225,928**	**101,818,351**	**115,798,964**	**107,598,095**	**125,143,693**	**137,707,506**	**145,101,125**	**144,205,083**
Headcount Total / FTE Transmission	**660 / 608**	**636 / 595**	**624 / 569**	**685 / 627**	**678 / 607**	**699**	**755**	**778**	**754**

Distribution Society Represented	2014	2015	2016	2017	2018	2019	2020	2021	2022
Base Pay	75,689,891	77,185,295	79,896,923	76,588,835	84,388,775	104,483,618	98,355,141	97,474,771	101,619,468
Overtime	4,029,156	3,788,344	5,240,140	3,090,085	3,961,353	3,630,776	3,675,211	3,751,111	3,811,473
Lump Sums	-	-	757,623	1,385,814	-	-	-	-	-
Burdens	50,848,469	52,445,778	41,956,906	39,430,255	36,233,130	44,380,958	42,416,482	42,680,982	45,212,909
Share Grants	-	-	-	-	1,436,756	1,319,711	1,302,342	1,255,478	1,203,601
Distribution Society Represented Total	**130,567,516**	**133,419,417**	**127,851,592**	**120,494,989**	**126,020,015**	**153,815,064**	**145,749,176**	**145,162,341**	**151,847,451**
Headcount Total / FTE Distribution	**741 / 683**	**734 / 687**	**764 / 698**	**724 / 662**	**815 / 730**	**878**	**810**	**788**	**806**
TOTAL Society Represented Labour	**246,177,271**	**248,645,345**	**229,669,943**	**236,293,954**	**233,618,109**	**278,958,757**	**283,456,682**	**290,263,465**	**296,052,535**
TOTAL Society Represented Headcount / FTE/YE	**1401 / 1291 / 1290**	**1370 / 1282 / 1285**	**1388 / 1267 / 1241**	**1409 / 1289 / 1288**	**1493 / 1337 / 1382**	**1,577**	**1,565**	**1,566**	**1,560**

Transmission PWU Represented	2014	2015	2016	2017	2018	2019	2020	2021	2022
Base Pay	148,298,536	146,298,728	145,538,184	158,933,735	154,996,772	165,116,892	185,433,184	196,453,689	196,258,552
Overtime	28,468,143	24,728,915	15,636,038	36,486,246	46,990,537	43,212,279	44,677,729	45,980,102	47,243,112
Lump Sums	-	1,345,306	2,637,844	-	-	-	-	-	-
Burdens	99,626,956	99,406,896	76,427,624	81,823,907	66,549,350	70,135,836	79,969,621	86,020,581	87,320,079
Share Grants	-	-	-	3,778,937	3,382,051	3,283,939	3,254,468	3,156,020	3,007,446
Transmission PWU Represented Total	**276,393,635**	**271,779,845**	**240,239,691**	**281,022,825**	**271,918,710**	**281,748,947**	**313,335,001**	**331,610,392**	**333,829,189**
Headcount Total / FTE Transmission	**1695 / 1574**	**1687 / 1558**	**1687 / 1523**	**1917 / 1645**	**1951 / 1602**	**1,658**	**1,827**	**1,900**	**1,862**

Distribution PWU Represented	2014	2015	2016	2017	2018	2019	2020	2021	2022
Base Pay	166,554,177	168,767,821	178,400,835	167,856,747	186,191,714	207,329,668	199,162,322	198,963,253	209,660,938
Overtime	39,001,377	32,831,201	45,703,166	24,324,164	31,327,025	28,808,186	29,785,152	30,653,401	31,495,408
Lump Sums	-	1,551,922	3,233,471	-	-	-	-	-	-
Burdens	111,891,096	114,674,170	93,685,049	86,417,744	79,943,198	88,066,336	85,890,427	87,119,436	93,283,118
Share Grants	-	-	-	3,991,098	3,907,977	3,794,608	3,760,554	3,646,797	3,475,119
Distribution PWU Represented Total	**317,446,650**	**317,825,115**	**321,022,520**	**282,589,752**	**301,369,913**	**327,998,798**	**318,598,456**	**320,382,887**	**337,914,583**
Headcount Total / FTE Distribution	**1903 / 1768**	**1946 / 1798**	**2068 / 1868**	**2024 / 1737**	**2343 / 1925**	**2,081**	**1,963**	**1,924**	**1,990**
TOTAL PWU Represented Labour	**593,840,285**	**589,604,960**	**561,262,211**	**563,612,577**	**573,288,623**	**609,747,745**	**631,933,457**	**651,993,279**	**671,743,773**
TOTAL PWU Represented Headcount / FTE/YE	**3598 / 3342 / 3271**	**3633 / 3356 / 3350**	**3755 / 3391 / 3411**	**3941 / 3382 / 3330**	**4294 / 3527 / 3529**	**3,739**	**3,790**	**3,824**	**3,852**

Temporary Transmission	2014	2015	2016	2017	2018	2019	2020	2021	2022
Casual Trades	117,432,836	114,683,317	126,561,770	120,254,743	126,691,541	134,172,558	134,088,990	131,778,118	130,179,945
Unrepresented	1,037,380	1,062,954	1,429,735	659,976	839,280	223,899	248,376	261,054	259,128
Society Represented	2,184,967	2,099,278	1,820,954	1,537,491	1,117,826	562,536	580,988	477,407	472,698
PWU Represented	9,810,066	5,736,423	6,145,715	5,764,657	4,887,005	2,944,456	3,233,454	3,394,711	3,365,930
Overtime	10,311,405	8,102,478	4,863,103	10,950,269	18,688,912	13,415,649	13,206,444	13,486,554	13,549,763
Other Allowances	-	-	-	-	-	-	-	-	-
Burdens	8,939,318	8,507,504	9,066,085	8,652,709	9,331,999	9,361,693	9,492,662	9,436,827	9,413,095
Temporary Transmission Total	**149,715,971**	**140,191,954**	**149,887,362**	**147,819,845**	**161,556,564**	**160,680,791**	**160,850,913**	**158,834,670**	**157,240,559**

Headcount Total / FTE Transmission	**2819 / 1836**	**2619 / 1711**	**2701 / 1860**	**2319 / 1724**	**2171 / 1748**	**1,811**	**1,775**	**1,715**	**1,661**

Temporary Distribution	2014	2015	2016	2017	2018	2019	2020	2021	2022
Casual Trades	72,600,869	70,901,026	78,244,679	74,345,466	78,324,908	101,074,235	98,122,007	105,105,675	107,938,200
Unrepresented	1,165,082	1,226,207	1,752,571	697,029	1,008,195	281,140	266,765	264,389	276,824
Society Represented	2,453,938	2,421,692	2,232,127	1,623,810	1,342,802	706,350	624,003	483,506	504,978
PWU Represented	11,017,691	6,617,444	7,533,423	6,088,301	5,870,573	3,697,218	3,472,853	3,438,076	3,595,788
Overtime	14,126,632	10,757,207	14,214,548	7,300,180	12,459,275	8,943,766	8,804,296	8,991,036	9,033,176
Other Allowances	-	-	-	-	-	-	-	-	-
Burdens	6,436,628	5,938,744	6,694,070	5,599,152	6,069,464	7,096,338	6,979,716	7,471,414	7,727,044
Temporary Distribution Total	**107,800,840**	**97,862,320**	**110,671,417**	**95,653,937**	**105,075,217**	**121,799,047**	**118,269,640**	**125,754,096**	**129,076,009**

Headcount Total / FTE Distribution	**1895 / 1234**	**1732 / 1131**	**1794 / 1235**	**1845 / 1118**	**1721 / 1179**	**1,397**	**1,323**	**1,384**	**1,393**

TOTAL Temporary Labour	**257,516,811**	**238,054,274**	**260,558,779**	**243,473,782**	**266,631,781**	**282,479,838**	**279,120,554**	**284,588,766**	**286,316,568**
TOTAL Temporary Headcount / FTE/YE	**4714 / 3070 / 2191**	**4351 / 2842 / 2063**	**4495 / 3095 / 2278**	**4164 / 2842 / 2760**	**3892 / 2927 / 1984**	**3,208**	**3,098**	**3,099**	**3,054**

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Capital Transmission Comp	397,892,921	391,130,026	400,633,366	394,177,597	424,531,224	456,985,537	506,498,946	542,636,628	543,823,133
Total OM&A Transmission Comp	207,166,269	200,807,004	151,489,987	223,675,880	185,069,058	176,094,700	179,413,328	171,377,284	169,214,468
Total Transmission Compensation	**605,059,190**	**591,937,030**	**552,123,353**	**617,853,477**	**609,600,282**	**633,080,237**	**685,912,274**	**714,013,912**	**713,037,600**

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Capital Distribution Comp	319,056,686	330,163,788	318,482,459	285,834,231	303,991,403	399,601,250	378,225,534	390,700,714	431,538,200
Total OM&A Distribution Comp	308,085,500	293,826,096	315,501,373	293,726,326	315,330,439	296,704,045	292,373,150	288,016,313	279,243,254
Total Distribution Compensation	**627,142,186**	**623,989,883**	**633,983,832**	**579,560,557**	**619,321,842**	**696,305,295**	**670,598,684**	**678,717,027**	**710,781,454**

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total Capital Transmission + Distribution Comp	716,949,607	721,293,813	719,115,826	680,011,828	728,522,627	856,586,788	884,724,480	933,337,343	975,361,333
Total OM&A Transmission + Distribution Comp	515,251,769	494,633,100	466,991,359	517,402,206	500,399,497	472,798,745	471,786,477	459,393,597	448,457,722
Total Shareholder Allocated Comp	3,089,801	2,615,254	9,597,169	9,660,409	13,112,786	23,748,837	24,288,558	24,881,971	25,490,502
Total Transmission + Distribution Compensation	**1,235,291,177**	**1,218,542,167**	**1,195,704,354**	**1,207,074,444**	**1,242,034,910**	**1,353,134,369**	**1,380,799,515**	**1,417,612,911**	**1,449,309,557**

Headcount FTE	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
MCP Represented Regular Employees	605	597	611	633	638	692	693	694	694
Society Represented Regular Employees	1,291	1,282	1,267	1,289	1,337	1,577	1,565	1,566	1,560
PWU Represented Regular Employees	3,342	3,356	3,391	3,382	3,527	3,739	3,790	3,824	3,852
Temporary and Casual Employees	3,070	2,842	3,095	2,842	2,927	3,208	3,098	3,099	3,054
Total	**8,308**	**8,077**	**8,364**	**8,146**	**8,429**	**9,216**	**9,146**	**9,183**	**9,160**

Burdens Tx include:	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Pension	77,400,000	76,500,000	49,500,000	41,000,000	35,500,000	34,000,000	38,000,000	40,000,000	39,000,000
OPEB	59,600,000	52,400,000	57,500,000	61,200,000	55,800,000	50,000,000	55,000,000	58,000,000	59,000,000

Burdens Dx include:	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Pension	90,100,000	94,700,000	54,100,000	43,400,000	37,000,000	36,000,000	35,000,000	34,000,000	34,000,000
OPEB	69,400,000	64,800,000	62,800,000	64,400,000	58,200,000	53,000,000	53,000,000	52,000,000	56,000,000

On December 20, 2016, in the transmission rate proceeding, Hydro One filed Undertaking J10.2, which provided a breakdown of transmission-only compensation costs. In its February 16, 2017 reply argument for that proceeding, Hydro One agreed to file a table similar to that contained in Undertaking J10.2 in its next transmission and distribution rates applications.[168]

OEB staff submitted that Hydro One does not yet appear to have a consistent template for presenting all of the information outlined by the OEB, and this often makes for a confusing variety of tables. OEB staff submitted that Hydro One should develop a standardized presentation of compensation costs that meets all of the OEB's stated requirements, and which would be used in future transmission and distribution filings.

Findings

The efficiency and value of compensation costs are addressed under Issue 40. Regarding information presentation, the OEB agrees with OEB staff that a consistent template for presenting compensation costs is required and directs Hydro One to develop such a template based on the direction provided by the OEB in the last transmission rate proceeding. This template is expected to be used by Hydro One to present compensation costs in all future rebasing applications.

3.6.5 Executive Compensation (Issue 42)

Issue 42. Is the updated executive compensation information filed by Hydro One in the distribution proceeding on December 21, 2017 consistent with the OEB's findings on executive compensation in the EB-2016-0160 Transmission Decision?

On August 3, 2018, the OEB issued a letter advising that it would be providing direction to the parties in relation to addressing the implications of the *Hydro One Accountability Act, 2018* (Hydro One Accountability Act or HOAA), which among other things amended section 78 of the *Ontario Energy Board Act, 1998* (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.

[168] EB-2016-0160 – Hydro One Reply submission, February 16, 2017, at p.83, para. 277.

Hydro One's past cost performance

As stated under Issue 30, historical performance is used in this Decision and Order to assess the reasonableness of Hydro One's proposed spending (both capital and OM&A). In the OEB's view, it is a good indicator of the robustness of Hydro One's planning and execution processes going forward.

In 2017, the actual OM&A spend was $34.3 million (5.8%) less than the approved amount. For the sustaining OM&A component, which represented approximately 60% of the total OM&A, the under-spend was $62.4 million or 17.0% of the approved budget.

Looking at the last three years (2015-2017), Hydro One underspent its approved OM&A by an average of $10.5 million (1.8%) per year. Hydro One over-spent in 2015 but under-spent in 2016 and 2017.

Although the proposed 2018 OM&A level ($576.7 million) is $16.3 million (2.7%) lower than the 2017 approved amount, it is $18.0 million (3.2%) above the 2017 actual spend. For the sustaining OM&A, the 2018 forecast is $20.4 million or 5.6% below the 2017 approved budget, but $42.0 million or 13.8% above the 2017 actual spend.

The above numbers show that, while Hydro One was not able to spend the approved budget in 2016 and 2017, it is still seeking a budget for 2018 which is higher than the actual spend in 2015, 2016 and 2017. The historical under-spending by Hydro One demonstrates that either the work program was not properly planned and estimated or Hydro One's ability to execute the work was limited, or both.

The OEB finds the proposed 2018 OM&A budget to be ambitious based on Hydro One's past cost performance. There is no compelling evidence in this proceeding to suggest that Hydro One needs an OM&A budget higher than it actually spent in each of the last three years.

The OEB is reducing the 2018 proposed budget by $10 million (from $576.7 million to $566.7 million) to account for Hydro One's past cost performance. This will bring it in line with the average actual spend in the 2015 to 2017 period ($565.6 million).

Compensation

Addressed under Issue 40.

OEB Staff Submission

OEB staff has made its submissions as to whether or not Hydro One has shown efficiency and value for compensation costs under Issue 40 above.

With respect to the matter of whether or not Hydro One has demonstrated improvements in presenting its compensation costs, especially in the context of the expectations outlined by the OEB in the most recent transmission and distribution decisions, OEB staff first notes the complexity of the record on this matter as summarized above.

OEB staff considers that the requirements established in the decision and order in the Transmission Proceeding for the distribution rate proceeding[261] (distribution presentation requirements) are critical in assessing the extent of the improvements Hydro One has demonstrated in presenting its compensation costs.

On this basis, OEB staff submits that Hydro One does not yet appear to have a consistent template for presenting all of the information outlined by the OEB in the distribution presentation requirements, and this makes for an often confusing variety of tables. As an example, the information filed by Hydro One on October 11, 2017 includes headcount and FTE information, but the tables filed in the format of transmission proceeding Undertaking J10.2 subsequently on December 12, 2017 and May 4, 2018 do not, which makes it hard to get a clear and consistent view of Hydro One's compensation levels along with the accompanying headcount.

Hydro One noted in the October 11, 2017 that it has not used FTEs in past rate filings.[262] As noted previously in the discussion in the compensation section of this submission, Hydro One stated in the application that in the future it expects to incorporate the FTE metric into its business planning and performance management processes. OEB staff considers it to be important for Hydro One to complete this process before it can be said that Hydro One has demonstrated improvements in its compensation costs presentation sufficient to meet the OEB's expectations. OEB staff further submits that Hydro One should develop a standardized presentation of compensation costs superseding that of Undertaking J10.2 that meets all of the OEB's stated requirements and which would be used in future transmission and distribution filings. Once Hydro One has accomplished this, OEB staff would be of the view that Hydro One had demonstrated sufficient improvements in its compensation cost reporting to meet the OEB's requirements.

[261] Summarized in the Background section above.

[262] Exh. C1-02-01, Attach. 6, p. 9 Filed 2017-10-11.

The OEB determined that it would reduce the OM&A envelope by $15.0 million in each of 2017 and 2018. The OEB found that the holding company should have greater responsibility for the compensation amounts that relate to its transformation and its commitments to increase shareholder value. The OEB considered these incremental costs to be of little, if any, value to consumers of electricity transmission services. This would also be true for consumers of electricity distribution services.

Compensation is dealt with on a consolidated basis as it relates to Hydro One's transmission and distribution activities, with overall amounts simply being allocated between transmission and distribution functions on a formulaic basis. The OEB does not intend to rehear the same evidence related to compensation in this distribution proceeding that it did in the transmission proceeding.

To determine the extent to which the OEB will consider compensation in this proceeding, the OEB requires Hydro One to explain the differences among what it proposed for compensation in the transmission proceeding; what the OEB decided in the transmission proceeding; and what is in its compensation evidence in this current proceeding.

In its letter dated October 11, 2017, Hydro One provided updated evidence on compensation, noting that it had changed its methodology for reporting compensation in this proceeding. The new methodology for reporting compensation may result in a more accurate reflection of compensation but means that it is no longer possible to compare the compensation evidence from the transmission proceeding and this proceeding. For this reason, Hydro One is required to file its total compensation, and allocation to distribution and transmission, using the methodology used in the transmission proceeding and shown in Undertaking J10.2 in that proceeding, filed December 20, 2016. The filing should include the years 2013 to 2018 as provided in Undertaking J10.2. This will identify any differences between the compensation in this proceeding and the compensation in the transmission proceeding not caused by the change in methodology; such as the impact of changing the allocation of compensation between transmission and distribution to reflect the business plan underpinning this application. Hydro One is expected to comment on the differences, if any.

Intervenors and OEB staff are being provided with the opportunity to review the evidence submitted by Hydro One and to provide any comments on how the OEB should scope its review of the compensation issue. Hydro One will then have the opportunity to reply to those submissions.

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Vice President, Chief Regulatory Officer,
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BY COURIER

December 12, 2017

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
P.O. Box 2319
Toronto, ON M4P 1E4

Dear Ms. Walli,

EB-2017-0049 - Hydro One Networks Inc.'s 2018-2022 Distribution Custom IR Application - Filing Additional Compensation Evidence

On December 1, 2017, the Ontario Energy Board ("OEB") issued its Decision on Issues List and Interim Rates and Procedural Order No. 2 in this proceeding. In that document, the OEB ordered Hydro One Networks Inc. ("Hydro One") to file its explanation for the differences among what it proposed for compensation in its 2017-2018 transmission rate proceeding (EB-2016-0160), what the OEB decided in that transmission proceeding and what is in its compensation evidence in this proceeding.

Hydro One has filed Attachment 7 to Exhibit C1, Tab 2, Schedule 1 which outlines the differences in methodologies used to calculate compensation costs in this proceeding and in Hydro One's 2017-2018 transmission rate proceeding. The OEB also asked Hydro One to file its total compensation, and allocation to distribution and transmission, using the methodology shown in Undertaking J10.2 of Hydro One's 2017-2018 transmission rate proceeding. This evidence has been provided as Attachment 8 to Exhibit C1, Tab 2, Schedule 1.

Sincerely,

ORIGINAL SIGNED BY FRANK D'ANDREA

Frank D'Andrea
Encls.
cc: EB-2017-0049 parties (electronic)

COMPLIANCE FILING – COMPENSATION EVIDENCE

1. OEB DECISION OF DECEMBER 1, 2017

This Exhibit Attachment contains the additional information ordered by the OEB in its Decision on Issues List and Interim Rates and Procedural Order No. 2 ("P.O. 2") issued on December 1, 2017 in this proceeding. It explains the differences between the total compensation evidence in Exhibit J10.2 in the proceeding for Hydro One's 2017-2018 transmission application (EB-2016-0160) (the "Tx Case") and Attachment 6 of this Exhibit which was filed on October 11, 2017 to comply with the OEB's decision of September 28, 2017 in the Tx Case. As requested by the OEB, Attachment 8 of this Exhibit also presents Hydro One's total compensation for its distribution and transmission businesses, reflecting the methodology used Exhibit J10.2 in the Tx Case covering the period 2013 to 2018.

2. HISTORICAL CONTEXT ON COMPENSATION EVIDENCE

2.1 HYDRO ONE'S HISTORICAL APPROACH

As described in Attachment 6 to this Exhibit, in each of Hydro One's rate applications leading up to this Application, Hydro One presented total compensation costs *at a point in time*, specifically, December 31st of each year, *for both its transmission and distribution businesses, combined*. Hydro One presented combined compensation data for its transmission and distribution businesses for a few reasons: (a) its payroll data systems are limited, and (b) Hydro One believed that the combined data provided continuity between filings and showed trending over multiple applications.

To clarify, evidence in past applications only captured the total compensation for employees on payroll on December 31st, but not all of Hydro One's employees are on payroll at that time. This is particularly true for Hydro One's temporary and casual employees.

The historical approach included in "total compensation" only base pay, overtime, short-term incentives, and other allowances for PWU and Society and Management employees. It did not include other compensation items, such as pension and OPEBs.

2.2 EXHIBIT J10.2 IN TX CASE

In the Tx Case, parties expressed concerns regarding Hydro One's historical approach to its compensation evidence. As a result, Hydro One filed Exhibit J10.2 during the oral hearing which showed, on a best efforts basis, its total compensation data with the following changes:

- an expanded definition of total compensation, which included long-term incentives, employee stock options, payroll burdens, and pension and OPEBs; and
- total compensation data for only its transmission business, applying the "labour content" method from the Black & Veatch study "Review of Overhead Capitalization Rates" (filed as Exhibit B1-3-10-1 in the Tx Case) to the combined transmission/distribution compensation data.

Exhibit J10.2 still reflected compensation costs for only those employees on payroll on December 31st.

2.3 ATTACHMENT 6 TO THIS EXHIBIT

As described in Attachment 6, Hydro One improved its compensation evidence filed in this Application on March 31, 2017. Specifically, Appendix B of Exhibit C, Tab 2, Schedule 1:

- uses the expansive definition of "total compensation", consistent with Exhibit J10.2 in the Tx Case;
- reflects total compensation costs for full years, rather than a point in time, which is inconsistent with Exhibit J10.2 in the Tx Case;
- refines the allocation of casual employee compensation based on management's expertise regarding the relative contribution of casual employees to the transmission and distribution work programs;
- isolates total compensation costs for its distribution business only; and
- reflects the Distribution Business Plan (vintage December 2016).

In the OEB's decision in the Tx Case, the OEB ordered Hydro One to file additional evidence on compensation in this proceeding. In response, Hydro One filed Attachment 6 to this Exhibit which shows total compensation for its transmission and distribution businesses, using its improved approach.

To enable a comparison to Exhibit J10.2 in the Transmission Case, as described in section 1 of this Attachment, the OEB has ordered the production of additional evidence.

3. EXPLANATION ON DIFFERENCES BETWEEN ATTACHMENT 6 AND EXHIBIT J10.2 IN TX CASE

Table 1 compares the similarities and differences between the methodologies used to generate the compensation evidence in the Tx Case and Attachment 6 of this proceeding.

Table 1: Comparing Tx Case Evidence and Attachment 6

	Exhibit C1-4-1-1 (TX Case)	**Exhibit J10.2 (Tx Case)**	**Attachment 6 (EB-2017-0049)**
Compensation Data	Based on compensation for employees on payroll December 31st	Based on compensation for employees on payroll December 31st	Based on compensation of all employees employed in the year
Compensation Elements	Base salary, Overtime, Incentive (STI) and other allowances	Base pay, burdens, other allowances, STIP, LTIP, ESOP, Share Grants	Base pay, burdens, other allowances, STIP, LTIP, ESOP, Share Grants
Headcount/ FTE's	Based on year-end headcount	Based on year-end headcount	Total & year-end count provided but FTE's used to calculate compensation costs
Compensation Costing	Average unit cost X headcount X escalation based on negotiated wage escalation/budget non represented wage escalation	Average unit cost X headcount X escalation based on negotiated wage escalation/budget non represented wage escalation	FTE X average unit cost X escalation based on negotiated wage escalation/budget non represented wage escalation
Allocation methodology	No allocation	Black and Veatch	Black and Veatch for regular employees. Casual employees compensation costs allocated by % used by line of business

4. DX TABLES (AS FILED ON OCTOBER 11, 2017) COMPARED TO EXHIBIT J10.2 (AS DIRECTED IN PROCEDURAL ORDER #2)

Table 2 - Variance Summary

Consolidated Tx and Dx Compensation as per Order #2 (updated J10.2)

	2014	2015	2016	2017	2018
Compensation MCP	133,852,144	136,917,207	134,770,393	141,269,500	147,152,721
Compensation Society	243,626,131	244,893,993	217,820,921	227,665,028	226,527,876
Compensation PWU	575,643,741	578,102,897	552,955,777	566,475,918	567,057,582
Compensation Temps	166,049,081	159,771,268	175,557,422	188,194,957	194,509,900
Total	**1,119,171,097**	**1,119,685,365**	**1,081,104,513**	**1,123,605,403**	**1,135,248,079**

Transmission Compensation (J10.2)

	2014	2015	2016	2017	2018
Compensation MCP	63,045,596	63,576,452	64,599,092	68,808,583	69,157,078
Compensation Society	114,374,026	113,480,871	102,812,746	110,170,524	105,512,289
Compensation PWU	267,903,386	266,458,363	251,591,352	270,529,781	261,296,861
Compensation Temps	77,224,661	73,613,339	79,980,793	89,838,758	89,591,926
Total	**522,547,669**	**517,129,026**	**498,983,983**	**539,347,645**	**525,558,154**

Distribution Compensation (using same methodology as J10.2)

	2014	2015	2016	2017	2018
Compensation MCP	70,806,548	73,340,755	70,171,301	72,460,917	77,995,643
Compensation Society	129,252,105	131,413,122	115,008,175	117,494,505	121,015,587
Compensation PWU	307,740,355	311,644,534	301,364,425	295,946,137	305,760,721
Compensation Temps	88,824,420	86,157,929	95,576,630	98,356,199	104,917,974
Total	**596,623,428**	**602,556,339**	**582,120,530**	**584,257,758**	**609,689,925**

Consolidated Tx and Dx Compensation as per October 11, 2017 filing

	2014	2015	2016	2017	2018
Compensation MCP	137,756,810	142,237,587	144,213,420	168,062,108	174,704,521
Compensation Society	246,177,271	248,645,345	229,669,943	249,479,699	256,801,566
Compensation PWU	593,840,285	589,604,960	561,262,211	582,932,358	585,102,092
Compensation Temps	257,516,811	238,054,274	260,558,779	258,030,241	266,185,981
Total	**1,235,291,177**	**1,218,542,167**	**1,195,704,354**	**1,258,504,405**	**1,282,794,160**

Transmission Compensation as per October 11, 2017 filing

	2014	2015	2016	2017	2018
Compensation MCP	64,884,730	66,046,929	64,754,323	81,811,052	81,997,567
Compensation Society	115,609,754	115,225,928	101,818,351	122,189,149	121,097,885
Compensation PWU	276,393,635	271,779,845	240,239,691	290,779,220	282,089,950
Compensation Temps	149,715,971	140,191,954	149,887,362	156,976,501	159,830,252
Total	**606,604,090**	**593,244,657**	**556,699,728**	**651,755,921**	**645,015,654**

Distribution Compensation as per October 11, 2017 filing

	2014	2015	2016	2017	2018
Compensation MCP	72,872,080	76,190,658	79,459,097	86,251,056	92,706,954
Compensation Society	130,567,516	133,419,417	127,851,592	127,290,550	135,703,681
Compensation PWU	317,446,650	317,825,115	321,022,520	292,153,138	303,012,142
Compensation Temps	107,800,840	97,862,320	110,671,417	101,053,740	106,355,729
Total	**628,687,087**	**625,297,510**	**639,004,626**	**606,748,484**	**637,778,506**

	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
Consolidated Tx and Dx Compensation: Variance between Oct 11 filing and Order #2						**Transmission Compensation**					**Distribution Compensation**				
1. Total Compensation v Year-End Compensation	24,652,349	20,573,796	15,888,566	65,063,718	75,870,000	11,565,110	9,537,017	6,486,534	45,270,533	49,219,174	13,087,239	11,036,779	9,402,032	19,793,186	26,650,826
2. Casual employee Method Change	91,467,731	78,283,006	85,001,357	69,835,284	71,676,081	42,792,855	36,228,151	39,553,786	37,996,396	37,734,132	48,674,876	42,054,855	45,447,571	31,838,888	33,941,949
3. Casual employee Allocation Change	-	-	-	-	-	29,698,456	30,350,464	30,352,784	29,141,347	32,504,194	(29,698,456)	(30,350,464)	(30,352,784)	(29,141,347)	(32,504,194)
4. Change in 2016 Actual Payroll			13,709,918					6,483,926					7,225,992		
5. Change in 2016 Allocation Split (based on Actuals %)			-					(25,161,284)					25,161,284		

5. SUMMARY OF DIFFERENCES

As Table 2 shows, the differences between the 2013-2018 total compensation figures for Hydro One's transmission business shown in (a) Attachment 6 and (b) Exhibit J10.2 in the Tx Case are the result of:

1. for 2013-2018, the difference in time period that the compensation data covers (i.e. Attachment 6 reflects total annual compensation costs while Exhibit J10.2 reflects total compensation for employees on payroll as at December 31st) for all non-casual employees;
2. for 2013-2018, compensation for casual employees was calculated on a FTE basis rather than on year-end headcount. Due to the seasonal nature of casual employee requirements (resourcing ramps up in March /April, peaks in the summer and reduces in the fall with the lowest complement at year end), there is a significant variance between compensation costs using a FTE compared to a year-end, point in time basis.
3. for 2013 -2018, the allocation for casual employees was updated. In the TX filing, the allocation for casual employees was based on the Black and Veatch allocation methodology. In Attachment 6, the approach was refined to reflect a more accurate allocation based upon management expertise for these resources. On an overall basis, consolidated compensation is not changed, however a greater share of costs were allocated to Hydro One Transmission, as a result.
4. 2016 figures being different because Attachment 6 reflects actual 2016 compensation rather than the forecast 2016 compensation that was included in J10.2 of the Tx Case.

5. An updated (actual) allocation between Transmission and Distribution compensation was used in Attachment 6 as compared to the forecasted allocation in J10.2. This shifted compensation to Hydro One Distribution with an equal offset to Hydro One Transmission.

As directed by the OEB in Procedural Order No. 2 for this case, Attachment 8 contains the detailed consolidated compensation data and the allocation to Hydro One's Distribution and Hydro One Transmission businesses using the same methodology used in Undertaking J10.2 of the Tx Case.

6. RECONCILIATION WITH EB-2016-0180 DECISION

In its decision in Hydro One's 2017-2018 transmission rate application, the OEB expressed concerns over the increases to Hydro One's Corporate Management costs. Specifically the OEB stated:

> The OEB is concerned that the difference between two amounts of approximately $10.5 million per year of Corporate Management Costs, incremental to those incurred before the transformation of the parent holding company, are being allocated for recovery from transmission and distribution ratepayers when the delivery of essential delivery services by Networks remains essentially as it was before that transformation.

The OEB stated that Hydro One's holding company "should have greater responsibility for the compensation amounts that relate to its transformation and its commitments to increase shareholder value."

In P.O. 2 the OEB asked Hydro One to provide an explanation regarding "what it proposed for compensation in the transmission proceeding, what the OEB decided in the transmission proceeding and what is in its compensation evidence in this proceeding."

At the Executive Presentation held at the OEB's offices on December 7, 2017, Hydro One noted that it intends to file an update to the Application which will include a modification to the proposal regarding compensation costs.

As stated by Mr. Lopez on page 30 of the transcript:

> Hydro One has reviewed the concerns raised by the OEB in its decision and will be revising its proposal for the allocation of these costs.
>
> Under the new proposal the transformation-related costs allocated to ratepayers will be changed to the pre-IPO amounts adjusted for inflation. The remainder of the transformation-related costs will be allocated to the shareholder. These costs include the CEO, the chief financial officer, the chief legal officer, and board costs.

Hydro One proposes:

- Increasing 2015 OEB-approved Corporate Management expense by inflation from $2.4 million[1] to $2.5 million in the 2018 test year plus recovery for $1.3 million in costs associated with Hydro One's Ombudsman;
- Decreasing 'Other OM&A – Other Costs' (page 33 of Exhibit C1, Tab 1, Schedule 7) by $1.3 million to remove Long Term Incentive Plan ("LTIP") costs related to the CEO, CFO and CLO

Under this approach, the proposed 2018 Corporate Management expense will reduce from $5.7 million to $3.8 million. The proposed 2018 'Other OM&A – Other Costs' credit will increase from $10.5 million to a credit of $11.8 million. This results in a net

[1] 2015 OEB-approved Corporate Management Expenses can be found in Table #5 of Exhibit 1, Tab 1, Schedule 7 of the Application.

OM&A reduction of $3.2 million in the 2018 test year. Hydro One will provide this reduction to OM&A in its application update to be filed later in December.

Total Compensation - Transmission (as per J10.2)

MCP	2013	2014	2015	2016	2017	2018
Base Pay	33,809,609	33,403,974	34,123,844	34,849,010	36,112,363	35,382,042
Burdens	22,652,438	22,440,789	23,186,431	18,300,538	19,136,366	18,961,872
Other Allowances	1,996,627	3,122,164	1,862,959	1,962,964	2,023,887	1,964,916
Short Term Incentive	4,374,928	4,078,670	4,403,218	7,563,773	7,781,560	7,575,929
Long Term Incentive				941,353	2,763,137	4,271,137
Employee Share Ownership				981,455	991,270	1,001,182
Transmission Total	**62,833,601**	**63,045,596**	**63,576,452**	**64,599,092**	**68,808,583**	**69,157,078**

Society	2013	2014	2015	2016	2017	2018
Base Pay	59,219,915	66,479,040	65,846,926	65,888,139	69,476,526	66,432,079
Overtime	2,223,563	3,234,367	2,892,349	1,665,676	2,565,423	2,503,795
Lump Sums				658,568	1,312,146	-
Burdens	39,677,343	44,660,619	44,741,596	34,600,362	36,816,429	35,602,144
Share Grants						974,271
Transmission Total	**101,120,821**	**114,374,026**	**113,480,871**	**102,812,746**	**110,170,524**	**105,512,289**

PWU	2013	2014	2015	2016	2017	2018
Base Pay	134,138,104	143,634,042	143,273,208	153,322,467	159,963,690	153,432,958
Overtime	22,835,014	27,775,994	24,488,731	14,942,723	23,043,480	22,986,409
Lump Sums			1,345,306	2,810,715	-	-
Burdens	89,872,530	96,493,350	97,351,119	80,515,447	84,766,642	82,227,477
Share Grants					2,755,969	2,650,016
Transmission Total	**246,845,648**	**267,903,386**	**266,458,363**	**251,591,352**	**270,529,781**	**261,296,861**

Temporary Resources	2013	2014	2015	2016	2017	2018
Casual Trades	44,489,030	52,518,110	50,641,118	57,137,565	62,644,095	62,340,282
MCP	530,830	719,625	826,616	664,724	662,329	649,603
Society	1,315,390	1,342,574	1,479,288	1,395,867	1,369,308	1,323,249
PWU	2,945,762	2,141,011	2,033,436	3,162,294	3,117,836	2,945,744
Overtime	5,347,679	7,972,313	6,685,080	4,346,674	7,350,168	7,602,294
Other Allowances	6,723,983	7,920,057	7,480,599	8,435,951	9,232,648	9,182,714
Burdens	3,889,760	4,610,969	4,467,202	4,837,717	5,462,373	5,548,041
Transmission Total	**65,242,434**	**77,224,661**	**73,613,339**	**79,980,793**	**89,838,758**	**89,591,926**

Transmission Total Compensation	**476,042,503**	**522,547,669**	**517,129,026**	**498,983,983**	**539,347,645**	**525,558,154**

	2013	2014	2015	2016	2017	2018
Estimated Labour in Capital Exp	317,396,377	362,360,860	362,315,956	365,303,753	354,849,786	351,973,855
Estimated Labour in OM&A	158,646,126	160,186,809	154,813,070	133,680,230	184,497,859	173,584,299
Transmission Total Compensation	**476,042,503**	**522,547,669**	**517,129,026**	**498,983,983**	**539,347,645**	**525,558,154**

Pension / OPEB	2013	2014	2015	2016	2017	2018
Pension	79,000,000	77,000,000	77,000,000	50,000,000	49,000,000	46,000,000
OPEB	53,000,000	57,000,000	51,000,000	44,000,000	52,000,000	50,000,000

Total Compensation - Distribution (as per J10.2)

MCP	2013	2014	2015	2016	2017	2018
Base Pay	41,032,642	37,516,023	39,364,708	37,947,246	38,139,818	40,277,208
Burdens	27,491,870	25,203,264	26,747,488	19,927,539	20,210,738	21,585,279
Other Allowances	2,423,183	3,506,504	2,149,079	2,137,481	2,137,514	2,236,766
Short Term Incentive	5,309,580	4,580,756	5,079,481	8,236,227	8,218,440	8,624,071
Long Term Incentive				941,353	2,763,137	4,271,137
Employee Share Ownership				981,455	991,270	1,001,182
Distribution Total	**76,257,275**	**70,806,548**	**73,340,755**	**70,171,301**	**72,460,917**	**77,995,643**

Society	2013	2014	2015	2016	2017	2018
Base Pay	71,871,566	74,662,651	75,959,938	71,745,896	73,377,144	75,623,070
Overtime	3,995,108	4,431,085	3,840,011	4,868,668	3,848,134	3,755,693
Lump Sums				717,118	1,385,814	-
Burdens	48,153,949	50,158,369	51,613,173	37,676,493	38,883,412	40,527,761
Share Grants						1,109,063
Distribution Total	**124,020,624**	**129,252,105**	**131,413,122**	**115,008,175**	**117,494,505**	**121,015,587**

PWU	2013	2014	2015	2016	2017	2018
Base Pay	162,795,162	161,315,481	165,277,630	166,953,537	168,944,527	174,660,668
Overtime	41,027,999	38,053,133	32,512,322	43,676,649	34,565,220	34,479,614
Lump Sums			1,551,922	3,060,600	-	-
Burdens	109,072,759	108,371,740	112,302,659	87,673,638	89,525,693	93,603,789
Share Grants					2,910,697	3,016,650
Distribution Total	**312,895,920**	**307,740,355**	**311,644,534**	**301,364,425**	**295,946,137**	**305,760,721**

Temporary Resources	2013	2014	2015	2016	2017	2018
Casual Trades	53,993,598	58,983,122	58,418,766	62,217,357	66,161,121	70,965,166
MCP	644,235	808,211	953,571	723,821	699,514	739,477
Society	1,596,408	1,507,846	1,706,482	1,519,966	1,446,185	1,506,322
PWU	3,575,089	2,404,571	2,345,739	3,443,436	3,292,881	3,353,293
Overtime	9,608,253	10,922,075	8,875,407	12,705,058	11,025,252	11,403,441
Other Allowances	8,160,485	8,895,021	8,629,497	9,185,946	9,750,996	10,453,158
Burdens	4,918,450	5,303,574	5,228,467	5,781,047	5,980,250	6,497,117
Distribution Total	**82,496,518**	**88,824,420**	**86,157,929**	**95,576,630**	**98,356,199**	**104,917,974**

Distribution Total Compensation	**595,670,336**	**596,623,428**	**602,556,339**	**582,120,530**	**584,257,758**	**609,689,925**

	2013	2014	2015	2016	2017	2018
Estimated Labour in Capital Exp	397,156,988	413,728,721	422,168,870	426,167,616	384,397,230	408,318,112
Estimated Labour in OM&A	198,513,348	182,894,707	180,387,470	155,952,915	199,860,528	201,371,813
Distribution Total Compensation	**595,670,336**	**596,623,428**	**602,556,339**	**582,120,530**	**584,257,758**	**609,689,925**

Pension / OPEB	2013	2014	2015	2016	2017	2018
Pension	76,000,000	91,000,000	95,000,000	54,000,000	51,000,000	52,000,000
OPEB	61,000,000	60,000,000	62,000,000	56,000,000	54,000,000	57,000,000

Total Compensation - Distribution and Transmission (as per J10.2)

MCP	2013	2014	2015	2016	2017	2018
Base Pay	74,842,250	70,919,997	73,488,551	72,796,256	74,252,181	75,659,250
Burdens	50,144,308	47,644,054	49,933,919	38,228,077	39,347,105	40,547,151
Other Allowances	4,419,810	6,628,668	4,012,037	4,100,445	4,161,402	4,201,682
Short Term Incentive	9,684,508	8,659,426	9,482,699	15,800,000	16,000,000	16,200,000
Long Term Incentive				1,882,705	5,526,273	8,542,273
Employee Share Ownership				1,962,910	1,982,539	2,002,365
Transmission + Distribution Total	**139,090,876**	**133,852,144**	**136,917,207**	**134,770,393**	**141,269,500**	**147,152,721**

Society	2013	2014	2015	2016	2017	2018
Base Pay	131,091,481	141,141,692	141,806,864	137,634,035	142,853,670	142,055,149
Overtime	6,218,672	7,665,451	6,732,360	6,534,345	6,413,557	6,259,488
Lump Sums				1,375,686	2,697,960	-
Burdens	87,831,292	94,818,988	96,354,769	72,276,855	75,699,841	76,129,905
Share Grants						2,083,333
Transmission + Distribution Total	**225,141,445**	**243,626,131**	**244,893,993**	**217,820,921**	**227,665,028**	**226,527,876**

PWU	2013	2014	2015	2016	2017	2018
Base Pay	296,933,266	304,949,524	308,550,838	320,276,004	328,908,217	328,093,626
Overtime	63,863,013	65,829,127	57,001,053	58,619,373	57,608,700	57,466,023
Lump Sums			2,897,228	5,871,315	-	-
Burdens	198,945,288	204,865,090	209,653,778	168,189,085	174,292,335	175,831,266
Share Grants					5,666,667	5,666,667
Transmission + Distribution Total	**559,741,568**	**575,643,741**	**578,102,897**	**552,955,777**	**566,475,918**	**567,057,582**

Temporary Resources	2013	2014	2015	2016	2017	2018
Casual Trades	98,482,627	111,501,232	109,059,885	119,354,922	128,805,216	133,305,447
MCP	1,175,065	1,527,837	1,780,187	1,388,546	1,361,843	1,389,080
Society	2,911,798	2,850,420	3,185,769	2,915,832	2,815,493	2,829,571
PWU	6,520,851	4,545,582	4,379,175	6,605,730	6,410,717	6,299,037
Overtime	14,955,932	18,894,389	15,560,487	17,051,732	18,375,420	19,005,736
Other Allowances	14,884,468	16,815,079	16,110,096	17,621,897	18,983,644	19,635,872
Burdens	8,808,209	9,914,543	9,695,669	10,618,764	11,442,623	12,045,157
Transmission + Distribution Total	**147,738,951**	**166,049,081**	**159,771,268**	**175,557,422**	**188,194,957**	**194,509,900**

Tx + Dx Total Compensation	1,071,712,840	1,119,171,097	1,119,685,365	1,081,104,513	1,123,605,403	1,135,248,079

	2013	2014	2015	2016	2017	2018
Estimated Labour in Capital Exp	714,553,365	776,089,581	784,484,826	791,471,368	739,247,016	760,291,966
Estimated Labour in OM&A	357,159,474	343,081,516	335,200,540	289,633,145	384,358,387	374,956,112
Tx + Dx Total Compensation	**1,071,712,840**	**1,119,171,097**	**1,119,685,365**	**1,081,104,513**	**1,123,605,403**	**1,135,248,079**

Pension / OPEB	2013	2014	2015	2016	2017	2018
Pension	155,000,000	168,000,000	172,000,000	104,000,000	100,000,000	98,000,000
OPEB	114,000,000	117,000,000	113,000,000	100,000,000	106,000,000	107,000,000

7.6 ACTUAL AND FORECAST COMPENSATION COSTS

Consistent with the OEB's findings in EB-2016-0160 and the compensation evidence filed in Hydro One's 2018-2022 Distribution Custom IR application (EB-2017-0049), Attachment 5 to this Exhibit provides actual total compensation cost for Hydro One Networks and for both the distribution and transmission businesses for 2014 to 2018 and forecast total compensation cost for the years 2019 to 2022. While the Transmission work program is growing by approximately 26% between 2019 and 2022, Transmission related compensation costs are growing by only 12% or 4% per annum.

Error! Reference source not found. and **Error! Reference source not found.** compare compensation spend (Distribution, Transmission and Total) to the work program spend (Distribution, Transmission and Total) over the period 2014 to 2022. The compensation spend as a percentage of total work program spend declines from 48% in 2014 to 44% in 2022. Transmission related compensation as a percentage of total Transmission spend declines from 49% in 2014 to 40% in 2022. In light of the increasing work program, Hydro One believes the increase in compensation costs is reasonable and reflective of improving productivity, better controls in monitoring and approving headcount and reductions in corporate costs.

Findings

Incomplete Total Payroll Table Information

The OEB agrees with OEB staff that the elaboration of the total compensation table provided by Hydro One in Undertaking J10.2 remains incomplete. The OEB directs Hydro One to remedy this information deficiency in its current application to the OEB for approval of distribution rates for the period commencing January 1, 2018.

The total compensation cost baseline for Hydro One transmission and distribution combined, derived from the year-end payroll tables and the other information that is captured in Exhibit J10.2 and in the Distribution Payroll Tables, is the base for the allocation of such costs to the transmission and distribution utility services segments. The OEB expects Hydro One to file this complete total compensation information in the distribution rates proceeding as soon as possible. The OEB expects that the information to be filed will include the following:

a) Tables comparable to the year-end payroll tables in the Transmission Payroll Tables for each the years 2014 to 2018 containing total compensation information that reconciles with the combined totals of the amounts for each of the years 2014-2018 allocated to transmission shown in Undertaking J10.2 and the amounts shown for distribution in the Distribution Payroll Tables

b) Within these total compensation tables, for each of the line item amounts and for each year, the total number of employees in a manner that reconciles with the total number of employees information presented in Transmission Payroll Tables

c) Beside the “Total Number of Employees” information described in item (ii), the total company full time equivalent (FTE) information for each of the years 2014-2018 in a format similar to that shown in EB-2017-0049 Exhibit C1/Tab 2/Schedule 1, Table1

d) In the total compensation tables, the allocation of total compensation between capital and OM&A for each of the years 2014-2018 in a manner comparable to that shown for transmission only in Undertaking J10.2

e) As part of the total compensation table, the Pension and OPEB amounts for distribution for each of the years 2014-2018 in a table similar to the table to that effect contained in Undertaking J10.2

f) A revision of the format used in Undertaking J10.2 to reflect the format of the total compensation tables described in items a) to e)

g) An exhibit that shows how the allocation factors used to allocate the total compensation amounts between transmission and distribution are derived.

The OEB directs the above information to be presented in the distribution rates proceeding on a basis that is consistent with the combined year-end payroll information for the transmission and distribution business segments.

OM&A Envelope Reduction Related to Compensation

The transformation on which Hydro One relies in this case was a transformation of Hydro One Limited, which is now established as the ultimate new holding company parent for Networks and its affiliates. The OEB finds that the primary purpose of the corporate restructuring, at the holding company level, was to maximize the value of the holding company shares to be sold by the Province in the initial and subsequent public share offerings.

The OEB finds that, under the outcomes approach to utility rate regulation, compensation and other costs incurred in connection with the transformation of a holding company parent are recoverable from ratepayers of an OEB regulated utility subsidiary only to the extent that they produce outcomes of demonstrable value to utility customers.

The OEB shares the concerns of OEB staff and those intervenors who question whether Hydro One has adequately demonstrated that the significant increases in compensation costs associated with the parent company's transformation will produce outcomes that utility customers value. Hydro One has failed to demonstrate that the increases in the transformation-related compensation costs that it proposes to recover in rates will produce continuous measurable improvements in efficiency or productivity and in the safety, reliability and quality of electricity transmission services being provided by Networks.

The transformation measures are clearly delivering value to shareholders of Hydro One Limited. The OEB notes that the letter from the Chair of Hydro One's Board of Directors to Hydro One Limited shareholders contained in the 2016 Annual Report reports on the generation of 19.7% return to shareholders over the period of November 5, 2015 to December 31, 2016. Current rates are producing favourable outcomes for shareholders. The provisions of the compensation incentive plans linked to delivering increased shareholder value had a positive impact in the period ending December 31, 2016.

The OEB shares the concerns of those parties who expressed the view that costs of incentive plans that are primarily designed to deliver value to the shareholder should not be recoverable from utility ratepayers.

UNDERTAKING - JT 2.8

Reference:

KT2.1
I-01-OEB-172

Undertaking:

In respect of the document prepared by OEB Staff and marked as Exhibit KT2.1, to consider and provide answers to the following questions to the extent they are probative: to explain the unexplained differences in table 1 and table 2 of the document.

Response:

Table 1 compares the distribution compensation from EB-2019-0082 and EB-2017-0049, and is not relevant to the current transmission application.

In respect of Table 2, as stated in Exhibit I, Tab 01, Schedule OEB-172, the difference in overall FTE levels between EB-2019-0082 and EB-2017-0049 is due to the fact that the 2019 to 2024 business plan underpins the evidence in EB-2019-0082, while the 2017 to 2022 business plan underpins the evidence in EB-2017-0049.

Some of the changes that drive the variance between the two business plans for 2019 include:

- an increase of approximately 400 FTE due to the repatriation of the call centre;
- an increase in Hydro One Networks engineers transferred from Hydro One Telecom; and
- increases in the Shared Services Supply Chain function to insource the strategic sourcing function.

Witness: Sabrin Lila

the same table and information, we can provide that as part of the previous undertaking.

MS. O'CONNELL: Sure, that's fine.

MS. LILA: So that will be all part of 2.7.

MS. O'CONNELL: That's fine.

MR. SIDLOFSKY: Thank you.

MS. O'CONNELL: So my next question is regarding the spreadsheet that I handed out today called Table 1. The spreadsheet, the one-page document I handed out today called "Table 1, unexplained differences in Hydro One DX compensation; Table 2, unexplained differences in Hydro One FTEs for both TX and DX.

So can I mark this -- Jamie, can you mark this as an exhibit, please?

MR. SIDLOFSKY: Mark that as KT2.1.

EXHIBIT NO. KT2.1: SPREADSHEET PROVIDED BY MS. O'CONNELL SHOWING TWO TABLES

MS. O'CONNELL: Okay. So, you know, I understand that the DX -- the Distribution proceeding is distribution, it's a separate proceeding. However, I note that both DX and TX are both regulated arms of Hydro One Networks, and I believe it would be logical to assume that any compensation policies from a DX proceeding would also inform and be relevant to a TX proceeding. So I just wanted to couch my exhibit with that clarification.

So Table 1 talks about unexplained differences in Hydro One DX compensation. So basically, this table shows 2019 to 2022. The first line is the compensation that you

provided in this proceeding response to SEC IR 58, and the second line relates to compensation that was filed in your DX proceeding, and I have included the reference.

So I understand also in IR 172 you also talked about changes -- differences between DX and TX proceedings may be different due to underlying business plans.

So my questions are, one, can you explain the unexplained differences in Table 1? And, two, why are the business plans so different to generate these big discrepancies?

MR. STERNBERG: I assume these are -- since this handout was provided this morning you are asking for an undertaking in respect of this one?

MS. O'CONNELL: Actually, I e-mailed it to you last Friday. Martin Davies e-mailed it to us. It was the third tab in the spreadsheet.

MR. STERNBERG: Okay. So the other document is the new one from this morning, the other spreadsheet --

MS. O'CONNELL: Yes, the other one, yeah.

MR. STERNBERG: So we are going to -- in any event, I think we will -- this is one we will take away and consider in part since you're referring to evidence from another proceeding and asking a question at least in part about the Distribution compensation.

So we'll consider your request, and if we are prepared to provide the answer, if we agree it's probative, we will do that, and --

MS. O'CONNELL: That's great.

comparing Hydro One compensation to the market median, and shows the improvements made by Hydro One from 2008 to 2017.

Table 8: Mercer Compensation Benchmarking Study Results vs. Market Median

Total Compensation Above/Below Market Median

Employee Group	2008 Survey Results	2011 Survey Results	2013 Survey Results	2016 Survey Results	2017 Survey Results	Total Change from 2008 to 2017
Management	-1%	-17%	-1%	2%	1%	2%
Society	5%	5%	9%	11%	12%	7%
PWU	21%	18%	12%	16%	12%	-9%
Overall	17%	13%	10%	14%	12%	-5%

**Management employee group positioning of -17% to market median likely impacted by legislative freeze for non-represented compensation.*

The 2017 study findings show that on an overall weighted average, Hydro One was positioned approximately 12% above market median. Since the first study in 2008, Hydro One has improved its positioning to market median by 5%.

8. PENSIONS AND OTHER POST EMPLOYMENT BENEFIT COSTS

In EB-2010-0002, the OEB stated that: "Hydro One must demonstrate measurable progress towards having its pension contributions reflect those prevailing in the public sector generally. The evidence suggests that an employee contribution level of 50% is the norm".

Hydro One has taken various steps to reduce pension costs. These include steps to increase employee contributions and reduce benefits with all employee groups. Hydro One has demonstrated this commitment to reducing pension costs by:

OEB INTERROGATORY #173

Reference:

F-04-01 p.37 Table 8

Interrogatory:

Table 8 provides "Mercer Compensation Benchmarking Study Results vs. Market Median Total Compensation Above/Below Market Median." This table shows that while Hydro One improved in the 2008 to 2017 period by 5%, it worsened by 2% in the more recent 2013 to 2017 period.

a) Please discuss the reasons for the deterioration in the 2013 to 2017 period.

Response:

a) During the 2013 to 2017 period, overall Hydro One moved from a weighted average multiple of Market of 1.10 to 1.12. The findings for the Hydro One Groups, that make up the overall figures did not all move identically. Specifically:

- Non-Represented – remained within 1% of its stated target of Market P50 moving from 0.99 in 2013 to 1.01 in 2017
- Trades & Technical – remained flat at a multiple of 1.12 of Market P50
- Energy Professionals – 2017 multiple of Market P50 was 1.12, up from 1.09 in 2013

Each Benchmark Study is predominantly a point in time comparison of Hydro One's total compensation to the Market. The Study findings, in this case the multiple of Market P50, is a function of both Hydro One's compensation practices and the "Market's" compensation practices. The tables below, list some of the factors that have impacted the Study outcomes.

Table 1

Market Factors - Impacting Study Findings
• Organizations agreeing to participate in the study – combination of peer group definition and success in soliciting participation • Current total compensation programs at the participating organizations – mix and relative magnitude • Changes in compensation programs since the prior study – cost containment efforts, cost sharing, plan enrichment, outsourcing, insourcing, etc. • Negotiated results of collective bargaining • Benchmark jobs matched by the participants

Table 2

Hydro One Factors - Impacting Study Findings
• Current total rewards programs • Introduction of new compensation arrangements designed to increase productivity and/or reduce employer costs going forward – lump sums, share grants, cost sharing • Benchmark jobs included in the study • Use of alternative staffing models (hiring hall, casual employment, outsourcing, insourcing, etc.) • Negotiated results of collective bargaining

All of these factors were "in play" and impacted the results of the 2013 and 2017 marketplace. It is challenging to identify the specific factors contributing to relatively small changes in the multiple of Market P50 for the near target Non-Represented Group and the flat multiple for the Trade & Technical Group.

OEB INTERROGATORY #178

Reference:

F-04-01-01

EB-2017-0049 Management and Non-Represented Role Benchmarking and 2018 Compensation Structure Recommendations, C1-02-01-01, C1-02-01-02

Interrogatory:

The first reference above is a compensation study prepared by Willis Towers Watson for the current application.

The second reference lists three compensation studies prepared by either Willis Towers Watson or Towers Watson for Hydro One's recent distribution rates application.

a) Please state how the study in the current application relates to the three studies filed in the previous application.

b) Please provide a table summarizing and comparing the key recommendations of the current study with those in the previous studies. Please include an explanation for any changes between the recommendations in the current study and those in the previous application, particularly with respect to recommended levels of compensation.

c) Please describe how Hydro One's consideration of the above referenced studies impacted the requested 2020 test year revenue requirement, including the impacts on both 2020 OM&A and 2020 capital.

Response:

a) All four studies provide a market competitive assessment of Hydro One's Management remuneration arrangements. Each study assesses different subsets of Hydro One's management employee group, and different components of Hydro One's remuneration programs relative to market. The table below provides a summary of each study as it relates to the area of focus, and management employees included in the analysis. This year's study is most similar in scope to (2) EB-2017-0049 Management and Non-Represented Role Benchmarking and 2018 Compensation Structure Recommendations Filed: 2018-04-20.

Witness: Sabrin Lila, Joel Jodoin

Study Reference	Competitive Assessment Area of Focus	Employee Groups Assessed	
		Executives	Management Employees
Exh F-4-1 Attachment 1	Compensation structure (1)	✓	✓
EB-2017-0049	Compensation structure (1)	✓	✓
Exh C1-2-1 Attachment 1	Total rewards (2)	✓	
Exh C1-2-1 Attachment 2	Total rewards (2)		✓

1. Compensation structure is defined as salary midpoint + target short-term incentives + expected value of long-term incentives
2. Total rewards is defined as salary + target short-term incentives + expected value of long-term incentives + pension & benefits

b) The table below summarizes the key recommendations of the current and previous compensation studies conducted by Willis Towers Watson.

Study Reference	Recommendation Focus	Willis Towers Watson (WTW) recommendations
Exh F-4-1 Attachment 1	Salary Increase Budgets	WTW recommended a 2019 salary increase budget of 2.5%. No adjustments to the salary structure were recommended
EB-2017-0049	Salary Structure	WTW recommended modest salary structure adjustments to align closer to the market 50th percentile
EB-2017-0049	Long-term Incentives	WTW recommended increasing participation levels of Hydro One's long-term incentive program at the Director level, along with adjustments to the mix of incentive vehicles, to better align with typical market practice of similar organizations
Exh C1-2-1 Attachment 1	Executive Compensation Peer Groups	WTW recommended selection criteria to establish a broader secondary executive compensation peer group, and an annual review process, to ensure continued appropriateness of the underlying peer groups
Exh C1-2-1 Attachment 1	Transition / implementation	WTW recommended a transitional approach in managing executive compensation relative to market, i.e. current executive roles may not immediately need to be aligned with the market 50th percentile ,and can be transitioned over time
Exh C1-2-1 Attachment 2	Pre- IPO Considerations	WTW recommended Hydro One consider transition planning timeline as it relates to salary structure development and administrative guidelines, incentive

		programs (both executive and non-executive), salary budget increases and implementation guidelines, which better reflect the new ownership structure
Summary: In each instance, WTW's recommendations included in the four studies reflected Hydro One's current and future desired state. As Hydro One's compensation programs evolved, recommendations were made to also support an evolving compensation program in terms of both design and administration, and align with its peer group as a publicly-traded company to establish good corporate governance. The approach to recommendations associated with levels of compensation were consistently provided to ensure Hydro One remained competitively positioned to market in order to attract and retain talent, while ensuring appropriate cost-control measures were considered.		

c) Management regularly benchmarks compensation with its consultant Willis Towers Watson. These studies are used to inform compensation decisions that may impact in year compensation. For example, Willis Towers Watson's recommendation for merit was 2.5% for management, whereas this Application assumes a 2% escalation, and therefore has no impact on the revenue requirement. Other recommendations may have an on-going impact, which are reflected in the labour burdens for each rate application.

SEC INTERROGATORY #55

Reference:

F-04-01-02

Interrogatory:

With respect to the Mercer Compensation Cost Benchmarking Study:

a) Please provide an estimate of the dollar difference between the weighted average total compensation for Hydro One's employees allocated to its transmission business and the P50 median used in the study. Please provide the amount in 2017 (the year the study was completed) and for each year between 2020 and 2022. Please provide a step-by-step explanation of how the estimate was reached and include the supporting calculations so that calculations can be verified.

b) Please provide a list of all types of compensation (i.e. salary, overtime, share grant, LTIP etc.) that were paid in 2017 that: i) were included in the study, and ii) were not included in the study.

c) Please provide the percentage of total compensation in each year between 2020 and 2022 that if of a type not types not included in the study.

d) Are there any additional types of compensation that will be paid in 2020 through 2022 that were not in 2017?

Response:

a) An estimate of the dollar difference between the weighted average total compensation for Hydro One's employees allocated to its transmission business and the market median used in the study is as follows:

	Study Year	2020	2021	2022
Estimated Dollar Difference (Hydro One to Market Median)	$34,485,965	$38,566,291	$40,010,087	$39,079,490

Witness: Sabrin Lila, Iain Morris, Joel Jodoin

This value was calculated based on the results of the Compensation Cost Benchmarking Study (F-04-01-02), based on the following set of assumptions:

- Estimates are based on the differential between the average salary and the market median rate for the corresponding level, multiplied by the number of incumbents in the relevant level.
- Projections assume external market increases and Hydro One salary increases as per the information below:
    - Market (MCP roles): CPI + 0.6%,
    - Market (represented roles): Increase at rate of CPI
    - CPI Assumptions: 2017: 2.3%, 2018: 2.3%, 2019: 2.0%, 2020: 2.0% , 2021: 1.9%, 2022: 2.0%

- Assumes that headcount increases occur as per the business plan (F-04-01 Table 2) and the proportion of MCP incumbents in each level remains consistent.

- The allocation of compensation to Transmission related activities is based on the following percentages 2020: 48.22%, 2021: 49.68% and 2022: 48.35%.

Hydro One has reduced the amount of compensation for recovery in revenue requirement since the Mercer Study was conducted. The above Mercer median should be updated to reflect the further offsetting reductions as consistent with OEB approved decision in EB-2017-0049. The variance between the Mercer study market median and Hydro One compensation as well as the reductions included in this application related to OM&A are set out in the table below:

Net Mercer Median Reductions Allocated to OM&A ($M)	**2020**
Mercer Median - Tx OM&A	10.1
Pension Reduction OM&A	(5.5)
OPEB Reduction OM&A	(2.4)
Executive Comp. Reduction	(1.5)
The Directive	(0.1)
Total Net Mercer OM&A Reductions	**0.5**

- Mercer Median (+$10.1 million) is the OM&A component of the transmission allocated portion of $36.8 million as stated above;

- The current revenue requirement reflects the reduced pension OM&A costs (-$5.5 million) due to the actuarial valuation of pension expenses completed by Willis Towers Watson (Exhibit F, Tab 5, Schedule 1 Attachment 1);

- The current revenue requirement reflects the reduced OPEB OM&A costs (-$2.4 million) as a result of the latest valuation which is provided in Exhibit I, Tab 1, Schedule OEB-205;

- The current revenue requirement reflects the reduced executive compensation OM&A costs (-$1.5 million) identified in EB-2018-0130, Exhibit I, tab 7, schedule 3, page 2 to be in compliance with Bill 2; and

- As part of the blue-page update Hydro One further reduced its OM&A (-$0.1 million) by factoring the Ontario Government Directive issued on January 1, 2019 ("the Directive"), as discussed in Exhibit F, Tab 4, Schedule 1, page 35 and also identified in Exhibit F, Tab 1, Schedule 1, page 3.

Hydro One submits that if the OEB is contemplating a further reduction to the amount of compensation recovered in rates based on the Mercer benchmark median, the appropriate amount is $0.5 million. This amount reflects the reductions already incorporated in Hydro One's current application.

b) The compensation elements included in the Mercer Compensation Benchmark Study are described in Exhibit F-4-1 Attachment 2, p. 28 of 34 Appendix C – Detailed compensation Benchmark Methodology. The compensation elements are: Base Salary / Wage, Short-term Incentive or Bonus paid/lump sum, Benefits including post retirement non-pension benefits, Pensions, and long-term incentives (i.e. LTIP, share awards).

c) The study included all relevant compensation elements for both Hydro One and market respondents.

d) There are no planned additional types of compensation that will be paid in 2020 through 2022 that were not in 2017.

UNDERTAKING - JT 2.15

Reference:

I-07-SEC-055

Undertaking:

Regarding SEC 55, in particular in respect of the global figures as to the differential relative to market median, to advise how the differential was calculated.

Response:

Below, Mercer has provided a summary of the methodology used.

An estimate of the dollar difference between the weighted average total compensation for Hydro One and the market median calculated in response to Exhibit I, Tab 07, Schedule SEC-55 is as follows:

Table 1: Estimated Dollar Differential – Hydro One (Dx and Tx)

	Study Year	2020	2021	2022
Estimated Dollar Difference (Hydro One to Market Median)	$70,915,000	$79,979,865	$80,535,602	$80,826,246

The Study Year value in Table 1 was calculated based on the results of the Mercer 2017 Compensation Cost Benchmarking Study (Exhibit F, Tab 4, Schedule 1 Attachment 2). The dollar differences in subsequent years were estimated based on the following steps and assumptions.

- Update the Hydro One benchmark and market benchmark based on salary/wage increases provided in Table 2 below and the market adjustment assumptions listed below. Results, by year, are provided in Table 3.

Witness: Sabrin Lila

Table 2: Actual and Projected Hydro One Salary/Wage Adjustments: 2018 to 2022

Category	Desc.	2018	2019	2020	2021	2022
MCP	Merit Budget	2.50% (actual)	2.30% (CPI)	2.00% (CPI)	2.50% (est.)	2.50% (est.)
PWU	Negotiated Step Increase	1.80% (Apr. 1, 18)	2.00% (Apr. 1, 19)	2.00% (Jan. 1, 20)*	2.00% (est.)	2.00% (est.)
SOCIETY	Negotiated Step Increase	0.50% (Apr. 1, 18)	2.00% (Apr. 1, 19)	2.00% (Apr. 1, 20)	2.00% (est.)	2.00% (est.)

*Table 2 Notes: *PWU has agreed to a 0.6% wage adjustment on January 1, 2020. A projected annual adjustment of 2.0% was used for 2020 to reflect the opportunity, in 2020, for a wage adjustment associated with the new collective agreement.*

- Projected external market salary/wage increases as per the information below:
  - Market (MCP roles): CPI + 0.6%,
  - Market (represented roles): Increase at rate of CPI
  - CPI Assumptions: 2017: 2.3%, 2018: 2.3%, 2019: 2.0%, 2020: 2.0% , 2021: 1.9%, 2022: 2.0%

Table 3: Updated Benchmark Based on Stated Assumptions: 2018 to 2022

	2017*	2018	2019	2020	2021	2022
Non-Represented		103.5	105.9	108.0	110.7	113.5
Market**		102.9	105.9	108.6	111.4	114.2
Multiple of P50	1.01	1.01	1.00	0.99	0.99	0.99
Energy Professionals		112.6	114.8	117.1	119.4	121.8
Market		102.3	104.7	106.7	108.8	110.9
Multiple of P50	1.12	1.10	1.10	1.10	1.10	1.10
Trades and Technical		114.0	116.3	118.6	121.0	123.4
Market		102.3	104.7	106.7	108.8	110.9
Multiple of P50	1.12	1.11	1.11	1.11	1.11	1.11
Total						
Multiple of P50	**1.12**	**1.11**	**1.10**	**1.10**	**1.10**	**1.10**

*Table 3 Notes:*Mercer Compensation Cost Benchmark Study effective October 1, 2017*

- Estimated Dollar Differentials are based on the differential between the average salary and the market median rate for the corresponding level, multiplied by the number of incumbents in the relevant level based on the FTE forecast found at Exhibit I, Tab 7, Schedule 58 Attachment 1 (Payroll Table).

- The allocation of compensation to Transmission related activities is based on the following percentages 2019: 44.33%, 2020: 48.22%, 2021: 49.68% and 2022: 48.35% to reach the figures provided in Exhibit I, Tab 07, Schedule SEC-55.

In summary, the 2017 estimated total reward dollar differential, based on the Mercer Study, was projected forward to 2022 by adjusting for Hydro One's actual and projected wage/salary adjustments and the expected market wage/salary adjustments during the

period. Further, forecasted increases or decreases in Hydro One employee numbers, by category, were taken into account yielding the figures in Table 1.

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Frank D'Andrea
Vice President, Chief Regulatory Officer,
Chief Risk Officer

BY COURIER

July 11, 2018

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
P.O. Box 2319
Toronto, ON M4P 1E4

Dear Ms. Walli,

EB-2017-0049 – Hydro One Networks Inc.'s Distribution 2018-2022 Rate Application – Memorandum of Agreement with PWU and Variance Analysis

Further to the request made on behalf of School Energy Coalition (SEC) for a copy of Hydro One Inc.'s Memorandum of Agreement (MoA) with the Power Workers' Union (CUPE Local 1000), please find a copy attached.

The wage escalation in the MoA is higher than the wage escalation assumed in the Application. As indicated during the oral hearing, Hydro One is not seeking to adjust its applied-for revenue requirement in light of the MoA.

Nonetheless, for the Board's information, Table 1 shows the variance between Hydro One Distribution compensation costs using (a) the one percent PWU wage escalation rate assumed in the Application, and (b) the following wage escalation rates in the MoA:

- 1.8% effective April 1, 2018 (or 1.60% yearly weighted average);
- 2.0% effective April 1, 2019 (or 1.95% yearly weighted average); and
- 0.6% effective January 1, 2020 (or a 1.35% yearly weighted average).

Table 1: Variance in Distribution Compensation Costs ($)
Application vs. PWU MoA

	2018	2019	2020	2021	2022
Total Capital Distribution Comp	1,124,471	2,984,682	3,513,999	3,425,871	3,454,966
Total OM&A Distribution Comp	970,021	2,529,018	3,143,061	3,077,404	3,103,539
Total Distribution Compensation	**2,094,492**	**5,513,700**	**6,657,060**	**6,503,276**	**6,558,505**

Table 2 shows the MoA impact by reference to the amounts requested for the 2018-2022 revenue requirements. The impact is reflected in the OM&A and capital-related components of revenue requirement. For the OM&A component, the MoA impact was calculated for 2018 only. The 2019-2022 OM&A forecasted costs were determined by applying the inflation factor and productivity factor to the 2018 forecast amount.

Table 2: Impact to Rate Term Revenue Requirement* ($Millions)

	2018	2019	2020	2021	2022
OM&A	0.97	0.98	0.98	0.99	1.00
Depreciation	0.02	0.11	0.24	0.36	0.47
Return on debt	0.01	0.06	0.14	0.22	0.30
Return on equity	0.02	0.09	0.20	0.32	0.43
Income taxes	0.01	0.03	0.07	0.11	0.15
Total revenue requirement	**1.03**	**1.27**	**1.64**	**2.01**	**2.35**

If the MoA wage escalators were adopted in the Application, the applied-for revenue requirements would increase by the amounts shown in Table 2. However, Hydro One is not seeking an adjustment to the applied-for revenue requirement.

This filing has been submitted electronically using the OEB's Regulatory Electronic Submission System and two (2) hard copies will be sent via courier.

Hydro One's points of contact for service of documents associated with the Application remain as listed in Exhibit A, Tab 2 Schedule 1.

Sincerely,

ORIGINAL SIGNED BY FRANK D'ANDREA

Frank D'Andrea
Encl.
cc. EB-2017-0049 parties (electronic)

OEB INTERROGATORY #55

Reference:

TSP-01-04 p. 22

Interrogatory:

At the above noted reference, Hydro One stated that "Half of utilities refurbish transformers to extend life."

a) Does Hydro One refurbish transformers to extend life?
   i. If yes, please provide documented examples of refurbishment vs. retirement decisions.
   ii. If no, please explain why not.

b) If one exists, please provide the formula used by Hydro One to establish refurbishment investment limits, driven solely by estimated remaining service life (defined as ESL minus actual age).
   i. Once an asset has exceeded ESL, what is the maximum allowed refurbishment investment?

Response:

a) No, power transformers are refurbished to preserve their expected service life and reliability, not to extend their life.

b) Hydro One employs a model that provides the Present Value for three options: maintain status quo, refurbish, or replace. It uses several factors such as maintenance cost, replacement cost, tax capital cost allowance, and the discount rate. Please refer to Interrogatory I-01-OEB-19 Attachment 1 for an example.
   i. There is no set value and the maximum allowed refurbishment cost will depend on the evaluated asset.

Witness: Donna Jablonsky

ONTARIO ENERGY BOARD

FILE NO.: **EB-2019-0082** **Hydro One Networks Inc.**

VOLUME: **Technical Conference**

DATE: **August 13, 2019**

So essentially, it's my understanding that this is the impact on the 2020 test year if the compensation was to be brought to market median. Can you confirm that's for the TX business only, the 38.6 million?

MS. LILA: That is correct.

MS. O'CONNELL: Okay, thank you. And then if you scroll down -- keep going down. Okay, that table at the bottom there, the first line is 10.1 million.

So can you confirm that that 10.1 million is the OM&A component of the 38.6 million?

MR. JODOIN: Confirmed.

MS. O'CONNELL: Could you provide a high level description as to how that 10.1 million was derived?

MR. JODOIN: The way we derived this figure and -- sorry, just if you could bear with me for one second?

The way we derived the OM&A and capital split is consistent with the output of the Black & Veatch methodologies that are embedded within this application, and it's consistent with how we've quantified it in past proceedings.

MS. O'CONNELL: Okay, thank you. So it's my understanding also that you're saying that -- in that table there at the bottom of that page, you're saying that the sum of that 5.5 million, 2.4 million, 1.5 million and .1 million is 9.6 million.

Can you confirm that you're saying that's already -- those increases are already reflected in the 2020 test year requirement?

MR. JODOIN: Yes.

MS. O'CONNELL: Okay, thank you. So you're saying that the 38 -- it's a $38.6 million amount allocated to Transmission business; so 10.1 million relates to OM&A. So what are you doing for the 28.5 million that's allocated to capital? So is that's the delta between the 38.6 and the 10.1.

MR. JODOIN: When you say what are we doing, can you just clarify what you mean by that?

MS. O'CONNELL: Sure. So thank you for providing this analysis of the impact of bringing this compensation to the market median on your OM&A. So that's the 10.1 million there, okay. That's the OM&A component --

MR. JODOIN: Sure. I think I understand the question now.

MS. O'CONNELL: So, yes.

MR. JODOIN: We can produce an equivalent table that would show the capital reductions, as each of those line items that we have quantified here would have capital portions as well.

MS. O'CONNELL: Okay, great. And then also if you could clarify whether or not these items are incorporated into the 2020 test year requirement or not. And if not, provide an explanation.

MR. JODOIN: I can confirm that now and that they would be, yes.

MS. O'CONNELL: Okay, thank you, yes. So if I can have an undertaking, please.

MR. SIDLOFSKY: That will be JT2.9.

UNDERTAKING NO. JT2.9: TO PRODUCE A TABLE SIMILAR TO THE ONE AT SEC IR NO. 55(A) TO SHOW CAPITAL REDUCTIONS

MS. O'CONNELL: Back to that table at the bottom there, what you are saying there is, in your view, only half a million dollars, your .5 million, would need -- further reduce the 2020 revenue requirement?

MR. JODOIN: That's correct. And that is consistent with the treatment and outcome of the Distribution 2018-to-2022 OEB decision.

MS. O'CONNELL: Okay, great. Okay. And then if you just scroll up, scroll up, scroll up. Sorry, scroll down. Scroll down. Okay, that -- sorry, that first bullet point on that page 3. I think you mean to say 38.6 million instead of 36.8 million; can you please confirm?

MR. JODOIN: Agreed, confirmed. Yeah.

MS. O'CONNELL: Okay, thank you. Okay, could you just also state if there have been any further compensation reductions that are incorporated in the 2020 test-year revenue requirement from the April 4, 2018 Mercer study that are not part of the 9.6 million?

MS. LILA: Not to our knowledge.

MS. O'CONNELL: Okay, thank you. Is there anything in that Mercer study that they recommended be reduced that you didn't reduce?

MS. LILA: The Mercer study doesn't have specific recommendations embedded within it. It is a study on compensation relative to market. It doesn't specifically

UNDERTAKING - JT 2.9

Reference:

I-07-SEC-055, part a)

Undertaking:

To produce a table similar to the one at SEC IR No. 55(a) to show capital reductions.

Response:

The following table outlines the capital reductions related to the net mercer median table and is consistent with how the OM&A table was produced in SEC IR No. 55 (a).

Net Mercer Median Reductions Allocated to Capital ($M)	2020
Mercer Median - Tx Capital	28.5
Pension Reduction Capital	(3.0)
OPEB Increase Capital	1.7
Executive Comp. Reduction	(2.6)
The Directive	(0.3)
Total Net Mercer Capital Reductions	**24.3**

- Mercer Median (+$28.5 million) is the Capital component of the transmission allocated portion of $38.6 million as stated above;

- The current revenue requirement reflects the reduced pension capital costs (-$3.0 million) due to the actuarial valuation of pension expenses completed by Willis Towers Watson (Exhibit F, Tab 5, Schedule 1 Attachment 1);

- The current revenue requirement reflects the updated OPEB capital costs, the allocation to Tx Capital results in an increase of (+$1.7 million) as a result of the latest valuation which is provided in Exhibit I, Tab 1, Schedule OEB-205;

- The current revenue requirement reflects the reduced executive compensation capital costs (-$2.6 million) identified in EB-2018-0130, Exhibit I, tab 7, schedule 3, page 2 to be in compliance with Bill 2; and

- As part of the blue-page update Hydro One further reduced its capital (-$0.3 million) by factoring the Ontario Government Directive issued on February 21,

2019 (“the Directive”), as discussed in Exhibit F, Tab 4, Schedule 1, page 35 and also identified in Exhibit F, Tab 1, Schedule 1, page 3.

Filed: 2019-03-21
EB-2019-0082
Exhibit F-4-1
Attachment 2
Page 1 of 34

COMPENSATION COST BENCHMARKING STUDY

HYDRO ONE NETWORKS INC.

04 APRIL 2018

Table 1: Summary of Transmission OM&A Expenditures ($ millions)

	Historical								Bridge	Test
	2015		2016		2017		2018		2019	2020
	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Forecast	Forecast
Category Level										
Sustainment	233.6	238.7	215.1	241.1	218.1	241.2	229.4	238.5	200.6	214.2
Development	6.1	12.9	4.6	13.4	5.1	4.8	5.2	5.0	6.0	6.9
Operations	59.0	58.5	62.5	59.1	61.1	61.3	53.4	62.1	46.1	48.9
Customer Care	5.1	5.5	4.5	5.5	8.5	4.0	11.0	3.9	7.3	7.5
Common Corporate Costs and Other Costs[1]	73.9	70.2	60.1	71.3	41.5	49.9	54.9	47.5	29.4	30.3
Property Taxes & Rights Payments	63.9	66.3	61.3	67.0	50.7	63.6	65.3	64.3	67.2	68.1
Adjustments										
EB-2014-0140 Settlement Reduction		-20.0		-20.0						
EB-2016-0160 Decision Reduction						-15.0		-15.0		
Removal of B2M Expense		-0.9		-0.7		-0.8		-2.1		
Pension Adjustment						-11.4		-9.9		
Directive *									-0.1	-0.1
Envelope Level										
Total Transmission OM&A	**441.6**	**431.2**	**408.1**	**436.8**	**385.0**	**397.7**	**419.2**	**394.3**	**356.5**	**375.8**
% Change Year over Year			-7.6%		-5.6%		8.9%		-9.6%	5.4%
Variance to Plan	10.4		-28.7		-12.7		24.9			

*Directive refers to the Government Directive as detailed and defined in Exhibit F, Tab 4, Schedule 1.

Hydro One's 2019 OM&A expenses are expected to be $38 million or 9.6 percent lower than the 2018 plan funding envelope. This OM&A reduction will be achieved largely through sustained productivity gains, a one-time extension of Hydro One's planned asset maintenance cycles, and corporate cost reductions, which are described further within Section 6 of this Exhibit. Hydro One plans to increase its 2020 OM&A expenditures by 5 percent from 2019 levels while still remaining 4.7 percent below the 2018 plan funding

[1] Common Corporate Costs and Other Costs includes Planning, (exhibit F-02-03), CCF&S (exhibit F-02-02), Information Technology (exhibit F-02-04), Cost of External Revenue (exhibit F-02-05), and Other OM&A (exhibit F-02-01).

Table 1: 2018 Board-approved versus 2018 Historic Year Rate Base

($ Millions)

Rate Base Component	2018 Historic Year	2018 Board-approved	Variance
Mid-Year Gross Plant	17,630.8	17,537.1	93.7
Less: Mid-Year Accumulated Depreciation	(6,481.9)	(6,416.3)	(65.6)
Mid-Year Net Utility Plant	11,148.9	11,120.8	28.1
Cash Working Capital	14.1	15.0	(0.8)
Materials & Supply Inventory	11.5	12.2	(0.7)
Total Rate Base	**11,174.6**	**11,148.0**	**26.6**

Total rate base in 2018 is in line with the OEB-approved total, within 0.24% of the amount.

3. UTILITY RATE BASE

Utility rate base for the transmission system for the test years is filed at Exhibit C, Tab 4, Schedule 1. The calculation of Net Utility Plant is provided at Exhibit C, Tab 4, Schedule 2 and 3.

Hydro One Transmission's forecast rate base for the test years 2020-2022 is shown in Table 2.

Table 2: Transmission Rate Base ($ Millions)

Description	Bridge	Test		
	2019	2020	2021	2022
Mid-Year Gross Plant	18,591.6	19,489.3	20,598.5	21,829.8
Mid-Year Accumulated Depreciation	(6,810.4)	(7,151.2)	(7,544.0)	(7,953.3)
Mid-Year Net Plant	11,781.2	12,338.1	13,054.5	13,876.5
Cash Working Capital	22.1	24.4	26.6	27.8
Materials and Supply Inventory *	11.7	12.0	12.2	12.4
Transmission Rate Base	**11,815.0**	**12,374.5**	**13,093.3**	**13,916.7**

** Average Materials and Supply Inventory*

The mid-year gross plant balance reflects the capital expenditures and in-service additions forecast for the bridge and test years. The capital expenditures are described in detail in Sections 3.1 through 3.3 of the TSP, and the in-service forecast is outlined in Exhibit C, Tab 2, Schedule 1.

Table 3 below provides historical and bridge year continuity of total fixed assets. The growth in gross plant primarily reflects the in-service additions made to Hydro One Transmission's rate base during the period from 2015 to 2018.

Table 3: Continuity of Fixed Assets Summary - Rate Base ($ Millions)

Description	Historic Years			
	2015	2016	2017	2018
Opening Gross Asset Balance	14,805.9	15,398.1	16,274.2	17,076.7
In-Service Additions	652.3	897.5	864.2	1,135.6
Retirements	(40.4)	(13.0)	(47.2)	(10.9)
Sales	(19.8)	(7.5)	(11.8)	(15.9)
Transfers / Other	0.0	(0.8)	(2.7)	(0.5)
Closing Gross Asset Balance	**15,398.1**	**16,274.2**	**17,076.7**	**18,185.0**

OEB INTERROGATORY #162

Reference:

F-01-01 p.3

Interrogatory:

At the above reference, Hydro One states that:

Hydro One's 2019 OM&A expenses are expected to be $38 million or 9.6 percent lower than the 2018 plan funding envelope. This OM&A reduction will be achieved largely through sustained productivity gains, a one-time extension of Hydro One's planned asset maintenance cycles, and corporate cost reductions, which are described further within Section 6 of this Exhibit. Hydro One plans to increase its 2020 OM&A expenditures by 5 percent from 2019 levels while still remaining 4.7 percent below the 2018 plan funding envelope. The investment plan was designed to utilize the approved funding to improve reliability and maintain asset condition over the planning period. In this manner, the investment plan appropriately balances the need to minimize customer rate impacts with the requirements of the system for supporting the delivery of safe and reliable transmission service.

a) Please discuss whether or not Hydro One's ability to remain 4.7 percent below the 2018 plan funding envelope approved in the previous transmission application would reasonably raise concerns that it may be over-forecasting OM&A requirements in the current application.

b) Given that Hydro One's OM&A expenditures were running below the envelope approved in the previous application, please explain why it was considered necessary to undertake the above referenced one-time extension of planned asset maintenance cycles, along with the other cost containment measures also described.

Response:

a) In 2018, actual OM&A was $24.9 million or 6.3% above the funding envelope approved in the previous transmission application for 2018. In the current application, the funding envelope for 2020 Test Year is 4.7% lower than the 2018 approved amount. This demonstrates that Hydro One is asking for a lower OM&A funding

envelope, contrary to the statement made that Hydro One is over-forecasting OM&A requirements in the current application.

Comparison of historical performance relative to prior approvals must include consideration of the contributing factors to the variances. The largest cost drivers (Sustainment, Operations), which have enabled the safe and reliable operation of the transmission system historically, are consistent within or below historic levels and reflect a level of expenditure which will ensure the continued safe and reliable operation of the transmission system in the future.

b) Per Table 1 of Exhibit F-01-01, Hydro One's originally forecasted 2018 OM&A expenditures were $5.1 million above the approved funding envelope. As part of the blue page update, the actual OM&A variance was updated to $24.9M above 2018 approved funding envelope. Hydro One implemented the noted measures to manage the transmission business within the approved revenue requirement envelope for 2019. The approved revenue requirement for 2019 was derived using a one year inflationary adjustment mechanism relative to 2018 approved revenue requirement.

6.7 OPERATIONS, MAINTENANCE AND ADMINISTRATION (OM&A) EXPENSE

A summary of forecast OM&A expenses for the 2020 test year is provided in Exhibit F, Tab 1, Schedule 1. These amounts have been reduced by the OM&A productivity savings outlined in Table 2 of this Exhibit. As shown in Table 9, 2020 OM&A expenses are expected to be $18.5 million lower (4.7%) than the 2018 OEB-approved (plan) funding envelope and are $34 million lower than what they would be if 2018 OEB-approved funding levels were increased at a 2% rate of inflation in 2019 and 2020.[7] OM&A reductions will be achieved through operating efficiencies, particularly the management of maintenance cycles, and a company-wide exercise undertaken by Hydro One to review and reduce corporate common costs. The review resulted in a significant commitment by business units to reduce corporate costs across the organization. These reductions were achieved primarily through a reduction in vacancies and by limiting consulting and contract engagements to critical functions, which also assist in strengthening and building internal capabilities. Hydro One's TSP is designed to utilize approved funding, in both capital and OM&A, to improve reliability and maintain asset condition over the planning period. In this manner, the plan appropriately balances customer rate impacts with the requirements of the system.

2019 OM&A expenditures are lower than the proposed test year OM&A as a result of the need to align to the funding envelope afforded in Hydro One's 2019 transmission revenue cap adjustment application (EB-2018-0130). This maintenance reduction has included reductions in activities including a one year extension of planned maintenance and asset

[7] 2018 OEB-approved OM&A inflated by 2% would have resulted in OM&A of $402.2 million in 2019 and $410.2 million in 2020

Table 1: Summary of Transmission OM&A Expenditures ($ millions)

	Historical								Bridge	Test
	2015		2016		2017		2018		2019	2020
	Actual	Plan	Actual	Plan	Actual	Plan	Actual	Plan	Forecast	Forecast
Category Level										
Sustainment	233.6	238.7	215.1	241.1	218.1	241.2	229.4	238.5	200.6	214.2
Development	6.1	12.9	4.6	13.4	5.1	4.8	5.2	5.0	6.0	6.9
Operations	59.0	58.5	62.5	59.1	61.1	61.3	53.4	62.1	46.1	48.9
Customer Care	5.1	5.5	4.5	5.5	8.5	4.0	11.0	3.9	7.3	7.5
Common Corporate Costs and Other Costs[1]	73.9	70.2	60.1	71.3	41.5	49.9	54.9	47.5	29.4	30.3
Property Taxes & Rights Payments	63.9	66.3	61.3	67.0	50.7	63.6	65.3	64.3	67.2	68.1
Adjustments										
EB-2014-0140 Settlement Reduction		-20.0		-20.0						
EB-2016-0160 Decision Reduction						-15.0		-15.0		
Removal of B2M Expense		-0.9		-0.7		-0.8		-2.1		
Pension Adjustment						-11.4		-9.9		
Directive *									-0.1	-0.1
Envelope Level										
Total Transmission OM&A	**441.6**	**431.2**	**408.1**	**436.8**	**385.0**	**397.7**	**419.2**	**394.3**	**356.5**	**375.8**
% Change Year over Year			-7.6%		-5.6%		8.9%		-9.6%	5.4%
Variance to Plan	10.4		-28.7		-12.7		24.9			

*Directive refers to the Government Directive as detailed and defined in Exhibit F, Tab 4, Schedule 1.

Hydro One's 2019 OM&A expenses are expected to be $38 million or 9.6 percent lower than the 2018 plan funding envelope. This OM&A reduction will be achieved largely through sustained productivity gains, a one-time extension of Hydro One's planned asset maintenance cycles, and corporate cost reductions, which are described further within Section 6 of this Exhibit. Hydro One plans to increase its 2020 OM&A expenditures by 5 percent from 2019 levels while still remaining 4.7 percent below the 2018 plan funding

[1] Common Corporate Costs and Other Costs includes Planning, (exhibit F-02-03), CCF&S (exhibit F-02-02), Information Technology (exhibit F-02-04), Cost of External Revenue (exhibit F-02-05), and Other OM&A (exhibit F-02-01).

costs related to detailed customer surveys which were centralized and included in this category level.

6. COMMON CORPORATE COSTS AND OTHER OM&A

The Common Corporate and Other OM&A expenditures include costs associated with common corporate functions and services ("CCF&S"), asset management planning, information technology, and cost of sales for external work. A summary of these expenditures is provided in Exhibit F, Tab 2, Schedule 1.

CCF&S includes the following functions and services that are shared by, and allocated among Hydro One's businesses: corporate management, finance, human resources, corporate relations, general counsel and corporate secretariat, regulatory affairs, security management, internal audit, and real estate and facilities. Other OM&A expenses include an environmental provision, indirect depreciation and other costs. Planning services include system investment and asset stewardship functions. IT activities include providing and managing computer systems, such as hardware and software, and IT infrastructure.

In its 2019-2024 business plan, Hydro One's business units undertook a significant commitment to reduce corporate costs across the organization. This is evident from the lower expenditure levels in the 2019 bridge year and the 2020 test year, relative to both actual and planned historical expenditures. These reductions were achieved primarily through a reduction in vacancies and by limiting consulting and contract engagements to critical functions, which also assist in strengthening and building internal capabilities. Additionally, beginning in 2018, the Information Technology line of business was able to recognize sustained cost reductions resulting from renegotiating the Inergi outsourcing agreement and from savings from productivity initiatives, as detailed in Exhibit F, Tab 2, Schedule 4 and in TSP Section 1.6.

OEB INTERROGATORY #185

Reference:

A-03-01, F-01-01

Interrogatory:

At the references above, Hydro One's derivation of its 2020 level of requested OM&A is discussed.

a) Please provide a summary table quantifying the impacts on the 2020 revenue requirement, including the impacts on both OM&A and capital, due to Hydro One's efforts, as noted in the references above, in the areas listed below:
   i. The management of maintenance cycles
   ii. The company-wide exercise undertaken by Hydro One to review and reduce corporate common costs as primarily achieved by:
      1. The reduction in vacancies
      2. The limiting of consulting and contract engagements to critical functions
   iii. Sustained productivity gains
   iv. The renegotiation of the Inergi outsourcing agreement

Response:

a) The impact to 2020 Revenue Requirement reductions are quantified below:

	OM&A	Capital	2020 Revenue Requirement Impact
Management of Maintenance Cycles*	($15.2M)	-	($15.2M)
The reduction in vacancies	($7.2M)	($7.2M)	($11.1M)
Limiting of consulting and contract engagements	($2.5M)	($6.2M)	
Sustained Productivity (excludes Inergi Renegotiation for IT and Corporate cost reductions)	($8.7M)	($63.7M)	($17.3M)
Sustained Productivity (Inergi Renegotiation)	($6.4M)		

**Relative to 2018 Actuals*

Witness: Joel Jodoin, Bruno Jesus

OEB INTERROGATORY #200

Reference:
F-01-01 p.7

Interrogatory:
At the above noted reference, Hydro One stated the following:

2018 actuals are lower than the 2018 plan and 2017 actual expenditure, mainly due lower Operations staff costs (i.e., lower pension burdens, adjustments based on average vacancy rates, and applied recoveries).

a) Please provide Hydro One's actual vacancy rate for each year between 2014 and 2018.

b) Please provide the forecast vacancy rate for 2020, and the basis for the forecast.

c) Please confirm that Hydro One has built into its budget for 2020 its forecast vacancy rate for 2020.

d) If (c) is confirmed, please explain how Hydro One has translated the forecast vacancy rate into a budgeted number.

e) If (c) is not, please explain why not.

Response:
a) Hydro One has not historically tracked vacancy rates. While Hydro One can determine a vacancy rate for Corporate groups, Hydro One's systems (Human Resource and Finance) do not support tracking monthly headcount, including vacancies, relative to budget headcount for field groups. For these organizations where vacancies occur, Hydro One is readily able to resource with the PWU hiring hall or staff augmentation.

b) The forecasted vacancy rate of 7% was used for 2020 planning of common corporate groups. The basis for the forecast was a three-year historical analysis of budget vs. actual headcount.

Witness: Sabrin Lila

c) Confirmed.

d) As described in Exhibit F, Tab 2, Schedule 1, there were significant commitments made by business units to reduce corporate costs across the organization. The reductions were achieved primarily through a reduction in vacancies and limiting consulting contracts to critical functions, with an overall focus on building internal capabilities. In addition, Hydro One translated the forecasted vacancy rate into a budgeted number by applying a 7% labour cost reduction to corporate budgets.

e) Not applicable.

OEB INTERROGATORY #189

Reference:
A-03-01 p.40, F-02-02 p.15

Interrogatory:
At the first reference above, the following is stated:

Higher costs in 2018 and forecasted for 2019 and 2020 are due to a renewed investment in human resources talent. In order to meet new demands and greater expectations for human resource products and services, Hydro One has recruited additional external resources that will enable the function to deliver on what is needed to support the execution of the overall business strategy.

At the second reference above, the following is stated:

… OM&A reductions will be achieved through operating efficiencies, particularly the management of maintenance cycles, and a company-wide exercise undertaken by Hydro One to review and reduce corporate common costs. The review resulted in a significant commitment by business units to reduce corporate costs across the organization. These reductions were achieved primarily through a reduction in vacancies and by limiting consulting and contract engagements to critical functions, which also assist in strengthening and building internal capabilities.

a) Please reconcile Hydro One's statement in the first reference that it has "recruited additional external resources" with its statement in the second reference that it is "limiting consulting and contract engagements to critical functions."

Response:
a) The Human Resources team has increased in size in part to consolidate HR related functions from other teams outside of HR (with the corresponding decreases in headcount by the transferring function) and to provide enhanced programs to support the business (for further details see Exhibit I-10-VECC 40). Some of these programs include alignment of the compensation, performance management, HR operations and change management functions, as well as staff for the technology projects related to HR transformation.

Witness: Sabrin Lila

By hiring experienced talent externally, the Human Resources team has been able to leverage best practices from other organizations and reduce consulting fees. Externally hired talent brings expertise in some areas in which Hydro One would have previously required consulting expertise. This model allows Hydro One to implement new programs while developing internal resources and maintaining knowledge in-house.

OEB INTERROGATORY #174

Reference:

F-03-01 p.2

Interrogatory:

At the above reference, it is stated that: "Hydro One relies on two main outsourcing arrangements in the operation of its businesses, one with Inergi LP ("Inergi") and another with Brookfield Asset Management."

a) Please state the percentage of Hydro One's total outsourcing dollars spent that are encompassed by these two agreements.

b) Please show the impact of the total outsourcing dollars on the 2020 test year revenue requirement, including the impacts on both 2020 OM&A and 2020 capital.

Response:

a) These 2 contracts represent 100% of outsourcing dollars spent.

b) The impact of the total outsourcing dollars on the 2020 test year revenue requirement is forecasted at $56.1 million.

The impact on 2020 OM&A is forecasted at $53.6 million.

The impact on 2020 capital is forecasted at $2.5 million.

Witness: Robert Berardi

OEB INTERROGATORY #174

Reference:

F-03-01 p.2

Interrogatory:

At the above reference, it is stated that: "Hydro One relies on two main outsourcing arrangements in the operation of its businesses, one with Inergi LP ("Inergi") and another with Brookfield Asset Management."

a) Please state the percentage of Hydro One's total outsourcing dollars spent that are encompassed by these two agreements.

b) Please show the impact of the total outsourcing dollars on the 2020 test year revenue requirement, including the impacts on both 2020 OM&A and 2020 capital.

Response:

a) These 2 contracts represent 100% of outsourcing dollars spent.

b) The impact of the total outsourcing dollars on the 2020 test year revenue requirement is forecasted at $45.4 million.

The impact on 2020 OM&A is forecasted at $42.9 million.

The impact on 2020 capital is forecasted at $2.5 million.

Witness: Robert Berardi

- Providing analytical support for a variety of financial planning and reporting processes; and
- Compiling forecast information for the appropriate audiences or stakeholders.

2.3 HUMAN RESOURCES

The Human Resources department ensures that Hydro One has the policies, systems, and programs to attract, manage, engage, and retain a high-performing workforce to execute business strategy. The department provides human resources consulting, leadership development and recruiting, diversity and inclusion and resourcing programs, compensation and benefits services, and labour relations services.

Table 8, below, provides an overview of the Hydro One Transmission portion of human resources costs.

Table 8: Summary of Human Resources Costs Allocated to Transmission ($ millions)

	Historical								Bridge	Test
Description	**2015**		**2016**		**2017**		**2018**		**2019**	**2020**
	Actual	**Plan**	**Actual**	**Plan**	**Actual**	**Plan**	**Actual**	**Plan**	**Forecast**	**Forecast**
Total	**6.8**	**6.9**	**8.3**	**6.5**	**9.2**	**7.6**	**11.1**	**7.3**	**11.9**	**12.2**
Change Year over Year			**22.7%**		**10.1%**		**20.8%**		**10.6%**	**2.0%**
Variance to Plan	**-0.1**		**1.8**		**1.5**		**3.8**			

In 2017 the human resource function began a transformation that will modernize its core processes. This multi-year program has three strategic priorities that support the Company's overall strategy. They are Operational Excellence, Customer Centric Commercial culture and Organizational Competency Development. The transformation has four guiding principles that will shape the modern human resources function:

OEB INTERROGATORY #201

Reference:
F-01-07 p.4, TSP-01-06 p.7

Interrogatory:
At the above noted reference, Hydro One stated the following:

Hydro One's aim is to execute its annual O&M work strategy at a lower cost relative to historical costs through improved productivity…

At the above noted second reference, Hydro One stated that $22 million of OM&A productivity savings have been estimated for 2020.

a) Please confirm that the above $22 million of forecasted OM&A productivity savings have been incorporated into Hydro One's requested OM&A for 2020 of $375.8 million. If this is not the case, please explain.

b) Are the forecasted productivity savings a key factor in keeping the 2020 OM&A at the requested level of $375.8 million? Please explain.

Response:
a) Confirmed.

b) Achieving sustained productivity gains in OM&A is a key factor in keeping OM&A at the requested level. Key OM&A initiatives are related to IT Renegotiation, Corporate Cost Reductions, Wrench Time Improvements and Tx Brush Control.

These initiatives are discussed further in the TSP Section 1.6. Hydro One has embedded the OM&A productivity savings forecast into the business plan supporting this filing application and in the compensation scorecards. As a result, Hydro One bears the risk of achieving these savings with no risk being put on the ratepayer.

Witness: Joel Jodoin

UNDERTAKING - JT 1.9

Reference:

I-01-OEB-002

Undertaking:

To provide an update for progressive productivity.

Response:

Below is an update on Hydro One's draft defined progressive productivity initiatives, which would include undefined progressive productivity that has been defined since the filing of this Application.

$ in millions

Working Draft - Defined Savings					
Initiative	**2020**	**2021**	**2022**	**2023**	**2024**
Reduce perimeter Hydro Vac excavations in Stations	1.9	2.2	2.3	2.6	2.6
Temporary portable access roads	2.5	3.0	3.1	2.8	3.2
Control Optimization Capital Savings	2.0	2.0	2.0	2.0	2.0
Cadweld vs DMC Connectors	3.0	1.0	1.0	1.0	1.0
A&B Cable Trench Separation employing a single route	1.0	1.0	1.0	1.0	1.0
MTU deployment	1.0	1.0	1.0	1.0	1.0
Total Defined	**11.5**	**10.1**	**10.4**	**10.5**	**10.8**

By giving the benefit of these savings to customers upfront, the Company has taken on financial and execution risk to deliver its planned work program within a reduced funding envelope. The initiative results in a further push towards a productive culture through the development of more initiatives.

UNDERTAKING - JT 2.27

Reference:

I-07-SEC-026

Undertaking:

To advise on Hydro One's position regarding SEC's request to provide the Hydro One Networks Inc. aggregated distribution and transmission totals for each initiative listed in SEC-026.

Response:

Please see response to JT 2.26, which confirms that most of the productivity initiatives in SEC-26 are subject to direct assignment to the Transmission work program. Additionally JT 2.26 also provides the allocation methodology and allocations applied to items that are not subject to direct allocation. Having provided the information in JT 2.26, the additional information requested in this undertaking regarding the Hydro One Networks Inc. aggregated distribution and transmission totals for other remaining productivity initiatives would provide no additional value in connection with evaluating the present application.

Witness: Joel Jodoin

SEC INTERROGATORY #26

Reference:
TSP-01-06 p.7

Interrogatory:
With respect to 'defined' savings:

a) Please provide a table that breaks all actual and forecast productivity savings beginning in 2017 (or earlier if tracked) to 2024, by initiative.

b) Please explain how the savings for each initiative was calculated.

Response:
Please see below for response to parts a) and b).

Note: The allocation of Common initiatives to OM&A and Capital can be found in TSP Section 1.6 Table 1.

Category		Initiative Grouping	Measurement and Expected Benefit	Updated Savings 2016A	2017A	2018A	2019	2020	2021	2022	2023	2024
Capital	Operations	Engineering	Cost Reduction from Software Implementation *Estimated by quantifying the expected FTE reductions in Engineering through the implementation of EDM software enhancements*	$ -	$ -	$ -	$ 0.4	$ 0.9	$ 1.1	$ 1.4	$ 1.4	$ 1.4
		Fleet Telematics and Right-Sizing	Fleet Rationalization - Unit Based Capital Plan Reduction *Estimated by utilizing Telematics data on fleet utilization and then measures the expected unit based reduction in the capital plan*	$ -	$ 1.9	$ 10.2	$ 10.6	$ 11.0	$ 11.1	$ 11.4	$ 11.6	$ 11.3
		Transmission and Stations	Cost Reduction based on Historical spend *Expected Capital allocation based on historical spend for Transmission and Stations efficiencies and Temporary work HQ. Calculated by measuring expected benefit per occurrence*	$ -	$ 1.8	$ 0.6	$ 0.7	$ 0.7	$ 0.7	$ 0.7	$ 0.7	$ 0.7
		OT Reductions	Overtime Reductions *Targeted effort to reduce the number of relative OT hours worked as a % vs prior year baseline*	$ -	$ 1.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5
		Procurement	Lower Cost per Unit - Historical Baseline vs Actual *Savings are estimated at a category level based on historical spend, expected and achieved negotiated savings, and updated per business plan assumptions (Capital program spend)*	$ 1.2	$ 12.8	$ 27.9	$ 25.1	$ 30.3	$ 34.9	$ 35.8	$ 35.7	$ 37.1
		Progressive Defined	Targeted Efficiencies - Defined *Efficiencies that have been allocated to specific Operating initiatives that are not yet proven. Allocations taken in Business Plan based on preliminary estimates. Ex - Hydro Vac reduction, Temp Access Roads*	$ -	$ -	$ -	$ 5.0	$ 6.1	$ 11.6	$ 11.6	$ 10.1	$ 10.1
		Progressive Undefined	Targeted Efficiencies - Undefined *Escalating commitment of 1-3% of capital work program to be allocated to future initiatives as they are defined. Included as a Top Line capital reduction*	$ -	$ -	$ -	$ -	$ 10.9	$ 27.4	$ 49.4	$ 67.9	$ 80.9
		Scheduling Tool	Cost Reduction from Software Implementation *Estimated by quantifying the expected FTE reductions in Scheduling Staff through the implementation of software enhancements*	$ -	$ -	$ 0.2	$ 0.9	$ 0.9	$ 0.9	$ 0.9	$ 0.9	$ 0.9
		Wrench Time	Lower Cost Per Unit of Operation *Utilize unit reporting to compare like for like work in actuals vs baseline year to determine $ savings per operation.*	$ -	$ -	$ -	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5
OM&A	Information Technology	Contract Reductions	Cost Reduction Based on Historical Spend *Lower cost resulting from Inergi IT Contract renegotiation. Measured against baseline spend for same scope of work*	$ 2.0	$ 2.3	$ 6.6	$ 6.3	$ 6.4	$ 8.9	$ 9.6	$ 9.6	$ 9.6
	Operations	Engineering	Cost Reduction from Software Implementation *Estimated by quantifying the expected FTE and contractor reductions in Engineering through the implementation of PCMIS software enhancements*	$ -	$ -	$ 0.7	$ 0.6	$ 0.6	$ 0.6	$ 0.6	$ 0.6	$ 0.6
		Fleet Telematics and Right-Sizing	Fleet Rationalization - Unit Based Capital Plan Reduction *Estimated by utilizing Telematics data on fleet utilization and then measures the expected unit based reduction in the capital plan*	$ -	$ 0.5	$ 0.2	$ -	$ -	$ -	$ -	$ -	$ -
		Forestry Initiatives	Lower Cost per KM *Estimated based on reductions in cost due to staff policy for inclement weather and expected overall unit volume reduction in trouble calls*	$ -	$ -	$ 1.3	$ 2.1	$ 2.0	$ 3.4	$ 2.0	$ 2.4	$ 1.9
		Transmission and Stations	Cost Reduction based on Historical spend *Expected OM&A allocation based on historical spend for Transmission and Stations efficiencies and Temporary work HQ. Calculated by measuring expected benefit per occurrence*	$ -	$ 0.8	$ 1.8	$ 1.2	$ 1.2	$ 1.2	$ 1.2	$ 1.2	$ 1.2
		Network Operating Efficiencies	Operational Program Efficiencies *Unit cost reduction in completing Load Transfer studies through Network Operating group*	$ -	$ -	$ 0.4	$ 1.0	$ 1.0	$ 1.0	$ 1.0	$ 1.0	$ 1.0
		OT Reductions	Overtime Reductions *Targeted effort to reduce the number of relative OT hours worked as a % vs prior year baseline*	$ -	$ 1.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5
		Procurement	Lower Cost per Unit - Historical Baseline vs Actual *Savings are estimated at a category level based on historical spend, expected and achieved negotiated savings, and updated per business plan assumptions*	$ 1.8	$ 2.9	$ 1.7	$ 0.9	$ 0.8	$ 0.8	$ 0.9	$ 0.8	$ 0.8
		Scheduling Tool	Cost Reduction from Software Implementation *Estimated by quantifying the expected FTE reductions in Scheduling Staff through the implementation of software enhancements*	$ -	$ -	$ 0.2	$ -	$ -	$ -	$ -	$ -	$ -
		Wrench Time	Lower Cost Per Unit of Operation *Utilize unit reporting to compare like for like work in actuals vs baseline year to determine $ savings per operation.*	$ -	$ -	$ 1.5	$ 2.3	$ 2.3	$ 2.3	$ 2.3	$ 2.3	$ 2.3
CCC	Corporate	Corporate Initiatives	Corporate Cost Initiative *Identified reductions in vacancies and contractor and consulting spending*	$ 2.3	$ 1.2	$ 1.4	$ 20.1	$ 19.1	$ 16.5	$ 13.6	$ 11.3	$ 9.4
	Operations	Procurement	Lower Cost per Unit - Historical Baseline vs Actual *Savings are estimated at a category level based on historical spend, expected and achieved negotiated savings, and updated per business plan assumptions (Corporate Allocation)*	$ 0.1	$ 1.8	$ 5.4	$ 2.3	$ 2.3	$ 2.3	$ 2.3	$ 2.3	$ 2.3
			Total Capital	**$ 1.2**	**$ 18.0**	**$ 39.4**	**$ 43.6**	**$ 61.7**	**$ 88.7**	**$ 112.2**	**$ 129.2**	**$ 143.4**
			Total OM&A	**$ 3.8**	**$ 8.0**	**$ 14.8**	**$ 14.7**	**$ 14.7**	**$ 18.6**	**$ 17.9**	**$ 18.3**	**$ 17.8**
			Total Common	**$ 2.3**	**$ 3.1**	**$ 6.8**	**$ 22.4**	**$ 21.5**	**$ 18.8**	**$ 16.0**	**$ 13.6**	**$ 11.7**
				$ 7.3	**$ 29.1**	**$ 61.0**	**$ 80.8**	**$ 97.9**	**$ 126.1**	**$ 146.1**	**$ 161.1**	**$ 172.9**

1

UNDERTAKING - JT 2.28

Reference:

SEC-026

Undertaking:

Regarding SEC 26, to consider if further level of details can be provided beyond what is currently provided in evidence regarding the base number for each one of the initiatives.

Response:

Please see Attachment 1 to this Exhibit.

				Updated Savings									
Category		Initiative Grouping	Measurement and Expected Benefit	2016A	2017A	2018A	2019	2020	2021	2022	2023	2024	Baseline
Capital	Operations	Engineering	Cost Reduction from Software Implementation *Estimated by quantifying the expected FTE reductions in Engineering through the implementation of EDM software enhancements*	$ -	$ -	$ -	$ 0.4	$ 0.9	$ 1.1	$ 1.4	$ 1.4	$ 1.4	129 Tx FTEs (2017 actual) in records and drafting job functions.
		Fleet Telematics and Right-Sizing	Fleet Rationalization - Unit Based Capital Plan Reduction *Estimated by utilizing Telematics data on fleet utilization and then measures the expected unit based reduction in the capital plan*	$ -	$ 1.9	$ 10.2	$ 10.6	$ 11.0	$ 11.1	$ 11.4	$ 11.6	$ 11.3	Baseline is $59.7M annual spend (HONI Total). See EB-2017-0049 Exhibit J 2.3 for detailed methodology
		Transmission and Stations	Cost Reduction based on Historical spend *Expected Capital allocation based on historical spend for Transmission and Stations efficiencies and Temporary work HQ. Calculated by measuring expected benefit per occurrence*	$ -	$ 1.8	$ 0.6	$ 0.7	$ 0.7	$ 0.7	$ 0.7	$ 0.7	$ 0.7	Savings Calculated per occurance for TWHQ (varies by zone - approx. $185). Baseline for Transmission and Stations efficiencies (BGIS Outsourcing)is 650k.
		OT Reductions	Overtime Reductions *Targeted effort to reduce the number of relative OT hours worked as a % vs prior year baseline*	$ -	$ 1.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	Savings calculated against 2015 baseline of 12.3% OT as a % of Base Hours - please refer to I-07-SEC-25
		Procurement	Lower Cost per Unit - Historical Baseline vs Actual *Savings are estimated at a category level based on historical spend, expected and achieved negotiated savings, and updated per business plan assumptions (Capital program spend)*	$ 1.2	$ 12.8	$ 27.9	$ 25.1	$ 30.3	$ 34.9	$ 35.8	$ 35.7	$ 37.1	Calculation described in EB-2017-0049 Exhibit J 2.3. As there are tens of thousands of materials being tracked (automated system reports) Hydro One is unable to reasonably provide the baseline price for each item.
		Progressive Defined	Targeted Efficiencies - Defined *Efficiencies that have been allocated to specific Operating initiatives that are not yet proven. Allocations taken in Business Plan based on preliminary estimates. Ex - Hydro Vac reduction, Temp Access Roads*	$ -	$ -	$ -	$ 5.0	$ 6.1	$ 11.6	$ 11.6	$ 10.1	$ 10.1	Refer to JT 1.09 for an Update on Progressive initiatives.
		Progressive Undefined	Targeted Efficiencies - Undefined *Escalating commitment of 1-3% of capital work program to be allocated to future initiatives as they are defined. Included as a Top Line capital reduction*	$ -	$ -	$ -	$ -	$ 10.9	$ 27.4	$ 49.4	$ 67.9	$ 80.9	N/A
		Scheduling Tool	Cost Reduction from Software Implementation *Estimated by quantifying the expected FTE reductions in Scheduling Staff through the implementation of software enhancements*	$ -	$ -	$ 0.2	$ 0.9	$ 0.9	$ 0.9	$ 0.9	$ 0.9	$ 0.9	32 Tx FTEs (2017 Actual) in Scheduling job functions
		Wrench Time	Lower Cost Per Unit of Operation *Utilize unit reporting to compare like for like work in actuals vs baseline year to determine $ savings per operation.*	$ -	$ -	$ -	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	Labour efficiency per Task: 2015 Labour Hours Less Estimated Labour Hours for planned orders multiplied by $143 per hour. Due to the volume of orders Hydro One is unable to reasonably provide the baseline price for each Task.
OM&A	Information Technology	Contract Reductions	Cost Reduction Based on Historical Spend *Lower cost resulting from Inergi IT Contract renegotiation. Measured against baseline spend for same scope of work*	$ 2.0	$ 2.3	$ 6.6	$ 6.3	$ 6.4	$ 8.9	$ 9.6	$ 9.6	$ 9.6	Baseline is $65.5M (Total 2015 Actual/2016 Plan)
	Operations	Engineering	Cost Reduction from Software Implementation *Estimated by quantifying the expected FTE and contractor reductions in Engineering through the implementation of PCMIS software enhancements*	$ -	$ -	$ 0.7	$ 0.6	$ 0.6	$ 0.6	$ 0.6	$ 0.6	$ 0.6	Baseline is 13 Non-Regular FTEs (2017 Historical Actual) in P&C functions.
		Fleet Telematics and Right-Sizing	Fleet Rationalization - Unit Based Capital Plan Reduction *Estimated by utilizing Telematics data on fleet utilization and then measures the expected unit based reduction in the capital plan*	$ -	$ 0.5	$ 0.2	$ -	$ -	$ -	$ -	$ -	$ -	There are no savings included in the plan years.
		Forestry Initiatives	Lower Cost per KM *Estimated based on reductions in cost due to staff policy for inclement weather and expected overall unit volume reduction in trouble calls*	$ -	$ -	$ 1.3	$ 2.1	$ 2.0	$ 3.4	$ 2.0	$ 2.4	$ 1.9	Estimate per occurance for inclement weather @ $85 per hour. Forestry baseline is $1566 per km (2015, escalated for labour inflation)
		Transmission and Stations	Cost Reduction based on Historical spend *Expected OM&A allocation based on historical spend for Transmission and Stations efficiencies and Temporary work HQ. Calculated by measuring expected benefit per occurrence*	$ -	$ 0.8	$ 1.8	$ 1.2	$ 1.2	$ 1.2	$ 1.2	$ 1.2	$ 1.2	Savings Calculated per occurance for TWHQ. See above in this table.
		Network Operating Efficiencies	Operational Program Efficiencies *Unit cost reduction in completing Load Transfer studies through Network Operating group*	$ -	$ -	$ 0.4	$ 1.0	$ 1.0	$ 1.0	$ 1.0	$ 1.0	$ 1.0	Baseline is historical program budget of $1.0M
		OT Reductions	Overtime Reductions *Targeted effort to reduce the number of relative OT hours worked as a % vs prior year baseline*	$ -	$ 1.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	See OT reductions within the Capital section above in this table

	Category	Initiative Grouping	Measurement and Expected Benefit	Updated Savings 2016A	2017A	2018A	2019	2020	2021	2022	2023	2024	Baseline
		Procurement	Lower Cost per Unit - Historical Baseline vs Actual *Savings are estimated at a category level based on historical spend, expected and achieved negotiated savings, and updated per business plan assumptions*	$ 1.8	$ 2.9	$ 1.7	$ 0.9	$ 0.8	$ 0.8	$ 0.9	$ 0.8	$ 0.8	See Procurement category within the Capital section above in this table
		Scheduling Tool	Cost Reduction from Software Implementation *Estimated by quantifying the expected FTE reductions in Scheduling Staff through the implementation of software enhancements*	$ -	$ -	$ 0.2	$ -	$ -	$ -	$ -	$ -	$ -	See Scheduling Tool category within the Capital section above in this table
		Wrench Time	Lower Cost Per Unit of Operation *Utilize unit reporting to compare like for like work in actuals vs baseline year to determine $ savings per operation.*	$ -	$ -	$ 1.5	$ 2.3	$ 2.3	$ 2.3	$ 2.3	$ 2.3	$ 2.3	See Wrench Time category within the Capital section above in this table
CCC	Corporate	Corporate Initiatives	Corporate Cost Initiative *Identified reductions in vacancies and contractor and consulting spending*	$ 2.3	$ 1.2	$ 1.4	$ 20.1	$ 19.1	$ 16.5	$ 13.6	$ 11.3	$ 9.4	Baseline is $303.9M (2019 Prior Plan (2018-2023). Tx is allocated by B&V methodology.
	Operations	Procurement	Lower Cost per Unit - Historical Baseline vs Actual *Savings are estimated at a category level based on historical spend, expected and achieved negotiated savings, and updated per business plan assumptions (Corporate Allocation)*	$ 0.1	$ 1.8	$ 5.4	$ 2.3	$ 2.3	$ 2.3	$ 2.3	$ 2.3	$ 2.3	Baseline is $0. Savings are quantified as a Early Pay credit (negotiated cost reduction) received from Vendors.
			Total Capital	**$ 1.2**	**$ 18.0**	**$ 39.4**	**$ 43.6**	**$ 61.7**	**$ 88.7**	**$ 112.2**	**$ 129.2**	**$ 143.4**	
			Total OM&A	**$ 3.8**	**$ 8.0**	**$ 14.8**	**$ 14.7**	**$ 14.7**	**$ 18.6**	**$ 17.9**	**$ 18.3**	**$ 17.8**	
			Total Common	**$ 2.3**	**$ 3.1**	**$ 6.8**	**$ 22.4**	**$ 21.5**	**$ 18.8**	**$ 16.0**	**$ 13.6**	**$ 11.7**	
				$ 7.3	**$ 29.1**	**$ 61.0**	**$ 80.8**	**$ 97.9**	**$ 126.1**	**$ 146.1**	**$ 161.1**	**$ 172.9**	

ONTARIO ENERGY BOARD

FILE NO.: **EB-2019-0082** **Hydro One Networks Inc.**

VOLUME: **Technical Conference**

DATE: **August 13, 2019**

there it's an 11.08 percent return vis-a-vis the Board's allowed 9 percent.

So what I am trying to look at is in 2018, now back to your OM&A, you have a planned and an actual, and I am assuming it's the actual that gives you that number, which is 419.2. That was the number used in that calculation?

MR. JODOIN: The actual OM&A in F-1-1 is a component of the ROE calculation in the interrogatory that we were reviewing. It's component of it, yes.

MR. GARNER: Right. So that means that if I am reading this correctly, you had approximately a 200-basis point over earning in 2018, with an OM&A number of 419.2. That's what I can gather from those two pieces of information. That's correct?

MR. CHHELAVDA: That would be correct, yes.

MR. GARNER: Okay, thank you. So my next thing is to talk just generally about the productivity savings in your plan anyways.

You know when we were at SEC 26 and we were looking at those amounts in the future, if those don't come to fruition, you know, they don't happen in any way, let's say, what difference does it make to the revenue-requirement calculation? It makes a difference in 2020, right, because they are embedded into your start, but subsequent to that, what difference do they make to anything? Let's say you don't achieve any of those savings. How does it impact the revenue requirement? Does it?

MR. JODOIN: It really depends on the initiative, but the reality is if we were to achieve, to be very simple with this, nothing embedded in that table, when we come back in 2023 our costs will be higher.

MR. GARNER: Right. That's what I am just trying to understand, is for the purpose of the plan, though, for each one of the subsequent years up until you rebase again, is there an impact other than, I would -- like, when you do the ESM calculation do you take those productivity savings and somehow recalculate them into that, or do you just -- is there no difference to the rate -- the revenue requirement during the term of the plan?

MR. JODOIN: yes and no. There would be no adjustment made from a productivity to ESM perspective. Slightly different but important to bring up in that, the in-service variance account, to the extent that if we can justify verifiable productivity capital gains over and above what's identified in this application, if we come in under the in-service number that we've quoted here but we can verify that it is related to productivity, then that is one specific adjustment we would make.

MR. GARNER: Right, thank you for that. And -- but for the -- so let's separate the capital versus the OM&A part of those productivity savings as you have. So for the OM&A portion, though, as you point out, the only distinction of whether you achieve or over-achieve or under-achieve or exactly make, whatever's in that plan, the only impact will be in the subsequent rebasing period.

ONTARIO ENERGY BOARD

FILE NO.:	**EB-2019-0082**	**Hydro One Networks Inc.**

VOLUME:	**3**	
DATE:	**October 24, 2019**	
BEFORE:	**Emad Elsayed**	**Presiding Member**
	Lynne Anderson	**Member**
	Robert Dodds	**Member**

as well?

MR. SPENCER: It's a contributing factor, yes. So I guess my point was that the quantum of the spread between plan and actual to some extent needs to be narrowed because we've had to implement the decisions from past proceedings, pension adjustments, et cetera.

MR. SIDLOFSKY: Now, if one element of the past decision related to a particular area of OM&A like compensation, for example, are you suggesting that even though the decision may have addressed a certain area of your overall OM&A, that's going to have an impact on other areas like sustainment OM&A?

MR. SPENCER: The mechanics of our compensation and opinions thereof I feel are best left to Ms. Sabrin Lila, who will be coming on later. But directionally any of the direction that comes from the Board through decisions, we have to take that back and determine how we will implement that in our forward-looking work programs. It is just a natural part of the process.

Do we have to -- of course we have to make trade-off decisions, and we have to respect the decision of the Board.

MR. SIDLOFSKY: Okay. Could I take you to -- sorry. three areas, actually. Unfortunately, I have to bounce around a little bit in the compendium, but in three places in the compendium, and that would be page 9, which is a reproduction of Exhibit A, tab 3, schedule 1, page 40, page 2 which is a reproduction of Exhibit F, tab 1, schedule

one, page 3 which we were just on, and page 10 which is -- sorry, and page 11 of the compendium.

In those various areas Hydro One's derivation of its 2020 level of requested OM&A is discussed, including your efforts to reduce OM&A by way of four items, and those would be the management of maintenance cycles, the company-wide exercise undertaken by Hydro One to review and reduce corporate common costs as primarily achieved by the reduction in vacancies and the limiting of consulting and contract engagements to critical functions -- contract engagements to critical functions, sustained productivity gains, and the renegotiation of the energy outsourcing agreement.

For today's purposes, I am just going to be touching on the management of maintenance cycles and some elements of productivity gains.

Now, in response to OEB Staff 185, Hydro One provided a breakdown of the impact of those activities on the 2020 test year revenue requirement. And that's shown in the table at page 12 of the compendium, which is taken from that response.

Now, in looking at the table that you provided as part of that response, first of all, I am going to ask you to confirm that that table shows the impacts on the 2020 revenue requirement versus 2018 plan, with the exception of the first item, management of maintenance cycles, which is relevant to -- which relates to 2018 actuals.

Am I correct when I read this table that it's only the

management of maintenance cycles item that relates to 2018 actuals, and all of those other items are related to the 2018 plan?

MR. JESUS: That's correct.

MR. SIDLOFSKY: Okay. Do you have a -- sorry, can you provide the value for management and maintenance cycles against your 2018 plan? Is that number available?

[Witness panel confers]

MR. JESUS: I guess we're trying to understand exactly what you're asking for.

So as Ms. Jablonsky had articulated, there are a number of reasons why we made the -- how the reductions came about.

Are you asking specifically to each one of those items where the reductions were provided, how they were arrived at? I thought we provided that as part of the previous table that you showed.

MR. SIDLOFSKY: No, I think I am just asking for what might be a different number related to the management and maintenance cycles.

I am trying to -- I am trying to do more of an apples-to-apples comparison here, so it would be helpful if there were a value in the management and maintenance cycles row that relates to the 2018 plan, like the other numbers seem to relate to.

[Witness panel confers]

MR. JESUS: I believe we can provide that, but we would need to confirm whether we can provide that.

MR. SIDLOFSKY: Okay. Well, I will take that as an undertaking, and I am sure you will tell me if you are not able to.

MR. JESUS: Sure.

MR. SIDLOFSKY: That will be J3.3.

UNDERTAKING NO. J3.3: WITH REFERENCE TO IR OEB STAFF 185, TO PROVIDE, IF POSSIBLE, A VALUE FOR MANAGEMENT OF MAINTENANCE CYCLES RELATED TO THE 2018 PLAN; IF NOT POSSIBLE, TO EXPLAIN WHY

MR. SIDLOFSKY: So turning to page 10 of the compendium, where we've reproduced table 1 of Exhibit F, tab 1, schedule 1, and of course we have seen that table before.

But you will note in this table that sustainment OM&A drops from 238.5 million for the 2018 plan to 214.2 million in 2020, which would be a difference of 24.3 million.

Can you tell us how much of that difference is related to the management and maintenance cycles? Or is that the number that you would be looking for in the undertaking that you just gave?

MR. JESUS: I believe that would be part of the undertaking that we just gave.

MR. SIDLOFSKY: Okay, thank you. I have a number of questions about productivity, and again, I believe these questions are for this panel, but please tell me if I should be moving those or saving those for another panel.

Can I take you to page 21 of the compendium, please? At that page we have produced page 7 of Exhibit B, tab 1,

UNDERTAKING - JT 2.28

Reference:

SEC-026

Undertaking:

Regarding SEC 26, to consider if further level of details can be provided beyond what is currently provided in evidence regarding the base number for each one of the initiatives.

Response:

Please see Attachment 1 to this Exhibit.

				Updated Savings									
Category		Initiative Grouping	Measurement and Expected Benefit	2016A	2017A	2018A	2019	2020	2021	2022	2023	2024	Baseline
Capital	Operations	Engineering	Cost Reduction from Software Implementation *Estimated by quantifying the expected FTE reductions in Engineering through the implementation of EDM software enhancements*	$ -	$ -	$ -	$ 0.4	$ 0.9	$ 1.1	$ 1.4	$ 1.4	$ 1.4	129 Tx FTEs (2017 actual) in records and drafting job functions.
		Fleet Telematics and Right-Sizing	Fleet Rationalization - Unit Based Capital Plan Reduction *Estimated by utilizing Telematics data on fleet utilization and then measures the expected unit based reduction in the capital plan*	$ -	$ 1.9	$ 10.2	$ 10.6	$ 11.0	$ 11.1	$ 11.4	$ 11.6	$ 11.3	Baseline is $59.7M annual spend (HONI Total). See EB-2017-0049 Exhibit J 2.3 for detailed methodology
		Transmission and Stations	Cost Reduction based on Historical spend *Expected Capital allocation based on historical spend for Transmission and Stations efficiencies and Temporary work HQ. Calculated by measuring expected benefit per occurrence*	$ -	$ 1.8	$ 0.6	$ 0.7	$ 0.7	$ 0.7	$ 0.7	$ 0.7	$ 0.7	Savings Calculated per occurance for TWHQ (varies by zone - approx. $185). Baseline for Transmission and Stations efficiencies (BGIS Outsourcing)is 650k.
		OT Reductions	Overtime Reductions *Targeted effort to reduce the number of relative OT hours worked as a % vs prior year baseline*	$ -	$ 1.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	Savings calculated against 2015 baseline of 12.3% OT as a % of Base Hours - please refer to I-07-SEC-25
		Procurement	Lower Cost per Unit - Historical Baseline vs Actual *Savings are estimated at a category level based on historical spend, expected and achieved negotiated savings, and updated per business plan assumptions (Capital program spend)*	$ 1.2	$ 12.8	$ 27.9	$ 25.1	$ 30.3	$ 34.9	$ 35.8	$ 35.7	$ 37.1	Calculation described in EB-2017-0049 Exhibit J 2.3. As there are tens of thousands of materials being tracked (automated system reports) Hydro One is unable to reasonably provide the baseline price for each item.
		Progressive Defined	Targeted Efficiencies - Defined *Efficiencies that have been allocated to specific Operating initiatives that are not yet proven. Allocations taken in Business Plan based on preliminary estimates. Ex - Hydro Vac reduction, Temp Access Roads*	$ -	$ -	$ -	$ 5.0	$ 6.1	$ 11.6	$ 11.6	$ 10.1	$ 10.1	Refer to JT 1.09 for an Update on Progressive initiatives.
		Progressive Undefined	Targeted Efficiencies - Undefined *Escalating commitment of 1-3% of capital work program to be allocated to future initiatives as they are defined. Included as a Top Line capital reduction*	$ -	$ -	$ -	$ -	$ 10.9	$ 27.4	$ 49.4	$ 67.9	$ 80.9	N/A
		Scheduling Tool	Cost Reduction from Software Implementation *Estimated by quantifying the expected FTE reductions in Scheduling Staff through the implementation of software enhancements*	$ -	$ -	$ 0.2	$ 0.9	$ 0.9	$ 0.9	$ 0.9	$ 0.9	$ 0.9	32 Tx FTEs (2017 Actual) in Scheduling job functions
		Wrench Time	Lower Cost Per Unit of Operation *Utilize unit reporting to compare like for like work in actuals vs baseline year to determine $ savings per operation.*	$ -	$ -	$ -	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	Labour efficiency per Task: 2015 Labour Hours Less Estimated Labour Hours for planned orders multiplied by $143 per hour. Due to the volume of orders Hydro One is unable to reasonably provide the baseline price for each Task.
OM&A	Information Technology	Contract Reductions	Cost Reduction Based on Historical Spend *Lower cost resulting from Inergi IT Contract renegotiation. Measured against baseline spend for same scope of work*	$ 2.0	$ 2.3	$ 6.6	$ 6.3	$ 6.4	$ 8.9	$ 9.6	$ 9.6	$ 9.6	Baseline is $65.5M (Total 2015 Actual/2016 Plan)
	Operations	Engineering	Cost Reduction from Software Implementation *Estimated by quantifying the expected FTE and contractor reductions in Engineering through the implementation of PCMIS software enhancements*	$ -	$ -	$ 0.7	$ 0.6	$ 0.6	$ 0.6	$ 0.6	$ 0.6	$ 0.6	Baseline is 13 Non-Regular FTEs (2017 Historical Actual) in P&C functions.
		Fleet Telematics and Right-Sizing	Fleet Rationalization - Unit Based Capital Plan Reduction *Estimated by utilizing Telematics data on fleet utilization and then measures the expected unit based reduction in the capital plan*	$ -	$ 0.5	$ 0.2	$ -	$ -	$ -	$ -	$ -	$ -	There are no savings included in the plan years.
		Forestry Initiatives	Lower Cost per KM *Estimated based on reductions in cost due to staff policy for inclement weather and expected overall unit volume reduction in trouble calls*	$ -	$ -	$ 1.3	$ 2.1	$ 2.0	$ 3.4	$ 2.0	$ 2.4	$ 1.9	Estimate per occurance for inclement weather @ $85 per hour. Forestry baseline is $1566 per km (2015, escalated for labour inflation)
		Transmission and Stations	Cost Reduction based on Historical spend *Expected OM&A allocation based on historical spend for Transmission and Stations efficiencies and Temporary work HQ. Calculated by measuring expected benefit per occurrence*	$ -	$ 0.8	$ 1.8	$ 1.2	$ 1.2	$ 1.2	$ 1.2	$ 1.2	$ 1.2	Savings Calculated per occurance for TWHQ. See above in this table.
		Network Operating Efficiencies	Operational Program Efficiencies *Unit cost reduction in completing Load Transfer studies through Network Operating group*	$ -	$ -	$ 0.4	$ 1.0	$ 1.0	$ 1.0	$ 1.0	$ 1.0	$ 1.0	Baseline is historical program budget of $1.0M
		OT Reductions	Overtime Reductions *Targeted effort to reduce the number of relative OT hours worked as a % vs prior year baseline*	$ -	$ 1.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	See OT reductions within the Capital section above in this table

	Category	Initiative Grouping	Measurement and Expected Benefit	Updated Savings 2016A	2017A	2018A	2019	2020	2021	2022	2023	2024	Baseline
		Procurement	Lower Cost per Unit - Historical Baseline vs Actual *Savings are estimated at a category level based on historical spend, expected and achieved negotiated savings, and updated per business plan assumptions*	$ 1.8	$ 2.9	$ 1.7	$ 0.9	$ 0.8	$ 0.8	$ 0.9	$ 0.8	$ 0.8	See Procurement category within the Capital section above in this table
		Scheduling Tool	Cost Reduction from Software Implementation *Estimated by quantifying the expected FTE reductions in Scheduling Staff through the implementation of software enhancements*	$ -	$ -	$ 0.2	$ -	$ -	$ -	$ -	$ -	$ -	See Scheduling Tool category within the Capital section above in this table
		Wrench Time	Lower Cost Per Unit of Operation *Utilize unit reporting to compare like for like work in actuals vs baseline year to determine $ savings per operation.*	$ -	$ -	$ 1.5	$ 2.3	$ 2.3	$ 2.3	$ 2.3	$ 2.3	$ 2.3	See Wrench Time category within the Capital section above in this table
CCC	Corporate	Corporate Initiatives	Corporate Cost Initiative *Identified reductions in vacancies and contractor and consulting spending*	$ 2.3	$ 1.2	$ 1.4	$ 20.1	$ 19.1	$ 16.5	$ 13.6	$ 11.3	$ 9.4	Baseline is $303.9M (2019 Prior Plan (2018-2023). Tx is allocated by B&V methodology.
	Operations	Procurement	Lower Cost per Unit - Historical Baseline vs Actual *Savings are estimated at a category level based on historical spend, expected and achieved negotiated savings, and updated per business plan assumptions (Corporate Allocation)*	$ 0.1	$ 1.8	$ 5.4	$ 2.3	$ 2.3	$ 2.3	$ 2.3	$ 2.3	$ 2.3	Baseline is $0. Savings are quantified as a Early Pay credit (negotiated cost reduction) received from Vendors.
			Total Capital	**$ 1.2**	**$ 18.0**	**$ 39.4**	**$ 43.6**	**$ 61.7**	**$ 88.7**	**$ 112.2**	**$ 129.2**	**$ 143.4**	
			Total OM&A	**$ 3.8**	**$ 8.0**	**$ 14.8**	**$ 14.7**	**$ 14.7**	**$ 18.6**	**$ 17.9**	**$ 18.3**	**$ 17.8**	
			Total Common	**$ 2.3**	**$ 3.1**	**$ 6.8**	**$ 22.4**	**$ 21.5**	**$ 18.8**	**$ 16.0**	**$ 13.6**	**$ 11.7**	
				$ 7.3	**$ 29.1**	**$ 61.0**	**$ 80.8**	**$ 97.9**	**$ 126.1**	**$ 146.1**	**$ 161.1**	**$ 172.9**	

1.6.1.2 (5.2.3 A) TIERED PRODUCTIVITY REPORTING

Hydro One introduced a tiered reporting structure so as to clearly differentiate between productivity improvements that will result in actual cost savings ("Tier 1 Productivity") and those that will enable Hydro One to complete more work for the same cost ("Tier 2 Productivity"). Only those savings that contribute to overall direct cost reductions in the Business Plan relative to their baseline, i.e. Tier 1 Productivity savings, are reported against productivity targets in Hydro One's corporate scorecards. However, all savings are monitored and tracked. For greater certainty, Hydro One defines the tiers as follows:

> "Tier 1 Productivity" means net savings with a direct correlation to a budget and/or spending forecast reduction (i.e. 'hard savings'), which are monitored, tracked and reported on corporate scorecards.
>
> "Tier 2 Productivity" means all unit based savings, other than Tier 1 Productivity savings, which are derived from calculation methodologies approved by Finance and result in Hydro One getting incremental work completed or increased output for the same dollars input (i.e. 'more work'), which are not reported on corporate scorecards but which are otherwise monitored and tracked.

1.6.1.3 (5.2.3 A) METHODOLOGY AND REVIEW PROCESS

Hydro One's productivity process was executed in parallel with, and as an input to, its business planning process. Through the productivity process and framework, each of Hydro One's lines of business[1] was asked to identify productivity initiatives that would have the potential to result in savings. In consultation with the Finance group, the lines of

[1] Hydro One's lines of business with productivity commitments are Fleet Services, Supply Chain, Station Services, Network Operating, Distribution Lines, Forestry Services, Information Technology, Corporate Groups, Planning, Customer Service, and Engineering.

ONTARIO ENERGY BOARD

FILE NO.:	**EB-2019-0082**	**Hydro One Networks Inc.**

VOLUME:	**3**	
DATE:	**October 24, 2019**	
BEFORE:	**Emad Elsayed**	**Presiding Member**
	Lynne Anderson	**Member**
	Robert Dodds	**Member**

Do they factor into your revenue-requirement calculations? Or...

MR. KEIZER: Sorry, Mr. Sidlofsky, it may be that in terms of the implementation relating to tier 2 and the administration of that really I think is under the finance department in Hydro One, that Mr. Jodoin on panel 2 is best placed to answer those questions.

MR. SIDLOFSKY: Okay. That would be helpful. Thank you.

Can I take you to page 3 of the compendium -- excuse me, page 33 of the Staff compendium.

We've reproduced your response to Undertaking JT1.9 from the technical conference. And in the table provided in that undertaking, you provide an updated defined progressive productivity initiatives totalling $11.5 million for the 2020 test year and lower amounts that range from 10.1 to 10.8 million for the 2021 to 2024 plan period.

You also stated that the updated amounts also include undefined progressive productivity that's been defined since the filing of your application. Correct?

MR. SPENCER: That's correct, yes.

MR. SIDLOFSKY: And given that you provided updated defined progressive productivity initiatives in that table in Undertaking JT1.9, does that -- should that result in an update to your 2020 test-year revenue requirement?

MR. SPENCER: No.

MR. SIDLOFSKY: Because?

MR. SPENCER: No. The progressive productivity is a concept we've implemented in our transmission capital work program.

MR. SIDLOFSKY: Right. And you explained that a few minutes ago. That is on the capital side, not on the OM&A side, correct?

MR. SPENCER: That is correct, yes.

MR. SIDLOFSKY: Okay. Sorry. Your response to undertaking JT2.28 from the technical conference -- and I do not have that in the compendium, I apologize for that -- but if we could have that brought up, please? Thank you.

I realize that's hard to read, but that response to undertaking JT2.28 provides a table that breaks out all of your actual and forecast productivity initiatives for the period from 2016 to 2024 by initiative, correct?

MR. SPENCER: That's correct, yes.

MR. SIDLOFSKY: And could you explain then how undertaking JT1.9, or your response to undertaking JT1.9 and this table in JT2.28 relate to each other? And does the table the you've provided in response to undertaking JT2.28 reflect the updates that you made in JT1.9?

[Witness panel confers]

MR. SIDLOFSKY: I'm sorry, I am just trying to understand if those two responses are consistent.

MR. KEIZER: Again, this may be best placed with panel 2.

MR. SIDLOFSKY: Okay, thank you. During the technical conference, Mr. Jodoin -- I realize -- well, this may be a

panel 2 question, but Mr. Jodoin stated that if Hydro One doesn't achieve any of the productivity savings we've been discussing when it comes back in 2023 in a future application, its costs would be higher.

And that extract isn't in the compendium, but I can give you the reference for that. It was an exchange between Mr. Garner and Mr. Jodoin. It was at the bottom of page 102 and the top of page 103 of volume 2 of the technical conference transcript.

Now, if you will bear with me I can read the exchange because it is very short.

Mr. Garner's question was:

> "Okay, thank you. So my next thing is to talk just generally about the productivity savings in your plan."

MR. SPENCER: Would you mind just waiting until we have it on the screen, please?

MR. SIDLOFSKY: Sure, thank you.

MR. KEIZER: Can you give us the citation again?

MR. SIDLOFSKY: It is bottom of page 102, top of page 103 of volume 2 of the technical conference transcript.

So just to shorten up that exchange, the question is really let's say you don't achieve any of those savings, how does it impact the revenue requirement and does it.

The response was:

> "It really depends on the initiative, but the reality is if we were to achieve to be very simple with this nothing embedded in that table,

then when we come back in 2023, our costs will be higher."

How does your exercise of generating productivity savings continue going forward, or of creating opportunities from productivity going forward when you are moving towards your next application?

MR. SPENCER: I feel that Mr. Jodoin would be best able to speak to the mechanics of the overall program.

MR. SIDLOFSKY: Okay. So I had a couple of questions here, but I will leave them until panel 2.

MR. SPENCER: Thank you.

DR. ELSAYED: Mr. Sidlofsky, do you have an estimate for how much more time you need?

MR. SIDLOFSKY: Sorry, I do have another area that I am coming to. I had hoped to be finished in a half hour. If you would like to take the lunch break now, I can finish off after.

DR. ELSAYED: Yes, I think we will do that. We will take the lunch break now and be back at 1:30.

--- Luncheon recess taken at 12:30 p.m.

--- On resuming at 1:33 p.m.

DR. ELSAYED: Please be seated.

Okay. Mr. Sidlofsky.

MR. SIDLOFSKY: Thank you, sir.

Good afternoon, panel. I have another question about productivity savings, and I am happy to have you suggest that we deal with that with panel 2, but if productivity savings are achieved by reducing a department by one FTE,

for example, so you need one fewer FTE to conduct the same amount of work, one less FTE, how do you ensure that there is no double-counting if that FTE is reclassified or reassigned to a different department?

MR. SPENCER: I think that one is best left for Mr. Jodoin.

MR. SIDLOFSKY: Thank you. At page 34 of the compendium, Staff have reproduced your response to Undertaking JT2.27 from the technical conference. In that undertaking you were asked to provide Hydro One Networks Inc.'s aggregated distribution and transmission totals for each of the productivity initiatives listed in School Energy Coalition interrogatory 26.

You didn't provide information specifically in response to that undertaking. And, sorry, I should note interrogatory 26 -- Schools interrogatory 26 is reproduced at pages 35 and 36 of the compendium.

But in response to Undertaking JT2.28 you did provide an updated table to that interrogatory response which showed additional detail about the base number for each one of your productivity initiatives. We have discussed that table a little bit before. But I just have a couple of questions about the aggregated distribution and transmission totals.

Can you confirm that there is no double-counting between distribution and transmission in your estimated productivity savings that you have either incorporated into or you will be incorporating into the 2020 test-year

supply them needs to be built.

So how do you measure load-serving capacity based on those instances where we're serving the LDCs from the transmission system, and yet there's no metric to actually measure what that capacity is?

So that's where I have the difficulty. We're actually building up the system to serve the generators, to serve LDCs and their facilities, but there's no metric that we would then be able to incorporate.

MR. SIDLOFSKY: Okay, thank you. Panel, those are my Questions. Thank you to the witness panel as well. I apologize for going slightly over my time.

DR. ELSAYED: Thank you, Mr. Sidlofsky. Mr. Brett, you are next.

CROSS-EXAMINATION BY MR. BRETT:

MR. BRETT: Thank you, Mr. Chair, and Panel.

Panel, I would like to start with a question on your determination of users' preferences and needs. And by way of context, you have a number of direct-connect customers, I think something like eighty, in the low 80s, and you have, as I recall, something like 45 LDCs, give or take, and you have generators.

And I think you had asked -- one of the engagement activities you did was to ask Innovative, the consulting firm, to survey and engage with your customers. And they came back to you with some general results, some results.

I think you have characterized those results as your customers having the view that safety, reliability are the

most important factors for them and that costs or price is not as important. That is -- would that be a fair summary?

MR. JESUS: Cost is not an outcome, and it wasn't seen as being as important, yes.

MR. BRETT: Now, at the same time -- well, let me next refer you to a passage from the last transmission case. This is the case you were discussing with James a few minutes ago; it's 2016-0160.

You touched on this a little bit with him, but I want to pursue it again. Do you agree with me that one of the -- if you look at page 24 of that decision, can you turn that up? Do you have it?

So what I will do is I just want to read a short passage from the middle of it, and then I want to move you to another page.

The second bullet on page 24, under the OEB findings, and they're talking here -- this is the section of the decision that talks about plans, your transmission plan, and the OEB says:

"Hydro One should have discussions with LDCs to determine practical ways to seek some input from their end users to inform Hydro One's application."

Then over on the same decision -- over on the conclusion section at page 117, and I will just read you part of a sentence here. "Hydro One must..."

Then they go down a third bullet.

> "...begin the customer engagement process sufficiently in advance of filing."

Updated OEB Staff Table 1 - Summary of Transmission OM&A Expenditures ($ millions)
Exhibit F, Tab 1, Schedule 1, Page 3, Table 1; Updated Exhibit J1.1 filed October 22, 2019

Actual 2015	Actual 2016	Actual 2017	Actual 2018	Forecast 2019	Forecast 2020	Average 2015-2018	Average 2015-2019	2020 versus Average 2015-2018	2020 versus Average 2015-2019
					A	B	C	D = A - B	E = A - C
$ 441.6	$ 408.1	$ 385.0	$ 419.2	$ 356.5	$ 374.1	$ 413.5	$ 402.1	$ (39.4)	$ (28.0)
								-9.5%	-7.0%

Updated OEB Staff Table 2 - Summary of Transmission OM&A Expenditures ($ millions) - Actual versus Plan
Exhibit F, Tab 1, Schedule 1, Page 3, Table 1; Updated Exhibit J1.1 filed October 22, 2019

	Actual 2015	Plan 2015	Difference	Actual 2016	Plan 2016	Difference	Actual 2017	Plan 2017	Difference	Actual 2018	Plan 2018	Difference	Plan 2019	Plan 2020	Difference of 2020 versus 2018 Plan
											A			B	C = B - A
Total OM&A	$ 441.6	$ 431.2	$ 10.4 2.4%	$ 408.1	$ 436.8	$ (28.7) -6.6%	$ 385.0	$ 397.7	$ (12.7) -3.2%	$ 419.2	$ 394.3	$ 24.9 6.3%	$ 356.5	$ 374.1	$ (20.2) -5.1%

OEB Staff Table 2-A - Summary of Overall OM&A Impact on the 2020 Revenue Requirement ($ Millions)
Exhibit F, Tab 1, Schedule 1, Page 3, Table 1; Updated Exhibit J1.1 filed October 22, 2019

2018 Actual A	2018 Plan B	2019 Forecast C	2020 Forecast D	2020 versus 2018 Actual E = D - A	2020 versus 2018 Plan F = D - B
$ 419.2	$ 394.3	$ 356.5	$ 374.1	$ (45.1)	$ (20.2)

Decrease 2019 versus 2018 actual (G = C - A)	$ (62.7)
Increase 2020 versus 2019 (H = D - C)	$ 17.6
Net decrease E	$ (45.1)

Decrease 2019 versus 2018 plan (I = C - B)	$ (37.8)
Increase 2020 versus 2019 (H = D - C)	$ 17.6
Net decrease F	$ (20.2)

OEB Staff Table 8 - Movements in Total Distribution and Transmission FTEs and Transmission OM&A ($ Millions)
Exhibit F, Tab 1, Schedule 1, Page 3, Table 1; Updated Exhibit J1.1 filed October 22, 2019

	2018 plan	2018 actual	2019 forecast	2020 forecast	2019 forecast over 2018 actual	2020 forecast over 2019 forecast	2020 forecast over 2018 actual	over 2018 OEB approved
OM&A	$ 394.3	$ 419.2	$ 356.5	$ 374.1	-15.0%	4.9%	-10.8%	-5.1%
FTEs		8,429	9,216	9,146	9.3%	-0.8%	8.5%	n/a

OEB Staff Table 9 - Movements in Total Distribution and Transmission FTEs and Capital Expenditures ($ Millions)
Exhibit B, Tab 1, Schedule 1, TSP Section 3.3 Page 2 & 3; Updated Exhibit J1.1 filed October 22, 2019

	2018 plan	2018 actual	2019 forecast	2020 forecast	2019 forecast over 2018 actual	2020 forecast over 2019 forecast	2020 forecast over 2018 actual	over 2018 OEB approved
Capital Expenditures	1,000.0	967.3	1,035.0	1,188.0	7.0%	14.8%	22.8%	18.8%
FTEs		8,429	9,216	9,146	9.3%	-0.8%	8.5%	n/a

OEB Staff Table 11 - Movements in Hydro One Transmission and Distribution Compensation and FTEs
Exhibit KT2.1

	2022 versus 2018		2020 versus 2018	
	Total % Change	**Annual % Change**	**Total % Change**	**Annual % Change**
Total Transmission Compensation	17.00%	4.20%	12.50%	6.30%
Total Distribution Compensation	14.80%	3.70%	8.30%	4.10%
Total Transmission FTEs	8.60%	2.20%	10.50%	5.20%
Total Distribution FTEs	8.70%	2.20%	6.50%	3.30%

iii. Hydro One's response

a. Proposed human resources costs are prudent

Some intervenors[506] have noted that Hydro One's witness stated that Hydro One has much more generous pensions and benefits than other employers. On this point, Hydro One reiterates that this situation, which – as noted by QMA[507] and EP[508] – is a legacy inherited from Ontario Hydro, is only within management's control to a certain extent.

In other words, having collectively bargained agreements and inability to unilaterally alter them provides the context in which Hydro One operates and the prudence of Hydro One's decisions should be evaluated in that context. This is not simply an "excuse" which is "trotted out" by Hydro One as alleged by SEC.[509] To the extent management does have some control in this regard, Hydro One submits it has made significant progress. EP suggests that "there is no evidence that Hydro One is doing anything to reduce its labour costs by elimination of represented positions and outsourcing or contracting out more activities"[510], but this is simply not true given that there is evidence in this proceeding of Hydro One doing precisely that[511]. Contrary to what is submitted by EP, Hydro One's management is doing what it can to reduce labour costs and this can be seen based on the evidence in this proceeding, as noted by QMA,[512] PWU[513] and SUP.[514]

Indeed, citing Exhibit C1, Tab 2, Schedule 1[515] the evidence is as follows (emphasis added):

> The base rate increases on the wages of PWU represented employees was 1% in each year from 2015 to 2017 and Society wages increased 2.25% in 2015 followed by three years of 0.5% increases. The lower than inflation base-rate wage increases

506 EP, s 66; CCC p 18.
507 QMA, p14.
508 EP, s 69.
509 SEC, s 4.1.5
510 EP, p 69.
511 See Transcript Vol 3, p 20-22 also cited by PWU at pp 50-51.
512 QMA, p 14.
513 PWU, pp 50-54.
514 SUP, pp 7-8.
515 P 29-31.

> coming out of the 2015-2017 collective agreements allow for a lower starting point for which compensation is based within this application.
>
> The rate of base salary increases embedded in the application maintains the low annual increases negotiated in the 2015 collective agreements. The annual base salary increases are 1% for PWU represented employees from 2018 to 2022 and 0.5% for Society represented employees. <u>These lower-than-inflation wage increases demonstrate Hydro One's commitment to control compensation costs.</u>

Moreover, SEC and EP[516] make assertions regarding the July 11, 2018 Memorandum of Agreement with the PWU regarding PWU's collective agreement (the "MOA"). SEC and EP assert that the MOA demonstrates that compensation matters "are likely to get worse".[517] Yet a consideration of the numbers in the MOA does not lead to the conclusion reached by SEC and others. As pointed out by PWU, the MOA shows wage increases of 1.8% in April 2018, 2% in April 2019 and 0.6% in January 2020.

In sum, a closer look at PWU wages shows wages increasing at rates lower than inflation from 2015-2022, and Hydro One has confirmed that it is not requesting a higher revenue requirement to account for the recently agreed-to increases for the 2018-22 period.

Hydro One submits that overall, the evidence demonstrates that Hydro One is working to lower compensation costs as best as it can.

As a result, Hydro One submits that its proposed revenue requirement related to compensation should be approved as prudent.

b. Proposed human resources costs are consistent with market median

Alternatively, should the Board seek to make a determination regarding Hydro One's compensation costs based on where Hydro One stands relative to its peers, Hydro One's proposed revenue requirement related to compensation should be approved based on the fact that on a total cash basis, Hydro One is at market median.

[516] EP, s 70, p 20.
[517] SEC s 4.2.8.

UNDERTAKING – J 2.3

Reference

I-25-Staff-123
K2.1

Undertaking

To provide the detail behind the numbers for the three initiatives move to mobile, procurement, and telematics, as well as the methodology for determining these calculations; and to provide a narrative as to whether or not what we are seeing is the same approach used in other initiatives.

Response

1. Move to Mobile – OM&A and Capital – Background

The Move to Mobile (M2M) solution was initiated to enhance Distribution workflow, with technology (SAP Work Manager with GIS Technology), upgrading our scheduling/dispatch tool (PCAD) and best in class process improvements. It was launched in Zone 3B in February 2017 and after a three-week period (to identify gaps/issues) was deployed across the province. The M2M project went live in the final Distribution Zone on April 24, 2017 and transitioned to sustainment on July 4, 2017.

M2M has two productivity savings components: Field Force Productivity (Capital) and Clerical Staff savings (OM&A).

Clerical Staff

M2M has automated the following:

- Automate creation of some work orders/notifications
- Auto scheduling of work types using improved scheduling technology

Some of this work was previously performed manually. This automation represents a reduction/ elimination of manual data entry.

Field force productivity

M2M has allowed for:

- Improved tools to support work planning, scheduling and dispatching.
- Improved data quality and timeliness
- Reduce re-work (truck rolls) when information is missing or incorrect
- Provide electronic access to documents, design standards and maps
- Allow field to create new asset notifications and clear erroneous system recorded defects

Target Setting Methodology

M2M Benefit Card Summary ($K)

Benefits were estimated and submitted as part of business case.
Benefit Card values were used to set the budget.

Category	Description	2018	2019	2020	2021	2022	Calculation Assumptions
OM&A	BASC Reduced Data Capture	2,121	2,164	2,207	2,207	2,207	reduction of 21 clerical FTE @ labour rate of $96, 492 PWU 57
OM&A/ Capital	FBC - Optimized Process	858	875	893	893	893	reduction of 8 clerical FTE @ labour rate of $102,456 PWU 58
Capital	Scheduling Optimization	8,196	8,359	8,527	8,527	8,527	5% of 900 FTE @ labour rate $157,844 PWU 01
Capital	Trouble / Outage Updates	765	780	796	796	796	4 calls x 47,504 trouble calls x 2 min@ labour rate $157,844 PWU 01
Capital	Maps & Standards Updates	838	855	872	872	872	map binder updates 90 hrs/ops/year + map issues 48 hrs/ops/year @ labour rate $157,844 PWU 01
Capital	Field - Data Capture	55	56	57	57	57	253 jobs reverified/yr @ 1 hr + 4 material issues/ops per year @ 1 hr @ labour rate $157,844 PWU 01
Capital	Courier and Printing	169	225	225	225	225	25 pages per job folder x 100,000 job folders + 75% of courier costs
Total Savings ($K)		**13,001**	**13,314**	**13,576**	**13,576**	**13,576**	

Calculation Methodology

Clerical Staff (OM&A) - Productivity savings are realized through reduced headcount. Baseline headcount is compared to actual headcount on a monthly basis. The change in headcount is quantified using actual labour rates.

Field Force Productivity (Capital) - A baseline of Labour Hours per unit has been quantified using SAP system data. Productivity Savings are calculated using Labor hours saved across the work program and compared to the established baseline. A unit based calculation compares historical labour hours per unit to actual.

2. Procurement Savings – OM&A and Capital – Background

In 2016, Supply Chain performed a comprehensive spend analysis to bundle procurement spend from across the company into natural sourcing categories for all goods and services. An opportunity analysis was conducted on these categories to identify and prioritize key initiatives and go-to-market strategies.

These strategies utilize industry best practices and streamlined processes. Examples of these strategies include; multiple feedback rounds in competitive sourcing events, enhanced direct negotiations for contract extensions and a redesigned sourcing process to make it faster and easier to do business with Hydro One. The opportunity analysis and category strategy developed were used to create a targeted savings percentage for each category.

During the investment planning process, Hydro One applied the targeted savings percentage to its work program by embedding the savings into the category related investment drivers.

Hydro One is unable to release the planned savings targets for categories that have not yet been executed as this would negatively impact Hydro One's ability to effectively negotiate with its suppliers. Below are examples of the target savings for completed sourcing events, including the weighted average savings target that was used to plan the procurement savings from 2018 to 2022.

Category	Target Savings %	Methodology	CAP	OM&A	CCC	2018	2019	2020	2021	2022
Equipment Rentals	7%	Hourly Rate	100%			2.9	3.3	3.5	3.7	3.9
General Contractors	4%	Hourly Rate	100%			1.0	1.1	1.2	1.3	1.3
Electrical Hardware	5%	Unit Cost	100%			3.2	3.8	3.8	4.0	4.1
General Hardware	10%	Unit Cost	70%	30%		0.1	0.1	0.1	0.1	0.1
Volume Rebates*	N/A	Total Rebates			100%	0.7	0.7	0.7	0.7	0.7
Other Categories						7.9	8.2	12.7	11.8	13.4
Total						**15.9**	**17.2**	**21.9**	**21.6**	**23.5**

*Note: volume rebate Savings are based on total dollar rebates received on all procurement spend and is not a percentage based target.

Target and Actual Calculation Methodologies

Categories that are services based and charged out on an hourly basis, such as Equipment Rentals and General Contractors, have savings estimates calculated based on the target hourly rate reduction. The target savings are based on all services provided within the category proportionately represented by estimated volume. To track actual savings, the negotiated savings rate (old hourly rate vs. new hourly rate) is multiplied by the actual volume purchased.

Categories for materials and equipment that have unit counts, such as Electrical Hardware and General Hardware, have savings estimates calculated based on the target unit cost reduction. The target savings are calculated by considering all units within the category proportionately represented by estimated volume. To track actual savings, the negotiated savings rate (old unit cost v.s new unit cost) is multiplied by the actual volume purchased.

An example of our corporate common cost savings are the Volume Rebates that Hydro One receives from suppliers from negotiated contracts. Not all contracts have volume rebates built into them and the target savings is based on a total dollar figure and not a percentage. Savings are tracked throughout the year based on actual credit notes or cash received.

3. Telematics – OM&A - Background

As a further safety initiative, Fleet Services has implemented Telematics Technology across the transport and work equipment in Hydro One. Telematics is an integrated use of telecommunications, including Global Positioning Systems (GPS) and informatics systems, which provide location of vehicles and live data. The benefits of telematics include:

- Provides insight to driving behaviours which allows us to reinforce road safety
- Allows for real-time management of corporate assets
- Provides solutions that allow operators to become more efficient and allows management to exercise better control of equipment
- Provides solutions to allow for driver behavior modification

The telematics initiative is one of the most significant initiatives underway in Fleet Services. The project was completed at the end of 2016 with a total of ~4,800 telematics units installed across various T&WE (Transport and Work Equipment) asset categories. The technology provides data that allows us to realize efficiencies in T&WE use, resulting in optimal usage of the assets. Some of the key metrics being tracked are fleet utilization, speeding, harsh driving, idling, PTO (power take-off) usage and fuel efficiency.

Target Setting Calculation

Reduction in Net Fleet Complement	2018	2019	2020	2021	2022
Light duty vehicles	*32*	*32*	*64*	*64*	*129*
Misc. (Chippers, Manlifts, Forklifts, etc)	*14*	*14*	*16*	*28*	*72*
Total	***46***	***46***	***80***	***92***	***201***

Reduction of 10% of Light duty and 5% of other specialized equipment as per the Telematics Business Case

Reduction in Fleet OM&A Requirement	2018	2019	2020	2021	2022
Fuel Savings Estimate Preliminary Estimate	*$0.5*	*$0.5*	*$0.5*	*$0.5*	*$0.0*
Maint. Savings $16k per unit estimate	*$0.7*	*$0.7*	*$1.3*	*$1.5*	*$3.2*
Extending life of parts replacement	*$0.0*	*$0.0*	*$0.3*	*$0.0*	*$0.0*
Total	***$1.2***	***$1.2***	***$2.1***	***$2.0***	***$3.2***
Allocation to Distribution (67%)	***0.8***	***0.8***	***1.4***	***1.3***	***2.2***

Assumptions
OM&A Savings: Blended avg. maintenance cost per unit for Light and Misc. vehicles (Annual) = $16,000
Savings anticipated from Fuel Savings in Speeding & Harsh event reduction - $500K/year (Based on 2017 estimate), due to Driver behavior modification
Additional one-time saving of $300K for maintenance through optimizing asset maintenance efficiency/extending life of parts replacement

Notes:

The table above represents the original savings targets.
In 2017 all committed savings were allocated to 'Fuel Savings Estimate' to correspond with approved tracking methodology.

Calculation Methodology - 2018

Encompassing all of Hydro One's vehicles across the province, savings are achieved through rationalization and improvement in driver behavior via the use of telematics to determine areas of consolidation and reduction of overall footprint. Savings are calculated as:

$$Savings = \left[\left(\frac{B}{A}\right) - C\right] \times D$$

Where:

A: Average kilometers per litre of fuel for 2016 (used as baseline year)
B: Total kilometers in 2018
C: Total litres of fuel in 2018
D: Average 2018 fuel cost per liter from ARI Reports[1]

Telematics - Capital - Background

The Fleet Right-Sizing Initiative leverages telematics data to identify all underutilized vehicles and remove all excess vehicles from service. The equipment complement has been reduced by 10% in 2017 and will be maintained at the new optimal level going forward. The goal is to have the right equipment and the right number of equipment to successfully execute the work programs and satisfy all customer staffing requirements.

[1] Data provided by ARI Global Feet Management Services, ARI Fleet Management System and Fuel Reports

Target Setting Methodology

	2018	2019	2020	2021	2022
Baseline	59.70	59.70	59.70	59.70	59.70
Updated Business Plan	39.72	44.59	45.10	45.41	45.76
Savings	**19.98**	**15.11**	**14.60**	**14.29**	**13.94**
Savings allocated to Distribution (67%)	**13.4**	**10.1**	**9.8**	**9.6**	**9.3**
Baseline Replacement Units	805	805	805	805	805
New Plan Units	503	473	473	473	473
New Plan Cost/unit	0.079	0.094	0.095	0.096	0.097
Baseline Cost/Unit	0.074	0.074	0.074	0.074	0.074

Calculation Methodology

Baseline capital replacement plan (monthly) is compared to actual Capital replacement. The variance to baseline in actual units and actual cost per unit is quantified to determine savings.

Other Initiatives

A similar framework is used when setting the anticipated targets and determining a calculation methodology for quantifying the benefits of the other initiatives.

Ex JT 2.31
Attachment 1, p. 15

Section 3: Contributions

3.1 Estimated Minimum Employer Contribution (Ensuing Years)

Year		2019		2020		2021
Employer Normal Actuarial Cost (including the PfAD)	$	66,463,461	$	65,993,735	$	65,248,200
Amortization Payments						
■ Going concern		0		0		0
■ Solvency		0		0		0
■ Sub-total	$	0	$	0	$	0
Application of Prior Year Credit Balance [1]		0		0		0
Application of available actuarial surplus		0		0		0
Estimated Minimum Employer Contribution	$	66,463,461	$	65,993,735	$	65,248,200

Note:

[1] As at the actuarial valuation date a $48,000,000 Prior Year Credit Balance exists, which may be applied to reduce Employer contributions in 2019, 2020 or 2021.

3.2 Estimated Maximum Employer Contribution (Ensuing Year)

	December 31, 2018	
Employer Normal Actuarial Cost	$	66,463,461
Greater of the Unfunded Actuarial Liability and the Unfunded Hypothetical Windup Liability		2,594,888,382
Estimated Maximum Employer Contribution	$	2,661,351,843

3.3 Timing of Contributions

Employer normal cost and member contributions: monthly and within 30 days of the month to which they pertain.

Amortization payments: monthly before the end of the month to which they pertain (or replaced by an equivalent letter of credit), if applicable.

Adjustment to contributions made since the valuation date: within 60 days from the date that this report is filed with the Pension Authorities.

OEB INTERROGATORY #203

Reference:
F-05-01-01 p.15 of 61, F-05-01 Table 2

Interrogatory:
At the first reference above, Hydro One has provided the pension valuation that underpins the pension cash contributions for the bridge and test years.

At the second reference above, Hydro One has presented its pension contributions for 2020 in Table 2, broken out between capital and OM&A.

a) For the bridge year 2019, please confirm if Hydro One chose to take a pension contribution holiday and whether it filed the related cost certificate within the legislated deadline of the Pension Benefits Act

b) In Table 2 of Ex F-5-1, Hydro One presents total pension contributions for the combined company of $78 million. Please explain the discrepancy compared to the total pension contributions for 2020 as presented in Section 3 of the pension valuation ($69 million).

c) If $69 million is in fact the correct contribution amount, then please prepare Table 2 of Ex F-5-1 with the correct amounts and allocations between the Transmission and Distribution businesses.

d) As part of the current application, Hydro One has capitalized amounts related to pension costs for the years 2021 and 2022. Please provide the amount of pension costs being capitalized for each of these years.

e) Please explain what underpins the pension costs being capitalized for those years. If they are an estimate, please explain the basis for this estimate.

f) Please explain where the variance is captured between what Hydro One proposes as the capital component of its pension costs compared to what it actually capitalizes in respect to its pension costs.

Witness: Samir Chhelavda

Response:

a) Hydro One filed a cost certificate for 2019 within the legislated deadline of the *Pension Benefits Act* to preserve its right to take a pension contribution holiday for the second part of 2019 as permitted under the legislation. A copy of the cost certificate is included as Attachment 1 to this interrogatory response. Since then, Hydro One received a letter from the Financial Services Regulatory Authority ("FSRA") dated July 17, 2019 confirming that the post-May 1 Rules (as defined in the evidence) will apply to Hydro One retroactively to March 1, 2018 ("FSRA Letter") once FSRA approves the Inergi Transfer (as defined in the evidence). The FSRA Letter is included as Attachment 2 to this interrogatory response.

Under the post-May 1 Rules, a private employer such as Hydro One may only take a contribution holiday in a year if an actuary certifies the plan has a funded ratio of at least 105% calculated on a wind-up basis. Provided the Inergi Transfer is approved by FSRA as anticipated, barring extraordinary circumstances such as the Hydro One Pension Plan assets experiencing at minimum a 56% investment return over two years, Hydro One will not be legally permitted to take a contribution holiday in any of 2020, 2021 or 2022, notwithstanding the fact that it filed a cost certificate for 2019. Please see the Eckler Report dated August 1, 2019, included as Attachment 3 to this interrogatory response for more details.

b) Table 2 of Ex F-5-1 presents total pension contributions for the company of $78 million. This is based on a forecast provided by the actuaries in mid-December of 2017. The Actuarial Valuation is as at December 31, 2017 and was filed April 30, 2018. The difference between the $69 million noted in the valuation and the $78 million forecast contributions presented in Table 2 of Ex F-5-1 is that the valuation is based on actual plan headcount as at December 31, 2017 whereas the forecast amount of $78 million accounts for future entrants into the plan, particularly the Customer Service Operations (CSO) or call-center employees (as described in Exhibit F, Tab 5, Schedule 1 page 5), which would have an impact on the 2020 pension contributions among other updated assumptions. Any variance between the OM&A portion of the forecast pension contributions included in rates and the actual pension contributions will be captured in the pension cost variance account. Please refer to part f) below for discussion on variances in relation to the capital portion.

Witness: Samir Chhelavda

c) Hydro One believes that the $78 million represents the appropriate amount of pension costs for 2020 based on the latest information available. Please see response to part b) above.

d) As part of the current application, pension costs capitalized in 2021 for Hydro One Transmission: $29 million, based on total consolidated capitalized pension costs of $48 million for Transmission and Distribution.

As part of the current application, pension costs capitalized in 2022 for Hydro One Transmission: $29 million, based on total consolidated capitalized pension costs of $50 million for Transmission and Distribution.

e) Capitalization of pension costs is based on the forecasted labour cost attributable to capital based on the forecasted work program for that year.

f) In respect to the variance between what Hydro One proposes as the capital component of its costs and subsequently what becomes the approved capitalized amount in rates, compared to what it actually capitalizes in respect to its pension costs is not currently tracked as part of a separate variance account. Unlike the OM&A component which has an established account, the capital component would be in essence captured as part of the Cumulative In-Service Variance Account (CISVA).

Moreover, as Hydro One earns a return on capital vs. OM&A which is recovered as expenses incurred capital related variances would not have a material impact on revenue requirement. Additionally, when it is time to rebase, the revenue requirement is calculated based on actual rate base and would reflect actual capitalized amounts of pension.

Lastly, Hydro One notes that currently, it does not have any established accounts that track capital related variances between OEB approved amounts in rates and actual amounts spent.

Witness: Samir Chhelavda