

EB-2019-0082

Hydro One Networks Inc.

**Application for electricity transmission rates for the
period from January 1, 2020 to December 31, 2022**

AMPCO Compendium

Panel #2

1

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.

2 Hydro One's 2019 OM&A expenses are expected to be \$38 million or 9.6 percent lower
3 than the 2018 plan funding envelope. This OM&A reduction will be achieved largely
4 through sustained productivity gains, a one-time extension of Hydro One's planned asset
5 maintenance cycles, and corporate cost reductions, which are described further within
6 Section 6 of this Exhibit. Hydro One plans to increase its 2020 OM&A expenditures by 5
7 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).

Witness: Joel Jodoin

UNDERTAKING - JT 2.19

Reference:

I-12-AMPO-035

Undertaking:

To explain the calculation of the vehicle utilization rate, giving an example.

Response:

The details of how Utilization Rate is calculated are indicated in the table below.

in \$ millions, u.o.s.	2015	2016	2017	2018	
Operating Cost	133.1	133.2	133.7	135.7	Ⓐ
Utilization, <i>in millions of hours</i>	6.2	6.2	5.8	5.7	Ⓑ
Utilization Rate	21.4	21.3	23.0	24.0	Ⓐ ÷ Ⓑ

UNDERTAKING - JT 2.20

Reference:

I-07-SEC-006

Undertaking:

To provide the telematics information utilization.

Response:

Telematics provides utilization related information which is available for varying time periods and durations. A weekly summary is used to assess utilization performance of different asset classes and how vehicles are being utilized across Hydro One.

Reports identify individual transport and work equipment details and their respective utilization related information such as:

- Run Time - Over the time period, the total number of hours, minutes, and seconds the engine was operating
- Idle Time - During the period, the total number of hours, minutes, and seconds the engine was idling (where each idling event must be at least five consecutive minutes)
- PTO Time - Total time the vehicle's PTO (power take-off) components were engaged over the time period
- Distance - Total distance travelled by the vehicle over the time period, in kilometers
- Odometer - The vehicle's current odometer reading at the end of the period
- Engine Hours - The total lifetime engine hours of the vehicle, as of the end of the time period

Telematics data is then analyzed and shared with managers. Fleet would identify under-utilized assets and reallocate them to areas of need to improve utilization, and to ensure we are operating efficiently and maintaining optimal level of fleet complement.

Additionally, telematics information is used to close gaps identified in financial controls through exception reporting and spot checking of items billed to Hydro One. For example, telematics data is used to validate highway 407 ETR transponder usage and fuel transaction verification by cross referencing transaction place and time against telematics location of the asset at the same time.

AMPCO INTERROGATORY #39

Reference:

ISD-GP-12 p.4 Table 1

Interrogatory:

a) Please provide table 1 for the years 2015 to 2019.

b) Please provide the total number of Light, Heavy and Off-road vehicles and helicopters in each of the years 2015 to 2018 an forecast for 2019 to 2022.

c) Please provide the number Light, Heavy and Off-road vehicles and helicopters replaced each year for the years 2015 to 2019 and the age at replacement.

Response:

a)

Table 1 - Forecast of Acquisitions for 2015 to 2019 (Tx Allocation)
(\$ millions)

Equipment Type	2015	2016	2017	2018	2019 Forecast
	Cost	Cost	Cost	Cost	Cost
Light	4.8	4.4	4	0	3.4
Heavy	8.2	10.2	4.7	5.1	3.9
Off-Road	3.4	4.2	3.4	0.8	0.5
Miscellaneous	3.6	1.6	1.3	0.4	0.9
Service Equipment	0.4	0.4	0.3	0.8	0.9
Helicopter	-	-	-	-	2
Telematics²	2	0.9	0.2	-	-
Total ¹	22.4	21.7	13.9	7.1	11.6

Light– cars, SUVs, pickups, vans

Heavy– service trucks, highway tractors, radial boom derricks (RDB), bucket trucks

Off Roads – rubber tire, tracked equipment

Miscellaneous – boats, chippers, tensioners, manlifts, forklifts

Service Equipment – snowmobiles, ATVs, managed Fleet Services.

¹Total investment costs are based on average unit costs and relate to approximately 400 units annually

² Telematics Spend was incurred in years 2015-2017, the table was updated to accommodate those spend

b) Below is the total vehicle count at end of year for each year for 2015 to 2018, and Forecast for 2019 to 2022.

	Actual				Forecast			
	2015	2016	2017	2018	2019	2020	2021	2022
Light	3,062	3,136	2,700	2,676	2,635	2,635	2,635	2,635
Heavy	1,444	1,479	1,414	1,446	1,419	1,419	1,419	1,419
Off Road	482	498	476	467	459	459	459	459
Helicopters	8	8	7	7	8	8	8	8

1 c) Below is the count of vehicles replaced in each year, and their age at replacement.

2

Replacement Count	Actual				Forecast
	2015	2016	2017	2018	2019
Light	415	341	277	2	281
Heavy	70	80	40	20	53
Off Road	25	22	3	4	3
Helicopters	-	-	-	-	1

3

Age at Replacement	Actual				Forecast
	2015	2016	2017	2018	2019
Light	8	8	8	9	9
Heavy	13	13	12	14	13
Off Road	28	26	40	14	31
Helicopters	-	-	-	-	18

1 innovation and policy initiatives (for example: the OEB's Advisory Committee on
2 Innovation, and the IESO's Innovation Roadmap and Market Renewal). Additional
3 funding has also been allocated to the Transmission Standards Program to revise existing
4 standards and maintenance procedures, to account for new equipment and technologies,
5 and to address compliance requirements.

6
7 The 2019 bridge year forecast is slightly higher than 2018 historical year forecast and
8 planned expenditures mainly due to the Transmission Standards Program which will
9 facilitate the review and revision of standards based on an established revision cycle.

10
11 The 2018 actual expenditures were \$0.2 million higher than the 2018 plan and \$0.1
12 million higher than 2017 actual expenditures, mainly due to increases in the Customer
13 Power Quality ("PQ") program to address higher volumes of customer enrollment in the
14 PQ meter integration program, an increase in third party PQ audit activities, and the need
15 for advanced PQ software.

16
17 The 2017 actual expenditures were slightly more than planned due to an increase in the
18 RD&D program, partially offset by delays in the revision of standards. Over the 2015 to
19 2016 period, actual expenditures trended downward, reflecting the transition from the
20 multi-year renewable generation and smart grid programs into the newly integrated
21 RD&D program.

22 23 **4. OPERATIONS**

24
25 Operations OM&A expenditures reflect the costs of performing the central transmission
26 operations function at Hydro One's Ontario Grid Control Centre. The Operations
27 function manages the real-time operation of Hydro One's transmission system equipment
28 including: monitoring and controlling transmission assets, coordinating and scheduling

Witness: Joel Jodoin

1 planned outages, reacting to system contingencies, provisioning for customer
2 notifications, and reporting on the performance of the transmission system. Operations
3 OM&A activities are described in additional detail in Exhibit F, Tab 1, Schedule 5.

4
5 Relative to the 2019 bridge year forecast, Hydro One proposes to spend an additional
6 \$2.8 million in the 2020 test year. This increase is necessary to reinstate the Operations
7 Support work programs that were part of the unsustainable reduction in 2019 to align
8 with the OM&A envelope in the inflation application². However, the 2020 test year
9 proposed expenditures still remain below previous plan amounts.

10
11 The 2019 bridge year forecast is lower than 2018 actual and plan expenditures. The
12 decrease is mainly due to the disallowance of the recovery of executive compensation
13 through rates brought forth in Bill 2 legislation, and a decrease in Operations
14 expenditures resulting from the corporate costing initiative conducted by management.
15 There is also a decrease to the Operation Support expenditures due to a single year
16 reduction made by reprioritizing and deferring certain work programs to align the OM&A
17 envelope in the 2019 inflation application, which is reinstated in the 2020 test year, as
18 noted above.

19
20 2018 actuals are lower than the 2018 plan and 2017 actual expenditure, mainly due lower
21 Operations staff costs (i.e., lower pension burdens, adjustments based on average vacancy
22 rates, and applied recoveries).

23

² Hydro One's 2019 Transmission Revenue Requirement Application, EB-2018-0130.

Witness: Joel Jodoin

UNDERTAKING - JT 2.14

Reference:

Undertaking:

To provide the Q2 FTE actuals for 2019.

Response:

The undertaking response provides the transmission allocated Q2 FTE actuals for 2019 which are relevant to this Application.

The regular FTEs are approximately 6% below budget largely due to vacancies. This is aligned with the current assumption of a 7% vacancy rate reduction for corporate groups.

For regular PWU represented positions, typically these become vacant throughout the year and are filled towards the end of the year through a “mass hire”. During the year this work is completed by PWU HH employees who are on and off boarded as required.

Overall Hydro One believes the 2019 FTE trend is on track with the forecasted budget.

2019 Transmission FTEs vs. Q2 Actuals				
	2019 Budget	2019 Q2 YTD FTE	2019 Q2 Actual vs. 2019 Budget	
			Number	Percentage
Regular	2,664	2,502	-162	-6 %
Non-Regular	1,811	1,869	58	3%
Total	4,475	4,371	-104	-2%

AMPCO INTERROGATORY #77

Reference:

F-04-01

Interrogatory:

For each of the years 2015 to 2018, please complete the following table:

Headcount	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Jan 1												
Hires												
Retirements												
Other Exits												
Vacancy Lag												

FTEs	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Jan 1												
Hires												
Retirements												
Other Exits												
Vacancy Lag												

Response:

The following tables were populated for regular employees, which correspond with retirements and other exits. The vacancy lag is the average number of days to fill a vacancy per month. For regular staff, Hydro One assumes 1 headcount equals 1 FTE. Hires include external hires only (excludes internal moves).

2015

Headcount	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Jan 1	5278	5272	5260	5246	5239	5229	5218	5213	5247	5246	5248	5239
Hires	2	7	5	5	4	5	7	2	5	9	4	1
Retirements	-18	-8	-18	-23	-18	-15	-32	-12	-15	-12	-7	-8
Other Exits	-5	-4	-1	-5	-0	-3	-8	-3	-0	-4	-0	-2
Vacancy lag	91	91	79	69	75	99	96	106	82	87	75	65

2016

Headcount	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Jan 1	5299	5282	5285	5277	5260	5265	5227	5264	5282	5271	5263	5303
Hires	2	3	10	4	6	18	2	10	10	7	3	3
Retirements	-16	-11	-17	-11	-15	-6	-40	-19	-23	-14	-13	-14
Other Exits	-6	-4	-4	-3	-5	-11	-4	-4	-1	-7	-1	-5
Vacancy lag	75	84	75	83	84	76	80	75	78	84	86	91

2017

Headcount	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Jan 1	5364	5357	5381	5368	5344	5326	5284	5266	5250	5258	5237	5231
Hires	21	9	16	7	12	7	8	5	8	23	9	10
Retirements	-35	-19	-15	-19	-27	-17	-45	-27	-28	-15	-12	-19
Other Exits	-4	-6	-6	-8	-16	-11	-14	-3	-5	-6	-12	0
Vacancy lag	71	77	108	94	81	88	81	84	89	69	77	98

2018

Headcount	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Jan 1	5268	5263	5505	5564	5511	5566	5532	5519	5512	5566	5553	5553
Hires	9	10	261*	28	17	14	12	8	9	31	16	3
Retirements	-31	-10	-13	-18	-18	-8	-38	-17	-14	-6	-13	-14
Other Exits	-21	-9	-9	-9	-7	-6	-14	-9	-7	-7	-20	0
Vacancy lag	78	86	105	109	110	103	103	81	55	80	91	85

*Includes employees added as part of the CSO acquisition on March 1, 2018

Note: monthly headcount cannot be derived by taking previous month headcount, adding hires, and subtracting retirements and other exists, due to the following reasons:

1. Employees who move from casual or temporary to regular, do not count as an external hire, but would increase headcount.
2. Employees moving on or off of a long term leave will impact the headcount, without impacting hires, retirements or exits.
3. Hires, retirements and other exits completed close to month-end may not impact headcount until the following month.

AMPCO INTERROGATORY #86

Reference:

F-04-01

Interrogatory:

a) Please provide Hydro One's absenteeism rate for the years 2014 to 2018.

b) Please provide Hydro One's turnover rate for the years 2014 to 2018.

Response:

The information presented below includes regular employees only, so as not to weight the figures with temporary or casual employees – many of which are not part of the workforce for the entire year.

a) The absenteeism rates (the average number of sick days taken) of regular employees for the years 2015 to 2018 are as follows:

Year	Absenteeism Rate ¹
2015	7.4 days
2016	8.0 days
2017	7.8 days
2018	8.0 days

¹ The absenteeism rate excludes outliers with greater than 90 days of absence.

b) Hydro One turnover rates of regular employees for the years 2015 to 2018 are as follows:

Year	Turnover Rate
2015	4.2%
2016	4.8%
2017	6.9%
2018	5.6%

Hydro One turnover includes retirements, as well as voluntary and involuntary turnover. The higher turnover rate in recent years is largely attributable to increasing retirements (please see Exhibit I, Tab 08, Schedule PWU-014) and increasing MCP turnover, possibly related to the introduction of a defined contribution pension which is allows for greater mobility.

2. DEPRECIATION EXPENSE

In accordance with the Board's Decision (EB-2016-0160), Hydro One Transmission used the Foster methodology, updated to reflect the results from the new Depreciation Study for Transmission assets only, completed in 2017 for determining the depreciation rates proposed to be used in the calculation of depreciation expenses for 2020 and 2022. Hydro One has historically employed the half-year rule in calculating depreciation expense for capital additions, and has continued this practice for the test years.

Detailed depreciation schedules are filed at Exhibit F, Tab 6, Schedule 1, Attachment 2.

The depreciation expense for 2020 to 2022 is summarized in the table below.

Table 1: Transmission Depreciation Expense (\$ Million)

Description	Historic				Bridge	Test		
	2015	2016	2017	2018	2019	2020	2021	2022
Depreciation On Fixed Assets	339.0	350.8	370.6	387.3	416.7	421.0	441.4	463.6
Less Capitalized Depreciation	(9.0)	(12.0)	(12.6)	(13.0)	(13.1)	(13.3)	(13.5)	(13.6)
Asset Removal Costs	29.0	34.6	38.3	37.7	57.3	54.1	59.7	61.5
Losses/(Gains) On Asset Disposition	-	(0.1)	(2.0)	(0.5)	-	-	-	-
Total	359.0	373.3	394.3	411.5	460.8	461.8	487.6	511.5

AMPCO INTERROGATORY #87

Reference:

F-04-01

Interrogatory:

Please provide a table that compares forecast and actual depreciation for the years 2015 to 2018.

Response:

Please see below for a comparison of Board approved amounts and actuals for 2015 through 2018, for Transmission.

Description	2015			2016			2017			2018		
	OEB Approved	Historical	Variance	OEB Approved	Historical	Variance	OEB Approved	Historical	Variance	OEB Approved	Historical	Variance
Depreciation on Fixed Assets	349.2	339.0	(10.2)	364.1	350.8	(13.3)	381.3	370.6	(10.7)	402.0	387.3	(14.7)
Less: Capitalized Depreciation	(6.4)	(9.0)	(2.6)	(6.7)	(12.0)	(5.3)	(12.1)	(12.6)	(0.5)	(12.8)	(13.0)	(0.2)
Asset Removal Costs	38.1	29.0	(9.1)	33.7	34.6	0.9	53.4	38.3	(15.1)	69.2	37.7	(31.5)
Losses/ (Gains) on asset disposition	-	-	-	-	(0.1)	(0.1)	-	(2.0)	(2.0)	-	(0.5)	(0.5)
Total	380.9	359.0	(21.9)	391.1	373.3	(17.8)	422.6	394.3	(28.3)	458.4	411.5	(46.9)

14 **figures in millions*

Witness: Samir Chhelavda

Table 1: In-Service Capital Additions 2014 – 2022 (\$ millions)

	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*																		-0.3	-0.3	-0.3	-0.4		
Total																		950.7	1,037.1	1,297.7	1,293.0		

¹ New Plan represents the 2016 Bridge Year forecast from 2017-2018 Transmission Rate Application (EB-2016-0160)

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

Witness: Andrew Spencer

1 **6. FULL TIME EQUIVALENTS (FTES)²**

2

3

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

4

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

- 7 • in 2018, Hydro One repatriated the Customer Contact Centre resulting in
8 approximately 280 regular employees and 130 non regular employees joining
9 Hydro One. By bringing this work in-house, contact centre agents will be able to
10 better serve customers by providing a more seamless customer experience. Since
11 this work is Distribution focused, none of the compensation related to the contact
12 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

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 <i>Estimated by quantifying the expected FTE reductions in Engineering through the implementation of EDM software enhancements</i>	\$ -	\$ -	\$ -	\$ 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 <i>Estimated by utilizing Telematics data on fleet utilization and then measures the expected unit based reduction in the capital plan</i>	\$ -	\$ 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 <i>Expected Capital allocation based on historical spend for Transmission and Stations efficiencies and Temporary work HQ. Calculated by measuring expected benefit per occurrence</i>	\$ -	\$ 1.8	\$ 0.6	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.7	\$ 0.7	Savings Calculated per occurrence for TWHQ (varies by zone - approx. \$185). Baseline for Transmission and Stations efficiencies (BGIS Outsourcing) is 650k.
		OT Reductions	Overtime Reductions <i>Targeted effort to reduce the number of relative OT hours worked as a % vs prior year baseline</i>	\$ -	\$ 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 <i>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)</i>	\$ 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 <i>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</i>	\$ -	\$ -	\$ -	\$ 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 <i>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</i>	\$ -	\$ -	\$ -	\$ -	\$ 10.9	\$ 27.4	\$ 49.4	\$ 67.9	\$ 80.9	N/A
		Scheduling Tool	Cost Reduction from Software Implementation <i>Estimated by quantifying the expected FTE reductions in Scheduling Staff through the implementation of software enhancements</i>	\$ -	\$ -	\$ 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 <i>Utilize unit reporting to compare like for like work in actuals vs baseline year to determine \$ savings per operation.</i>	\$ -	\$ -	\$ -	\$ 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 <i>Lower cost resulting from Inergi IT Contract renegotiation. Measured against baseline spend for same scope of work</i>	\$ 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 <i>Estimated by quantifying the expected FTE and contractor reductions in Engineering through the implementation of PCMIS software enhancements</i>	\$ -	\$ -	\$ 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 <i>Estimated by utilizing Telematics data on fleet utilization and then measures the expected unit based reduction in the capital plan</i>	\$ -	\$ 0.5	\$ 0.2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	There are no savings included in the plan years.
		Forestry Initiatives	Lower Cost per KM <i>Estimated based on reductions in cost due to staff policy for inclement weather and expected overall unit volume reduction in trouble calls</i>	\$ -	\$ -	\$ 1.3	\$ 2.1	\$ 2.0	\$ 3.4	\$ 2.0	\$ 2.4	\$ 1.9	Estimate per occurrence 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 <i>Expected OM&A allocation based on historical spend for Transmission and Stations efficiencies and Temporary work HQ. Calculated by measuring expected benefit per occurrence</i>	\$ -	\$ 0.8	\$ 1.8	\$ 1.2	\$ 1.2	\$ 1.2	\$ 1.2	\$ 1.2	\$ 1.2	Savings Calculated per occurrence for TWHQ. See above in this table.
		Network Operating Efficiencies	Operational Program Efficiencies <i>Unit cost reduction in completing Load Transfer studies through Network Operating group</i>	\$ -	\$ -	\$ 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 <i>Targeted effort to reduce the number of relative OT hours worked as a % vs prior year baseline</i>	\$ -	\$ 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

				Updated Savings									
Category	Initiative Grouping	Measurement and Expected Benefit		2016A	2017A	2018A	2019	2020	2021	2022	2023	2024	Baseline
	Procurement	Lower Cost per Unit - Historical Baseline vs Actual <i>Savings are estimated at a category level based on historical spend, expected and achieved negotiated savings, and updated per business plan assumptions</i>		\$ 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 <i>Estimated by quantifying the expected FTE reductions in Scheduling Staff through the implementation of software enhancements</i>		\$ -	\$ -	\$ 0.2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	See Scheduling Tool category within the Capital section above in this table
	Wrench Time	Lower Cost Per Unit of Operation <i>Utilize unit reporting to compare like for like work in actuals vs baseline year to determine \$ savings per operation.</i>		\$ -	\$ -	\$ 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 <i>Identified reductions in vacancies and contractor and consulting spending</i>										Baseline is \$303.9M (2019 Prior Plan (2018-2023). Tx is allocated by B&V methodology.
				\$ 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 <i>Savings are estimated at a category level based on historical spend, expected and achieved negotiated savings, and updated per business plan assumptions (Corporate Allocation)</i>										Baseline is \$0. Savings are quantified as a Early Pay credit (negotiated cost reduction) received from Vendors.
				\$ 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	

Table 1: Standard Hourly Labour Rate Composition
Regional Maintainer Electrical – Regular Staff

	Historic				Bridge	Test	
	2012	2013	2014	2015	2016	2017	2018
Payroll Obligations	77.56	78.32	79.04	79.63	84.63	85.25	85.88
Contractual time away from work	9.10	9.33	9.42	9.49	9.02	9.09	9.16
Time not directly benefiting a specific Program or Project	8.30	8.51	8.59	8.66	7.57	7.63	7.68
Field Supervision and Technical Support	17.24	18.74	17.88	18.01	16.14	16.26	16.38
Support Activities	16.80	18.10	18.07	18.21	17.64	17.77	17.90
Hourly Rate	129.00	133.00	133.00	134.00	135.00	136.00	137.00

The cost elements embedded in the standard rate as illustrated in Table 1 are explained in the pages following, using the position of Regional Maintainer Electrical – Regular Staff and the 2016 cost composition, as an example.

2.1.1 Payroll Obligations (\$84.63)

A brief description of the cost elements included in this category is provided below. Compensation, wages and benefits are more fully explained in Exhibit C1, Tab 4.

(a) Base Labour and Payroll Allowances (56.3% of Payroll Obligations)

Base pay is contractually negotiated and reflected in wage schedules. Payroll allowances are also contractually negotiated and stated in collective agreements. Regular staff (PWU) is entitled to travel, footwear, and on-call allowances. Casual trades are entitled to board and travel allowances where circumstances require it.

Witness: Glenn Scott

Table 1: Standard Hourly Labour Rate Composition
Regional Maintainer Electrical (Stations) – Regular Staff

	Historic				Bridge	Test		
	2015	2016	2017	2018- Forecast	2019	2020	2021	2022
Payroll Obligations	79.63	78.61	79.23	78.08	76.11	76.63	77.15	77.68
Contractual time away from work	9.49	9.03	9.09	9.43	9.70	9.80	9.89	9.99
Time not directly benefiting a specific Program or Project	8.66	7.57	7.63	7.91	8.14	8.22	8.30	8.38
Field Supervision and Technical Support	18.01	15.39	15.51	14.44	14.67	14.82	14.96	15.10
Support Activities	18.21	17.40	16.54	16.14	16.37	16.53	16.69	16.85
Hourly Rate	134.00	128.00	128.00	126.00	125.00	126.00	127.00	128.00

The cost elements embedded in the standard labour rate as illustrated in Table 1 are explained in this Exhibit, using the position of Regional Maintainer Electrical – Regular Staff and its 2019 cost composition, as an example. The reduction in the labour rate from 2015 to 2016 largely relates to a reduction in operating costs resulting from revised pension valuation reports, as well as a reduction in the number of supervisory staff within the Field Supervision and Technical Support category. Further reductions from 2016 to 2019 represent an increased billable ratio resulting from less downtime and more time charged to projects, as well as a further reduction to payroll benefits.

1.1 PAYROLL OBLIGATIONS (\$76.11)

A brief description of the cost elements included in this position category is provided below. Hydro One’s compensation, wages and benefits costs are more fully explained in Exhibit F, Tab 4, Schedule 1.

Witness: Joel Jodoin

UNDERTAKING - JT 2.22

Reference:

I-12-AMPCO-067
C-09-02, Table 1

Undertaking:

To provide the billable ratio and its derivation.

Response:

The actual billable hours ratios for Transmission and Stations organization which is indicative of the majority of the transmission work of variable staff, including both regular and non-regular employees for 2015-2018 are provided below:

(%)	2015	2016	2017	2018
Billable Hours Ratio	84	84	84	83
Non-Billable Hours Ratio	16	16	16	17
Total Hours	100	100	100	100

The description of the billable hours ratio components are outlined below:

- **Billable Hours** – represents the view of the timesheet hours that were charged to work program or other recoverable work (capital, OMA, external)
- **Non Billable Hours** – represents the hours that do not directly impact the work program. The hours include vacation, sickness, training, etc.

Billable Hours Ratio = Billable Hours / Total Hours

COSTING OF WORK: LABOUR RATE

1. LABOUR RATE

Labour costs for Hydro One's work execution functions are distributed directly to benefiting programs and projects by using timesheets, consistent with common industry practice. Standard hourly labour rates are used to allocate costs to Hydro One's work programs and projects. This Attachment outlines Hydro One's methodology in deriving the labour rate and provides an example of a typical rate and its components.

The labour rate is "fully loaded" to ensure that all associated support costs required to deploy resources and equipment are accurately and cost-effectively distributed. Included in the "fully loaded" costs are elements associated with compensation. Hydro One's workforce planning and employee compensation strategies are discussed in Exhibit F, Tab 4, Schedule 1 which outlines the total costs of compensation reflected in the Hydro One Transmission business plan, including, but not limited to, the components of payroll obligations such as base pay, overtime, burdens, pension and OPEB and other costs like short-term incentive payments for management staff.

On an annual basis, the standard labour rates are derived based on information gathered through the annual budgeting process. Total payroll and expense costs along with an assignment of support activity costs, divided by the forecast billable hours, create the standard labour rate. Table 1 shows an example of the composition of a standard labour rate for one category, the Regional Maintainer Electrical Stations – Regular Staff, over the period 2015 to 2022.

Table 1: Standard Hourly Labour Rate Composition
Regional Maintainer Electrical (Stations) – Regular Staff

	Historic				Bridge	Test		
	2015	2016	2017	2018-Forecast	2019	2020	2021	2022
Payroll Obligations	79.63	78.61	79.23	78.08	76.11	76.63	77.15	77.68
Contractual time away from work	9.49	9.03	9.09	9.43	9.70	9.80	9.89	9.99
Time not directly benefiting a specific Program or Project	8.66	7.57	7.63	7.91	8.14	8.22	8.30	8.38
Field Supervision and Technical Support	18.01	15.39	15.51	14.44	14.67	14.82	14.96	15.10
Support Activities	18.21	17.40	16.54	16.14	16.37	16.53	16.69	16.85
Hourly Rate	134.00	128.00	128.00	126.00	125.00	126.00	127.00	128.00

The cost elements embedded in the standard labour rate as illustrated in Table 1 are explained in this Exhibit, using the position of Regional Maintainer Electrical – Regular Staff and its 2019 cost composition, as an example. The reduction in the labour rate from 2015 to 2016 largely relates to a reduction in operating costs resulting from revised pension valuation reports, as well as a reduction in the number of supervisory staff within the Field Supervision and Technical Support category. Further reductions from 2016 to 2019 represent an increased billable ratio resulting from less downtime and more time charged to projects, as well as a further reduction to payroll benefits.

1.1 PAYROLL OBLIGATIONS (\$76.11)

A brief description of the cost elements included in this position category is provided below. Hydro One’s compensation, wages and benefits costs are more fully explained in Exhibit F, Tab 4, Schedule 1.

Witness: Joel Jodoin

1 a) Base Labour and Payroll Allowances (64.4% of Payroll Obligations)

2
3 Base pay is contractually negotiated and reflected in wage schedules. Payroll
4 allowances are also contractually negotiated and stated in collective agreements.
5 Regular staff (e.g., PWU) is entitled to travel, footwear, and on-call allowances.
6 Casual trades are entitled to board and travel allowances where circumstances
7 require it.
8

9 b) Company Benefits (29.6% of Payroll Obligations)

10
11 For regular staff, this is comprised of pension and current and post-employment
12 benefits and health, dental, etc. For non-regular staff (for example, casual trades),
13 this is comprised of pension and welfare contributions made on behalf of the non-
14 regular employee. These contributions are significantly lower than those made on
15 behalf of regular employees.
16

17 c) Government Obligations (6% of Payroll Obligations)

18
19 This consists of Canada Pension Plan, Employment Insurance, Employee Health
20 Tax and Workplace Safety and Insurance Board contributions.
21

22 **1.1.1 CONTRACTUAL TIME AWAY FROM WORK (\$9.70)**

23
24 This category consists primarily of employee vacation and statutory holidays, and all are
25 established and identified in the relevant collective agreements. Sickness and accident
26 costs are also included and are based on historical trends.

1 **1.1.2 TIME NOT DIRECTLY BENEFITING A SPECIFIC PROGRAM OR**
2 **PROJECT (\$8.14)**

3
4 This category includes time for attendance of safety meetings, housekeeping and
5 downtime often created due to inclement weather. These estimates are based primarily
6 on historical trends.

7
8 **1.1.3 FIELD SUPERVISION AND TECHNICAL SUPPORT (\$14.67)**

9
10 This category includes the costs associated with field trades supervision and other
11 management and technical staff providing support services to manage and monitor the
12 status of the assigned programs and projects.

13
14 **1.1.4 SUPPORT ACTIVITIES (\$16.37)**

15
16 a) Administrative Expenses and Support (68.3% of Support Activities)

17
18 These costs include administrative expenses such as travel costs, cell-phones and
19 other miscellaneous expenses that cannot be specifically attributed to a particular
20 program or project. Also included is an assignment of costs for clerical support
21 activities and other centralized support to facilitate work management system
22 requirements.

23
24 b) Work Methods and Training (14.5% of Support Activities)

25
26 These are costs to design, develop, continually update, maintain and deliver work
27 methods and training programs. Costs are assigned based on the forecast

1 consumption of these services as agreed to by the work methods and training
2 function and service recipient.

3

4 c) Health, Safety and Environmental Support (17.2% of Support Activities)

5

6 These are costs to design, develop, update, maintain and deliver health, safety and
7 environmental practices primarily for staff working in field locations. Costs are
8 assigned based on the forecast consumption of these services as agreed to by the
9 health, safety and environment function and the service recipient.

1 Fleet Management Services has adapted to the changing needs of its business by:

- 2
- 3 • converting the Company's fixed zone model for responding to internal requests to
- 4 a mobile model, with maintenance garages strategically placed throughout the
- 5 province to facilitate a more rapid turnaround for vehicle servicing;
- 6 • optimizing the number of geographical locations served through implementation
- 7 of garage hubs;
- 8 • reducing equipment downtime and improving equipment utilization;
- 9 • providing more competitive and cost-efficient fleet support, enhanced through the
- 10 procurement of modern maintenance facilities;
- 11 • adopting a flexible service delivery model that matches the nomadic and variable
- 12 work program needs of Hydro One's lines of business with service delivery
- 13 options that mirror private sector practices (e.g., shift work, extended hours of
- 14 service and mobile service delivery);
- 15 • developing more timely, strategic and cost-efficient processes for equipment
- 16 procurement and disposal;
- 17 • developing a long-range capital replacement program; and
- 18 • adopting data collection and information management systems that match the
- 19 nomadic requirements of the company's business units.