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**Frank D'Andrea**

Vice President, Regulatory Affairs & Chief Risk Officer



BY COURIER

October 22, 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 – Hydro One Network's 2020-2022 Transmission Rates Application –  
Undertaking J-1.01**

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During Hydro One's Oral Hearing Presentation on Monday, October 21, 2019, the company provided updates to its rates revenue requirement and bill impacts for the 2020 Test Year, relative to the blue-page evidence filed on June 19, 2019.

The company committed to summarizing and updating relevant tables from its blue-page evidence which are being provided as part of undertaking J-1.01.

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

Sincerely,

ORIGINAL SIGNED BY KATHLEEN BURKE ON BEHALF OF FRANK D'ANDREA

Frank D'Andrea



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

Components	2018 <sup>1</sup>	2019 <sup>2</sup>	2020 Blue Page	2020 Accelerated CCA <sup>4</sup>	2020 Actual Debt Issuances <sup>5</sup>	2020 Updated Pension Valuation <sup>6</sup>	2020 OPEB ISA Assumptions <sup>7</sup>	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
<b>Total Revenue Requirement</b>	<b>1,623.8</b>	<b>1,644.4</b>	<b>1,673.8</b>	<b>(23.6)</b>	<b>(8.2)</b>	<b>(0.7)</b>	<b>0.7</b>	<b>1,642.0</b>
Deduct External Revenues and Other <sup>3</sup>	(54.7)	(54.5)	(52.6)					(52.6)
<b>Rates Revenue Requirement</b>	<b>1,569.1</b>	<b>1,589.9</b>	<b>1,621.2</b>					<b>1,589.4</b>
Regulatory Deferral and Variance Accounts Disposition / Foregone Revenue	(58.4)	(37.6)	6.8					6.8
<b>Rates Revenue Requirement (with Deferral and Variance Accounts)</b>	<b>1,510.7</b>	<b>1,552.3</b>	<b>1,628.0</b>					<b>1,596.2</b>

<sup>3</sup> Note 1: Represents OEB approved 2018 revenue requirement from Hydro One Transmission's 2017 to 2018 rate application in EB-2016-0160

<sup>4</sup> Note 2: Represents OEB approved 2019 revenue requirement in EB-2018-0130

<sup>5</sup> Note 3: External Revenue and Other includes External Revenue, MSP Revenue, Export Tx Service Revenue and Low Voltage Switch Gear Credit

<sup>6</sup> Note 4: As quantified in I-1-OEB-208

<sup>7</sup> 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

<sup>8</sup> Note 6: Updated JT-2.31 Attachment 1 (October 17, 2019) provided the updated pension valuation as of December 31, 2018

<sup>9</sup> 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	<b>Total Capital Related Revenue Requirement</b>		<b>1,267.9</b>	<b>1,344.4</b>	<b>1,434.0</b>
9	OM&A	F-1-1	374.1	379.4	384.7
10	<b>Total Revenue Requirement</b>		<b>1,642.0</b>	<b>1,723.7</b>	<b>1,818.7</b>
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	<b>Capital Factor</b>			<b>3.58%</b>	<b>4.11%</b>

Witness: Joel Jodoin, Clement Li, Stephen Vetsis

**Table 3: Custom Cap Index (RCI) by Component (%)**  
**Revised from Exhibit A, Tab 4, Schedule 1 – Table 3**

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

**Table 4: Revenue Requirement by Year**  
**Revised from Exhibit A, Tab 4, Schedule 1 – Table 4**

<b>Year</b>	<b>Formula</b>	<b>Revenue Requirement</b>
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.*

<sup>1</sup> **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
<b>Category Level</b>										
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
<b>Adjustments</b>										
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 <sup>1</sup>									-0.1	-0.1
<b>Envelope Level</b>										
<b>Total Transmission OM&amp;A</b>	<b>441.6</b>	<b>431.2</b>	<b>408.1</b>	<b>436.8</b>	<b>385.0</b>	<b>397.7</b>	<b>419.2</b>	<b>394.3</b>	<b>356.5</b>	<b>375.8</b>
Pension Adjustment Dec 31, 2018 Valuation										-1.7
<b>Updated Total Transmission OM&amp;A</b>	<b>441.6</b>	<b>431.2</b>	<b>408.1</b>	<b>436.8</b>	<b>385.0</b>	<b>397.7</b>	<b>419.2</b>	<b>394.3</b>	<b>356.5</b>	<b>374.1</b>

<sup>2</sup> <sup>1</sup>: Directive refers to the Government Directive as detailed and defined in Exhibit F, Tab 4, Schedule 1.

Witness: Joel Jodoin, Clement Li, Stephen Vetsis

**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
<b>System Access</b>	24.3	33.7	39%	45.1	24.8	11.3	11.7	12.7	4.1
<b>System Renewal</b>	780.4	776.2	-1%	773.3	865.2	1,103.1	1,172.8	1,177.4	1,193.8
<b>System Service</b>	75.6	73.9	-2%	103.8	204.1	148.2	151.8	174.3	204.2
<b>General Plant</b>	119.7	83.6	-30%	116.3	115.4	94.4	94.7	83.6	58.9
<b>Progressive Productivity</b>	0.0	0.0	0%	0.0	-17.0	-39.0	-61.0	-78.0	-91.0
<b>Directive<sup>1</sup></b>				-0.3	-0.3	-0.3	-0.4	-0.4	-0.4
<b>Total</b>	<b>1,000.0</b>	<b>967.3</b>		<b>1,038.2</b>	<b>1,192.2</b>	<b>1,317.7</b>	<b>1,369.6</b>	<b>1,369.6</b>	<b>1,369.6</b>
<b>Pension Adjustment Dec 31, 2018 Valuation</b>				-3.2	-4.2	-5.2	-5.4	-5.4	-5.4
<b>Updated Total</b>				<b>1,035.0</b>	<b>1,188.0</b>	<b>1,312.5</b>	<b>1,364.2</b>	<b>1,364.2</b>	<b>1,364.2</b>

<sup>1</sup>: 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																	Bridge	Test			
	2014			2015			2016				2017			2018			2019		2020	2021	2022	
	Actual	Plan	Variance	Actual	Plan	Variance	Actual	New Plan <sup>1</sup>	Plan	Variance (New Plan)	Variance (Plan)	Actual	Plan	Variance	Actual	Plan						Variance
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)	
<b>Total Directive<sup>2</sup></b>	<b>914.5</b>	<b>863.3</b>	<b>6%</b>	<b>699.1</b>	<b>821.3</b>	<b>-15%</b>	<b>910.2</b>	<b>911.7</b>	<b>673.3</b>	<b>-0.2%</b>	<b>35%</b>	<b>872.2</b>	<b>867.7</b>	<b>1%</b>	<b>1,160.4</b>	<b>1,178.4</b>	<b>-2%</b>	<b>951.0</b>	<b>1,037.4</b>	<b>1,298.0</b>	<b>1,293.3</b>	
																		-0.3	-0.3	-0.3	-0.4	
<b>Total</b>																		<b>950.7</b>	<b>1,037.1</b>	<b>1,297.7</b>	<b>1,293.0</b>	
Pension Adjustment Dec 31, 2018 Valuation																		-3.2	-4.2	-5.2	-5.4	
<b>Updated Total</b>																		<b>947.5</b>	<b>1,032.9</b>	<b>1,292.5</b>	<b>1,287.6</b>	

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

<sup>2</sup>: 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 <sup>1</sup>	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%
<b>Net Impact on Average Transmission Rates</b>		<b>8.7%</b>	<b>6.6%</b>	<b>6.2%</b>	<b>5.7%</b>	<b>5.9%</b>	<b>6.4%</b>
Transmission as a % of Tx-connected customer's Total Bill		7.4%	7.4%	7.4%	7.4%	7.4%	7.4%
<b>Estimated Average Bill impact</b>		<b>0.6%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.5%</b>
Transmission as a % of Dx-connected customer's Total Bill		6.2%	6.2%	6.2%	6.2%	6.2%	6.2%
<b>Estimated Average Bill impact</b>		<b>0.5%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.4%</b>

<sup>1</sup> 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 25<sup>th</sup> 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 <sup>1</sup>	\$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
<i>Estimated 2019 Monthly RTSR</i> <sup>2</sup>	\$5.10	\$5.10	\$9.56	\$9.56	\$22.95	\$22.95
<b>2019 increase in Monthly Bill</b>	<b>\$0.13</b>	<b>\$0.13</b>	<b>\$0.24</b>	<b>\$0.24</b>	<b>\$0.58</b>	<b>\$0.58</b>
<i>2019 increase as a % of total bill</i>	<i>0.2%</i>	<i>0.2%</i>	<i>0.2%</i>	<i>0.2%</i>	<i>0.2%</i>	<i>0.2%</i>
<i>Estimated 2020 Monthly RTSR</i> <sup>3</sup>	\$5.52	\$5.42	\$10.35	\$10.16	\$24.83	\$24.39
<b>2020 increase in Monthly Bill</b>	<b>\$0.42</b>	<b>\$0.32</b>	<b>\$0.79</b>	<b>\$0.60</b>	<b>\$1.89</b>	<b>\$1.44</b>
<i>2020 increase as a % of total bill</i>	<i>0.5%</i>	<i>0.4%</i>	<i>0.6%</i>	<i>0.5%</i>	<i>0.8%</i>	<i>0.6%</i>
<i>Estimated 2021 Monthly RTSR</i> <sup>3</sup>	\$5.84	\$5.71	\$10.96	\$10.71	\$26.29	\$25.70
<b>2021 increase in Monthly Bill</b>	<b>\$0.32</b>	<b>\$0.29</b>	<b>\$0.61</b>	<b>\$0.55</b>	<b>\$1.46</b>	<b>\$1.31</b>
<i>2021 increase as a % of total bill</i>	<i>0.4%</i>	<i>0.3%</i>	<i>0.5%</i>	<i>0.4%</i>	<i>0.6%</i>	<i>0.5%</i>
<i>Estimated 2022 Monthly RTSR</i> <sup>3</sup>	\$6.17	\$6.06	\$11.56	\$11.36	\$27.76	\$27.26
<b>2022 increase in Monthly Bill</b>	<b>\$0.32</b>	<b>\$0.35</b>	<b>\$0.61</b>	<b>\$0.65</b>	<b>\$1.46</b>	<b>\$1.56</b>
<i>2022 increase as a % of total bill</i>	<i>0.4%</i>	<i>0.4%</i>	<i>0.5%</i>	<i>0.5%</i>	<i>0.6%</i>	<i>0.6%</i>

<sup>1</sup>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).

<sup>2</sup>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.

<sup>3</sup>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 <sup>1</sup>	\$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
<i>Estimated 2019 Monthly RTSR<sup>2</sup></i>	\$11.35	\$11.35	\$22.69	\$22.69	\$170.21	\$170.21
<b>2019 increase in Monthly Bill</b>	<b>\$0.29</b>	<b>\$0.29</b>	<b>\$0.58</b>	<b>\$0.58</b>	<b>\$4.33</b>	<b>\$4.32</b>
<i>2019 increase as a % of total bill</i>	<i>0.1%</i>	<i>0.1%</i>	<i>0.2%</i>	<i>0.2%</i>	<i>0.2%</i>	<i>0.2%</i>
<i>Estimated 2020 Monthly RTSR<sup>3</sup></i>	\$12.28	\$12.06	\$24.56	\$24.12	\$184.20	\$180.90
<b>2020 increase in Monthly Bill</b>	<b>\$0.93</b>	<b>\$0.71</b>	<b>\$1.86</b>	<b>\$1.43</b>	<b>\$13.99</b>	<b>\$10.69</b>
<i>2020 increase as a % of total bill</i>	<i>0.5%</i>	<i>0.4%</i>	<i>0.5%</i>	<i>0.4%</i>	<i>0.5%</i>	<i>0.4%</i>
<i>Estimated 2021 Monthly RTSR<sup>3</sup></i>	\$13.00	\$12.71	\$26.00	\$25.42	\$195.04	\$190.63
<b>2021 increase in Monthly Bill</b>	<b>\$0.72</b>	<b>\$0.65</b>	<b>\$1.44</b>	<b>\$1.30</b>	<b>\$10.84</b>	<b>\$9.74</b>
<i>2021 increase as a % of total bill</i>	<i>0.4%</i>	<i>0.3%</i>	<i>0.4%</i>	<i>0.4%</i>	<i>0.4%</i>	<i>0.4%</i>
<i>Estimated 2022 Monthly RTSR<sup>3</sup></i>	\$13.73	\$13.48	\$27.45	\$26.96	\$205.88	\$202.21
<b>2022 increase in Monthly Bill</b>	<b>\$0.72</b>	<b>\$0.77</b>	<b>\$1.45</b>	<b>\$1.54</b>	<b>\$10.85</b>	<b>\$11.58</b>
<i>2022 increase as a % of total bill</i>	<i>0.4%</i>	<i>0.4%</i>	<i>0.4%</i>	<i>0.4%</i>	<i>0.4%</i>	<i>0.4%</i>

<sup>1</sup>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).

<sup>2</sup>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.

<sup>3</sup>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).