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July 11, 2019

Via RESS

Ms. Kirsten Walli  
Board Secretary  
Ontario Energy Board  
PO Box 2319  
2300 Yonge Street, 27th floor  
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: EB File No. EB-2018-0165, Toronto Hydro-Electric System Limited ("Toronto Hydro")  
Custom Incentive Rate-setting ("Custom IR") Application for 2020-2024 Electricity Distribution  
Rates and Charges – Responses to Day 7 Undertakings**

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Please find enclosed Toronto Hydro's responses to all undertakings provided on Day 7 except undertakings J7.5 and J7.6, which will be filed later today along with undertakings J6.7 and J6.12.

Please contact me directly if you have any questions or concerns.

Respectfully,

A handwritten signature in black ink, appearing to read "D. Coban", written over a light blue horizontal line.

**Daliana Coban**  
Manager, Regulatory Law  
Toronto Hydro-Electric System Limited

cc: Lawrie Gluck, OEB Case Manager  
Michael Miller, OEB Counsel  
Parties of Record  
Amanda Klein, Toronto Hydro  
Andrew Sasso, Toronto Hydro  
Charles Keizer, Torys LLP

1 ORAL HEARING UNDERTAKING RESPONSES TO  
2 VULNERABLE ENERGY CONSUMERS COALITION  
3

4 UNDERTAKING NO. J7.1:

5 Reference(s):  
6

7 To confirm whether THESL's CDM assessment only included programs IESO has now  
8 indicated it will be continuing to fund for 2019 and 2020.  
9

10  
11 RESPONSE:

12 Toronto Hydro confirms that for the purposes of the assessment of the impact of the  
13 IESO's CDM announcement, savings from programs outside of those listed in the Interim  
14 Framework were removed from the CDM Forecast. However, savings from settled  
15 projects (closed by April 1<sup>st</sup> 2019 deadline) and from projects with legally binding  
16 agreements (signed by the April 1<sup>st</sup> 2019 deadline, to be completed by 2020) remain in  
17 the CDM Forecast.

# ORAL HEARING UNDERTAKING RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION

## UNDERTAKING NO. J7.2:

Reference(s): Exhibit K7.1, Tab 14, Page 52

To make best efforts to review the data in the CRRVA calculation and reconcile plan and actual.

## RESPONSE:

Figure 1 illustrates how Toronto Hydro calculates the capital related revenue requirement which flows from capital expenditures and in-service additions in a given year.

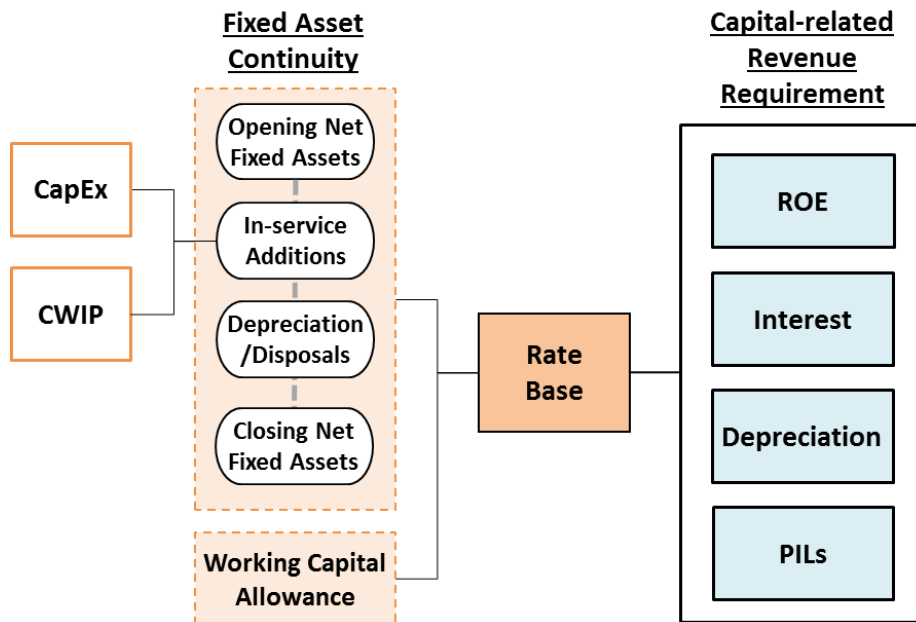


Figure 1: Capital Related Revenue Requirement

1 Toronto Hydro calculates the balance in the CRRRVA by comparing the capital related  
2 revenue requirement (“CRR”)<sup>1</sup> resulting from the amounts approved in rates, with the  
3 CRR for actual in-service additions based on the execution of the utility’s capital plan over  
4 the 2015-2019 rate period. Toronto Hydro excludes variances that are captured in other  
5 capital related variance accounts (i.e. derecognition and externally driven capital).

6

7 Appendix A to this response shows the calculation of the CRRRVA balance for 2015 in  
8 accordance with the information above. In addition, the table in Part B of Appendix A  
9 provides a reconciliation of approved and achieved earnings for 2015 to demonstrate that  
10 Toronto Hydro’s achieved earnings excludes the differences ROE to be returned to  
11 customers through the CRRRVA. For more information, please refer to Toronto Hydro’s  
12 response to undertaking J7.7.

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<sup>1</sup> CRR includes depreciation, ROE, interest expense, and PILs.

## J7.2 Appendix A

### Part A: 2015 Capital-Related RR Calculation for CRRRVA

	2015 Approved in Rates		2015 Actual		
CWIP Balance	516.1	a	522.1	o	
Capital Expenditures					
Approved: EB-2014-0116, Draft Rate Order Update, Page 4, Table 1†	477.6	b	490.6	p	
Actual: Exhibit U, Tab 2, Schedule 2, Appendix A (2-AA)					
Opening Net Fixed Assets	2,849.0	c	2,844.5	q	
In-Service Additions	512.5	d	435.3	r	
Exhibit U, Tab 2, Schedule 1, App A	(226.8)	e	(193.7)	s	
Accumulated Depreciation and others*					
Closing Net Fixed Assets	3,134.7	f=c+d+e	3,086.2	t=q+r+s	
Average Net Fixed Assets	2,991.9	g=(c+f)/2	2,965.3	u=(q+t)/2	
Working Capital Allowance	240.0	h	240.0	v	
Rate Base^	3,231.9	i=g+h	3,205.3	w=u+v	
Return on Equity	120.2	j=i*40%*9.3%	119.2	x=w*40%*9.3%	
Deemed Interest	79.3	k=i*60%*4.09%	78.6	y=w*60%*4.09%	
Depreciation	206.0	l	190.5	z	
PILS	25.0	m	25.2	aa	
Capital-Related RR	430.5	n=Σj:m	413.6	ab=Σx:aa	
Total Capital-Related RR Variance	(16.9)	ac=ab-n			
2015 CRRRVA Balance	(2.7)	ag=ac-ad-ae-af			
Exhibit U, Tab 9, Schedule 1, pg. 5					
2015 CRRRVA Balance including Carrying Charges	(2.7)	ai=ag+ah			
Exhibit U, Tab 9, Schedule 1, pg. 5					
* Includes asset derecognition/disposals.					
† Excludes \$0.4 million related to Renewable Energy Investments that are not in rate base.					
* Carrying charges are applicable and is an immaterial amount of \$17k in 2015					
^Difference between funded and actual rate base is \$26.6M					

Exclude variances recorded in other capital variance accounts and other:	
Exhibit U, Tab 9, Schedule 1, pg. 5	
Derecognition Variance Account	(12.9)
External Demand Projects Variance Account	(0.2)
Other Adjustments	(1.2)
<b>Total</b>	<b>(14.2)</b>

Carrying Charges\* (0.0)

**J7.2 Appendix A**

**Part B - 2015 Deemed versus Actual Earnings Reconciliation**

	Earnings (\$M)	Notes
Earnings in rates ("funded")	120.2	EB-2014-0116, Draft Rate Order Update, page 5, Table 2
Earnings for capital not placed in service	(1.0)	Change in rate base (Part A of J7.2, App. A): \$26.6M*40%*9.30%
<b>Adjusted Earnings in Rates</b>	<b>119.2</b>	
Out-of-Period and other adjustments	20.9	Exh. U-Staff-166.17, Table 2, "Total Adjustments" line
Actual NCRR in excess of funded	(3.3)	Exh. U-Tab 9-Schedule 1, page 14, Table 18, Item K
Other variances	0.9	Weather and rounding variances
<b>Earnings as per RRR 2.1.5.6</b>	<b>137.7</b>	<b>U-Staff-166.17, Table 1, Item A</b>

**ORAL HEARING UNDERTAKING RESPONSES TO  
ASSOCIATION OF MAJOR POWER CONSUMERS ONTARIO**

**UNDERTAKING NO. J7.3:**

**Reference(s):** JTC4.6, Appendix A

To calculate bill increases without rate riders for large users.

**RESPONSE:**

Please see Table 1 which shows the Large User Sub-Total A monthly bill estimate excluding Rate Riders annual bill percent and cumulative total percent changes. The table includes bill amounts based on 2019 OEB-approved distribution rates and the most recent proposed 2020-2024 distribution rates submitted to the OEB as part of the Exhibit U. Note that these bills do not reflect the updates reflected in Undertaking J1.2.

**Table 1: Large User Sub-Total A excluding Rate Riders Bill Change**

	ii Sub-Total A excluding Rate Riders (\$)	Annual Change (%)	Cumulative Total Change (%)	2020-2024 Average Annual increase (%)
<b>2019</b>	70,697.02			
<b>2020</b>	73,266.36	3.6%	3.6%	
<b>2021</b>	75,654.55	3.3%	7.0%	
<b>2022</b>	77,515.35	2.5%	9.6%	
<b>2023</b>	80,802.04	4.2%	14.3%	
<b>2024</b>	83,977.69	3.9%	18.8%	3.5%

1 ORAL HEARING UNDERTAKING RESPONSES TO  
2 SCHOOL ENERGY COALITION  
3

4 UNDERTAKING NO. J7.4:

5 Reference(s): JTC4.6, Appendix A  
6

7 To provide an updated version of JTC4.6, Appendix A including the latest, best  
8 information.  
9

10  
11 RESPONSE:

12 Please find attached updated Appendix A table with 2019 Board-approved distribution  
13 related rates and most recent proposed 2020-2024 distribution rates submitted to the  
14 OEB as part of Exhibit U. Note that these rates do not reflect the updates noted in  
15 Undertaking J1.2.



APPENDIX A: 2010-2024 Sub-total A Amounts

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 Proposed	2021 Proposed	2022 Proposed	2023 Proposed	2024 Proposed		Average Annual Increase		
																	2010-14	2015-19	2020-24
Residential - 750 kWh																			
i Sub-Total A including Rate Riders	31.26	30.60	30.57	31.74	32.18	30.25	36.81	39.23	40.98	44.37	40.79	42.16	43.23	45.12	46.95				
annual change - \$	3.31	-0.66	-0.03	1.17	0.44	-1.93	6.56	2.42	1.75	3.39	-3.58	1.37	1.07	1.89	1.83		0.85	2.44	0.52
annual change - %	11.8%	-2.1%	-0.1%	3.8%	1.4%	-6.0%	21.7%	6.6%	4.5%	8.3%	-8.1%	3.4%	2.5%	4.4%	4.1%		2.9%	6.6%	1.1%
ii Sub-Total A excluding Rate Riders	30.04	29.65	29.65	29.84	30.17	30.17	36.88	39.03	40.60	41.63	42.17	43.54	44.61	46.50	48.33				
annual change - \$	2.45	-0.39	0.00	0.19	0.33	0.00	6.71	2.15	1.57	1.03	0.54	1.37	1.07	1.89	1.83		0.52	2.29	1.34
annual change - %	8.9%	-1.3%	0.0%	0.6%	1.1%	0.0%	22.2%	5.8%	4.0%	2.5%	1.3%	3.2%	2.5%	4.2%	3.9%		1.8%	6.7%	3.0%
Competitive Sector Multi-Unit Residential - 300 kWh <sup>1</sup>																			
i Sub-Total A including Rate Riders	-	-	-	26.63	26.26	25.20	27.36	29.63	31.62	34.01	32.30	33.39	34.24	35.74	37.18				
annual change - \$					-0.37	-1.06	2.16	2.27	1.99	2.39	-1.71	1.09	0.85	1.50	1.44		-0.37	1.55	0.63
annual change - %					-1.4%	-4.0%	8.6%	8.3%	6.7%	7.5%	-5.0%	3.4%	2.5%	4.4%	4.0%		#VALUE!	5.3%	1.8%
ii Sub-Total A excluding Rate Riders	-	-	-	24.93	25.20	25.20	27.70	29.89	31.68	33.12	33.32	34.41	35.26	36.76	38.20				
annual change - \$					0.27	0.00	2.50	2.19	1.79	1.44	0.20	1.09	0.85	1.50	1.44		0.27	1.58	1.02
annual change - %					1.1%	0.0%	9.9%	7.9%	6.0%	4.5%	0.6%	3.3%	2.5%	4.3%	3.9%		#VALUE!	5.6%	2.9%
General Service < 50 kW - 2,000 kWh																			
i Sub-Total A including Rate Riders	70.78	70.61	70.61	73.45	82.90	76.26	94.64	101.93	99.56	108.33	102.51	105.96	108.65	113.40	117.99				
annual change - \$	9.50	-0.17	0.00	2.84	9.45	-6.64	18.38	7.29	-2.37	8.77	-5.82	3.45	2.69	4.75	4.59		4.32	5.09	1.93
annual change - %	15.5%	-0.2%	0.0%	4.0%	12.9%	-8.0%	24.1%	7.7%	-2.3%	8.8%	-5.4%	3.4%	2.5%	4.4%	4.0%		6.2%	5.5%	1.7%
ii Sub-Total A excluding Rate Riders	69.70	69.24	69.24	69.89	70.66	70.66	86.83	93.14	98.19	102.04	106.11	109.56	112.25	117.00	121.59				
annual change - \$	8.76	-0.46	0.00	0.65	0.77	0.00	16.17	6.31	5.05	3.85	4.07	3.45	2.69	4.75	4.59		1.94	6.28	3.91
annual change - %	14.4%	-0.7%	0.0%	0.9%	1.1%	0.0%	22.9%	7.3%	5.4%	3.9%	4.0%	3.3%	2.5%	4.2%	3.9%		3.0%	7.6%	3.6%
General Service 50-999 kW - 200 kVA																			
i Sub-Total A including Rate Riders	1,156.75	1,164.63	1,163.73	1,213.89	1,257.53	1,197.40	1,453.46	1,564.60	1,628.94	1,779.43	1,655.34	1,711.62	1,755.49	1,832.95	1,907.79				
annual change - \$	93.37	7.88	-0.90	50.16	43.64	-60.13	256.06	111.14	64.34	150.49	-124.09	56.28	43.87	77.46	74.84		38.83	104.38	25.67
annual change - %	8.8%	0.7%	-0.1%	4.3%	3.6%	-4.8%	21.4%	7.6%	4.1%	9.2%	-7.0%	3.4%	2.6%	4.4%	4.1%		3.4%	7.2%	1.4%
ii Sub-Total A excluding Rate Riders	1,152.29	1,154.68	1,154.68	1,165.80	1,178.61	1,178.61	1,423.22	1,526.54	1,609.29	1,672.54	1,726.67	1,782.95	1,826.82	1,904.28	1,979.12				
annual change - \$	89.42	2.39	0.00	11.12	12.81	0.00	244.61	103.32	82.75	63.25	54.13	56.28	43.87	77.46	74.84		23.15	98.79	61.32
annual change - %	8.4%	0.2%	0.0%	1.0%	1.1%	0.0%	20.8%	7.3%	5.4%	3.9%	3.2%	3.3%	2.5%	4.2%	3.9%		2.1%	7.3%	3.4%
General Service 1,000-4,999 kW - 2,000 kVA																			
i Sub-Total A including Rate Riders	8,789.08	9,963.73	9,656.35	10,072.37	10,191.31	9,784.48	11,483.66	12,555.43	13,378.69	14,472.09	13,688.07	14,151.65	14,512.83	15,150.78	15,767.10				
annual change - \$	-466.75	1,174.65	-307.38	416.02	118.94	-406.83	1,699.18	1,071.77	823.26	1,093.40	-784.02	463.58	361.18	637.95	616.32		187.10	856.16	259.00
annual change - %	-5.0%	13.4%	-3.1%	4.3%	1.2%	-4.0%	17.4%	9.3%	6.6%	8.2%	-5.4%	3.4%	2.6%	4.4%	4.1%		1.9%	7.3%	1.7%
ii Sub-Total A excluding Rate Riders	8,747.40	9,585.86	9,585.86	9,678.06	9,784.48	9,784.48	11,689.49	12,538.06	13,217.52	13,736.92	14,222.07	14,685.65	15,046.83	15,684.78	16,301.10				
annual change - \$	-603.95	838.46	0.00	92.20	106.42	0.00	1,905.01	848.57	679.46	519.40	485.15	463.58	361.18	637.95	616.32		86.63	790.49	512.84
annual change - %	-6.5%	9.6%	0.0%	1.0%	1.1%	0.0%	19.5%	7.3%	5.4%	3.9%	3.5%	3.3%	2.5%	4.2%	3.9%		0.9%	7.0%	3.5%
Large Use - 9,700 kVA																			
i Sub-Total A including Rate Riders	44,687.52	50,904.48	49,298.23	51,478.37	52,088.26	50,007.83	59,065.92	65,062.02	70,581.76	75,465.01	70,211.83	72,600.02	74,460.82	77,747.51	80,923.16				
annual change - \$	4,258.54	6,216.96	-1,606.25	2,180.14	609.89	-2,080.43	9,058.09	5,996.10	5,519.74	4,883.25	-5,253.18	2,388.19	1,860.80	3,286.69	3,175.65		2,331.86	4,675.35	1,091.63
annual change - %	10.5%	13.9%	-3.2%	4.4%	1.2%	-4.0%	18.1%	10.2%	8.5%	6.9%	-7.0%	3.4%	2.6%	4.4%	4.1%		5.2%	7.7%	1.4%
ii Sub-Total A excluding Rate Riders	44,440.46	48,992.93	48,992.93	49,464.19	50,007.83	50,007.83	60,158.67	64,526.14	68,023.43	70,697.02	73,266.36	75,654.55	77,515.35	80,802.04	83,977.69				
annual change - \$	3,633.86	4,552.47	0.00	471.26	543.64	0.00	10,150.84	4,367.47	3,497.29	2,673.59	2,569.34	2,388.19	1,860.80	3,286.69	3,175.65		1,840.25	4,137.84	2,656.13
annual change - %	8.9%	10.2%	0.0%	1.0%	1.1%	0.0%	20.3%	7.3%	5.4%	3.9%	3.6%	3.3%	2.5%	4.2%	3.9%		4.2%	7.2%	3.5%
Street lighting - 2,700 kVA																			
i Sub-Total A including Rate Riders	114,725.63	113,109.30	98,996.96	103,202.80	104,358.29	100,284.27	99,151.07	107,582.88	113,641.34	124,154.21	120,971.44	125,024.40	128,199.16	133,795.22	139,240.08				
annual change - \$	47,138.76	-1,616.33	-14,112.34	4,205.84	1,155.49	-4,074.02	-1,133.20	8,431.81	6,058.46	10,512.87	-3,182.77	4,052.96	3,174.76	5,596.06	5,444.86		7,354.28	3,959.18	3,017.17
annual change - %	69.7%	-1.4%	-12.5%	4.2%	1.1%	-3.9%	-1.1%	8.5%	5.6%	9.3%	-2.6%	3.4%	2.5%	4.4%	4.1%		9.1%	3.5%	2.3%
ii Sub-Total A excluding Rate Riders	100,005.63	98,356.96	98,356.96	99,262.97	100,284.27	100,284.27	104,116.37	111,683.91	117,742.37	122,354.93	126,341.20	130,394.16	133,568.92	139,164.98	144,609.84				
annual change - \$	32,418.76	-1,648.67	0.00	906.01	1,021.30	0.00	3,832.10	7,567.54	6,058.46	4,612.56	3,986.27	4,052.96	3,174.76	5,596.06	5,444.86		6,539.48	4,414.13	4,450.98
annual change - %	48.0%	-1.6%	0.0%	0.9%	1.0%	0.0%	3.8%	7.3%	5.4%	3.9%	3.3%	3.2%	2.4%	4.2%	3.9%		8.2%	4.1%	3.4%
USL - 285 kWh																			
i Sub-Total A including Rate Riders	24.00	23.50	22.72	23.79	24.07	23.1	28.55	30.77	32.42	34.80	28.92	29.90	30.66	32.01	33.32				
annual change - \$	8.82	-0.50	-0.78	1.07	0.28	-0.97	5.45	2.22	1.65	2.38	-5.89	0.98	0.76	1.35	1.31		1.78	2.15	-0.30
annual change - %	58.1%	-2.1%	-3.3%	4.7%	1.2%	-4.0%	23.6%	7.8%	5.4%	7.4%	-16.9%	3.4%	2.6%	4.4%	4.1%		9.7%	7.7%	-0.9%
ii Sub-Total A excluding Rate Riders	22.78	22.63	22.63	22.84	23.10	23.10	28.46	30.53	32.18	33.45	30.11	31.09	31.85	33.20	34.51				
annual change - \$	7.11	-0.15	0.00	0.21	0.26	0.00	5.36	2.07	1.65	1.27	-3.34	0.98	0.76	1.35	1.31		1.49	2.07	0.21
annual change - %	45.4%	-0.7%	0.0%	0.9%	1.1%	0.0%	23.2%	7.3%	5.4%	3.9%	-10.0%	3.3%	2.5%	4.2%	3.9%		8.1%	7.7%	0.6%

Note 1: Competitive Sector Multi-Unit Residential rates were first approved as part of 2013 Toronto Hydro Decision and Order (EB-2012-0064)

**ORAL HEARING UNDERTAKING RESPONSES TO  
SCHOOL ENERGY COALITION**

**UNDERTAKING NO. J7.7:**

**Reference(s):**

To explain the interplay of the ROE and the CRRRVA.

**RESPONSE:**

Toronto Hydro reviewed the transcript and believes the undertaking is intended to confirm: (i) whether Toronto Hydro's achieved ROE includes earnings related to capital funded in approved rates which was not brought into service; and (ii) what caused the achieved earnings in 2015 and 2016 to be in excess of approved.

The CRRRVA is a ratepayer protection mechanism approved by the OEB in the utility's last rate application. This account tracks the capital related revenue requirement ("CRR")<sup>1</sup> differences resulting from variances between the approved and actual in-service additions over the 2015-2019 rate period. For more information, please refer to Toronto Hydro's response to undertaking J7.2 and Exhibit 9, Tab 1, Schedule 1, pages 10-11.

Toronto Hydro confirms that achieved ROE does not include earnings related to capital funded in approved rates which was not brought into service. Please refer to the response to J7.2, Appendix A, Part B for the demonstration of this fact.

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<sup>1</sup> CRR includes depreciation, ROE, interest expense, and PILs.

As stated in Toronto Hydro's response to interrogatory 1B-CCC-22, achieved ROE for 2016 (12.18 percent) was greater than approved (9.30 percent) primarily due to the accounting recognition of out of period items for: (i) 2012-2014 ICM results, following OEB approval in July 2016; and (ii) 2008-2010 Smart Meter results. The accounting of these two items followed the OEB's accounting guidelines and were not reflected in Toronto Hydro's achieved 2008-2014 earnings.

Annually-reported achieved earnings (i.e. ROE) are affected by the timing of OEB decisions and related accounting from the natural course of reviewing and approving regulatory account balances. Table 1 presents the average utility earnings over the 2008-2018 period which normalizes for the identified timing differences. This table shows that over the ten-year period, Toronto Hydro's achieved earnings are slightly lower than approved (0.23%).

**Table 1 – Approved and Achieved ROE<sup>2</sup>**

Year	Approved	Achieved	Difference
2008	8.57%	10.90%	2.33%
2009	8.01%	7.23%	(0.78%)
2010	9.85%	8.14%	(1.71%)
2011	9.58%	9.73%	0.15%
2012	9.58%	7.62%	(1.96%)
2013	9.58%	7.10%	(2.48%)
2014	9.58%	7.41%	(2.17%)
2015	9.30%	10.71%	1.41%
2016	9.30%	12.18%	2.88%
2017	9.30%	9.08%	(0.22%)
2018	9.30%	9.33%	0.03%
<b>10 Year Average</b>	<b>9.27%</b>	<b>9.04%</b>	<b>(0.23%)</b>

<sup>2</sup> Approved and achieved ROE are provided in: the response to 1B-Staff-29, for 2008-2017; and Exhibit U, Tab 1B, Schedule 1, Table, Page 2 for 2018.