Clarification 1

For 2019, OPG reported the OEB-approved ROE as $203.4M at Table 3 / Line 18. According to the EB-2016-0152 Payment Amounts Order / Appendix A / Table 3 / Line 12, the OEB approved ROE for 2019 was $119.2M. Can you please verify that the reported $203.4M is accurate and if so, provide a brief clarification to reconcile that number with the $119.2M.

OPG Response 1

The correct OEB-approved ROE for 2019 is $119.2M, as reported in EB-2016-0152 Payment Amounts Order ("PAO"), App. A, Table 3, line 12, col. (c). The amount of $203.4M reported in Table 3, as filed on July 31, 2020, was incorrect. A corrected version of Table 3 for the year ended December 31, 2019 is attached.

There are four changes to the OEB-approved amounts in the updated Table 3 for the year ended December 31, 2019:

1) Line 1, col. (a): Revenue Requirement
   This line has been corrected to reflect PAO, App. A, Table 3, line 26, col. (c), rather than PAO, App. A, Table 3, line 28, col. (c).

2) Line 4, col. (a) and line 8, col. (a): Amortization of Variance & Deferral Account Amounts
   These lines have been corrected to include the sum of PAO, App. A, Table 3, line 27, col. (c) ("EB-2016-0152 D&V Amount") and EB-2018-0243 Ex. M1 Settlement Proposal (as approved by the OEB), App. A, Table 2, line 18, col. (i), rather than solely the EB-2016-0152 D&V Amount. This change affects both line 4 (revenue) and line 8 (expense) and therefore does not impact the corrected OEB-approved Regulatory Return on Equity amount at line 18, col. (a).

3) Line 4a, col. (a) and line 16a, col. (a): Income Tax Impact from Amortization of Pension & OPEB Cash Versus Accrual Differential Deferral Account

These lines have been added to present the income tax impacts associated with the recovery of the Pension & OPEB Cash Versus Accrual Differential Deferral Account balance and the OEB-approved recovery amounts for these impacts included in the EB-2018-0243 nuclear payment rider in effect during 2019. These tax impacts are shown separately from the EB-2016-0152 OEB-approved income tax amount at line 16, col. (a), which did not contemplate recovery of the Pension & OPEB Cash Versus Accrual Differential Deferral Account. The recovery of amounts for these impacts is presented separately from the amortization of variance and deferral account amounts at line 4, col. (a). The addition of these offsetting lines does not impact the corrected OEB-approved Regulatory Return on Equity amount at line 18, col. (a).

4) Line 17a, col. (a): Cumulative Nuclear Stretch Dollars

This line has been added to present the OEB-approved stretch factor amount of $24.8M included as a reduction in OPG's 2019 nuclear revenue requirement (per PAO, App. A, Table 3, line 25, col. (c)). This amount has been included in the updated table in order to reconcile to the corrected OEB-approved Regulatory Return on Equity amount at line 18, col. (a).

Clarification 2

After observing the difference in numbers from the above question, OEB staff also noticed that for 2018 OPG reported the OEB-approved ROE as $139.6M at Table 3 / Line 18. According to the EB-2016-0152 Payment Amounts Order / Appendix A / Table 2 / Line 12, the OEB approved ROE for 2018 was $119.1M. Can you please verify that the reported $139.6M is accurate and if so, provide a brief clarification to reconcile that number with the $119.1M.

OPG Response 2

The correct OEB-approved ROE for 2018 is $119.1M, as reported in PAO, App. A, Table 2, line 12, col. (c). Consistent with the changes outlined in the response to Clarification 1, an updated Table 3 for the year ended December 31, 2018 is attached.

There are two changes to the OEB-approved amounts in the updated Table 3 for the year ended December 31, 2018:

1) Line 1, col. (a): Revenue Requirement
   This line has been corrected to reflect PAO, App. A, Table 2, line 26, col. (c), rather than PAO, App. A, Table 2, line 28, col. (c).

2) Line 17a: Cumulative Nuclear Stretch Dollars
   This line has been added to present the OEB-approved stretch factor amount of $12.3M included as a reduction in OPG's 2018 nuclear revenue requirement (per PAO, App. A, Table 2, line 25, col. (c)). This amount has been included in the updated table in order to reconcile to the corrected OEB-approved Regulatory Return on Equity amount at line 18, col. (a).

Clarification 3

For both the 2019 OEB-approved and actual ROE calculations, can OPG please clarify if the amortization of variance and deferral account amounts are eliminated between the adjustments made at Table 3 / Line 4 (added as revenue) and Table 3 / Line 8 (removed as an expense) so that no amount associated with the disposition of deferral accounts flows to the ROE amount.

OPG Response 3

Confirmed, based on the changes discussed in the response to Clarifications 1 and 2.

Clarification 4

To assist OEB staff with understanding the components of the reported 2019 OEB-approved ROE calculation, can OPG please provide a breakout for Table 3 / Line 8 between depreciation and amortization of OPG's nuclear assets and the amortization of variance and deferral accounts.

OPG Response 4

Per the updated Table 3, the amount at line 8, col. (a) is $583.6M and comprises the following:

Description	**Amount ($M)**	**Reference / Notes**
Amortization of Deferral & Variance Account Balances (EB-2016-0152)	108.9	EB-2016-0152 PAO, App. A, Table 3, line 27, col. (c)
Depreciation & Amortization on Nuclear Assets	403.7	EB-2016-0152 PAO, App. A, Table 3, line 17, col. (c)
Amortization of Deferral & Variance Account Balances (EB-2018-0243)	71.0	EB-2018-0243 Ex. M1, App. A, Table 2, line 18, col. (i)
Total	583.6	Numbers may not add due to rounding

Clarification 5

For Table 3, can OPG please provide amounts for each of Lines 1 to 4, as opposed to just the total in Line 5. (For Line 1, please provide the actual base revenue amount net of other revenue, Bruce lease revenues, and the amortization of variance and deferral account amount).

OPG Response 5

The breakdown of Table 3, line 5, col. (b) into lines 1 through 4, and line 4a added in the response to Clarification 1, is provided below:

Line No.	Description	Actual ($M)
	Revenues:	
1	Revenue Requirement[1]	3,421.2
2	Ancillary and Other Revenue	[redacted]
3	Bruce Lease Revenues Net of Direct Costs	0.0
4	Amortization of Variance & Deferral Account Amounts	179.9
4a	Income Tax Impact from Amortization of Pension & OPEB Cash Versus Accrual Differential Deferral Account	14.7
5	Total Revenues (lines 1 through 4a)	[redacted]

OPG notes that the amount of actual total revenue is reported on the same basis as in OPG's audited financial statements for the prescribed facilities prepared in accordance with US GAAP, consistent with Note 1 in Table 2a. As unregulated facilities, revenues and costs associated with the Bruce facilities (and related additions to the Bruce Lease Net Revenues Variance Account) are not reflected in the financial statements for the prescribed facilities[2] and therefore are not reflected (shown as 0.0 above) in the total revenues reported as part of actual Regulatory Return on Equity. The amount of Bruce

[1] Represents total revenue reported in the financial statements for the prescribed facilities in accordance with US GAAP, less amounts shown at lines 2 through 4a.
[2] For example, see EB-2016-0152, Ex. A2-1-1: p. 3, lines 5-6 and Attachment 5, pp. 25-26.

Lease revenues net of costs, including the impact of additions to the Bruce Lease Net Revenues Variance Account, was a net cost of approximately $23 million for the year ended December 31, 2019.

Clarification 6

To assist OEB staff with understanding the components of the reported actual ROE, can OPG please break out Table 3 / Line 8 between depreciation and amortization of OPG's nuclear assets and the amortization of variance and deferral accounts.

OPG Response 6

The amount at line 8, col. (b) of $605.3M comprises the following:

Description	**Amount ($M)**	**Reference / Notes**
Amortization of Deferral & Variance Account Balances (EB-2016-0152)	108.9	EB-2016-0152 PAO, App. A, Table 3, line 27, col. (c)
Depreciation & Amortization on Nuclear Assets	425.5	Actual 2019 Depreciation & Amortization (net of depreciation & amortization amounts recorded as additions to deferral and variance accounts)
Amortization of Deferral & Variance Account Balances (EB-2018-0243)	71.0	EB-2018-0243 Ex. M1, App. A, Table 2, line 18, col. (i)
Total	605.3	Numbers may not add due to rounding

Clarification 7

OEB staff seek to further understand the purpose of the adjustment made at Table 3 / Line 14, "Cost of Capital Variance and Deferral Account Additions." Can OPG please further clarify what types of costs associated with capital additions are being included in the adjustment described by Table 2a / Note 6 (e.g. return, debt, depreciation, etc.) and provide background on why those costs are included.

OPG Response 7

The amount at Table 3, line 14 represents cost of capital additions recorded to deferral and variance accounts applicable to OPG's prescribed nuclear assets as authorized by the OEB. Cost of capital additions comprise cost of deemed debt, return on equity, and cost of capital related to the lesser of the unfunded nuclear liability (UNL) and asset retirement cost (ARC), as applicable. For 2019, cost of capital additions for the prescribed nuclear assets were recorded in the Capacity Refurbishment Variance Account and the Impact Resulting from Changes in Station End-of-Life Dates (December 31, 2017) Deferral Account.

The adjustment ensures that the actual Regulatory Return on Equity appropriately reflects the impact of cost of capital additions to deferral and variance accounts in the period in which the underlying costs or returns arise. In the case of cost of deemed debt and cost of capital related to the lesser of UNL and ARC, this effectively adjusts the expenses at Table 3, lines 12 and 13, which are calculated on actual rate base and nuclear liability-related values, to recognize that a portion of these costs is recoverable in the future (and conversely that a portion of cost of capital amounts recovered through current payment amounts is refundable in the future), subject to OEB's approval. Similarly, in the case of return on equity additions, the adjustment recognizes these amounts as an increase or reduction to current year's Regulatory Return on Equity, for recoverable additions and refundable additions, respectively.

Other cost and revenue items recorded as additions to deferral and variance accounts for the prescribed nuclear assets are not included in Table 3, line 14 as they are

reflected directly in the corresponding other lines at Table 3. For example, depreciation amounts recorded as recoverable additions to deferral and variance accounts are netted against depreciation & amortization expense at line 8 (and conversely refundable additions are added as part of line 8).

For clarity, the adjustment at Table 3, line 14 also appears at Table 2, line 10 as part of the calculation of the actual Regulatory Return on Equity amounts.

Clarification 8

OPG's reported actual ROE by business segment for 2017-2019 is set out in the following table:

($M)	2017	2018	2019
Hydroelectric	$400.5 (12.05%)	$332.1 (9.98%)	$370.9 (11.08%)
Nuclear	-$122.6 (-8.73%)	$186.0 (12.22%)	$401.6 (25.07%)
Total Regulated	$277.9 (5.88%)	$518.1 (10.69%)	$772.4 (15.61%)

Can OPG please confirm that the above noted ROE amounts are correct and, if not, provide revised ROE amounts by business segment.

OPG Response 8

OPG confirms the regulated earnings dollar amounts for each of the nuclear and regulated hydroelectric business segments provided in the clarification, which are as set out in OPG's respective annual Regulatory Return on Equity reporting to the OEB.

OPG's return on equity (i.e., in percentage terms) is not measured on a technology specific basis. OPG operates as a single company, with a single management structure and, as approved by the OEB since it began to regulate OPG's prescribed facilities, a single cost of capital and capital structure for the purpose of establishing payment amounts. Similarly, OPG obtains corporate financing as a single company. Accordingly, OPG reports achieved return on equity for the prescribed facilities as a whole and, as in EB-2016-0152, maintains that the financial performance of the regulated business should be evaluated on that basis.[3]

At the same time, the OEB has held the longstanding view that that the risks related to nuclear generation are higher than those related to hydroelectric generation.[4] As a result, it is not possible to determine technology specific achieved return on equity by

[3] For example, see EB-2016-0152, Ex. L-11.7-11 LMPA-012.
[4] For example, see EB-2010-0008 Decision with Reasons, p. 116; EB-2013-0321 Decision with Reasons, p. 113; EB-2016-0152 Decision and Order, p. 102

dividing technology specific regulated earnings dollar amounts by technology specific deemed equity, where the level of deemed equity and therefore payment amount revenues and regulated earnings are based on the combined risks of both technologies.

For the above reasons, OPG does not confirm return on equity percentage values by business segment provided in the clarification.

Clarification 9

OEB staff notes that OPG's total ROE for 2018 and 2019 is higher than the OEB-approved amounts.

Can OPG please comment on the driving factors for this trend in both the hydroelectric and nuclear business segments, and clarify if those factors are expected to continue in 2020. Specifically, OEB staff seek to understand the driving factors behind any variance between the actual and OEB-approved production forecasts, for both hydroelectric and nuclear, that underpin the payment amounts for 2018 and 2019.

OPG Response 9

As explained in the response to Clarification 8, OPG's return on equity is not measured on a technology specific basis.

As set out in the letter accompanying OPG's 2019 Regulatory Return on Equity submission, the higher than expected regulated ROE performance in 2019 is primarily attributable to higher nuclear generation due to fewer outage days than planned, reflecting improvements achieved in OPG's nuclear asset management cycle and efficiencies realized in the execution of planned outages. The same applies to 2018 regulated ROE performance.

As further noted in the July 31, 2019 submission, OPG expects that its response measures to COVID-19 will have an impact on the regulated ROE performance for 2020 and 2021. The single largest such impact relates to a planned deferral of a Darlington Unit 1 outage (D2011) from the Fall of 2020 to 2021 to support the revised start date of the Darlington Unit 3 refurbishment. While the change in the D2011 timing is expected to increase the 2020 ROE above the 300 basis points dead band, to approximately 12.8%, it will have a corresponding negative effect on the 2021 ROE, which OPG expects to be slightly below the OEB-approved ROE, at approximately 9.0%. As a result, the projected average performance over both the 2020-2021 period and over the full 2017-2021 rate term period will remain within the dead band, at approximately 10.9% and 11.0%, respectively. Had the D2011 outage remained in 2020, the projected

performance for 2020 and 2021 would be within the dead band at approximately 11.0% for each year.

OPG is unable to meaningfully identify specific drivers for the variance between the actual and OEB-approved production forecast for the hydroelectric business for 2018 and 2019 because the last OEB-approved forecast was established based on the business plan and outage profile for the years 2014 and 2015, in EB-2013-0321. OPG's production plan for the 2017-2021 period was not reviewed or approved by the OEB in establishing OPG's current hydroelectric payment amounts under the IRM formula.

As a general matter, OPG observes that production from its regulated hydroelectric facilities does not typically vary significantly year over year, subject to any variability in water conditions. For example, the average OEB-approved production forecast for 2014 and 2015 is 33.0 TWh,[5] compared to actual production (before surplus baseload generation) of 33.1 TWh for 2018 and 33.9 TWh for 2019. This relatively stable level of hydroelectric production is expected to continue for 2020 and 2021. The financial impact of changes in hydroelectric generation as a result of fluctuations in water conditions is recorded in the Hydroelectric Water Conditions Variance Account and therefore does not drive variability in regulated ROE performance.

[5] Per EB-2013-0321 Decision with Reasons, p. 9 and as reflected in EB-2016-0152 Payment Amounts Order, App. I, Table 2, line 3.

Numbers may not add due to rounding.

Revised: September 11, 2020

Ontario Power Generation Inc.
Reporting and Record Keeping Requirements

Table 3
Comparison of Actual Regulatory Return on Equity to Board Approved for Nuclear ($M)
Year Ended December 31, 2019

Line No.	Description	Note	OEB Approved	Actual	(b) - (a) Variance
			(a)	(b)	(c)
	Revenues:				
1	**Revenue Requirement**	1	3,107.2		
2	**Ancillary and Other Revenue**	1	[redacted]		
3	**Bruce Lease Revenues Net of Direct Costs**	1	(20.6)		
4	**Amortization of Variance & Deferral Account Amounts**	11	179.9		
4a	**Income Tax Impact from Amortization of Pension & OPEB Cash Versus Accrual Differential Deferral Account**	12	14.7		
5	**Total Revenues** (lines 1 through 4a)	2	[redacted]	[redacted]	[redacted]
	Expenses:				
6	**OM&A**	1, 3	2,305.4	2,200.8	(104.6)
7	**Fuel**	1	217.1	239.4	22.3
8	**Depreciation & Amortization, including Amortization of Variance & Deferral Account Amounts**	4	583.6	605.3	21.7
9	**Property Taxes**	1	15.3	12.5	(2.8)
10	**Total Expenses** (lines 6 through 9)		3,121.3	3,058.0	(63.3)
11	**Other Losses/(Gains)**		0.0	0.4	0.4
	Cost of Capital Excluding Return on Equity:				
12	**Cost of Deemed Debt for Regulated Assets**	5	75.7	84.4	8.7
13	**Adjustment for Lesser of UNL or ARC**	1, 6	17.7	24.1	6.4
14	**Cost of Capital Variance and Deferral Account Additions**	7	0.0	(36.3)	(36.3)
15	**Total Cost of Capital Excluding Return on Equity** (lines 12 through 14)		93.3	72.2	(21.2)
16	**Income Tax**	1, 8	[redacted]		
16a	**Income Tax Impact from Amortization of Pension & OPEB Cash Versus Accrual Differential Deferral Account**	12	14.7		
16b	**Total Income Tax** (line 16 + line 16a)		[redacted]	98.6	[redacted]
17	**Reporting Adjustment**	9	N/A	[redacted]	N/A
17a	**Cumulative Nuclear Stretch Dollars**	1	24.8		
18	**Regulatory Return on Equity** (line 5 - line 10 + line 11 - line 15 - line 16b + line 17 + line 17a)	1, 10	119.2	401.5	282.3

Notes:

1 OEB-approved amounts are he sum of corresponding amounts in EB-2016-0152 Payment Amounts Order, App. A, Table 3 (2019 Nuclear).

2 Actual amounts in col. (b) includes the adjustment to remove the revenue component of the shareholder portion of heavy water sales net of costs for Nuclear shown in Table 2, line 5.

3 Actual amount in col. (b) includes the adjustment to remove he cost component of the shareholder portion of heavy water sales net of costs shown in Table 2, line 5.

4 OEB Approved amount in col. (a) is calculated as the sum of line 17, col. (c) in EB-2016-0152 Payments Amount Order, App. A, Table 3, plus line 4, col. (a) above. Actual amounts in col. (b) include he amortization adjustment shown in Table 2, line 6.

5 OEB Approved amounts are the sum of short-term debt cost and long-term debt cost from the EB-2016-0152 Payment Amounts Order (App. A, Table 3, lines 10 and 11). Actual amounts are from Table 2, line 8, col. (b).

6 Actual amount in col. (b) from Table 2, line 9, col. (b).

7 Actual amount in col. (b) from Table 2, line 10, col. (b).

8 Actual amount in col. (b) from Table 2, line 12, col. (b).

9 The Reporting Adjustment line is included solely to maintain the confidentiality of he amount of actual heavy water sales net of costs.

10 Actual amount in col. (b) are as shown in Table 2, line 13, col. (b).

11 OEB Approved amount is the sum of EB-2016-0152 PAO, App. A, Table 3, line 27, col. (c) and EB-2018-0243, Ex. M1, Att. A, Table 2, line 18, col. (i).

12 OEB Approved amount per EB-2018-0243, Ex. M1, Att. A, Table 2, line 20, col. (i).

Numbers may not add due to rounding.

Revised: September 11, 2020

Ontario Power Generation Inc.
Reporting and Record Keeping Requirements

Table 3
Comparison of Actual Regulatory Return on Equity to Board Approved for Nuclear ($M)
Year Ended December 31, 2018

Line No.	Description	Note	OEB Approved[2]	Actual	(b) - (a) Variance
			(a)	(b)	(c)
	Revenues:				
1	**Revenue Requirement**	1	3,025.3		
2	**Ancillary and Other Revenue**	1	[redacted]		
3	**Bruce Lease Revenues Net of Direct Costs**	1	(7.3)		
4	**Amortization of Variance & Deferral Account Amounts**		32.7		
5	**Total Revenues** (lines 1 through 4)	2	[redacted]	[redacted]	[redacted]
	Expenses:				
6	**OM&A**	1, 3	2,248.0	2,296.2	48.2
7	**Fuel**	1	207.0	227.3	20.4
8	**Depreciation & Amortization, including Amortization of Variance & Deferral Account Amounts**	4	417.6	444.0	26.3
9	**Property Taxes**	1	14.9	12.7	(2.2)
10	**Total Expenses** (lines 6 through 9)		2,887.5	2,980.2	92.8
11	**Other Gains/(Losses)**		0.0	0.1	0.1
	Cost of Capital Excluding Return on Equity:				
12	**Cost of Deemed Debt for Regulated Assets**	5	76.7	82.9	6.1
13	**Adjustment for Lesser of UNL or ARC**	1, 6	21.3	28.1	6.8
14	**Cost of Capital Variance and Deferral Account Additions**	7	0.0	(27.3)	(27.3)
15	**Total Cost of Capital Excluding Return on Equity** (lines 12 through 14)		98.1	83.7	(14.4)
16	**Income Tax**	1, 8	[redacted]	9.3	[redacted]
17	**Reporting Adjustment**	9	N/A	[redacted]	N/A
17a	**Cumulative Nuclear Stretch Dollars**	1	12.3		
18	**Regulatory Return on Equity** (line 5 - line 10 + line 11 - line 15 - line 16 + line 17)	1, 10	119.1	186.0	66.9

Notes:

1 OEB-approved amounts are the sum of corresponding amounts in EB-2016-0152 Payment Amounts Order, App. A, Table 2 (2018 Nuclear).

2 Actual amounts in col. (b) includes the adjustment to remove the revenue component of the shareholder portion of heavy water sales net of costs for Nuclear shown in Table 2, line 5.

3 Actual amount in col. (b) includes the adjustment to remove the cost component of the shareholder portion of heavy water sales net of costs shown in Table 2, line 5.

4 OEB Approved amount in col. (a) is calculated as the sum of line 17, col. (c) in EB-2016-0152 Payments Amount Order, App. A, Table 2, plus line 4, col. (a) above. Actual amounts in col. (b) include the amortization adjustment shown in Table 2, line 6.

5 OEB Approved amounts are the sum of short-term debt cost and long-term debt cost from the EB-2016-0152 Payment Amounts Order (App. A, Table 2, lines 10 and 11). Actual amounts are from Table 2, line 8, col. (b).

6 Actual amount in col. (b) from Table 2, line 9, col. (b).

7 Actual amounts in col. (b) from Table 2, line 10, col. (b).

8 Actual amounts in col. (b) from Table 2, line 12, col. (b).

9 The Reporting Adjustment line is included solely to maintain the confidentiality of the amount of actual heavy water sales net of costs.

10 Actual amount in col. (b) are as shown in Table 2, line 13, col. (b).