UNDERTAKING JTX4.18

Undertaking

TO UPDATE THE ANALYSIS IN SEC 149 TO INCLUDE THE IMPACT OF THE HYDRO ONE SHARES, AND THEN SIMILARLY PROVIDE THAT DETAILED CALCULATION AS TO THE PREVIOUS UNDERTAKING.

Response

The following response was prepared by Willis Towers Watson ("WTW"):

Table 1 below provides an estimate of the dollar difference, by year, between total remuneration (including Hydro One shares) for each of PWU, Society, and Management employee groups and the market 50th percentile:

Table 1: Estimated Dollar Difference between Total Remuneration – OPG Overall and Market P50

	PWU ($Millions)			Society ($Millions)			Management ($Millions)			Overall ($Millions)		
	OPG	Market	$ Variance	OPG	Market	$ Variance	OPG	Market	$ Variance	OPG	Market	$ Variance
2019	$682.1	$601.8	$80.2	$529.3	$459.2	$70.1	$228.6	$259.2	($30.7)	$1,440.0	$1,320.2	$119.7
2022	[redacted]											
2023												
2024												
2025												
2026												

Table 2 below provides, by year, the portion allocated to the nuclear operations and the portion of the allocated nuclear values that are attributed to OM&A expenses.

Table 2: Estimated Dollar Difference between Total Remuneration – Amounts allocated to Nuclear Facilities and attributable to OM&A portion of Total Compensation

	PWU ($Millions)		Society ($Millions)		Management ($Millions)		Overall ($Millions)	
	Nuclear $ Allocated Variance	OM&A Attributed	Nuclear $ Allocated Variance	OM&A Attributed	Nuclear $ Allocated Variance	OM&A Attributed	Nuclear $ Allocated Variance	OM&A Attributed
2019	--	--	--	--	--	--	--	--
2022	$20.7	$11.2	$47.2	$35.5	($28.5)	($22.6)	$39.4	$24.2
2023	$12.0	$3.2	$40.7	$30.4	($32.2)	($25.5)	$20.5	$8.1
2024	$4.9	($4.3)	$34.2	$25.3	($34.7)	($27.1)	$4.5	($6.1)
2025	$10.7	$0.6	$27.5	$19.1	($32.2)	($24.4)	$6.0	($4.8)
2026	$33.5	$22.3	$19.7	$12.3	($25.1)	($18.4)	$28.2	$16.2

The 2019 values for PWU, Society, and Management employee groups in Table 1 are consistent with the results of WTW's 2019 compensation benchmarking report (Ex. F4-3-1, Attachment 2), extrapolated to reflect the full OPG population within each representation based on relative percentage of benchmarked employees.[1] Table 3, step 1 below illustrates the calculations for each employee group, separately showing PWU Regular and PWU Term Employees.

Table 3

Step 1: Extrapolation of 2019 total benchmarked values to reflect full OPG population

OPG Group	2019 Total Dollar Values ($MM) *OPG Benchmarked Population*		% of OPG Matched Incumbents	2019 Total Dollar Values ($MM) *Full OPG Population*		Variance	
	OPG	Market		OPG	Market	%	$MM
	(A)	(B)	(C)	(D) = A * (1 + (1 - C))	(E) = B * (1 + (1 - C))	(F) = (D / E) - 1	(G) = D - E
PWU *(Regular)*	$563.6	$477.1	84%	$655.8	$555.2	18.1%	$100.6
PWU *(Terms)*	$25.8	$45.7	98%	$26.3	$46.6	-43.6%	($20.3)
PWU *(Regular + Terms)*	$589.3	$522.8	85%	$682.1	$601.8	13.3%	$80.2
Society	$461.7	$400.5	85%	$529.3	$459.2	15.3%	$70.1
Management	$190.7	$216.3	80%	$228.6	$259.2	-11.8%	($30.7)
Overall *(Sum of groups)*	**$1,241.8**	**$1,139.7**	**84%**	**$1,440.0**	**$1,320.2**	**9.1%**	**$119.7**

In Step 2 presented in Table 4 below, WTW then calculated the projected year over year headcount changes for each year and employee group based on a percentage change from the 2019 headcount as provided by OPG (Table 5 in L-F4-03-SEC-149 and reproduced below in Table 5).

[1] As the overall OPG results shown are based on the extrapolated total across all three representations, it may not align to the overall OPG results in the 2019 compensation benchmarking report that was based on benchmarked incumbents.

Table 4

Step 2: Incorporate projected OPG headcount reductions (%) and calculate the year over year % change for each year from 2019

OPG Group	Overall 2019 Headcount	OPG Headcount Projections													
		2020		2021		2022		2023		2024		2025		2026	
		% change from 2019	Year over Year % change	% change from 2019	Year over Year % change	% change from 2019	Year over Year % change	% change from 2019	Year over Year % change	% change from 2019	Year over Year % change	% change from 2019	Year over Year % change	% change from 2019	Year over Year % change
PWU	4998	[redacted]													
Total Exc. Nuc. Auth	4754														
Nuclear Authorized	244														
PWU *(Regular)*	4608														
PWU *(Terms)*	390														
Society	3115														
Total Exc. Nuc. Auth	3020														
Nuclear Authorized	95														
Management	1069														
Total Exc. Nuc. Auth	1019														
Nuclear Authorized	50														
OPG Overall	9182														

Reflects amounts presented in L-F4-03-SEC-149 Table 5

Table 5: OPG Headcount – 2019-2026

OPG Group	OPG Headcount Projections							
	2019	2020	2021	2022	2023	2024	2025	2026
PWU	100.0%	[redacted]						
PWU Terms	100.0%							
Society	100.0%							
Management	100.0%							
Overall	100.0%							

The dollar differences in each year over the 2022-2026 IR term were determined based on the following steps and assumptions:

- Update the OPG benchmark data based on changes in salary assumed in OPG's business plan as provided in the Table 6 below (same as Table 3 in L-F4-03-SEC-149).

Table 6: OPG Salary Assumptions – 2020-2026

[redacted]

- Adjust OPG's data for the forecasted number of employees receiving Hydro One share awards – given that new hires do not receive Hydro One shares – based on the following information provided by OPG (refer to Table 7 below).

Table 7: Employees Receiving Hydro One Share Awards

[redacted]

- Adjust the market benchmark data based on future wage / salary increases determined by WTW and set out in Table 8 below (same as Table 4 in L-F4-03-SEC-149), reflecting the following assumptions:

  - Salary increase assumptions for 2020 and 2021 are sourced from WTW's 2020 Canadian General Industry Salary Budget Survey.
  - For the remaining years, estimated market increases for Management group employees are based on estimated [redacted] which represents the average premium of salary increases above CPI over the past five years.
  - Salary increase assumptions for represented employees tend to track [redacted] however, the market for PWU and Society positions includes a mix of represented and non-represented employees, therefore the salary premium was adjusted to reflect an estimate of the unionized versus non-unionized workforce. Specifically, salary increase assumptions include estimated [redacted] based on an estimate that 70% of the Canadian workforce is non-unionized.

Table 8: Adjustments to Market Benchmark Data for Future Wage / Salary Increases

[redacted]

- Estimate dollar differentials based on the difference between OPG's total remuneration and the market median total remuneration for the corresponding employee group for each year. In doing so, for each year, OPG total values and the market were adjusted to reflect the percent changes in headcount from Tables 4 and 5 above, percent changes in the number of employees eligible for Hydro One share awards per Table 7 above and expected salary increases at OPG and in the market per Table 6 and Table 8 above, respectively. These steps are captured in Table 9 below.

Table 9

Step 3: Incorporate Hydro One shares, salary and headcount adjustments

OPG Group	OPG								Market				Variance	
	Beginning Total $ Value ($MM)	Sum of H1 Shares Pre-Adjustment	H1 Shares Elig. Adjustment*	Sum of H1 Shares Post-Adjustment	Total $ Value Post Adjustment ($MM)	Salary Increase Adjustment %	Headcount Adjustment %	Ending Total $ Value ($MM)	Beginning Total $ Value ($MM)	Salary Increase Adjustment %	Headcount Adjustment %	Ending Total $ Value ($MM)	%	$MM
	(D) *for 2019*	(I)	(J)	(K) = I x J	(L) = (D - I) + K	(M)	(H) *from step 2*	(N) = L x M x H	(E) *for 2019*	(O)	(H) *from step 2*	(P) = E x O x H	(Q) = (N / P) - 1	(R) = N - P
PWU *(Regular)*														
2019	$655.8	$10.8	n/a	$10.8	$655.8	n/a	n/a	$655.8	$555.2	n/a	n/a	$555.2	18.1%	$100.6
[redacted]														
PWU *(Terms)*														
2019	$26.3	--	--	--	$26.3	n/a	n/a	$26.3	$46.6	n/a	n/a	$46.6	-43.6%	($20.3)
[redacted]														
PWU *(Regular + Terms)*														
2019	--	--	--	--	--	--	--	$682.1	--	--	--	$601.8	--	$80.2
[redacted]														
Society														
2019	$529.3	$5.6	n/a	$5.6	$529.3	n/a	n/a	$529.3	$459.2	n/a	n/a	$459.2	15.3%	$70.1
[redacted]														
Management														
2019	$228.5	--	--	--	$228.5	n/a	n/a	$228.5	$259.2	n/a	n/a	$259.2	-11.8%	($30.7)
[redacted]														
Overall *(Sum of groups)*														
2019	--	--	--	--	--	--	--	$1,439.9	--	--	--	$1,320.2	--	$119.7
[redacted]														

* **Note:** 2021-2022 Hydro One share awards percentage shown relative to 2019. Number of employees eligible for Hydro One share awards in 2020 and 2021 is held constant for presentation purposes.

- Allocate the total remuneration differentials to the nuclear operations based on the percentage of OPG's total compensation cost attributed to the nuclear operations by employee group (results shown in Table 1 above), and then further attribute the results to OM&A expenses on the basis of the percentage of OPG's total compensation cost attributed to the nuclear operations that is represented by OM&A expenses by employee group (results shown in Table 2 above); these percentages as provided by OPG are set out in Table 10 below

and the calculations are provided in Table 11 below (same as L-F4-03-SEC-149 Table 6).

Table 10: OPG Allocations

Nuclear % of Total	2022	2023	2024	2025	2026
Management	80%	80%	79%	77%	71%
Society	79%	79%	79%	77%	72%
PWU- Reg	76%	76%	74%	74%	72%
PWU- Term	100%	100%	100%	100%	100%
OM&A % of Total Compensation	**2022**	**2023**	**2024**	**2025**	**2026**
Management	79%	79%	78%	76%	73%
Society	75%	75%	74%	69%	62%
PWU- Reg	85%	84%	82%	76%	57%
PWU- Term	99%	99%	99%	97%	0%

Table 11

Step 4: Incorporate nuclear allocation and OM&A attribution adjustments

OPG Group	OPG $ Variance ($MM)	Nuclear $ Allocation %	Nuclear $ Allocation ($MM)	OM&A Attribution %	OM&A $ Attributed ($MM)
	(R) *from step 3*	(S)	(T) = R x S	(U)	(V) = T x U
PWU *(Regular)*	[redacted]				
2022	[redacted]	75.6%	$64.4	84.7%	$54.5
2023	[redacted]	75.6%	$56.7	83.9%	$47.6
2024	[redacted]	74.5%	$52.3	81.5%	$42.6
2025	[redacted]	73.5%	$45.4	75.6%	$34.4
2026	[redacted]	72.2%	$39.1	57.1%	$22.3
PWU *(Terms)*	[redacted]				
2022	[redacted]	100.0%	($43.6)	99.2%	($43.3)
2023	[redacted]	100.0%	($44.8)	99.2%	($44.4)
2024	[redacted]	100.0%	($47.4)	99.1%	($47.0)
2025	[redacted]	100.0%	($34.7)	97.3%	($33.8)
2026	[redacted]	100.0%	($5.6)	0.0%	$0.0
PWU *(Regular + Terms)*	[redacted]				
2022	[redacted]	--	$20.7	--	$11.2
2023	[redacted]	--	$12.0	--	$3.2
2024	[redacted]	--	$4.9	--	($4.3)
2025	[redacted]	--	$10.7	--	$0.6
2026	[redacted]	--	$33.5	--	$22.3
Society	[redacted]				
2022	[redacted]	79.1%	$47.2	75.3%	$35.5
2023	[redacted]	79.0%	$40.7	74.7%	$30.4
2024	[redacted]	78.6%	$34.2	73.7%	$25.3
2025	[redacted]	76.7%	$27.5	69.3%	$19.1
2026	[redacted]	72.3%	$19.7	62.1%	$12.3
Management	[redacted]				
2022	[redacted]	79.7%	($28.5)	79.3%	($22.6)
2023	[redacted]	79.9%	($32.2)	79.3%	($25.5)
2024	[redacted]	79.2%	($34.7)	78.2%	($27.1)
2025	[redacted]	76.8%	($32.2)	75.8%	($24.4)
2026	[redacted]	71.4%	($25.1)	73.1%	($18.4)
Overall *(Sum of groups)*	[redacted]				
2022	[redacted]	--	$39.5	--	$24.2
2023	[redacted]	--	$20.5	--	$8.1
2024	[redacted]	--	$4.5	--	($6.1)
2025	[redacted]	--	$6.0	--	($4.8)
2026	[redacted]	--	$28.2	--	$16.2

As in Ex. L-F4-03-SEC-149, WTW notes that Society Extended Temporary Employees ("ETEs") were excluded from the 2019 compensation benchmarking report and are also excluded from this analysis. Given that Society ETEs cannot join OPG's pension plan, WTW expects that including Society ETEs would improve OPG's positioning relative to market and therefore the total remuneration dollar variance between OPG and the market.

WTW also notes that in the total remuneration calculation, total direct compensation reflects the cost of the employer providing the target level of compensation, while pension and benefits values represent the estimated employer provided value. The pension and benefit values may not align directly with the cost for OPG to provide these programs; therefore, WTW suggests caution in using total remuneration, which reflects

a mix of cost and value, to assess OPG's overall cost competitiveness relative to the market 50th percentile.

The following response was prepared by OPG:

The percentage changes from 2019 in step 2a and the corresponding year-over-year percentage changes in step 2b were derived directly from the corresponding employee group line items in Ex. L-F4-03-Society-018, Attachment 1 (i.e., line 26 for Management, line 27 for Society, line 29 for PWU Regular and line 31 for PWU Term).

The 2022-2026 OM&A attribution percentages in step 4 represent the distribution of labour costs, by employee group, as reflected in the annual requested nuclear revenue requirement in this application and summarized on an overall basis in Ex. L-F4-03-Staff-275, Attachment 1.

The forecasted total of PWU and Society employees eligible for Hydro One share awards can also be found at Ex. L-F4-03-PWU-031, Chart 1.