NUCLEAR PAYMENT AMOUNTS

1.0 PURPOSE

This evidence presents OPG's requested payment amounts for the nuclear facilities for 2022, 2023, 2024, 2025, and 2026.

2.0 PAYMENT AMOUNT

OPG is seeking approval of the following smoothed payment amounts:

- $101.51/MWh for the nuclear facilities effective January 1, 2022;
- $105.13/MWh for the nuclear facilities effective January 1, 2023;
- $104.42/MWh for the nuclear facilities effective January 1, 2024;
- $106.70/MWh for the nuclear facilities effective January 1, 2025; and
- $120.67/MWh for the nuclear facilities effective January 1, 2026.

The basis for the requested payment amount is presented in Ex. I1-3-1, Table 1.

Numbers may not add due to rounding.

Table 1
Payment Amounts - Nuclear
January 1, 2022 to December 31, 2026

Line No.	Description	Note	2022	2023	2024	2025	2026
			(a)	(b)	(c)	(d)	(e)
1	**Revenue Requirement Net of Stretch Factor ($M)**	1	3,611.4	3,540.8	3,644.2	3,324.5	2,550.9
2	**Forecast Production (TWh)**	2	33.2	30.8	33.3	30.2	21.5
3	**Smoothed Nuclear Payment Amount ($/MWh)**	3	101.51	105.13	104.42	106.70	120.67
4	**Forecast Nuclear Revenue Received ($M)** (line 2 x line 3)		3,370.1	3,240.9	3,477.2	3,221.2	2,595.8
5	**Nuclear Revenue Requirement Deferred ($M)** (line 1 - line 4)		241.2	299.9	167.0	103.4	(44.8)

Notes:
1 From Ex. I1-1-1 Table 1, line 26.
2 From Ex. I1-1-1 Table 2a, line 14.
3 From Ex. I1-1-2 Table 2, line 4

Numbers may not add due to rounding.

Table 2
Calculation of Nuclear Stretch Factor
January 1, 2022 to December 31, 2026 ($M)

Line No.	Description	Note	2022	2023	2024	2025	2026
			(a)	(b)	(c)	(d)	(e)
	Stretch Factor Applicable Nuclear OM&A Expenses						
	Darlington Nuclear OM&A Expenses						
1	Base OM&A	1		576.2	582.8	578.6	616.3
2	Project OM&A	2		74.0	70.6	70.9	62.0
3	Outage OM&A	3		187.2	94.7	192.6	61.3
4	Allocation of Corporate Costs	4		199.1	200.1	200.3	252.9
5	Darlington Total OM&A Expenses Subject to Stretch Factor (sum of lines 1 to 4)			1,036.4	948.2	1,042.3	992.5
	Pickering Total Nuclear OM&A Expenses						
6	Base OM&A	5		730.1	709.8	490.5	-
7	Project OM&A	6		11.0	10.0	5.8	-
8	Outage OM&A	7		157.4	104.0	-	-
9	Allocation of Corporate Costs	8		180.9	175.2	134.1	-
10	Pickering Total OM&A Expenses Subject to Stretch Factor (sum of lines 6 to 9)			1,079.4	998.9	630.4	-
	Stretch Factor Applicable Nuclear Capital In-Service Additions Revenue Requirement						
11	Cost of Capital for Nuclear Capital In-Service Additions	10		16.0	46.9	71.6	94.9
12	Depreciation Expense	9		14.0	41.1	63.0	84.8
13	Income Tax Expense	11		(27.8)	(10.2)	(13.5)	(4.4)
14	Total Nuclear Capital In-Service Additions Revenue Requirement Subject to Stretch Factor (line 11 + line 12 + line 13)			2.2	77.7	121.0	175.3
15	Total Revenue Requirement Amount Subject to Stretch Factor (line 5 + line 10 + line 14)			2,118.1	2,024.8	1,793.8	1,167.8
16	Nuclear Stretch Factor	12		0.45%	0.45%	0.45%	0.30%
17	**Nuclear Stretch Factor Revenue Requirement Adjustment ($M)**	13		**9.5**	**18.6**	**25.5**	**18.0**

Notes:
Refer to Table 2a

Numbers may not add due to rounding.

Table 2a
Notes to Ex. I1-3-1 Table 2

Notes:

1 From Ex. F2-2-1, Table 1, line 1 plus Ex. F2-2-1, Table 1, Darlington line of note 4.
2 Ex. F2-3-1, Table 1, line 1 + Darlington lines of Ex. F2-3-1, Table 1 note 4
3 From Ex. F2-4-1_Table 1, line 3.
4 From Ex. F3-1-1, Table 3a, line 11, col. (h).
5 From Ex. F2-2-1, Table 1, line 2 plus Ex. F2-2-1, Table 1, Pickering line of note 3.
6 Ex. F2-3-1, Table 1, line 2 + Pickering lines of Ex. F2-3-1, Table 1 note 4
7 From Ex. F2-4-1 Table 1, line 6.
8 From Ex. F3-1-1, Table 3b, line 1, col. (h).
9 The continuinty of OEB-approved nuclear operations and support services in-service capital additions for 2023-2026 and resulting rate base amounts are as follows:

		2023	2024	2025	2026
(a)	Opening Balance: Non-DRP In-service Fixed Assets (Prior year (d))	-	485.6	967.9	1,430.0
(b)	In-Service Additions Excluding Darlington Refurbishment (Ex. B3-3-1, Table 2, col. (d))	499.6	523.4	525.1	379.2
(c)	Depreciation Expense on In-Service Additions	(14.0)	(41.1)	(63.0)	(84.8)
(d)	Closing Balance: In-service Fixed Assets Excluding Darlington Refurbishment (a) + (b) + (c)	485.6	967.9	1,430.0	1,724.5
(e)	Net Fixed Assets Rate Base Amount = [(a) + (d)] / 2	270.7	782.8	1,190.5	1,577.3

10 Cost of capital for OEB-approved nuclear operations and support services in-service capital additions for 2023-2026 is calculated as follows:

		2023	2024	2025	2026
(a)	Net Fixed Asset Rate Base (Note 9, line (e))	270.7	782.8	1,190.5	1,577.3
(b)	Return on Equity (50% Equity at 8.34% per Ex. C1-1-1, Tables 1-4)	11.3	32.6	49.6	65.8
(c)	Cost of Debt (50% Debt at Total Debt Cost per Ex. C1-1-1, Tables 1-4)	4.8	14.3	21.9	29.1
(d)	Total Cost of Capital (b) + (c)	16.0	46.9	71.6	94.9

11 Income tax expense associated with the OEB-approved nuclear operations and support services in-service capital additions for 2023-2026 is calculated as follows:

		2023	2024	2025	2026
(a)	Depreciation Expense (Note 9, line (c))	(14.0)	(41.1)	(63.0)	(84.8)
(b)	Capital Cost Allowance & Other Deductions	(108.6)	(104.5)	(153.2)	(163.6)
(c)	Return on Equity (Note 10, line (b))	11.3	32.6	49.6	65.8
(d)	Net Regulatory Taxable Income Increase / (Decrease) (Note 10 line (b) less Note 9 line (c) plus Note 11 line (b))	(83.4)	(30.7)	(40.6)	(13.1)
(e)	Income Tax Expense (line (d) x 25% / (1 - 25%)	(27.8)	(10.2)	(13.5)	(4.4)

12 From Ex. A1-3-2, Section 2.2.1

13 The nuclear stretch factor revenue requirement adjustment can be further broken down as follows:

		2023	2024	2025	2026
(a)	Darlington OM&A Stretch Factor Adjustment (line 5 x line 16) + Prior Year	4.66	8.93	13.62	16.60
(b)	Pickering OM&A Stretch Factor Adjustment (line 10 x line 16) + Prior Year +	4.86	9.35	11.01	
(c)	Capital Stretch Factor Adjustment (line 14 x line 16) + Prior Year	0.01	0.36	0.90	1.43
(d)	Total Nuclear Stretch Factor Revenue Requirement Adjustment (line (a) plus line (b) plus line (c))	9.53	18.64	25.54	18.03

+ 2025 adjusted for removal of Pickering Units 1 & 4. 2026 adjusted for removal of Pickering Units 5-8.