Board Staff Interrogatory #328

Interrogatory

Reference:
Exhibit H1 / Tab 1 / Schedule 1 / p. 19

Preamble:

OPG stated that there are three nuclear CRVA-eligible projects included in the proposed revenue requirements in the current application as follows:

- Pickering Optimized Shutdown
- Fuel Channel Life Extension
- Fuel Channel Life Extension Ongoing Costs

Question(s):

a) Please confirm that the DRP is also eligible and has revenue requirement amounts during the 2022-2026 Custom IR term.

b) Please provide the proposed annual revenue requirements for each of the nuclear CRVA-eligible projects and confirm that these will be the reference amounts to which any variance will be recorded (if approved as filed).

Response

a) Confirmed. In addition to the Darlington Refurbishment Program ("DRP"), there are revenue requirement impacts during the IR term period related to Pickering Extended Operations capital in-service amounts projected to be placed in service in 2020 and 2021.

b) Non-capital costs for CRVA-eligible nuclear projects are provided in Chart 1. OPG confirms these will be the reference amounts to which any variance will be recorded for the non-capital components of these projects (if approved as filed).

The revenue requirements associated with DRP capital costs are provided in Chart 2, inclusive of corrections identified response in Ex. L-B1-01-Staff-24 and Ex. L-F4-01-Staff-269.[1] The amounts at line 15 will be the reference amounts to which any variance will be recorded for the capital component of the DRP (if approved as filed). For reconciliation purposes to the uncorrected pre-filed evidence, Chart 2A

[1] As noted in these responses, OPG will reflect the corrections in preparing the draft payment amounts order.

provides the revenue requirements associated with the DRP capital costs before the corrections.

The revenue requirements associated with Pickering Extended Operations (PEXT) capital projects are provided in Chart 3. The amounts at line 11 will be the reference amounts to which any variance will be recorded for the capital component of the Pickering Extended Operations initiative (if approved as filed).

Chart 1
Forecast Non-Capital Costs for Nuclear CRVA-eligible Projects

Line No.	Category	2022 Plan	2023 Plan	2024 Plan	2025 Plan	2026 Plan
		(a)	(b)	(c)	(d)	(e)
	Optimization of Pickering Shutdown					
1	Base OM&A (Ex. F2-2-1, Table 1, line 12)	5.8	2.7	4.8	0.0	0.0
2	Outage OM&A (Ex. F2-4-1, Table 1, line 9)	2.6	2.2	13.5	0.0	0.0
3	Project OM&A (Ex. F2-3-1, Table 1, line 10)	7.8	0.0	0.0	0.0	0.0
4	**Total Optimization of Pickering Shutdown**	**16.2**	**4.9**	**18.4**	**0.0**	**0.0**
	Fuel Channel Life Extension					
5	Base OM&A - Ongoing (Ex. F2-2-1, Table 1, line 10)	5.9	4.3	0.8	0.4	0.0
6	Outage OM&A - Ongoing (Ex. F2-4-1, Table 1, line 7)	29.8	14.5	0.3	0.0	0.0
7	Sub-total Ongoing	35.7	18.7	1.1	0.4	0.0
8	Project OM&A - FCLE Project (Ex. F2-3-1, Table 1, line 12)	0.4	0.0	0.0	0.0	0.0
9	**Total Fuel Channel Life Extension**	**36.1**	**18.7**	**1.1**	**0.4**	**0.0**
10	**Darlington Refurbishment Program** (Ex. F2-7-1, Table 1, line 1)	**24.2**	**23.6**	**29.3**	**25.0**	**8.4**
11	**Total Forecast Non-Capital Costs** (line 4 + line 9 + line 10)	**76.5**	**47.2**	**48.7**	**25.4**	**8.4**

Chart 2
Forecast DRP Revenue Requirement (Capital Component) – Corrected

Line No.	Category	2022 Plan	2023 Plan	2024 Plan	2025 Plan	2026 Plan
		(a)	(b)	(c)	(d)	(e)
	Rate Base					
1	DRP Average Rate Base (Ex. B3-1-1, Table 2, lines 2 and 10)	4,978.0	4,815.3	7,114.2	8,191.6	8,853.7
2	D2O Average Rate Base (Ex. B3-1-1, Table 2, lines 3 and 11)	455.9	441.0	426.0	411.0	396.1
3	**Total Rate Base**	**5,433.9**	**5,256.3**	**7,540.2**	**8,602.7**	**9,249.8**
4	Weighted Average Cost of Capital (Ex. C1-1-1, Tables 1-5)	5.98%	5.93%	5.99%	6.01%	6.01%
5	**Cost of Capital** (line 3 x line 4)	**325.2**	**311.5**	**451.7**	**517.2**	**556.3**
	Depreciation					
6	DRP (Ex. F4-1-1, Table 2, line 2)	163.4	163.4	249.8	298.9	334.6
7	D2O (Ex. F4-1-1, Table 2, line 3)	15.0	15.0	15.0	15.0	15.0
8	**Total Depreciation**	**178.3**	**178.3**	**264.8**	**313.9**	**349.6**
	Regulatory Taxable Income Impacts					
9	ROE (line 3 x 50% x 8.34%)	226.6	219.2	314.4	358.7	385.7
10	Depreciation (line 8)	178.3	178.3	264.8	313.9	349.6
11	CCA (F4-2-1, Table 3c, Note 3)	(527.6)	(554.4)	(543.8)	(542.1)	(523.1)
12	**Net Increase (Decrease) in Regulatory Taxable Income**	**(122.7)**	**(156.9)**	**35.4**	**130.5**	**212.2**
13	**Income Tax Rate**	25.0%	25.0%	25.0%	25.0%	25.0%
14	**Income Tax Impact** (line 12 x line 13/(1 - line 13))	**(40.9)**	**(52.3)**	**11.8**	**43.5**	**70.7**
15	**Total Forecast DRP Capital Revenue Requirement** (line 5 + line 8 + line 14)	**462.7**	**437.6**	**728.3**	**874.6**	**976.5**

Chart 2A
Forecast DRP Revenue Requirement (Capital Component) – As Filed

Line No.	Category	2022 Plan	2023 Plan	2024 Plan	2025 Plan	2026 Plan
		(a)	(b)	(c)	(d)	(e)
	Rate Base					
1	DRP Excluding D2O (Ex. B3-1-1, Table 2, lines 2 and 10)	4,979.4	4,815.2	7,112.6	8,188.5	8,849.1
2	D2O Storage Project (Ex. B3-1-1, Table 2, lines 3 and 11)	455.9	441.0	426.0	411.0	396.1
3	**Total Rate Base**	**5,435.3**	**5,256.2**	**7,538.6**	**8,599.6**	**9,245.2**
4	Weighted Average Cost of Capital (Ex. C1-1-1, Tables 1-5)	5.98%	5.93%	5.99%	6.01%	6.01%
5	**Cost of Capital** (line 3 x line 4)	**325.3**	**311.5**	**451.6**	**517.0**	**556.0**
	Depreciation					
6	DRP Excluding D2O (Ex. F4-1-1, Table 2, line 2)	164.9	164.9	251.3	300.4	336.1
7	D2O Storage Project (Ex. F4-1-1, Table 2, line 3)	15.0	15.0	15.0	15.0	15.0
8	**Total Depreciation**	**179.8**	**179.8**	**266.3**	**315.4**	**351.1**
	Regulatory Taxable Income Impacts					
9	ROE (line 3 x 50% x 8.34%)	226.7	219.2	314.4	358.6	385.5
10	Depreciation (line 8)	179.8	179.8	266.3	315.4	351.1
11	CCA (F4-2-1, Table 3c, Note 3)	(527.6)	(554.4)	(543.8)	(542.1)	(523.1)
12	**Net Increase (Decrease) in Regulatory Taxable Income**	**(121.1)**	**(155.4)**	**36.8**	**131.9**	**213.5**
13	**Income Tax Rate**	25.0%	25.0%	25.0%	25.0%	25.0%
14	**Income Tax Impact** (line 12 x line 13/(1 - line 13))	**(40.4)**	**(51.8)**	**12.3**	**44.0**	**71.2**
15	**Total Forecast DRP Capital Revenue Requirement** (line 5 + line 8 + line 14)	**464.8**	**439.6**	**730.2**	**876.4**	**978.2**

Chart 3:
Forecast Pickering Extended Operations Revenue Requirement (Capital Component)

Line No.	Category	2022 Plan	2023 Plan	2024 Plan	2025 Plan	2026 Plan
		(a)	(b)	(c)	(d)	(e)
1	**Rate Base**	**23.2**	**14.4**	**5.6**	**1.0**	**0.8**
2	Weighted Average Cost of Capital (Ex. C1-1-1, Tables 1-5)	5.98%	5.93%	5.99%	6.01%	6.01%
3	**Cost of Capital** (line 3 x line 4)	**1.4**	**0.9**	**0.3**	**0.1**	**0.0**
4	**Depreciation**	**8.8**	**8.8**	**8.8**	**0.2**	**0.0**
	Regulatory Taxable Income Impacts					
5	ROE (line 1 x 50% x 8.34%)	1.0	0.6	0.2	0.0	0.0
6	Depreciation (line 4)	8.8	8.8	8.8	0.2	0.0
7	CCA	(2.1)	(1.9)	(1.7)	(1.6)	(1.4)
8	**Net Increase (Decrease) in Regulatory Taxable Income**	**7.7**	**7.5**	**7.3**	**(1.3)**	**(1.4)**
9	**Income Tax Rate**	25.0%	25.0%	25.0%	25.0%	25.0%
10	**Income Tax Impact** (line 8 x line 9/(1 - line 9))	**2.6**	**2.5**	**2.4**	**(0.4)**	**(0.5)**
11	**Total Forecast PEXT Capital Revenue Requirement** (line 3 + line 4 + line 10)	**12.8**	**12.2**	**11.6**	**(0.1)**	**(0.4)**