Board Staff Interrogatory #237

Interrogatory

Reference:
Exhibit F2 / Tab 4 / Schedule 1 / p. 3

Preamble:

OPG noted that the Darlington NGS units are on a three-year outage cycle but are currently impacted by the refurbishment schedule. As a result, outage OM&A expenditures reflect two regular planned outages in 2021, one regular planned outage in each of 2023 and 2025, and no regular planned outages in 2020, 2022, 2024 and 2026. In addition, as noted above, the units laid up during refurbishment (e.g. Unit 3 during 2020-2023) will be subject to Cyclical Outages. The work activities and associated outage OM&A expenditures for Cyclical Outages are in addition to and separate from the refurbishment of the units.

OPG also noted that Darlington NGS's Unit 2, Unit 3 and Unit 1 are scheduled for a combined six short, post-refurbishment planned outages in 2021-2026 following return to service. These post refurbishment outages will address equipment issues that are expected to arise after the refurbishment is complete and the unit has resumed operations.

Question(s):

a) Please further explain cyclical outages and the requirement for these outages while the units are laid up during refurbishment.

b) Please provide the number of mini outages for each of Units 2, 3 and 1 planned for the 2022-2026 Custom IR term. Please also provide the cost of each mini outage by unit. Please confirm that the budget for the mini outages is split between base OM&A and outage OM&A (and provide a breakdown).

c) Please advise whether a mini outage has already been completed for Unit 2. If so, please provide the actual costs and compare those actual costs to the planned costs for the remaining mini outages. Please also describe any lessons learned from mini outages completed to date and how those lessons will be applied to the future mini outages.

Response

a) See Ex. F2-4-1, p. 1, lines 12-23 for a description of Cyclical Outages and how they apply to units undergoing refurbishment.

b) For purposes of response to part b) and c), OPG interprets a mini-outage to refer to the scheduled post-refurbishment outages at Darlington.

In 2022-2026, Unit 2 has scheduled one post-refurbishment outage, while Units 3 and 1 have two each. The incremental outage OM&A budget for each post refurbishment outage by unit is included in the table below.

Post-Refurb Mini-Outage Costs (M$)		2022	2023	2024	2025	2026
D2	Post-Refurb Mini-Outage #2	4.1				
D3	Post-Refurb Mini-Outage #1		0.1	11.4		
	Post-Refurb Mini-Outage #2				4.5	
D1	Post-Refurb Mini-Outage #1				12.0	
	Post-Refurb Mini-Outage #2					4.6

OPG does not separately identify the OM&A base resources working on outages in the future plan years.

c) A post refurbishment outage on Unit 2 has not been completed as of the date of this response.