Board Staff Interrogatory #193

Interrogatory

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

Question(s):

a) Please comment on OPG's reliability performance when evaluated using measures of Critical Deficiencies (i.e. 1-year On-Line Deficient Critical Maintenance Backlogs and 1-year On-Line Corrective Maintenance Backlogs). In the response, please discuss whether OPG achieves a better performance when considering measures of Critical Deficiencies exclusively.

Response

OPG notes that it has incorrectly identified the names of the new metrics on page 4 of Ex. F2-1-1. The correct term is "1-Year On-Line Deficient Critical Backlogs" and "1-Year On-Line Corrective Critical Backlogs" (i.e., no reference to maintenance).

In 2017, OPG started benchmarking 1-Year On-Line Deficient Critical Backlogs and 1-Year On-Line Corrective Critical Backlogs to focus on the backlog of critical work orders, as opposed to non-critical work orders. Critical work orders have a more significant impact on reliability. OPG continues to benchmark 1-Year On-Line Deficient Maintenance Backlogs and 1-Year Corrective Maintenance Backlogs, which reflect the sum of critical and non-critical work orders. ScottMadden's evaluation of 2019 OPG Nuclear Benchmarking concluded that OPG's suite of benchmarked metrics provided a sufficiently robust view of OPG's nuclear performance (Ex. F2-1-1, Attachment 3, p. 3).

As shown in Tables 1 and 2 below, both stations' backlogs have improved for all backlog metrics, with the critical backlogs showing a more favourable rate of reduction between 2017 and 2019. The one exception was Pickering's 1-Year On-Line Corrective Critical Backlog in 2019 due to standby generator and fueling machine repair work orders, which were completed in January of 2020 (Ex. F2-1-1, Attachment 2, p. 4).

See Charts 1 and 2 below summarizing the performance at both stations from 2017-2019.

The deficient maintenance backlog and deficient critical backlog metrics showed the same quartile performance in 2019 at both stations.

The corrective maintenance backlog and corrective critical backlog metrics showed the same quartile performance in 2019 at Pickering. At Darlington in 2019, the corrective maintenance backlog metric was in the third quartile while the corrective critical backlog metric was in the first quartile.

Chart 1: Pickering Backlog Benchmarking Performance 2017-2019

	Pickering Actuals		
Metric	**2017**	**2018**	**2019**
1-Year On-line Deficient Maintenance Backlog (work orders per unit)	383	279	114
1-Year On-line Deficient Critical Backlog (work orders per unit)	41	9	5
1-Year On-line Corrective Maintenance Backlog (work orders per unit)	25	17	9
1-Year On-line Corrective Critical Backlog (work orders per unit)	0	0	1

Chart 2: Darlington Backlog Benchmarking Performance 2017-2019

	Darlington Actuals		
Metric	**2017**	**2018**	**2019**
1-Year On-line Deficient Maintenance Backlog (work orders per unit)	119	124	110
1-Year On-line Deficient Critical Backlog (work orders per unit)	15	9	3
1-Year On-line Corrective Maintenance Backlog (work orders per unit)	13	6	4
1-Year On-line Corrective Critical Backlog (work orders per unit)	1	0	0