Board Staff Interrogatory #145

Interrogatory

Reference:
Exhibit D2 / Tab 2 / Schedule 7 / Attachment 3 / pp. 10-11, 27-28

Preamble:

Burns McDonnell / Modus Strategic Solutions stated that CanAtom's Unit 2 performance of the Feeder work yielded the largest cost variance from the base RQE estimate. CanAtom has updated the base estimate for Unit 3 planned production rates, resulting in a 45% increase in direct field labour (DFL) hours over RQE.

Burns McDonnell / Modus Strategic Solutions also stated that the feeder lessons learned examination has only just begun, and until it is complete, there is a risk that CanAtom's Unit 3 estimate could be impacted (reduced or increased). Once the lessons learned process is complete, CanAtom's Unit 3 Feeder plan will require additional vetting to ensure consistency, accuracy and clearly identified changes from Unit 2.

Question(s):

a) With respect to feeder work in particular, to what extent does U3EE reflect the lessons learned process? In OPG's view, was the lessons learned process sufficiently far along at the time of U3EE preparation to provide representative guidance or does OPG expect to develop a restated U3EE to account for the still ongoing nature of the lessons learned process at the time of U3EE preparation?

b) Does the 45% increase in DFL hours over RQE reflect a subset of lessons learned only factors (e.g. workforce scheduling, refinement of crew sizes), or does it encompass the broader set of lessons learned, which include strategic improvements and the Darlington 3 Innovations Project?

c) Please comment on whether / the extent to which the Unit 3 estimates received additional review and vetting based on the completion of the lessons learned.

Response

a) For clarity, the Burns/ Modus report in Ex. D2-2-7, Attachment 3, which was prepared in November 2019, states ”The formal lessons learned process for the Feeder work has recently begun; however, the DR Team has been addressing and mitigating issues on the Feeder work on an ongoing basis throughout Unit 2”.

Lower feeder pipe installation on Unit 2 was completed in October 2019. Upper feeder pipe and middle feeder installation had been completed several months before in July 2019. OPG does not wait until the completion of a particular work activity or series of work activities to gather and incorporate those Lessons Learned into the planning for the subsequent units. Therefore, by the time of the U3EE being reviewed by the Burns/Modus report in November 2019, OPG had already developed a robust list of Lessons Learned on the feeder program. Further, the overarching Strategic Improvements described in Ex. D2-2-3, Section 5.0, including Organizational Evolution (i.e. the Project Centric Organization, Workstream Specialization and the One Team Approach), the Hybrid Schedule, Training Improvements, and Radiation Protection Improvements, are expected to benefit the execution of the feeder work on subsequent units. These Strategic Improvements, along with the above noted Lessons Learned, have all been incorporated into the U3EE reviewed by Burns/Modus.

Finally, as explained in Ex. D2-2-7, pp. 3-5, the U3EE was refined and updated twice and the final U3EE included the most up to date actual experience on Unit 2, including Lessons Learned. For all of the above reasons, OPG does not intend to develop a restated U3EE and has high confidence that it has addressed the challenges encountered during the Unit 2 feeder work program through its Lessons Learned process, and the incorporation of overarching Strategic Improvements.

See also, Ex. L-D2-2-Staff-144, which explains that OPG will continue to gather and incorporate Lessons Learned after the completion of the unit EEs and right up until the execution of a particular work activity.

b) Please see the discussion in part a) re: Strategic Improvements. The 45% increase in DFL hours was not prepared in isolation. It incorporated a broad set of Lessons Learned, as well as assumed gains from Strategic Improvements, particularly the Project Centric Approach, Workstream Specialization, Training Improvements and the Radiation Protection Improvements. A Darlington 3 Innovations Project tooling improvement specific to feeders had also been incorporated.

c) Please see part a).