

1 Q. Further to the response to PUB-NLH-027, what lessons were learned in the execution of this
2 project with respect to budgeting?

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5 A. The following lessons learned were identified during the execution of the Upper Salmon
6 Hydroelectric Generating Station Rotor Rim Shrinking and Stator Recentering Project (“Upper
7 Salmon Project”) with respect to budgeting, and are considered during the development of
8 applicable future capital budget estimates.

9 a. Consideration should be given to carrying larger-than-typical contingency amounts in
10 the estimates for projects that:

11 i. Are first-of-a-kind;

12 ii. Are supplemental to the current work plan; and/or

13 iii. Involve refurbishment work that can only be fully defined following disassembly
14 and condition assessment of the asset.¹

15 b. For projects that involve refurbishment work that can only be fully defined following
16 disassembly and condition assessment of the asset, consideration should be given with
17 regards to the appropriate level of inspection to be completed in advance during the
18 project budget stage, recognizing that there is a balance to be struck between fully
19 defining the refurbishment scope to support a more accurate estimate, and the cost and
20 schedule requirements to make that determination.²

¹ The Upper Salmon Project was a supplemental project that involved the disassembly of the generator for the first time. Identification of additional scopes of work following disassembly and condition assessment, including rotor refurbishment, rotor pole removal/cleaning, stator refurbishment, and generator unit realignment, was the main contributor to the project cost variance.

² Unit disassembly and condition assessment to fully define the generator refurbishment scope at the budget stage for the Upper Salmon Project would have required an extended unit generation outage and considerable cost. There may have been an opportunity; however, to better define the refurbishment scope of the powerhouse crane and lifting devices at the budget stage. Greater-than-originally estimated level of inspection, refurbishment, testing, and recertification of the powerhouse crane and lifting device, required for the lift of the generator rotor, was a contributor to the project cost variance.

1 c. When the requirement for a supplemental project is identified, a review of future
2 planned capital projects should be completed at the budget preparation phase, to
3 identify any that should be advanced and completed at the same time as the
4 supplemental project to achieve potential cost savings.³

5 Newfoundland and Labrador Hydro (“Hydro”) continuously reviews its estimating practices to
6 ensure lessons learned are incorporated in future estimates; Hydro will consider these lessons
7 learned in the context of its estimating practices for future capital budget applications.

³ Following approval of the Upper Salmon Project, it was identified that the planned unit overhaul for 2024 could be completed more cost-effectively in 2023 as part of this supplemental project. This change was implemented, which contributed to the project cost variance.