

1 Q. **Reference: Schedule 4 2023 Capital Expenditures Overview, Page 4, lines 12–14**

2 Please detail the performance issues with the owner’s engineer for the Rotor Rim Shrinking and
3 Stator Recentering Project at the Upper Salmon Hydroelectric Plant that Hydro had originally
4 contracted for this project and detail the estimated impact to the cost and schedule of the
5 project arising from the performance issues.

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8 A. Newfoundland and Labrador Hydro (“Hydro”) retained an external consultant as the owner’s
9 engineer to assist in completion of the project in 2022. The owner’s engineer contracted
10 services included confirmation of powerhouse crane operation, certification of generator lifting
11 devices, confirmation of equipment laydown area, development of disassembly/reassembly
12 procedures, technical and field engineering support during construction, assistance with the
13 development of a commissioning plan, and commissioning/start-up support following
14 completion of construction activities. The owner’s engineer encountered a number of issues in
15 2022 that impacted delivery on a portion of the required services.

16 The most significant impacts were related to issues with certification of generator lifting devices
17 and confirmation of the powerhouse crane operation that were necessary in preparation for
18 generating unit disassembly. Hydro managed and mitigated those issues with the original
19 consultant to the extent possible; however, Hydro was ultimately required to terminate a
20 portion of the contract and retain additional external engineering consulting and contract
21 resources to execute this work.

22 Cost implications were such that Hydro paid the owner’s engineer \$226,981 for services
23 rendered and hours billed. After the termination of the original contract, the project scope was
24 increased as a result of more engineering requirements that originally expected, particularly
25 with respect to refurbishment of the powerhouse crane and certification of the lifting devices.
26 Cost of the incremental external engineering consulting was \$430,769, mostly attributed to
27 increased scope as the project progressed. Some portion of the incremental cost of owner’s
28 engineer services can be attributed to the performance challenges and effort to handover the

1 engineering work from one consultant to another; however, this was not tracked as a specific
2 cost. Hydro's best estimate is roughly \$150,000.

3 The impact to the schedule was not material as engineering deliverables were still completed in
4 time for the start of construction in 2023.