

1 Q. **Reference Application Rev. 1, Volume 2, Overhaul Unit 1 Turbine and Valves – Holyrood, page**
2 **i**

3 It is stated “*Hydro expects to complete the project in 2021.*” It is understood that Holyrood Unit
4 1 is not expected to be used for production purposes beyond March 31, 2022. The above
5 statement implies that the overhaul is “*expected*” but may not be completed in 2021.

6 a. If it may not be completed in 2021 and will not be needed beyond March 31, 2022, why is
7 Hydro proposing to do this work in its 2021 Capital Budget Application? Would it be more
8 appropriate to inspect the turbine during annual maintenance in 2021 and decide at that
9 time on the extent of repairs needed to get the plant through the winter of 2021/22?

10 b. Please quantify the risk, reliability, efficiency improvements and rate impacts on customers
11 if this project were eliminated (or deferred by a year if it is ultimately determined that there
12 is a continued need for the plant beyond March 31, 2022). With respect to risk, please
13 identify the probability of failure and the consequences of failure. In effect, what is the
14 trade-off between cost to ratepayers, system reliability and risk?

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17 A.

18 a. The intent of the phrase “*expects to complete*” in the Executive Summary of the proposal
19 was to reflect the statements made elsewhere in the proposal regarding the unique
20 circumstances created by the timing of this project relative to the in-service date for
21 Muskrat Falls. Hydro has indicated that, should the successful integration and demonstrated
22 reliability of the Muskrat Falls assets occur prior to March 31, 2022¹ and/or if Newfoundland
23 and Labrador Hydro (“Hydro”) has clear evidence with respect to the in-service date of the
24 Muskrat Falls assets prior to the execution of the proposed 2021 capital projects, further

¹ At the time of filing the 2021 Capital Budget Application, Hydro was expecting the operation of the Holyrood Thermal Generating Station (“Holyrood TGS”) as a generating facility to conclude on March 31, 2022. However, Hydro has since advised the Board, on September 28, 2020, of its intention to extend the operation of the Holyrood TGS as a generating facility until March 31, 2023.

1 consideration will be given to the necessity of executing the full scope of steam generation
2 related projects.

3 The condition of the turbine and the turbine valves cannot be adequately determined
4 through external inspection or monitoring instrumentation. In order to assess the condition
5 of the turbine and valves during annual maintenance in 2021, it is necessary to disassemble
6 the turbine and valves which essentially constitutes the execution of the proposed project.

7 During the execution of the project, there may be opportunities to reduce costs by adjusting
8 refurbishment scope based on expected remaining operation time of the unit relative to the
9 status of reliable power from Muskrat Falls.

10 **b.** The Overhaul Unit 1 Turbine and Valves – Holyrood project is proposed to execute required
11 sustaining capital works for Hydro existing assets so as to operate, maintain, and renew its
12 infrastructure to achieve required service standards and to optimize the cost of electricity in
13 an environmentally responsible and safe manner.

14 Hydro uses its internal expertise supplemented, when required, by consultants, original
15 equipment manufacturers, and readily available industry information to determine, in
16 Hydro’s opinion, the appropriate timing of capital work to maintain service standards and to
17 optimize costs. As noted in the information presented by Hydro, deferral of this project is
18 not a viable option as it will increase the risk of premature failures. Hydro believes, based
19 upon its knowledge at this time, deferral would be imprudent. The detail requested for
20 quantification of risk and reliability impact requires analysis capability which at this time
21 Hydro does not have within its Asset Management System.

22 With respect to rate impact, Hydro does not compute rate impact on an individual project
23 basis. Hydro’s pro forma computation of revenue requirement impact on a total capital
24 budget basis was included in its 2021 Capital Projects Overview.