

1 Q. **Reference: Schedule 3 Holyrood Thermal Generating Station Overview, Page 15, lines 9–15**

2 It is stated that the approval, engineering, procurement, construction, and commissioning of
3 new generation sources will take seven to ten years. On page 4 of Schedule 3 Hydro stated that
4 its commitment is to have the Holyrood Thermal Generating Station fully available to March 31,
5 2030. Is Hydro investigating the required capital that would be necessary to extend the life of
6 the Holyrood Thermal Generating Station beyond 2030 if new generation sources are not
7 commissioned by 2030?

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10 A. Newfoundland and Labrador Hydro’s (“Hydro”) current capital plan for Holyrood Thermal
11 Generating Station (“Holyrood TGS”) assumes that the station is not required for generation
12 operation beyond March 31, 2030. The current plan includes capital to support continued
13 operation of Unit 3 as a synchronous condenser only beyond that date.

14 In its 2021 Condition Assessment and Life Extension Study¹ for the Holyrood TGS, Hatch Ltd.
15 (“Hatch”) stated that all three generating units were adequate for operation as baseload or
16 backup units to 2030 and beyond, subject to ongoing inspections, maintenance, and repairs.²

¹ Hatch’s “HTGS Condition Assessment and Life Extension Study,” was filed with the Board of Commissioners of Public Utilities as Attachments 1, 2, and 3 of “Reliability and Resource Adequacy Study Review – Assessment to Determine the Potential Long-Term Viability of the Holyrood Thermal Generating Station,” Newfoundland and Labrador Hydro, March 31, 2022. <<http://pub.nl.ca/applications/NLH2018ReliabilityAdequacy/reports/From%20NLH%20-%20Assessment%20to%20Determine%20the%20Potential%20Long-Term%20Viability%20of%20the%20Holyrood%20Thermal%20Generating%20Station%20-%202022-03-31.PDF>>.

² “Reliability and Resource Adequacy Study Review – Assessment to Determine the Potential Long-Term Viability of the Holyrood Thermal Generating Station,” Newfoundland and Labrador Hydro, March 31, 2022, att. 2, s. 1.4, pp. 5 and 6. <<http://pub.nl.ca/applications/NLH2018ReliabilityAdequacy/reports/From%20NLH%20-%20Assessment%20to%20Determine%20the%20Potential%20Long-Term%20Viability%20of%20the%20Holyrood%20Thermal%20Generating%20Station%20-%202022-03-31.PDF>>.

1 The study provided Hatch’s recommended capital plan to support generation operation to
2 March 31, 2030, which included a total cost of \$2 million for an EPRI³ class 2 level condition
3 assessment of the assets again in 2026 and 2027.⁴ Hatch recommended that this condition
4 assessment be completed if Hydro intends to extend the backup generation mode of the
5 Holyrood TGS units beyond 2030. Hydro has not included this condition assessment in the
6 capital plan for the Holyrood TGS but will pursue this project should it be determined through
7 the Reliability and Resource Adequacy proceeding that this work is necessary and prudent.
8 While Hatch did provide a range of capital costs for the period 2031–2040, Hatch notes that this
9 is a forecast of baseline, routine capital such as overhauls and routine inspections only and
10 placeholders for potential capital requirements such as generator rotor rewinding, and does not
11 include incremental life extension work that could arise from future condition assessment.

12 While the aforementioned condition assessment would be required to identify incremental
13 capital work, Hydro has considered what routine capital work would be necessary to extend the
14 life of the generation assets at the Holyrood TGS beyond 2030 and recognizes that a
15 continuation of the regular overhaul programs for major equipment would be required. This
16 would include Boiler Condition Assessment, Turbine Valve Overhauls, Turbine Major Overhauls,
17 Generator Overhauls, and Major Pump Overhauls. The scope of these overhauls would be
18 similar to the current scope, which is necessary to maintain safe and reliable operation of the
19 assets. The frequency of the overhauls may reduce and would be contingent on operating hours,
20 standby hours, number of starts, and other factors. In its study, Hatch also notes the need to
21 continue these programs to support generation operation beyond 2030.⁵ Other additional
22 projects may be identified through the completion of the recommended condition assessment.

³ Electric Power Research Institute (“EPRI”).

⁴ “Reliability and Resource Adequacy Study Review – Assessment to Determine the Potential Long-Term Viability of the Holyrood Thermal Generating Station,” Newfoundland and Labrador Hydro, March 31, 2022, att. 3, s. 6.1.3, p. 64. <<http://pub.nl.ca/applications/NLH2018ReliabilityAdequacy/reports/From%20NLH%20-%20Assessment%20to%20Determine%20the%20Potential%20Long-Term%20Viability%20of%20the%20Holyrood%20Thermal%20Generating%20Station%20-%202022-03-31.PDF>>.

⁵ “Reliability and Resource Adequacy Study Review – Assessment to Determine the Potential Long-Term Viability of the Holyrood Thermal Generating Station,” Newfoundland and Labrador Hydro, March 31, 2022, att. 3, s. 6.1.4, p. 64. <<http://pub.nl.ca/applications/NLH2018ReliabilityAdequacy/reports/From%20NLH%20-%20Assessment%20to%20Determine%20the%20Potential%20Long-Term%20Viability%20of%20the%20Holyrood%20Thermal%20Generating%20Station%20-%202022-03-31.PDF>>.