

1 Q. **Reference: Application, Schedule 3 relating to Holyrood TGS, page 3**

2 It is stated

3 If the LIL is found to perform reliably for an extended period and system
4 conditions permit, Hydro would have the opportunity to strategically remove
5 the Holyrood TGS units from service to place them in standby.

6 a) What cost savings would result from removing Holyrood from service and placing it in
7 standby?

8 b) Please define “extended period” as it relates to LIL reliability.

9 c) Please provide examples of “system conditions” that may not lead to placing Holyrood
10 in standby.

11 d) How might government zero-carbon initiatives impact Holyrood operation until 2030, or
12 beyond?

13 e) Will work proposed in the 2024 CBA cause Holyrood units to be unavailable for service
14 in the winter of 2024/25?

15 f) Is Holyrood expected to be fully available for the winter of 2023/24?

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18 A. a) At this time, Newfoundland and Labrador Hydro (“Hydro”) has not completed this analysis
19 as it is not anticipated that all three Holyrood Thermal Generating Station (“Holyrood TGS”)
20 units can be removed from service and placed in standby during the Bridging Period.¹ As
21 presented in the 2022 Update to the Reliability and Resource Adequacy Study,² there are
22 reliability concerns associated with the operation of the units at the Holyrood TGS in a
23 standby capacity. However, Hydro recognizes there are significant fuel costs associated with
24 the continued base-loaded operation of the three units. Hydro remains committed to

¹ Hydro considers the Bridging Period to be from 2023 to 2030. During the Bridging Period, the system would rely primarily on existing sources of generation capacity to maintain reliability while new generation capacity is being built. The primary, readily available supply options in this period are extending the retirements of the Holyrood TGS and the Hardwoods Gas Turbine until their capacities can be adequately replaced.

² “Reliability and Resource Adequacy Study – 2022 Update,” Newfoundland and Labrador Hydro, October 3, 2022.

- 1 investigating operational strategies to optimize the dispatch of the units to manage start-up
2 challenges while minimizing cost; however the result is not anticipated to be all three
3 Holyrood TGS units being placed in standby. Any cost savings would be from fuel only as all
4 three Holyrood TGS units must be able to operate, if required, during the Bridging Period.
- 5 **b)** Hydro is actively tracking the reliability performance of the Labrador-Island Link (“LIL”) and
6 have previously maintained that a period of demonstrable reliable performance is required
7 prior to strategically removing Holyrood TGS units from service and placing them in standby.
8 At this time, Hydro has not quantified what “extended period” means as it relates to LIL
9 reliability; however, by the end of winter 2023–2024 it is expected that reliability data
10 should be available to make an informed decision to quantify the statement.
- 11 **c)** System conditions that could require keeping all three Holyrood TGS units online at
12 minimum generation include, but are not limited to, availability of the LIL in bipole and/or
13 monopole operation, approaching periods of forecasted peak system load, approaching
14 severe weather conditions, and potential unavailability of remaining on-Island generation.
- 15 **d)** In addition to monitoring the Clean Electricity Regulations initiative, Hydro will incorporate
16 any potential implications of zero-carbon initiatives into long-term decisions relating to
17 resource planning. Any developments relating to the implications of the proposed Clean
18 Electricity Regulations would be addressed in the next update to the Reliability and
19 Resource Adequacy Study.
- 20 **e)** There is presently no work proposed in Hydro’s 2024 Capital Budget Application (“CBA”)
21 that will render the Holyrood TGS units unavailable for the winter of 2024–2025.
- 22 **f)** Hydro has encountered cracking on the low pressure blades³ on Unit 2 turbine at the
23 Holyrood TGS that will render the unit unavailable into the first quarter of 2024. This issue
24 was found during the regularly scheduled overhaul, as approved in the 2023 CBA. While it is
25 a priority for Hydro to ensure all three units are available and as such, Hydro is exploring
26 every opportunity to advance this schedule, Hydro’s assumptions are for a minimum of two

³ These are the L-1 blades, a separate stage of blades from the last stage, or L-0 blades, being repaired under a separate supplemental CBA.

1 units online at the Holyrood TGS throughout the winter season.⁴ Hydro will provide further
2 details on the investigation and estimated return to service date in Hydro's 2023–2024
3 Winter Readiness Planning Report.⁵

⁴ "2024 Capital Budget Application," Newfoundland and Labrador Hydro, rev. August 18, 2023 (originally filed July 12, 2023), sch. 3, p. 11/19–20.

⁵ The filing of the 2023–2024 Winter Readiness Planning Report is scheduled for October 10, 2023.