

1 **Q. Reference: *2024 Resource Adequacy Plan, Revision 2, August 28, 2024, Appendix C: 2024***
2 ***Expansion Plans – Development Process and Recommendation, Page 72 of 163.***

3 “As Chart 11 demonstrates, it is evident that the estimated annual emissions
4 decrease dramatically in all cases upon retirement of the existing thermal assets
5 (Holyrood TGS, Hardwoods GT, and Stephenville GT). Emissions up to 2029 are
6 estimated to be approximately 350 kt per year, dropping to no more than 70 kt
7 (which corresponds to Scenario 1AD that builds the most CTs and assumes an
8 annual fuel burn-off requirement). This is an approximately 80% reduction in
9 fuel emissions that may be achieved within the study period, once the Holyrood
10 TGS is retired. Should system conditions differ from that assumed in this
11 analysis, annual emissions could be more than presented.”

12 Hydro estimates that it would achieve an approximate 80% reduction in fuel emissions once the
13 Holyrood TGS is retired and assumes an annual fuel burn-off requirement.

- 14 **a)** Please confirm that Hydro’s estimated fuel emissions reduction of 80% includes the
15 retirement of the Holyrood TGS coupled with the addition of a new 150 MW
16 combustion turbine.
- 17 **b)** Please estimate the approximate reduction in fuel emissions that could be achieved if
18 the annual fuel burn-off associated with the planned 150 MW combustion turbine could
19 be avoided.
- 20 **c)** Please summarize possible alternatives that would avoid an annual fuel burn-off.

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23 **A. a)** The Holyrood Thermal Generating Station (“Holyrood TGS”) is assumed to be retired in 2030
24 in all scenarios and sensitivities; however, the estimated 80% reduction in annual emissions
25 corresponds to Scenario 1AD, in which two 141.6 MW combustion turbines (“CTs”) are built
26 in 2031, with a third built in 2033. As shown in the 2024 Resource Adequacy Plan,¹ in the
27 Minimum Investment Required (Scenario 4) Sensitivities, the reduction from 2029 (prior to

¹ “2024 Resource Adequacy Plan – An Update to the Reliability and Resource Adequacy Study,” Newfoundland and Labrador Hydro, rev. August 26, 2024 (originally filed July 9, 2024), app. C, p. 80, Chart 13.

1 the retirement of the Holyrood TGS) to 2034 (the end of the planning horizon) is estimated
2 to be approximately 86% or greater.

3 **b)** Sensitivities 1AC and 1AEC both assume there is no annual fuel burn-off requirement for
4 new CTs, and they both result in the same expansion plan and hence the same estimated
5 emissions. In these two sensitivities, three 141.6 MW CTs will be built in 2031. The
6 estimated reduction in emission from 2029 to 2034 for both of these sensitivities was
7 approximately 99%.

8 **c)** Newfoundland and Labrador Hydro (“Hydro”) continues to investigate alternatives to avoid
9 an annual fuel burn-off through engagement with potential fuel suppliers such as the
10 issuance of an Expression of Interest² as discussed in Hydro’s response to NP-NLH-102 of
11 this proceeding.

² This was issued as a request for information under the public procurement guidelines, an information-gathering tool issued by a public body to learn about the marketplace in advance of issuing a procurement solicitation. Please refer to NP-NLH-102, Attachment 1 for further details.