

1 Q. **Reference: Reliability and Resource Adequacy Study 2022 Update, Volume I, page 26.**

2 Table 3, page 26, Holyrood TGS and Hardwoods and Stephenville GTs all retire on April 1, 2024.

3 In Table 4, page 27, Hardwoods and Stephenville GTs retire on April 1, 2024, but HTGS continues
4 operating until 2030. In Table 5, page 28, only Stephenville GT retires on April 1, 2024.

5 The descriptions of the three cases do not indicate any other difference in assumptions between
6 Tables 3, 4, and 5. Therefore, it seems that the assumptions underlying Tables 3, 4, and 5 are
7 identical for 2023. However, there is a significant difference in the LOLH results for 2023 as
8 shown in the following comparison. Explain the differences.

Scenario	2023		
	Table 3	Table 4	Table 5
1	1.9	0.2	0.1
2	9.7	0.8	0.7
3	9.6	0.8	0.7
4	9.6	0.8	0.7
5	9.8	0.8	0.7
6	19.1	1.5	1.4
7	21.7	1.7	1.4

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11 A. There was an inaccuracy between the modelling assumptions used to produce the results in
12 Table 3, Table 4, and Table 5¹ and the description of the assumptions. The tables, with corrected
13 results for the years 2023 and 2024, are provided herein.

¹ "Reliability and Resource Adequacy Study - 2022 Update," Newfoundland and Labrador Hydro, October 3, 2022, vol. I, p. 26, Table 3; p. 27, Table 4; and p. 28, Table 5.

**Table 1: LOLH² Results – No Generation Capacity Additions through 2030
Holyrood TGS,³ Hardwoods Gas Turbine, and Stephenville Gas Turbine Retired**

Scenario	2023	2024	2025	2026	2027	2028	2029	2030
Scenario 1: LIL ⁴ 900 MW, FOR ⁵ 1%, Base Island/Base Labrador	0.1	2.1	8.2	7.8	7.7	7.5	8.6	10.4
Scenario 2: LIL 675 MW, FOR 5%, Base Island/Base Labrador	0.6	10.4	41.0	38.5	38.9	37.6	43.0	52.6
Scenario 3: LIL 675 MW, FOR 5%, High Island/Base Labrador	0.6	10.6	42.5	40.5	42.1	41.8	49.6	66.5
Scenario 4: LIL 675 MW, FOR 5%, Base Island/High Labrador	0.6	10.4	41.0	38.7	39.1	37.8	43.3	57.0
Scenario 5: LIL 675 MW, FOR 5%, High Island/High Labrador	0.6	10.5	42.5	40.5	42.3	42.2	50.5	73.1
Scenario 6: LIL 675 MW, FOR 10%, Base Island/Base Labrador	1.2	20.8	81.6	76.2	77.2	74.4	84.8	103.3
Scenario 7: LIL 475 MW, FOR 10%, Base Island/Base Labrador	1.3	23.6	104.6	99.5	101.1	101.4	115.7	152.0

**Table 2: LOLH Results – No Generation Capacity Additions
Holyrood TGS Extended through 2030**

Scenario	2023 ⁶	2024	2025	2026	2027	2028	2029	2030
Scenario 1: LIL 900 MW, FOR 1%, Base Island/Base Labrador	N/A	0.2	0.3	0.3	0.4	0.3	0.4	0.5
Scenario 2: LIL 675 MW, FOR 5%, Base Island/Base Labrador	N/A	0.9	1.5	1.5	1.6	1.7	1.8	2.6
Scenario 3: LIL 675 MW, FOR 5%, High Island/Base Labrador	N/A	0.9	1.7	1.7	1.8	1.9	2.3	3.6
Scenario 4: LIL 675 MW, FOR 5%, Base Island/High Labrador	N/A	0.9	1.6	1.6	1.7	1.7	1.9	2.8
Scenario 5: LIL 675 MW, FOR 5%, High Island/High Labrador	N/A	0.8	1.7	1.7	1.8	2.0	2.4	3.7
Scenario 6: LIL 675 MW, FOR 10%, Base Island/Base Labrador	N/A	1.7	3.2	3.2	3.2	3.5	3.7	5.2
Scenario 7: LIL 475 MW, FOR 10%, Base Island/Base Labrador	N/A	1.8	3.6	3.4	3.5	3.7	4.0	5.8

² Loss of load hours (“LOLH”).

³ Holyrood Thermal Generating Station (“Holyrood TGS”).

⁴ Labrador-Island Link (“LIL”).

⁵ Forced outage rate (“FOR”).

⁶ The LOLH results in 2023 are the same as those found in Table 3.

**Table 3: LOLH Results – No Generation Capacity Additions
Holyrood TGS and the Hardwoods Gas Turbine Extended through 2030**

Scenario	2023 ⁷	2024	2025	2026	2027	2028	2029	2030
Scenario 1: LIL 900 MW, FOR 1%, Base Island/Base Labrador	N/A	0.2	0.2	0.2	0.2	0.2	0.2	0.4
Scenario 2: LIL 675 MW, FOR 5%, Base Island/Base Labrador	N/A	0.8	1.1	1.1	1.1	1.1	1.3	1.8
Scenario 3: LIL 675 MW, FOR 5%, High Island/Base Labrador	N/A	0.8	1.1	1.2	1.3	1.4	1.6	2.7
Scenario 4: LIL 675 MW, FOR 5%, Base Island/High Labrador	N/A	0.8	1.1	1.1	1.1	1.2	1.3	1.9
Scenario 5: LIL 675 MW, FOR 5%, High Island/High Labrador	N/A	0.8	1.2	1.2	1.3	1.3	1.6	2.7
Scenario 6: LIL 675 MW, FOR 10%, Base Island/Base Labrador	N/A	1.6	2.2	2.1	2.2	2.3	2.6	3.7
Scenario 7: LIL 475 MW, FOR 10%, Base Island/Base Labrador	N/A	1.6	2.3	2.3	2.3	2.6	2.8	3.9

⁷ The LOLH results in 2023 are the same as those found in Table 3.