

1 Q. **Reference: 2021 Capital Budget Supplemental Application Approval of the Construction of**
2 **Hydro’s Long-term Supply Plan for Southern Labrador – Revision 1 – Safe and Reliable Power**
3 **Supply to Charlottetown – Reply, Attachment 2, Summary of Technical Note RP-TN-089, page**
4 **4 of 25.**

5 ...plant auxiliary systems such as the main bus, service conductors, and
6 substation transformers are sized based on the system’s peak load and not the
7 full plant installed capacity.

8 a) Please confirm that Table 1, page 2 of 8, of Technical Note RP-TN-051 filed on March 17,
9 2022, showing the installed and design plant capacities for each of the four diesel plants
10 in Southern Labrador, still applies.

11 b) Please confirm that Table 5, page 4 of 8, of Technical Note RP-TN-051 filed on March 17,
12 2022, shows that there is excess firm capacity available without increasing the number
13 of units.

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16 A. a) The installed capacity and design plant capacity in Table 1 of Technical Note RP-TN-051¹ still
17 apply but are based on the diesel generation unit capacities and do not consider auxiliary
18 equipment limitations. The firm capacities listed for Mary’s Harbour no longer apply, as
19 Newfoundland and Labrador Hydro (“Hydro”) is no longer considering the mobile generator
20 in Mary’s Harbour as part of its firm capacity considerations. This is to align with Midgard
21 Consulting Inc.’s (“Midgard”) recommendation from its Southern Labrador Communities –
22 Integrated Resource Plan (“Midgard IRP”)² filed with the Board of Commissioners of Public

¹ “Long-Term Supply for Southern Labrador – Phase 1 - Supplemental Information,” Newfoundland and Labrador Hydro, March 17, 2022, att. 1, p. 2 of 8, Table 1.

² “Southern Labrador Communities - Integrated Resource Plan,” Midgard Consulting Inc., March 28, 2023.

1 Utilities on March 31, 2023.³ Table 12⁴ from the Midgard IRP includes revised firm capacity
2 values.

3 **b)** Table 5 of Technical Note RP-TN-051⁵ shows that there is excess firm capacity available if all
4 units in the region rated 450 kW or below are replaced with 545 kW units. This table also
5 includes the capacity of the mobile unit in Mary’s Harbour, which was since removed from
6 Hydro’s aforementioned firm capacity considerations.⁶ In the Summary of Technical Note
7 RP-TN-089,^{7,8} the mobile unit in Mary’s Harbour is not included in firm capacity calculations
8 in Section 2.2.2, to align with Midgard’s recommendation from the Midgard IRP. Table 5 of
9 Technical Note RP-TN-051 does not consider auxiliary equipment limitations.

³ “Long-Term Supply of Southern Labrador – Phase 1 – Midgard Consulting Inc. Report,” Newfoundland and Labrador Hydro, March 31, 2023, att. 1.

⁴ “Southern Labrador Communities - Integrated Resource Plan,” Midgard Consulting Inc., March 28, 2023, p. 39, Table 12.

⁵ “Long-Term Supply for Southern Labrador – Phase 1 - Supplemental Information,” Newfoundland and Labrador Hydro, March 17, 2022, att. 1, p. 4 of 8, Table 5.

⁶ Table 5 and Table 6 of Technical Note RP-TN-051 contain errors. The first rows of both tables should be labeled “Region Installed Capacity.” The “Region Excess Firm Capacity (2025)” and “Region Excess Firm Capacity (2035)” rows are correct based on the load forecast at that time.

⁷ “Newfoundland and Labrador Hydro – 2021 Capital Budget Supplemental Application Approval of the Construction of Hydro’s Long-term Supply Plan for Southern Labrador – Revision 1 – Safe and Reliable Power Supply to Charlottetown – Reply,” Newfoundland and Labrador Hydro, October 5, 2023, att. 2.

⁸ Summary of Technical Note RP-TN-089 used a more recent load forecast and assumptions than Technical Note RP-TN-051.