

1 Q. **Reference: Reliability and Resource Adequacy Study – 2022 Update, Volume I: Study**
2 **Methodology and Planning Criteria, October 3, 2022, page 5, lines 17-19.**

3 Furthermore, the proposed Clean Electricity Standard has brought into question
4 resource options that would traditionally have been recommended but are now
5 uncertain as a future resource option (e.g., fossil fuel-burning combustion
6 turbines).

7 a) What technologies, including combustion turbines, are currently capable of providing
8 reliable and dispatchable backup generation to customers on the Island Interconnected
9 System in the event of an extended (i.e. six weeks or longer) bipole outage to the LIL?

10 b) Does Hydro anticipate that new technologies, capable of providing reliable and dispatchable
11 backup generation, could be available and brought into service on the Island Interconnected
12 System by the end of the 2023-2030 bridging period? If so, please elaborate.

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15 A. a) The list of expansion resource options being considered can be seen in the “Reliability and
16 Resource Adequacy Study – 2022 Update” (“2022 Update”).¹ The two generation options on
17 the list that would be dispatchable and reliable in the case of a prolonged bipole outage of
18 the Labrador-Island Link (“LIL”) are gas turbines and hydroelectric generation. Battery
19 storage options would be dispatchable; however, because of energy storage limitations,
20 they may be of limited use in the case of a prolonged outage of the LIL.

21 b) Hydro does not expect that new technologies outside of the list of expansion options in the
22 2022 Update² would be available in the 2023–2030 timeframe.

¹ "Reliability and Resource Adequacy Study - 2022 Update," Newfoundland and Labrador Hydro, October 3, 2022, vol. III, sec. 7.1.

² Ibid.