

1 Q. **Reference Reliability and Resource Adequacy Study 2022 Update, Volume I, page 17, lines 5-**
2 **12.**

3 Explain how Hydro determined that restoration of the LIL could take up to seven weeks and
4 provide documentation of the analysis or study that was completed to support this conclusion.
5 In light of this conclusion explain why Hydro has chosen a period of six weeks for restoration as
6 the basis for analysis of the implications of an extended LIL outage.

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9 A. This initial estimate of a two-week response time for a worst-case failure was a result of internal
10 estimates completed between Newfoundland and Labrador Hydro (“Hydro”) operations and
11 contractors working on the completion of the Lower Churchill Project. In order to refine these
12 estimates, Hydro contracted a third-party resource in 2021 (Locke’s Electrical Ltd.) to evaluate
13 various scenarios including the worst-case repair time for a major Labrador-Island Link (“LIL”)
14 bipole outage, which led to the mentioned three- to six-week period.

15 The “Reliability and Resource Adequacy Study – Additional Considerations of the Labrador Island
16 Link Reliability Assessment and Outcomes of the Failure Investigation Findings”¹ includes
17 Hydro’s current estimate of the length of time necessary to repair a bipole outage on the LIL for
18 various scenarios.

19 The monitoring of response and repair times based on the current performance of the LIL is
20 ongoing.

21 Hydro used the output of the Emergency Response and Restoration Plan to inform the shortfall
22 analysis in the “Reliability and Resource Adequacy Study – 2022 Update” (“2022 Update”).² The
23 purpose of which was to inform the Board of Commissioners of Public Utilities and other
24 stakeholders of the implications of a prolonged LIL outage on the Island Interconnected System
25 and potential solutions to mitigate such effects. For this purpose, aligning the analysis with the

¹ “Reliability and Resource Adequacy Study – Additional Considerations of the Labrador-Island Link Reliability Assessment and Outcomes of the Failure Investigation Findings,” Newfoundland and Labrador Hydro, December 22, 2021, sec. 3.3 and apps.

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

1 Emergency Response and Restoration Plan, which was the most recent assessment conducted
2 for LIL restoration time, was deemed appropriate to inform the 2022 Update. The response time
3 will be reviewed and updated accordingly as outages occur and further experience is gained.