Q. **Reference: Evidentiary Update, Table 2, Pages 5 and 6**

In the expansion plan analysis, the LIL EqFOR is 1% in the scenarios where the 2025 Slow Electrification Load Forecast is assumed, but 5% in the scenarios based on the 2025 Reference Load Forecast.

a) What was the reason for using different EqFORs in the two sets of scenarios?

b) According to Hydro's 2026 General Rate Application, Volume I, Company Evidence (pages 2.9 and 2.10), the LIL has recently been released to operate at its full capacity of 900MW and its performance has steadily improved since commissioning, and from Chart 2-6 its 2025 EqFOR appears only slightly more than 1% at 900MW and about 1% at 700 MW. (i) What are the reasons for the improvement? (ii) Is Hydro now confident that it can achieve an EqFOR at or close to 1% over the planning horizon?

A. **a)** In the Reliability and Resource Adequacy Study – 2022 Update, Newfoundland and Labrador Hydro ("Hydro") established the assumption that the Labrador-Island Link ("LIL") bipole EqFOR[1] over the long term would be in the range of 1% to 10%. Hydro has been monitoring the asset's performance, including prior to commissioning, and has accrued some operational metrics and data to develop a LIL reliability measure, giving an early indication of performance.

Hydro continues to gain critical data and experience operating the asset. Therefore, in the 2024 Resource Adequacy Plan, Hydro has considered three levels of LIL reliability in its scenarios—representing 1%, 5%, and 10% LIL bipole EqFOR—to understand the impact of long-term LIL reliability on system needs. These levels correspond to high (1%), reference or expected (5%) and low (10%) reliability. Hydro utilized the most conservative assumption

[1] Equivalent Forced Outage Rate ("EqFOR").

(i.e., 1%) within the Minimum Investment Expansion Plan and will evaluate the level of LIL reliability assumed in its next Resource Adequacy Plan.

For further information on how Hydro determined assumptions used within scenarios, please refer to Appendix C of the 2024 Resource Adequacy Plan.

b) As reported in Hydro's most recent Quarterly Report on Asset Performance report,[2] despite expectations of unavailability being at the higher end of this range early in its commissioned operation, the EqFOR for the period of January 1, 2025 to December 31, 2025 was 1.30%.[3] The improvement in LIL performance can be attributed to less forced outages as a result of increased operational experience since commissioning and the implementation of remedial actions as referenced in Hydro's response to CA-NLH-009 of this proceeding.

As discussed in Hydro's response to PUB-NLH-337 of the 2024 Resource Adequacy Plan proceeding, the EqFOR measures the performance of the LIL end-to-end system, including converter stations at Muskrat Falls and Soldiers Pond, overhead lines between Muskrat Falls and Soldiers Pond, transition compounds in Shoal Cove and Forteau Point, and subsea cables in the Strait of Belle Isle. For reference, a LIL bipole EqFOR of 1% equates to LIL unavailability of less than 4 days per year; a LIL bipole EqFOR of 5% represents approximately 18 days of unavailability per year; and a LIL bipole EqFOR of 10% represents approximately 37 days per year of unavailability. Absent any long-term operational experience with the LIL post-commissioning, Hydro does not have a basis to assume a LIL EqFOR of less than 1%. Therefore, Hydro's Minimum Investment Required Expansion Plan assumed a minimum LIL EqFOR of 1%. Because the LIL EqFOR of 1% does not mitigate against the LIL shortfall criteria, Hydro is not recommending to solely plan to a LIL EqFOR of 1%. Rather, recommended expansion plans should also adhere to the LIL shortfall criteria, which is why Hydro recommended advancing the second capacity option to 2031 in the Minimum Investment Required Expansion Plan.

[2] "Quarterly Report on Asset Performance in Support of Resource Adequacy for the Twelve Months Ended March 31, 2026," Newfoundland and Labrador Hydro, May 4, 2026.
[3] This EqFOR is calculated on a base LIL capacity of 900 MW.

Hydro will continue to work to achieve a LIL with an outage rate at the lower end of the outage range and will evaluate the continued use of reference or expected reliability of the LIL for a range of scenarios in its next Resource Adequacy Plan as Hydro continues to gain experience with the operation of the LIL. However, Hydro does not believe that it is practical to plan a system with an assumption of the LIL having less than four days of forced outages per year given the length of the line and the complexity of the components involved.