Q. Reference: Reliability and Resource Adequacy Study 2022 Update, Volume I, page 5-6.

Hydro has listed a number of uncertainties that may influence system planning for the electrical system in the province and states that the 2022 Update does not include an expansion plan that contemplates all these uncertainties. Given that system planning always must include consideration of uncertain and unknown factors, explain why Hydro believes it can not propose a long-term plan at this time that does include appropriate consideration of such factors.

A. Uncertainties and unknown factors are an inherent aspect of system planning, which Newfoundland and Labrador Hydro ("Hydro") continuously strives to capture.

The "Reliability and Resource Adequacy Study – 2022 Update" ("2022 Update")¹ assessed supply adequacy under various potential future realities, namely assumptions used for Labrador-Island Link reliability that have a material impact on system reliability as well as the fundamental change that the Newfoundland and Labrador Interconnected System is undergoing due to electrification and load growth, and concluded that new generation is required.

Since the "Reliability and Resource Adequacy Study – 2019 Update," Unit 8 at the Bay d'Espoir Hydroelectric Generating Station ("Bay d'Espoir") has been the proposed option for adding additional firm generation capacity to the Island Interconnected System. Given the projected long-term needs for incremental on-Island generation identified in the 2022 Update, Hydro proposed beginning the regulatory process to seek approval to construct Bay d'Espoir Unit 8 as the first step of a phased approach. While material impacts to the Newfoundland and Labrador Interconnected System were considered, Hydro maintains that more information and analysis was prudent in order to make educated assumptions that could further impact the long-term plan.

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

² "Reliability and Resource Adequacy Study – 2019 Update," Newfoundland and Labrador Hydro, November 15, 2019.

1 Since the filing of the 2022 Update, Order in Council OC2022-2663 was issued, which has 2 reduced the number of applications; therefore, the total requirement for additional generation 3 on the Labrador Interconnected System through the ongoing Network Additions Policy – 4 Labrador Interconnected System⁴ process. While the remaining requests are still significant, 5 Hydro is now in a better position to assess how load growth on the Labrador Interconnected 6 System will affect reliability and, therefore, generation requirements on the Island 7 Interconnected System. 8 Additional ongoing uncertainty includes grid implications of wind and hydrogen integration into 9 the existing system as well as the extended implementation of oil-to-electric conversion, which has the potential to have a significant impact on the load forecast and therefore new generation 10 11 requirements. Hydro remains committed to assessing suitable generation expansion options and the timing for 12 13 new generation builds as part of the Reliability and Resource Adequacy Study – 2023 Update.

³ OC2022-266 (Public Utilities Act, RSNL 1990, c P-47 and Electrical Power Control Act, 1994, SNL 1994, c E-5.1,) https://www.exec-oic.gov.nl.ca/public/oic/details?order-id=20484.

⁴ Newfoundland and Labrador Hydro (2020). *Network Additions Policy – Labrador Interconnected System*, https://nlhydro.com/wp-content/uploads/2021/03/Network-Additions-Policy.pdf.