Q. **Reference: Assessment of Labrador Island Transmission Link (LIL) Reliability in Consideration of Climatological Loads, March 10, 2021 (Haldar Report) by Dr. Asim Haldar, Ph.D., P. Eng. page 89, lines 2583-2587.**

Dr. Haldar concludes that there are gaps in the current LIL design due to the "complete omission of load combinations in the design". Explain the implication of this gap for the LIL design and its reliability.

A. *The following response has been provided by Haldar and Associates.*

The gap is primarily referred with respect to the omission of load combinations under unbalanced ice; the significant impact is predominantly observed in Labrador section of the line (Zones 1 and 3a) under glaze ice loads. Although the final analysis of unbalanced ice was done based on a deterministic analysis of the tower in Labrador section, the probabilistic analysis following CSA 60826 revealed that the line will have an approximately 2% annual POF (50-year return period) in the Labrador section.

Newfoundland and Labrador Hydro ("Hydro") provides the following additional information.

As per Hydro's response to PUB-NLH-193, the findings of the analysis related to unbalanced icing will be reflected in Hydro's Q4 2021 report and will include results from both the island and Labrador section of the Labrador-Island Link.