Q. **Reference: Schedule 3, Expansion Plan Update, Page 50**

Regarding the recommended $150 million transmission upgrade option, it is stated "*This option is the least-cost option to reliably meet Island demand in combination with the Expansion Plans applied during a LIL bipole outage to keep Avalon load shed requirements below 100 MW.*"

a) Does Hydro consider the loss of a LIL bipole to be an n-2 criterion?

b) Is Hydro planning its transmission system to meet an n-3 criterion; e.g., in addition to a LIL bipole loss (n-2), the loss of a transmission line between Bay d'Espoir and Soldiers Pond during a LIL bipole outage?

c) Why is Hydro considering the loss of only one of the transmission lines between Bay d'Espoir and Soldiers Pond during a LIL bipole outage?

A. **a)** Yes, Newfoundland and Labrador Hydro ("Hydro") does consider the loss of the Labrador-Island Link ("LIL") bipole as an N-2 event.

b) No, Hydro does not plan to meet an N-3 criterion. The loss of a 230 kV transmission line during a LIL bipole outage is considered an N-2-1 event based on the North American Electric Reliability Corporation definition.

As per Hydro's response to CA-NLH-008 of this proceeding, Hydro applied Emergency Transmission Planning criteria as a basis for reliable operation during an extended outage to the LIL bipole. In such an event, Hydro has also proposed that up to 100 MW of load shed is permissible as a basis for preliminary planning within the scope of the ongoing *Reliability and Resource Adequacy Study Review* proceeding. In the event of further contingencies, Hydro is proposing that a remedial action scheme would be a reasonable solution to avoid the significant capital expenditure ($150 million transmission upgrade option) that would be required to mitigate the risk, given the low probability of an N-2-1 event.

c) Hydro's recommendation is that the Remedial Action Scheme would provide a reasonable level of reliability for customers in the event of alternating current transmission line contingencies following a LIL bipole outage. If such an outage were to occur, Hydro would take operational measures to posture the system to ensure system security in the event of additional contingencies. The outcome would involve additional load shedding, which would be appropriate for an N-2-1- system event.