

1 Q. **Reference: Response to Request for Information P2-CA-NLH-146.**

2 Requirement R3, Part 3.2 of TPL-001-4, provides for assessment of the impact of extreme  
3 events. Further, Hydro's response to Request for Information P2-CA-NLH-146 indicates that  
4 severe contingencies have not been listed by Hydro as its transmission criteria is focused on N-1  
5 contingences.

6 Would Hydro consider including a Bi-Pole outage to its near-term and long-term planning  
7 assessment list requiring ongoing assessment? If not please explain why.

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10 A. Newfoundland and Labrador Hydro ("Hydro") is not considering the inclusion of a bipole outage  
11 to its near-term and long-term planning assessment list requiring ongoing assessment. Rather,  
12 Hydro's preferred approach is to include a bipole outage to its near-term and long-term  
13 planning assessment once appropriate criteria have been established. These criteria will define  
14 transient performance during a trip of the Labrador-Island Link ("LIL") bipole as well as  
15 transmission system requirements when the LIL bipole is out of service. The criteria will be  
16 developed as operational studies are completed and analysis associated with the Reliability and  
17 Resource Adequacy Study is advanced.

18 As per Hydro's response to PUB-NLH-161 and PUB-NLH-176, operational studies have been  
19 performed and are ongoing to assess Under-Frequency Load Shedding ("UFLS") schemes. These  
20 studies will help to ensure that there is a controlled load shed in the event of a bipole trip and  
21 that system stability is maintained. It is Hydro's intention to develop criteria and include the  
22 transient analysis of bipole trips in its annual assessments once the studies are complete and the  
23 UFLS scheme has been finalized.

24 Hydro is also working to develop criteria to assess system performance when the LIL bipole is  
25 out of service. In 2019, Hydro presented a technical note<sup>1</sup> with proposed "Emergency Planning

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<sup>1</sup> TP-TN-068 Application of Emergency Transmission Planning Criteria for a Labrador Island Link Bipole Outage, Hydro, July 31, 2019.

1           Criteria.” The appropriateness of the Emergency Transmission Planning Criteria as a long term  
2           solution is dependent on whether incremental generation is installed and on where the  
3           generation is located. The criteria to be considered as part of near-term and long-term planning  
4           assessments will therefore be developed as Hydro’s Reliability and Resource Adequacy Study  
5           continues.