

1 Q. **Reference: Reliability and Resource Adequacy Study 2022 Update, Volume I, page 11.**

2 Provide a description of the time frames and risks on resumption of transmission following trips  
3 caused by converters versus resumption following line failures.

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6 A. The timeframes and risks relating to resumption of transmission following trips caused by  
7 converter or line failures would be dependent on the mode of failure. While a direct comparison  
8 of the timeframes and risks for restoration following converter or line failures is not possible on  
9 this basis, some primary considerations are provided herein.

10 These failure modes would more frequently affect a single pole. Newfoundland and Labrador  
11 Hydro (“Hydro”) system operators would proceed to dynamically operate the healthy pole and  
12 dispatch/start available generation to meet supply requirements. There would be no customer  
13 impact in such cases. In the event that a converter or line failure resulted in a bipole outage on  
14 the Labrador-Island Link (“LIL”), customer outages would typically be expected.

15 In all cases, operator-initiated restarts of the LIL would be attempted unless there were  
16 unacceptable system conditions for restarts or if there were confirmation of a permanent fault  
17 and/or equipment failure. If restart attempts were unsuccessful or no restart could be  
18 attempted, an operational and/or engineering review of the failure would be required. In most  
19 instances, such a review would extend well beyond the timelines for operational reserves.  
20 Therefore, system operators would need to avail of other sources of supply to meet demand.

21 The resumption of full LIL operation following such an event would require the provision of  
22 confirmation from the asset owner/operator to the Newfoundland and Labrador System  
23 Operator that the failure was been repaired or mitigated and that there is no risk to safe and  
24 reliable operation. Such repairs or mitigations could range from hours to weeks or longer,  
25 depending on the extent of the repair required, repair procedures, the accessibility of the site of  
26 the failure, the availability of spare equipment, and other factors.