

1 Q. **Reliability and Resource Adequacy Study Update, November 15, 2019**

2 ***TGS Study Reports***

3 With respect to the potential for a three-phase fault in the area near Soldiers Pond to cause a
4 commutation failure during fault recovery have commutation failures happened in some cases
5 after the clearance of faults near the Soldiers Pond converter station.

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8 A. The Power System Simulator for Engineering (“PSS®E”) analysis have shown that for some faults,
9 there is a potential for a commutation failure on recovery as described in operational studies.¹
10 There have been instances of commutation failures to date and in one instance, the Labrador-
11 Island Link tripped due to a protection misoperation, which has been rectified. As per
12 Newfoundland and Labrador Hydro’s response to PUB-NLH-161, Power Systems CAD (“PSCAD”)
13 studies of these cases be carried out, which provides an accurate model of the commutation
14 process. This PSCAD analysis that includes commutation failures and dc line fault performance is
15 ongoing in support of the development of operating instructions. This will address fault near the
16 Soldier’s Pond bus and assess the impact of the number of syncs.

¹ Technical Note TN1205.74.02, “Operational Considerations With 0 and 1 SOP Synchronous Condensers,” TransGrid Solutions, April 7, 2020.