

1 Q. With reference to IC-NLH-011, please provide a description of the outcome of operating the LIL  
2 deliveries to the Island at a level higher than represented in the Technical Conference #3  
3 presentation slide 47

4 i) Under normal operating conditions (e.g., no outages) can the higher level of deliveries  
5 be achieved? If not, why not, and what would be the consequences?

6 ii) What types of non-normal outages or system conditions would lead to broader Island  
7 issues if the system was operated as described in (i) above.

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10 A. i) The Island Interconnected System frequency decreases significantly following a Labrador-  
11 Island Link (“LIL”) bipole trip. System instability is a probable outcome once the frequency  
12 drops below 58 Hz, which could result in a forced unplanned and uncontrolled outage of the  
13 entire Island Interconnected System. Therefore, the LIL limits are set to ensure the system  
14 frequency remains above 58 Hz to maintain system stability. LIL limits should not be  
15 exceeded under any circumstance given the severe potential consequences. The higher the  
16 level of deliveries to the Island, the lower the frequency will drop below 58 Hz following a  
17 bipole trip, increasing the likelihood of a negative impact on the Island Interconnected  
18 System.

19 ii) The consequences of operating the LIL beyond its limits is the same regardless of system  
20 state or conditions. A forced and uncontrolled outage of the entire Island Interconnected  
21 System would be considered the worst-case scenario outcome, and would occur even if the  
22 system is in a normal state. If the system is in a vulnerable state in which there are major  
23 equipment outages, the likelihood of system instability could be more probable if frequency  
24 dropped below 58 Hz following a LIL bipole trip.