

1 Q. **Reference: Redesign of UFLS Scheme for High Power Operation, dated March 17, 2021 (UFLS**
2 **2021 Report)**

3 Assuming the frequency controller is in service on the Maritime Link and the LIL and both
4 interconnections are in service, what categories of system events would result in operation of
5 the Under-Frequency Load Shedding scheme?

6

7

8 A. Once the Labrador-Island Link (“LIL”) is fully functional there should only be two contingency
9 events that could result in operation of the Under Frequency Load Shedding (“UFLS”) scheme.
10 These contingency events include:

11 **1. LIL Bipole Event**

12 The interruption of capacity from a LIL bipole event would likely trigger UFLS. The
13 magnitude of the UFLS would be a function of capacity deficit within the Island
14 Interconnected System resulting from the interruption. In such cases, UFLS may be
15 mitigated or prevented depending on the response of the Maritime Link in the form of
16 runbacks or frequency controller action.

17 **2. LIL Pole Event – LIL Monopole Mode (Other Pole Unavailable - Emergency Scenario)**

18 UFLS may occur following an event involving the LIL when it is in-service in monopole mode
19 while the other pole is not in-service or is unavailable for pole compensation. Similar to an
20 event involving the LIL bipole, the magnitude of UFLS would depend on the capacity
21 shortfall. During normal operation, the LIL monopole capacity would be limited to avoid
22 UFLS. During an emergency situation when incremental capacity is required, higher LIL
23 transfers and UFLS would be permitted in the event of an interruption.