

1 Q. **Newfoundland and Labrador Hydro – Near-Term Reliability Report, May 15, 2020**

2 **Other Near-Term Issues**

3 With regard to the FAT setup and circumstances, please:

4 a. Describe the ac networks to which the LIL was connected during the FAT; addressing the  
5 different system configurations used at the connection points of the MF converter and at  
6 the Soldiers Pond converter.

7 b. Provide the minimum the short circuit level for each setup tested.

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10 A. a. The majority of the FAT<sup>1</sup> test cases were set up using Thevenin equivalents with minimum  
11 short circuit levels as per contract values. The Thevenin setup was used for protection cases,  
12 functional testing, dynamic performance, transformer energization, and switching of  
13 reactive components. Additional dynamic performance tests were performed using models  
14 directly converted from PSS<sup>®</sup>E<sup>2</sup> base cases representing bookend system conditions varying  
15 from extreme light to peak loading on the Island.

16 b. The minimum short circuit levels are 2,847 MVA at Muskrat Falls and 3,462 MVA at Soldier's  
17 Pond.

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<sup>1</sup> Factory Acceptance Test ("FAT").

<sup>2</sup> Power System Simulator for Engineering.