

1 Q. Please state how many synchronous condensers will be operated on the Island  
2 Interconnected System: (i) when the Maritime Link is in operation and (ii) when the  
3 Maritime Link is not in operation.  
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6 A. Detailed operational studies necessary to develop complete operating guidelines  
7 for the Labrador-Island HVdc Link will be completed in the 2015-2016 timeframe  
8 following completion of the HVdc converter design and final, validated PSS®E and  
9 PSCAD™ model development by the vendor. The analysis to date identifies the  
10 following requirements:

- 11 i. When the Maritime Link is in operation, a minimum of two high inertia  
12 synchronous condensers at Soldiers Pond plus Holyrood Unit 3 operating  
13 in synchronous condenser mode and a nominal 120 MVAR synchronous  
14 condenser in the Holyrood/Soldiers Pond area.
- 15 ii. When the Maritime Link is not in operation and the Labrador – Island  
16 HVdc Link is operating at full import capability, three high inertia  
17 synchronous condensers at Soldiers Pond plus Holyrood Unit 3 operating  
18 in synchronous condenser mode and a nominal 120 MVAR synchronous  
19 condenser in the Holyrood/Soldiers Pond area are required to minimize  
20 the potential for under frequency load shedding on the Island. As noted  
21 above, detailed operational studies will be required to develop the  
22 synchronous condenser operating guidelines for the Labrador – Island  
23 HVdc Link loading schedule with the Maritime Link not in operation.