

1 Q. **Tab 4; Volume II: Install Plant Heating System (Holyrood Thermal Generating**  
2 **Station)**

3 Was the \$5,685,000 capital expenditure to install the plant heating system a  
4 consideration in the analysis to use Unit 3 as a synchronous condenser and not  
5 move all synchronous condensing functions to Soldiers Pond or elsewhere?  
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9 A. During the development of the Basis of Design for the Lower Churchill Project, it  
10 was determined that the capital cost of installing incremental synchronous capacity  
11 on the Avalon Peninsula to replace Holyrood Unit 3 would exceed the life cycle  
12 costs of maintaining the existing unit in synchronous condensing mode. This was  
13 based on preliminary synchronous condenser equipment budgetary cost  
14 information. A detailed cost benefit analysis was not performed and capital  
15 expenditures associated with the installation of the plant heating system were  
16 therefore not specifically considered.

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18 No further analysis regarding movement of the synchronous condensing functions  
19 away from Holyrood was completed. Following completion of the Labrador-Island  
20 HVdc Link and shut down of the Holyrood Thermal Generating Station as an energy  
21 source, the site will operate as a synchronous condensers facility with Unit 3 in  
22 synchronous condenser mode for the foreseeable future. In addition, the Holyrood  
23 plant site and interconnection to the 230 kV transmission system is a preferred  
24 location should additional synchronous condenser capacity (either high or standard  
25 inertia machines) be required at a future date given the availability of two 230 kV  
26 connections and its proximity to the Soldiers Pond Converter Station and Avalon  
Peninsula load centre.