

1 Q. (page ix, report entitled Upgrade Transmission Line Corridor - Bay d'Espoir to
2 Western Avalon) It is stated "*Following the conclusion of the CT proposal and*
3 *clarification of its characteristics, the requirements for further reactive support in*
4 *the Avalon Peninsula area will be determined and will be planned to be in service at*
5 *the time LIL is operational*". Now that the CT project is underway, what further
6 reactive support in the Avalon Peninsula is needed, what is its estimated cost and
7 what is the schedule for its completion?

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10 A. At present, the CT project does not include synchronous condenser capability on
11 the machine being installed. As a result, an additional 120 MVAR (nominal) of
12 reactive support will be required on the Avalon Peninsula in the 2017 – 2018 time
13 frame. Hydro has several alternatives available to provide the reactive power
14 support including:

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- 16 • Installation of a clutch assembly on the CT being installed in Holyrood;
- 17 • Installation of a nominal 168 MVA electric generator and pony motor or
18 variable frequency drive starting system without a prime mover such as a
19 combustion turbine; and
- 20 • Conversion of Holyrood Units 1 or 2 to permanent synchronous condenser
21 capability post Labrador – Island HVdc Link completion.

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23 The year 2015 provides time to investigate the viable alternatives and determine
24 capital cost, with 2016 and 2017 providing a two-year construction window.