Q. Further to PUB-Nalcor-152, with reference to pg. 2 of the Report referred to in PUB-Nalcor-151, what issues have been identified with the Bay d'Espoir East 230kV transmission system: i) under the Isolated Island Scenario; and ii) under the Labrador Infeed Scenario?

A. Under the Isolated Island Scenario, the Bay d'Espoir East 230 kV transmission system is capacity constrained. This introduces two issues:

1) Units at Holyrood must be dispatched to reduce the loading on the Bay d'Espoir east transmission corridor from late spring to early fall.
2) The capacity benefits of renewable resources off the Avalon Peninsula, including Portland Creek (23 MW), Island Pond (36 MW), and Round Pond (18 MW), are diminished because transmission capacity is insufficient to enable them to meet demand on the Avalon Peninsula. In the absence of a Labrador interconnection, the Provincial Energy Plan places a priority on the development of renewable sources in an effort to minimize dependence on fossil fuels.

Under the Interconnected Island scenario, two issues arise:

1) System stability issues arise during certain AC fault conditions on the transmission system between Bay d'Espoir and the Avalon Peninsula.
2) The capacity constraints limit the ability to meet demand on the Avalon Peninsula if an HVdc bipole fault occurs.