Q. Please refer to page 19, Table 6.1 of the Upgrade Transmission Line Corridor Report. Please explain why there is no base case with system load of 1757MW and maximum import on the Labrador Island Link.

A. The results of the load flow and transient stability analysis indicate that for peak load conditions there is an increased power flow in the corridor between Bay d'Espoir Terminal Station and Western Avalon Terminal Station in cases with maximum hydroelectric generation online. In these cases, reserve is available on the Labrador-Island Link (LIL).

The increased power flow in the corridor results in increased thermal stresses on transmission lines and increases the relative rotor angles of the rotating machines on the Avalon Peninsula. Due to the larger potential for thermal overloads and angular instability, these cases are of particular importance in the development of a technical solution for the transmission line corridor.

The base case with the system load of 1757 MW is a future peak load case used to demonstrate the performance of the system in the longer term and it was decided to limit this analysis to the more onerous maximum hydroelectric case. It should be noted; cases involving maximum import over the LIL are extensively studied in Base Case 2, Base Case 5, and Base Case 7 for Winter Peak, Winter Day, and Spring/Fall Day conditions, respectively.