Q. Further to CA-NLH-53, will the primary and back-up auxiliary power supplies both be impacted by voltage disturbances on the AC transmission or AC retail distribution networks?

A. Station service power for the Muskrat Falls and Soldiers Pond converter stations are to be supplied from a minimum of two independent, secure sources. The design of the HVdc transmission system, including converter stations, transition compounds, and terminal stations is such that the failure of a single system element will not cause a reduction in power transfer capacity.

Loads supplied by the auxiliary power system are designed so that momentary voltage and frequency variations can be tolerated. Equipment is designed to ensure that the HVdc system can remain online under low-voltage conditions caused by critical faults or other contingencies. In the event of a drop-out of critical equipment such as a cooling motor or a pump, the equipment is designed to restart automatically when the voltage recovers to ensure that converter equipment will continue to function without interruption and without the need for manual intervention.

There shall be no curtailment of transmission and no discontinuity of the operation of protection and monitoring systems in the event of the loss of one auxiliary power source or transformer.