Q. Reference: Muskrat Falls Review: Exhibit 30 – Lower Churchill Project Design Progression, Sections 6: Basis of Design

Section 6.1 of Exhibit 30 – Lower Churchill Project Design Progression indicates that the Basis of Design for the Lower Churchill Project as "*A compilation of the fundamental criteria, principles and/or assumptions upon which Design Philosophies and Engineering Design Briefs will be developed.*"

Exhibit 30, which is dated July 10, 2011, further indicates that the HVAC and HVDC transmission lines as well as the electrode lines for the Lower Churchill Project are designed to a "50 year reliability level return period of loads".

Please explain in detail, if and how Hydro has adopted a new 'Basis of Design' since July 10, 2011 to ensure the design of the Labrador Island Link meets the CAN/CSA-C22.3 No. 60826-10 1:500-year return period on the Avalon Peninsula and a 1:150 year return period on all other sections of the line.

A. The ability of the Labrador-Island Transmission Link to withstand the loads specified in C22.3 No. 60826-10 at the 1:500-year return period on the Avalon Peninsula and a 1:150 year return period on all other sections of the line has been fully described in Hydro's response to NP-NLH-004.

The meteorological loadings for the Labrador-Island Transmission Link were provided in Exhibit 97 to the Muskrat Falls Review and are the same as those provided in Hydro's response to NP-NLH-004.

As indicated on page 2 of Hydro's response to NP-NLH-004, a comparison of the design loads to the CSA reference loads was not completed during the Muskrat Falls review, but is provided in Hydro's response to NP-NLH-004.

The results of that analysis conclude that the estimate of 50-year return period loads developed in Exhibit 85 of the Muskrat Falls Review (which was the basis for the statement in the Basis of Design) shows a much longer return period according to the most recently available CSA reference loads.