

1 Q. Reference: (<http://www.powerinourhands.ca/pdf/MHI.pdf>) *Manitoba Hydro*
2 *International: Review of the Muskrat Falls and Labrador Island HVdc Link and the*
3 *Isolated Island Options*, October 2012, page 47.
4 *“The climatic loadings for each line section were selected based on Nalcor’s past*
5 *research studies and statistical analysis of the climate data. Extreme values based*
6 *upon historical data and observations on ice accumulation and wind speed were*
7 *implemented in the line regions through the Long Range Mountains and other*
8 *regions in Labrador.”*
9 Has Hydro experienced buildup of ice on overhead lines as a result of successive
10 storms or icing events? If so, how was this experience considered in designing the
11 Labrador-Island HVdc Link or any other transmission line?

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14 A. In calculating a glaze ice event, it is assumed that gaps of less than 12 hours where
15 glaze ice accumulations have not occurred are all part of the same event. There
16 can, however, be events that occur one after another. Meteorological studies have
17 considered all events, and the final accumulation of ice, whether it is a single
18 isolated event or a combination of close events, in determining the final calculated
19 icing levels. Rime icing events are not isolated events like glaze ice, but are a
20 gradual build-up over time for time periods where the right conditions of wind
21 speed, low cloud elevations and appropriate temperature exist. Rime ice load
22 calculation has taken into account the fact that Rime icing events could be weeks in
23 duration, with ice staying on the line for significant periods.