

1 Q. Reference: Public Utilities Board Muskrat Falls Review, *Manitoba Hydro*
2 *International: Report on Two Generation Expansion Alternatives for the Island*
3 *Interconnected Electrical System*, January 2012, page 61.

4 *“The appropriate design criteria for the proposed Labrador-Island Link HVdc*
5 *transmission line is the “Design Criteria of Overhead transmission Lines” code*
6 *(International Standard CEI/IEC 60826:2003) with Canadian deviations in CSA*
7 *Standard CAN/CSA-C22.3 No. 60826:06.”*

8 In the CSA standard referenced above, clause No. 6.3.2 states that “The experience
9 of some Canadian utilities is that in some locations the ground wire (GW) accretes
10 as much radial ice weight as the larger-diameter conductors. This is partly due to
11 the higher elevation of the GW, the higher temperature of the phase conductor,
12 and possibly the comparative torsional stiffnesses. In such locations, it is
13 recommended to design the GW for the same linear unit weight of ice as for the
14 phase conductor.”

15 Please describe how this recommendation was followed in the design of the ground
16 wire (GW) or optical power ground wire (OPGW) of the Labrador-Island HVdc Link.
17 If the recommendation was not followed, please explain why it was not.

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20 A. Nalcor has followed the general application recommendations in the standard, and
21 has applied a uniform radial ice thickness around conductors, ground wires, and
22 optical ground wires.

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24 The statement referenced in the question is not a general application
25 recommendation, but rather an exception to general practice to be applied under
26 specific circumstances.