

1 Q. Reference: CAN/CSA-C22.3 No. 60826-10, Design Criteria of Overhead Transmission
2 Lines

3 The referenced standard CAN/CSA-C22.3 No. 60826-10 states in Section 6.4.4.1 on
4 page 73:

5 *“Wind velocities associated with icing episodes can be calculated from data, if*
6 *available or, when there is little or no data, from the following assumptions. In the*
7 *latter case, the reference wind speed is multiplied by a reduction factor B_i [0.4-*
8 *0.5]...”*

9 The response to Request for Information NP-NLH-004 indicates that a reduction
10 factor of 0.4 was used to determine ice loading for the combined wind and ice
11 loading criteria for the Labrador Island Link. Why has the minimum of the range
12 (0.4 to 0.5) been selected? In your response, please indicate how Hydro
13 incorporated Exhibit 95 - Evaluation of in-cloud icing in the Long Range Mountain
14 Ridge from the Muskrat Falls Review which implies on page 50 of 96 that a factor of
15 0.5 is more appropriate.

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18 A. The analysis was undertaken to demonstrate that the Labrador-Island Transmission
19 Link structures were capable of withstanding combined loads within the range as
20 proposed by the standard, and the selected reduction factor is within the range as
21 stated in the standard.

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23 The statement from Exhibit 95 does not offer additional guidance over the
24 standard, noting that “... it [the wind] may be around 50% of the maximum wind
25 load with the same return period.”

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27 Furthermore, the maximum structure utilization in the rime areas is less than 70%.