

1 Q. Reference: *Structural Capacity Assessment of the Labrador Island Transmission Link (LITL)*,
2 EFLA, April 28, 2020, page 35.

3 *“Following assumptions are made in the study:*

- 4 • *In this study, a wind speed of $0.6 \cdot V_R$ is used for the load case “Wind and Ice” in case of*
5 *glaze ice.*
- 6 • *All design in the LITL was based on using radial ice in the PLS-Cadd models. It was not*
7 *possible to define the ice load in “Wind and Ice” as $0.40 \cdot G_R$ without considerable*
8 *modification. Therefore, a simple approach was made with approximating the loading*
9 *as 0.58 of the radial ice loading. It overestimates the icing in case of pole conductor and*
10 *electrode conductor but slight underestimation in case of small OPGW with high ice load.*
- 11 • *In this study, a wind speed of $0.4 \cdot V_R$ is used for the load case “Ice and Wind” in case of*
12 *glaze ice.*
- 13 • *The drag coefficient of conductor covered with glaze ice is assumed = 1.0, which is*
14 *recommended in Table 8 of the CSA 60826-10 standard.”*

15 Please explain why EFLA assumed the bottom of the range of values for wind speed ($0.6 \cdot V_R$ and
16 $0.4 \cdot V_R$) in both the “Wind and Ice” and “Ice and Wind” loading combinations.

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19 A. The load cases in the design of Labrador-Island Link were specified slightly differently than in the
20 CSA and based on lower combination factors.¹ The selection of those values was based on the
21 principle stated on page 5 in the report: “It was specified in the project that underlying
22 assumptions, used in the design, should be kept as far as they complied with the design
23 standard.”

¹ Please refer to paragraph 3.3.5, page 35 of the EFLA Consulting Engineers report titled “Structural Capacity Assessment of the Labrador Island Transmission Link (LITL),” filed with the Board of Commissioners of Public Utilities on April 30, 2020.