

1 Q. **Reference: *Structural Capacity Assessment of the Labrador Island Transmission Link (LITL)*,**
2 **EFLA, April 28, 2020, pages 5-6.**

3 *“The OPGW conductor has utilization exceedance up to 9% in the load case “Ice and Wind” in*
4 *zones 3b, 4a, 4b, 6 and 10. The maximum utilization in the study was set at the damage limit of*
5 *80% of RTS. The increased utilization may lead to permanent elongation of the OPGW, however*
6 *it is within the failure limit and should not break or result in a line outage. It may therefore be*
7 *possible to accept a higher utilization value in few spans provided it is well below the failure*
8 *limit. The strength capacity corresponds to approximately 90 years return period of loading.”*

9 Please provide the tensions limits of the OPGW as specified by Nalcor/Hydro and as provided by
10 the manufacturer of the OPGW.

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13 A. The tension limits for the optical ground wire (“OPGW”) design for the Labrador-Island Link
14 (“LIL”) were specified by Nalcor Energy in consultation and agreeance with the OPGW
15 manufacturer, following type tests and manufacturing. The limit is 80% of the Rated Tensile
16 Strength (“RTS”) of the OPGW. There are three separate types of OPGW used on the LIL; one has
17 a RTS of 140 kN,¹ and the other two have an RTS of 278 kN.

¹ Kilonewton (“kN”).