

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 6.3.6.3.1A
4 on page CSA/14.

5 *“Non-uniform ice loading examples where the structure is subjected to 70% of the*
6 *design ice weight on the left or right spans while the other spans are loaded with*
7 *28% (40% of 70%) of the same design ice weight are illustrated in Figure 12 and*
8 *Table 6.”*

9 Was the requirement for consideration of unequal ice accumulations in the
10 CAN/CSA-C22.3 No. 60826-10 standard applied in the design of the Labrador Island
11 Link and the planned 3rd 230kV transmission line from Bay D’Espoir to Western
12 Avalon? If so please describe in detail. If not, why not?

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15 A. The requirements for consideration of unequal ice accumulation in CAN/CSA-C22.3
16 No. 60826:10 were applied during design of the Labrador-Island Transmission Link,
17 and will be used for design of the approved 230 kV line from Bay d’Espoir to
18 Western Avalon line.

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20 The design is based on more conservative criteria than specified in the CSA
21 standard. Rather than the CSA 70%/28% differential ice load, the design criteria
22 instead used an ice load of 100%/70% differential ice load. From structural analysis
23 of the as-designed structures using the zone 11 loads for analysis, the CSA
24 stipulated 70%/28% loading stressed the structure to 54% of its capacity. The
25 100%/70% differential ice stressed the structure to 73% of its capacity.

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27 The same criteria will be applied to the Bay d’Espoir to Western Avalon line.