

1 **Q. Page 2-26, line 9 to page 2-27, line 3: Is Newfoundland Power reviewing its design**
2 **standards for wind in light of the number of significant events involving wind speeds**
3 **in excess of 100 km/hr in the period 2010-2017?**
4

5 A. Wind issues over the years have resulted in changes to Newfoundland Power’s design
6 standards. For example, the use of clamp top insulators to better secure the conductor to
7 the pole is now standard. Newfoundland Power is not revising its design standards
8 specifically due to the number of significant events involving wind speeds in excess of
9 100 km/hr in the period 2010-2017.

10
11 Newfoundland Power’s design standards meet or exceed the requirements of Canadian
12 Standards Association (“CSA”) standard C22.3 No. 1 – 10, Overhead Systems. This
13 standard is constantly evolving to meet changes in weather patterns, loading
14 requirements, etc. New construction or line upgrades by the Company reflect changes
15 made to the CSA standard.

16
17 In recent years, much of Newfoundland Power’s service territory has been reclassified by
18 CSA as *severe loading area* from *heavy loading area*. Non-linear standards are now
19 mandatory, resulting in changes to Newfoundland Power’s design standards.¹ Another
20 CSA standard change has resulted in combined severe ice and wind loading and heavy
21 wind loading design being used throughout the Company’s service territory.

22
23 As CSA design standards evolve, Newfoundland Power design standards will change and
24 should adequately address the issues caused by the increased number of significant events
25 involving wind speeds in excess of 100 km/hr in recent years.

¹ Non-linear analysis factors into the loading calculations that the physical characteristics of a pole change over time with age (bending due to loading, etc.). Linear analysis did not consider changes over time.