

1 Q. Reference: *Probabilistic Based Transmission Reliability Summary Report*, Appendix
2 A, Page 28 of 56.

3 *“Based on the Nalcor study the following are the expected failure rates and repair*
4 *times for the HVDC overhead lines.*

- 5 • *Average failure rate per pole (based on 1100km length): 2.101/year*
- 6 • *Average repair time: 1.78 hours*
- 7 • *Average common mode failure rate: 0.02/year/100km*
- 8 • *Average common mode repair time: 24 hours”*

9 Please explain why ‘Average failure rate per pole’ is represented in failures/year
10 while ‘Average common mode failure rate’ is represented in failures/year/km.

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13 A. The average failure rate per pole has considered the total length of the line (as
14 stated between the brackets). Average failure rate /pole and common mode failure
15 rate are in proportion with the line length. In other words, failure/year and
16 failure/year/100 km are two different ways of describing the same thing.