

1 Q. Reference: Summary Report of Probabilistic Based Transmission Reliabilities

2 Assessment - Island Interconnected System:

3 *“Based on CIGRE data, the expected pole failure rate for the LIL is approximately*
4 *1.9 failures per year with an average duration of approximately*
5 *19.8 hours. These values are comparable to Hydro’s assessment which included*
6 *an expectation of 2.0 failures per year with an average pole outage duration of*
7 *21hours. HVdc system design ensures that failure of one pole, as documented*
8 *here, does not translate to customer outage”(pg 5)*

9 Which CIGRE data is being referred to? Why is this data different than that in 5.3.1.
10 Line Commutated Converters (page 23-24) and 5.3.3. HVDC Overhead Lines (page
11 25 to 27) of the Teshmont Report?

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14 A. References number 8 to number 12 from Teshmont study report (“Probabilistic Based
15 Transmission Reliability Assessment – Island Interconnected System”) is the CIGRE data
16 referred to.

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18 The above mentioned failure rate and duration is for the complete HVdc system,
19 including converter stations, transmission lines, cables, and electrode lines. The
20 reason for the difference is:

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22 a) The data in Section 5.3.1 considers the reliability of the converter stations part of
23 the HVdc system, excluding the outages that were caused by transmission lines or
24 cables.

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26 b) The data in Section 5.3.3 only considers the reliability figures of the HVdc
27 overhead lines part of HVdc systems.