

1 Q. Please comment on the statement on page 10 of the Teshmont Report regarding
2 transmission line failure rates, which states that *“five years of data was considered*
3 *insufficient to provide statistically meaningful data for individual lines”*. What would
4 be impact of using five year data compared to the data based on a longer historical
5 period?

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8 A. The impact of using data based on a longer historical period would have the
9 potential to improve the accuracy of the probabilities of ac transmission line
10 outages. However, such a refinement would not have an appreciable impact on the
11 results of the relative reliability analysis performed by Teshmont. As noted on page
12 39 of the report:

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14 *“While the reliability of the transmission network is improved, the*
15 *EUE resulting from ac transmission line outages is not material to*
16 *the comparison of Pre-HVDC and Post-HVDC cases. Rather, this*
17 *comparison is fundamentally between the reliability of the Holyrood*
18 *units and the HVDC transmission links...”*

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20 This is due to the fact that the ac transmission line outages result in a small amount
21 of expected unserved energy, as compared to Holyrood units and the Labrador
22 Island Link. As indicated in the report, the expected unserved energy for the Pre-
23 HVdc scenario due to ac transmission line outages is 100.8 MWh/year, as compared
24 to 41.9 MWh/year in the Post-HVdc scenario. This is compared to an expected

- 1 unserved energy of 16 GWh/year per year for Holyrood Units¹ and 2.7 GWh/year
2 for the HVdc link.
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4 On the basis of the above, five years of performance data for the ac transmission
5 lines was acceptable for the analysis.

¹ Based on Hydro reliability data