

1 Q. Reference: *Probabilistic Based Transmission Reliability Summary Report*, Page 2,
2 Footnote 2.
3 *“There is no single universally accepted probabilistic reliability based value, or index,*
4 *to demonstrate that a transmission network provides an acceptable level of*
5 *reliability.”*

6 The statement seems to imply that there are multiple (as opposed to single)
7 accepted probabilistic values or indices for transmission reliability. Please provide a
8 list of known values or indices used to determine transmission line reliability, and
9 indicate how they were established and how they are used.

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12 A. Please note that the reference statement refers to a network of transmission lines
13 to provide reliable service and not transmission line reliability. Therefore, the
14 statement does not relate to a “list of known values or indices” of transmission line
15 reliability, but implies that the application of a probabilistic reliability assessment
16 and the interpretation of results for a network of transmission lines are system
17 specific.

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19 Such assessments provide a methodology to assess the reliability of a transmission
20 network beyond conventional practices that use deterministic performance criteria.
21 These studies are complex due to the wide range of generation dispatch
22 alternatives, the number of system elements, and the network’s load distribution.
23 Therefore, they are typically limited in scope to a particular component or
24 subsystem within a transmission network.

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26 Probabilistic reliability assessments are often comparative in nature. This was the
27 case in the Teshmont analysis where the relative performances of the pre-HVdc and

1 post-HVdc scenarios were contrasted. Such a review is well suited to the technical
2 comparison of alternatives for a particular application. Due to variations in
3 transmission networks and operational considerations, it is challenging to compare
4 system reliability in different jurisdictions using a set of absolute indices.