1 Q. Reference: Teshmont Report - Section 5 - HVDC Reliability Data (Part 5.2) Data 2 Provided by Nalcor Energy (pg 21): 5.2. Data Provided by Nalcor Energy 3 4 "The forced outage rates and availability of the HVDC systems are highly 5 dependent on their design, installation, and location (for example availability of a spare converter transformers and/or submarine cables can significantly improve 6 7 the reliability of the overall system). Therefore, unless details of a specific system 8 are available, an accurate estimate of its forced outage rates and availability 9 cannot be calculated. For the purpose of this study, Teshmont is planning to use 10 the following values, which are based on the information that was provided to Teshmont by Nalcor Energy." 11 12 Did Teshmont request any verification or background information/documents used 13 by Nalcor in completing its "Reliability and Availability Assessment of the HVDC 14 Island Link" dated April 10, 2012? If so, what verification/background/documents 15 were provided and please provide the same. If Teshmont did not request any 16 additional information, why not? 17 18 19 A. Teshmont did not request any verification or background information/documents. 20 Teshmont performed a review of the HVdc reliability data provided by Nalcor 21 Energy, specifically the Lower Churchill Project, Reliability and availability 22 assessment of the HVdc Island Link - SNC Lavalin Inc. - April 2012 report. This 23 report included background information for Nalcor's reliability assumptions on the 24 basis of CIGRE statistics and also based on assumptions related to the design (e.g. 25 availability of spare equipment with long lead time such as transformers or

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smoothing reactors).

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- 1 Teshmont has significant experience with the design, specification and operation of
- 2 HVdc transmission and the reported statistics from CIGRE and other resources (e.g.
- 3 CEA). Teshmont was therefore capable of performing verification and
- 4 benchmarking of Nalcor's reliability assumptions, as provided.