

1 **Q: Reference: Liberty Consulting Report, August 19, 2016, Review of**
2 **Newfoundland and Labrador Hydro Power Supply Adequacy and Reliability**
3 **Prior to and Post Muskrat Falls Final Report**

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5 *"Furthermore, the electrode line's relatively long length (300km) and the higher*
6 *resistance resulting from operation with a single electrode conductor would result*
7 *in substantially less power being delivered to Soldiers Pond Hydro considers this*
8 *scenario to be an N-1 failure, and therefore not one for which it has designed"*
9 *(p20).*

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11 **For both the LIL and ML, did Liberty review the protection technology that**
12 **will be applied on the electrode lines? If yes, please provide a description of the**
13 **protection and estimate the annual availability of the protection.**

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16 A. Liberty did not receive any detailed information about the electrode line protection scheme
17 from either LIL or ML. Electrode line protection is installed on many HVdc schemes, i.e.
18 virtually all bipolar schemes that use earth or sea electrodes. There are several different ways
19 to provide protection for the electrode line