Q. Reference PUB-NLH-279: Please explain whether Hydro takes into account (i) the risk of two concurrent HVDC cable failures (not necessarily both at the same time); (ii) the risk of an electrode line failures; and (iii) the risk of an electrode line conductor failure in its planning of standby and reserve generation resources for LIL and Maritime Link.

A. In its planning of standby and reserve generation resources for LIL and Maritime Link, Hydro takes into account the following, as described:

(i) the risk of two concurrent HVDC cable failures (not necessarily both at the same time);

Hydro takes into account the risk of two concurrent HVDC cable failures (not necessarily both at the same time) as part of the composite system reliability.

> Please see the response to PUB-NLH-212, Attachment 2, *Lower Churchill Project Reliability & Availability Assessment of The HVdc Island Link, SNC-Lavalin, April 10, 2012*, Section 3 Composite System, page 17 to 22 of 32.

(ii) the risk of an electrode line failures; and
(iii) the risk of an electrode line conductor failure

Hydro does not take into account the risk of electrode line failures or the risk of electrode line conductor failure.

From the response to PUB-NLH-212, Attachment 2, *Lower Churchill Project Reliability & Availability Assessment of The HVdc Island Link, SNC-Lavalin, April 10, 2012*, Section 3.3 Electrode Lines, page 19 of 32:

> *As mentioned above, the link can still be operated at full power or reduced power even for the complete loss of the electrode line at either end of the link. As such, the reliability of the electrode line is considered to have no significant impact on the composite reliability of the link.*

For complete loss of an electrode line please refer to response PUB-NLH-557 for operational precautions for this mode of operation.