

1 Q. Please provide all reports and expert opinions relating to the life of HVDC cables  
2 overland or in a water free environment.

3

4

5 A. The only HVdc cables incorporated as part of the Lower Churchill Project are the  
6 submarine cables under the Strait of Belle Isle and approximately one km of buried  
7 cable on either side of the Strait. The factors affecting the life of HVdc cables were  
8 discussed in Hydro's response to DD-NLH-067 Attachment 1. The thermal  
9 conductivity of the material surrounding the cable is a design consideration, and the  
10 Distributed Temperature Sensing (DTS) system will be used to monitor the  
11 temperature of the cables and to avoid exceeding design temperature limits.