

1 Q. **Reference: Nalcor, EIS, Labrador-Island Transmission Link, page 2-22**

2 Citation:

3 In the context of the analysis completed in the Technical Note on reliability,  
4 increasing the return period of the HVdc transmission line design from 1:50  
5 years to, say 1:150 years, would reduce the probability of the occurrence of the  
6 event resulting in inability to supply all customer load. For the Interconnected  
7 Island alternative with a 1:50 year return period design for the HVdc line the  
8 probability of occurrence is 0.15% to 0.65% (availability 99.35% to 99.85%). If  
9 the HVdc line return period were increased to 1:150 years, the probability of  
10 occurrence of the event resulting in inability to supply all customer load would  
11 be 0.04% to 0.22% (availability 99.78% to 99.95%). However, the level of load  
12 curtailment (i.e., quantity of unsupplied energy during the two-week anticipated  
13 repair interval after an event), should the event occur, would not change with  
14 the change in design return period. In other words, increasing the return period  
15 of the line design reduces the probability of a failure for a given storm, but  
16 when the line failure happens the same number of customers will be without  
17 electricity. In essence, increasing the return period of the line design alone  
18 solves only one aspect of the exposure to Island customers for loss of the  
19 Labrador–Island Transmission Link.

20 Please explain why in its EIS Nalcor considered the maximum outage period to be two weeks,  
21 and now Hydro considers it to be six weeks or more (p. 28, 109 pdf).

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24 A. Please refer to Newfoundland and Labrador Hydro’s response to PUB-NLH-248 of this  
25 proceeding.