

1 Q. Consumer Question: In the exhibit "Labrador-Island HVDC Link and Island
2 Interconnected System Reliability" (Nalcor exhibit # 106) we see at page 9 that the
3 peak losses incurred delivering Muskrat Power to Soldier's Pond are approximately
4 10%. What are Nalcor's estimates for the peak and average losses incurred
5 delivering Muskrat Power to Soldier's Pond, Cape Bretton downstream of the
6 AC/DC converter, the New Brunswick/Nova Scotia border, the New
7 Brunswick/Maine border, and the Maine/New Hampshire border? (Precise
8 estimates are not necessary.)
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11 A. Losses on the HVdc transmission system when operating at rated capacity will not
12 exceed 10%. Nalcor estimates that average losses incurred delivering Muskrat Falls
13 energy to Soldiers Pond will be 5% as the system will not be operating at rated
14 capacity at all times. Please note that converter and transmission losses are
15 generally proportional to the square of the transmitted power, so losses when the
16 system is operating at one half of rated capacity will be approximately one quarter
17 of rated capacity losses.
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19 The peak and average losses associated with deliveries to locations other than
20 Soldiers Pond are beyond the Terms of Reference for this review. Therefore the
21 requested information does not assist consideration of the Reference Question.