

1 Q. Table 5, Exhibit 106, indicates that the level of unsupplied energy for the Isolated
2 Island Option varies from 0 MWh to 19,838 MWh for the years 2017 to 2037.
3 Corresponding figures for the Island Interconnected Option without the Maritime
4 Link range from 14,384 MWh to 93,744 MWh over the same period. This
5 demonstrates that over the period 2017 to 2037 the Isolated Island Option has less
6 unsupplied energy than the Island Interconnected Option without the Maritime
7 Link.

8
9 Assuming for the moment that the loss of TL202/206 under the Isolated Island
10 Option and a bipole outage under the Island Interconnected Option without the
11 Maritime Link for the *"worst 2 week window"* is a reasonable comparison, please
12 confirm that Table 5 demonstrates that the Isolated Island Option is more reliable
13 than the Island Interconnected Option without the Maritime Link for the period
14 2017-2037?

15
16
17 A. While Nalcor agrees that Table 5 of Exhibit 106 indicates the Isolated Island
18 alternative has less unsupplied energy than the Island Interconnected alternative
19 without the Maritime Link, Nalcor does not agree with the conclusion that the
20 Isolated Island alternative is more reliable than the Interconnected Island
21 alternative without the Maritime Link for the period 2017 to 2037. Further
22 information and context than is provided in Table 5 would be required to draw such
23 a conclusion.

24
25 The results presented in Table 5 represent a worst case comparison of the level of
26 risk of unsupplied energy during extraordinary events in the Isolated Island
27 alternative and Interconnected Island alternative without the Maritime Link. As

1 indicated in Exhibit 106, the likelihood of an icing event occurring during the worst
2 2 week period is remote and the level of unsupplied load would be expected to be
3 less than half of that indicated in Table 5 should an outage due to icing occur.¹
4

5 While the Isolated Island expansion plan has considerable investment in thermal
6 generation on the Avalon Peninsula, thermal units are deployed on the Avalon for
7 economic rather than reliability reasons.
8

9 The expansion plans presented for both the Isolated Island and Interconnected
10 Island alternatives meet all prescribed and accepted criteria for generation planning
11 and from this perspective both can be considered of comparable reliability with the
12 Interconnected Island alternative showing a considerable economic preference.
13

14 Without established criteria setting the level of acceptable risk to unsupplied
15 energy during extraordinary operating conditions, Exhibit 106 demonstrates both
16 the Interconnected Island and Isolated Island options perform comparably to or
17 better than the current system during such conditions. Notwithstanding the level
18 of performance provided by the current system, Table 6 in Exhibit 106² indicates
19 that the level of unsupplied energy in the Interconnected Island alternative without
20 the Maritime Link can be decreased through the addition of combustion turbines on
21 the system, and the “level of exposure can be managed to a preset level by
22 incremental additions of combustion turbines”³.

¹ This issue is discussed in Exhibit 106 on pages 26 through 29

² Exhibit 106, Page 25

³ Exhibit 106, Page 24

1 Nalcor has signed a term sheet with Emera for the construction of the Maritime
2 Link, and therefore believes a comparison between the Isolated Island alternative
3 and the Interconnected Island alternative with the Maritime Link is reasonable. If,
4 however, the Maritime Link were not to proceed, and new reliability criteria were
5 developed that required a lower level of unsupplied energy, then the exposure in
6 the Interconnected Island expansion plan without the Maritime Link can be reduced
7 by installing combustion turbines.

8
9 Nalcor therefore disagrees with the conclusion that the Isolated Island alternative is
10 more reliable than the Interconnected Island alternative.