

- 1 Q. **Reference Avalon Capacity Study, page 7:**
- 2 The base case assumes the ML frequency controller is available as import capacity permits;
- 3 please:
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- 5 a. Identify how much import capacity this requires.
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- 7 b. Whether the ML would be able to deliver more than 300 MW if the frequency on the
- 8 IIS were to drop below the frequency range.
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- 11 A. a. The Maritime Link frequency controller is activated for frequency support for the Island
- 12 Interconnected System to the extent that the capacity is available on the Maritime Link.
- 13 The current amount of response that is available for Island frequency support is 150 MW.
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- 15 b. The maximum transfer limit of the Maritime Link (from Woodbine, Nova Scotia to
- 16 Bottom Brook, Newfoundland and Labrador) is 325 MW, as measured at Woodbine
- 17 Terminal Station.<sup>1</sup> The combined capacity of imports to the Island Interconnected System
- 18 and the capacity required by the Maritime Link frequency controller (150 MW) cannot
- 19 exceed this value in order to gain full benefit of the frequency controller action. If there is
- 20 insufficient capacity for the Maritime Link frequency controller to operate at its specified
- 21 limit, it will respond at a reduced capacity. Under normal operation to date, on-Island
- 22 generator and Labrador-Island Link (“LIL”) loading limits are put in place to avoid the risk of
- 23 under frequency load shedding. In the event of an emergency scenario such as a LIL bipole
- 24 outage during periods of higher flows, such operational limits may not be practical and
- 25 there may be an increased risk of under frequency load shedding. However, operational
- 26 studies are currently being performed that will consider runbacks on the Maritime Link
- 27 following a significant loss of supply to the Island system. These coordinated runbacks
- 28 would improve system frequency response following the unlikely event of a LIL bipole trip

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<sup>1</sup> A limit of 300 MW is currently in place at Bottom Brook to account for Maritime Link losses.

- 1 and therefore reduce the level of under frequency load shedding required on the Island
- 2 Interconnected System.