

1 Q. Please describe the planned use in the dispatch process of the supply provided via
2 the Labrador Island Link project and what portion of load will be served by the
3 Labrador Island Link project versus supply from other Island resources.

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6 A. Once completed, capacity from Muskrat Falls, via the Labrador-Island Link, will be
7 dispatched to meet the Island load as part of the integrated Island/Labrador
8 system. The integrated system will be more complex than the Island alone because
9 the loads and generation in Labrador will also be part of the supply and total load.
10 All generation will be optimized to ensure maximum value and least cost to Hydro's
11 customers.

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13 Optimization of the hydro resources will be undertaken using Hydro's existing
14 generation dispatch decision support tools with enhancements to reflect the
15 expanded system.

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17 The amount of load supplied over the Labrador-Island Link to meet Island load will
18 vary from time of day, time of year and by the level of water available from on
19 Island reservoirs, much like the Holyrood plant is currently dispatched. The total
20 amount of power on the Labrador-Island Link will vary based on Island load and the
21 level of exports on the Maritime Link.

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23 The line is anticipated to operate similarly to AC transmission lines on the system
24 with the load varying by customer demand and economic generation dispatch. Like
25 Holyrood, due to Island capacity limits, the power transfer on the Labrador-Island
26 Link for Island consumption is expected to be highest in the high demand winter
27 period.

Island Interconnected System Supply Issues and Power Outages

The expected range of load on the Labrador-Island Link (LIL) for varying Island demand can be characterized by the base case scenarios analyzed in the recent application Upgrade Transmission Line Corridor Bay d’Espoir to Western Avalon and summarized below.

Base Case Scenarios

Case	Hydro System Load MW	LIL Mode	LIL Load MW at SOP	Hydro Island Generation MW	Comments
BC1	1757	Bipole	672	1085	Maximum Future Winter Peak – Max Island Generation with reserve on LIL
BC2	1603	Bipole	830	773	Winter Peak – Max LIL import with reserve on Island Generation
BC3	1603	Bipole	518	1085	Winter Peak – Max Island Generation with reserve on LIL
BC4	1458	Monopole	200	1258	Winter – Max Island Generation with CTs running and reserve on LIL
BC5	1415	Bipole	830	585	Winter Day – Max LIL with reserve on Island Generation
BC6	1415	Bipole	330	1085	Winter Day – Max Island Generation with reserve on LIL
BC7	1261	Bipole	830	431	Spring/Fall Day – Max LIL with reserve on Island Generation
BC8	1261	Bipole	176	1085	Spring/Falls Day – Max Island Generation with reserve on LIL
BC9	700	Bipole	375	325	Summer Day – Min Island Generation with reserve on LIL
BC10	700	Monopole	154	546	Summer Day – Max LIL with reserve on Island Generation
BC11	440	Bipole	120	320	Summer Night – Min LIL and Island Generation with reserve on Island Generation