

November 3, 2022

Board of Commissioners of Public Utilities
Prince Charles Building
120 Torbay Road, P.O. Box 21040
St. John's, NL, A1A 5B2

Attention: Ms. Cheryl Blundon
Director of Corporate Services & Board Secretary

Dear Ms. Blundon:

Re: *Reliability and Resource Adequacy Study Review – Labrador-Island Link Monthly Update – October 2022*

On November 21, 2019, the Board of Commissioners of Public Utilities (“Board”) requested that Newfoundland and Labrador Hydro (“Hydro”) provide further information as a result of the findings in The Liberty Consulting Group’s (“Liberty”) Eighth Quarterly Monitoring Report on the Integration of Power Supply Facilities to the Island Interconnected System. In its response, Hydro committed to providing Liberty and the Board with a monthly status update regarding the schedule for the Labrador-Island Link (“LIL”) software development and testing, updated information in response to the specific requests detailed in the Board’s November 21, 2019 correspondence, and other pertinent information with respect to the Muskrat Falls Project. On January 19, 2021, the Board requested Hydro continue monthly reporting and outlined specific information, at a minimum, to be included.¹ Enclosed please find the update as requested.

1.0 LABRADOR-ISLAND LINK

1.1 Commissioning Activities

1.1.1 Bipole Commissioning

As previously reported, Dynamic Commissioning tests were conducted from August 22, 2022 to September 2, 2022. Testing was generally successful; however, due to issues with a ground switch and pole ramp rates it was decided that the 475 MW test would be repeated during Trial Operations observed during Dynamic Commissioning. Trial Operations commenced on October 11, 2022, and has continued since that time; the period will be considered successful after 30 consecutive days of operation without a trip attributed to the HVdc² system. In coordination with the Interconnecting Partners, a repeat of the 475 MW test, as noted above, was successfully performed on October 15, 2022, which confirms the LIL’s capability to operate in a continuous overload mode of operation, up to 675 MW The Newfoundland and Labrador System Operator (“NLSO”) will determine

¹ Hydro’s report has been adjusted to reflect the Board’s request, with the exception of information related to the LIL monthly energy transfers and Maritime Link availability and exports and imports in the month. Both pieces of information are currently included in Hydro’s monthly energy supply report and are not available in a time frame that corresponds with the timing of this report.

² High-voltage direct current (“HVdc”).

the actual power transfer level daily based on system conditions. Testing the LIL at power levels greater than 675 MW will require cold weather and elevated loads, which is anticipated to occur this fall, tentatively scheduled for the week of November 21, 2022. Successful testing at this level will confirm the LIL's short-term overload capability, thus providing verification of the software functionality required for operation up to the full rated capacity of 900 MW. Confirmation of acceptance of final commissioning requirements are being worked with financing partners, including Government of Canada.

1.1.2 Soldiers Pond Synchronous Condensers

GE Power's mitigation measures and additional testing have been unsuccessful in addressing the bearing tilt issue observed in Synchronous Condenser ("SC") 1. GE Power has indicated that a design review is required to resolve the issue. SC2 and SC3 are currently online; however, both units experienced forced outages due to vibration twice during the month of October unrelated to the bearing issue on Unit 1. GE Power cleared both units for return to service; an investigation into the events is ongoing. Monthly meetings between the CEOs of Hydro and GE Power are ongoing to ensure this issue is resolved to satisfaction.

As a result of the risk of forced outages to SC2 and SC3 due to vibrations, LIL operation has been restricted by the NLSO to ensure that no more than two filter banks can be placed in service. This limitation will ensure reliable operation and that voltages remain within acceptable limits in the event of a trip of the synchronous condensers. With this restriction in place, the LIL capacity is currently limited to a maximum of 315 MW to provide for reliable service.

The limitation will be lifted once the NLSO has received documentation to confirm that the investigation is complete and that the issue has been resolved. It is noted that a resolution of this item is a prerequisite to testing the LIL at power levels greater than 675 MW.

1.2 Operations

LIL operated in bipole and monopole mode at various levels, as determined by the NLSO, throughout the month of October 2022.

1.3 Outages

There were no LIL-related customer outages to report for October 2022.

2.0 MUSKRAT FALLS GENERATION

2.1 Operations

Muskrat Falls Units 4 is currently offline for planned maintenance. Units 1, 2 and 3 are in operation.

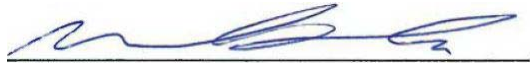
3.0 LABRADOR-ISLAND LINK SCHEDULE

As noted above, Trial Operations started on October 11, 2022; this period will be deemed successful after 30 consecutive days of operation without a trip attributed to the HVdc system. Testing the LIL at power levels greater than 675 MW is tentatively scheduled for the week of November 21, 2022. The LIL will be considered commissioned upon successful completion of these tests. Confirmation of acceptance of final commissioning requirements are being worked with financing partners, including Government of Canada.

If you have any questions or comments, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO



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Vice President, Chief Legal Officer & Corporate Secretary
MSL/kd

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