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April 3, 2025

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

Attention: Jo-Anne Galarneau

Executive Director and Board Secretary

Re: Reliability and Resource Adequacy Study Review – Labrador-Island Link Update for the Quarter Ended March 31, 2025

In 2019, Newfoundland and Labrador Hydro ("Hydro") committed to providing the Board of Commissioners of Public Utilities ("Board") and its consultant with a monthly status update reflecting specific requests by the Board and other pertinent information with respect to the Muskrat Falls Project. 1, 2 Hydro's update is as follows.

Since commissioning in April 2023, the Labrador-Island Link ("LIL") has been in service and successfully providing power to the provincial grid. Since the last update, the LIL has been operating at various power transfer levels, as required by the system. In total, approximately 902 GWh were delivered over the LIL from January 1, 2025 to March 31, 2025. Hydro continues to ensure the availability of generation at the Holyrood Thermal Generating Station; however, energy and capacity delivered over the LIL are used to minimize thermal generation whenever possible.

As reported in Hydro's most recent Quarterly Report on Asset Performance in Support of Resource Adequacy ("Rolling 12"), despite expectations of unavailability being at the higher end of this range early in its commissioned operation, the equivalent forced outage rate ("EqFOR") for the LIL from January 1, 2024 to December 31, 2024, was approximately 3.37%. This is well within the assumed long-term range of 1% to 10%. Hydro will provide an update on EqFOR for the twelve months ended March 31, 2025, in its next Rolling 12 report due to the Board on April 30, 2025.

1.0 Labrador-Island Link

1.1 900 MW Test and Software

All software functionality required for operation up to 900 MW was proven and accepted as satisfactory during pole overload tests in winter 2023 prior to the April 2023 commissioning; however, as committed, controlled testing at the highest power levels will be performed prior to operation in this range when system conditions permit. As reported in Hydro's final 2024–2025 Winter Readiness Report, new equipment was successfully installed to mitigate cable switching transients at the LIL Transition Compounds in mid-October 2024.

¹ "Newfoundland and Labrador Hydro – Reliability and Resource Adequacy Study Review – Information Required for Monthly Reports," Board of Commissioners of Public Utilities, January 19, 2021.

² On July 25, 2023, the Board directed Hydro to reduce the frequency of reporting to quarterly from monthly.

³ "Quarterly Report on Asset Performance in Support of Resource Adequacy for the Twelve Months Ended December 31, 2024," Newfoundland and Labrador Hydro, January 31, 2025.

Since the Winter Readiness Report, Hydro has identified an icing issue with transition compound disconnects that can impact cable switching in winter conditions. Hydro is engineering a solution to resolve this issue. In the interim, Hydro is developing operating procedures to ensure reliable operation in winter conditions, including high power testing. As the winter testing window is now closed due to system loading conditions, Hydro has postponed the 900 MW test to the fall of 2025.

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Planning for the 900 MW test continues. As previously reported, the following are prerequisite conditions for the test to occur:

- Satisfactory system conditions are present, including both those in Newfoundland and Labrador, where a high system load can be reasonably expected to occur and neighbouring jurisdictions;
- Successful coordination with all relevant neighbouring system operators is attained; and
- Identification of risks and implementation of all necessary risk mitigation actions are in place.

New LIL software was commissioned in mid-October. This software, as with the previous version, allows for full operation of the LIL up to 900 MW. Through dynamic commissioning, non-critical software-related items were identified. The software to address these non-critical issues successfully passed Factory Acceptance Testing in November and is anticipated to be installed in spring 2025 once system conditions allow.

1.2 Operations

During the first quarter of 2025, the LIL experienced six pole trip events, two bipole and four monopole. The LIL was returned to service each time in an average of 9 hours. There was no impact to customers as a result of any trip events.

Hydro will include an update on the LIL, including forced outages, for the twelve months ended March 31, 2025, in its next Rolling 12 report.

2.0 Soldiers Pond Synchronous Condensers

Outside of planned outages, the Soldiers Pond Synchronous Condensers have been in operation at all times since the last LIL update, with the exception of one trip on Synchronous Condenser 3, which was returned to service within an hour. There was no customer impact.

Hydro will include an update on the total number of hours of operation for the Soldiers Pond Synchronous Condensers for the twelve months ended March 31, 2025, in its next Rolling 12 report.

3.0 Muskrat Falls Generation

As reported in its most recent Rolling 12 report, the Muskrat Falls Hydroelectric Generating Station ("Muskrat Falls") total plant DAFOR⁴ performance through the end of the fourth quarter of 2024 was 1.70%, which was significantly better than the Electricity Canada average of 5.27% for similar units across Canada.⁵

Hydro will include an update on the performance of the Muskrat Falls generation for the twelve months ended March 31, 2025, in its next Rolling 12 report.

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

⁴ Derated Adjusted Forced Outage Rate ("DAFOR").

⁵ Electricity Canada five-year average (2019-2023).

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

Michael S. Ladha, KC

Vice President, Chief Legal Officer & Corporate Secretary $\mathsf{MSL/KD/MC}$

ecc:

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