

March 18, 2021

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: Labrador East Reliability Plan Update

On September 30, 2020, Newfoundland and Labrador Hydro ("Hydro") filed correspondence with the Board of Commissioners of Public Utilities ("Board") indicating that, due to the time frame associated with the in-service of the Muskrat Falls generating units, Hydro was unable to complete the interconnection of the six kilometre transmission line extension ("L1303")¹ prior to the 2020–2021 winter season and will continue to supply Labrador East using the 138 kV interconnection to Churchill Falls via transmission line L1301/1302 for the upcoming winter season. Hydro anticipates completing the interconnection in the late spring/early summer of 2021 when an outage for the interconnection can be accommodated with minimal customer impact and subject to the availability of generation at Muskrat Falls.

With a focus on the provision of reliable service, Hydro has implemented a reliability plan for Labrador East during the 2020–2021 winter season similar to that which was in place during the 2019–2020 winter season. In its September 30, 2020 correspondence, Hydro committed to providing monthly updates to the Board on the status of its winter reliability plan in Labrador East beginning in November 2020 and carrying through to March 2021.

The forecasted P50 peak load for Labrador East this winter is 78.3 MW and the forecasted P90 peak load is 79.7 MW. The transfer capacity on the transmission system remains at 76.0 MW and an additional approximately 29.0 MW are available from the Happy Valley Gas Turbine and North Plant for peak loading conditions. The loads in the area have continued to trend below forecast this winter with an actual peak of less than 65 MW to date.

Hydro's March 2021 update on the components of its Labrador East Reliability Plan follows.

i. Happy Valley Gas Turbine

Status: Complete

Update: The 2020 Annual Work Plan activities are complete. The gas turbine has operated in synchronous condenser mode since December 10, 2020 with no issues. The most recent test run of the unit was completed on February 26, 2021.

¹ Approved in Board Order No. P.U. 9(2019).

ii. North Plant

Status: Complete

Update: The 2020 Annual Work Plan activities are complete. The diesel units at the North Plant have operated several times since August 2020. The most recent testing and run up of the units was successfully completed during the week of March 1, 2021.

iii. L1301/L1302 Inspections

Status: Ongoing

Update: Hydro completed its most recent inspection of L1301/L1302 on March 9, 2021. There were no deficiencies identified during the inspection and no issues have occurred on the lines since the inspection.

iv. Interruptible Service Agreement

Status: Complete

Update: Hydro filed an application with the Board on October 27, 2020 for approval of an interruptible service agreement with Labrador Lynx Limited which provides up to 5.5 MW of interruptible load each month during the term of the agreement.² The Board approved the application in Board Order No. P.U. 31(2020). Hydro has not had to avail of customer interruption under this agreement to date.

v. Operations Protocol

Status: Complete

Update: Hydro has reviewed and updated, as appropriate, the following procedures:

1. Sectionalization procedures for the Happy Valley distribution system;
2. Labrador East 25 kV Bus Regulation procedure (TOP-P-053); and
3. Procedures for the emergency establishment of the Muskrat Falls to Happy Valley Interconnection in the event of a loss of transmission from L1301.³

vi. Labrador East Customer Communication Initiative

Status: Complete

Update: The Labrador East Communication Initiative has been updated for 2020–2021 and implemented. Hydro representatives have met with stakeholders to review the Advance Notification Protocol and contingency planning efforts for the coming winter season.

² The agreement indicates an expiry date of the earlier of the end of March 2021 or the in-service date of the Muskrat Falls to Happy Valley Interconnection.

³ As communicated to the Board on March 17, 2020, testing of L1303 was completed earlier in 2020, confirming that in the event of a catastrophic failure of L1301, Hydro is in the position to provide power on a contingency basis to Labrador East over the new system through the energization of L1303.

Other Items

Load Restrictions

Regulation 17, approved by the Board in Order No. P.U. 34(2019),⁴ remains in effect and limits large⁵ load additions in Labrador East and Labrador West. Hydro will continue to consider any new applications for load in light of this restriction. On November 12, 2020, Hydro filed an application for an exemption to Regulation 17 to provide a service connection to the Department of Justice and Public Safety Building being constructed in Happy Valley-Goose Bay. The Board approved the application in Board Order No. P.U. 34(2020).

Contingency Power

In the event of a catastrophic failure of L1301, Hydro is in the position to provide power on a contingency basis to Labrador East over the new system through the energization of L1303. Such an interconnection would require operating restrictions to mitigate risk to customers and would only be considered in an emergency situation due to the voltage regulation considerations required. Hydro would make a decision based on customer outage exposure in consideration of the limited supply from the Happy Valley Gas Turbine and North Plant, L1301 restoration time, forecasted weather, and energization time for the interconnection.

Other Labrador East Reliability Considerations

As previously communicated to the Board,⁶ a consequence of the deferral of the Muskrat Falls to Happy Valley Interconnection is that the 50 MVA transformer in the Muskrat Falls Terminal Station 3 on the North Spur is not available for relocation to the Happy Valley Terminal Station. For this winter, overloads that might arise from a power transformer failure in this station will be avoided by the operation of the Happy Valley Gas Turbine and the North Plant.

This is Hydro's final update for the 2020–2021 winter season. Hydro is not aware of any new or emerging issues that could impact the reliability of the Labrador East Interconnected System during the remainder of the 2020–2021 winter season.

Should you have any questions or comments about any of the enclosed, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO



Shirley A. Walsh
Senior Legal Counsel, Regulatory
SAW/sk

ecc: **Board of Commissioners of Public Utilities**
Jacqui Glynn
PUB Official Email

⁴ Originally approved in Board Order No. P.U. 32(2018).

⁵ 200 kW and greater.

⁶ "Labrador East Reliability Plan Update," Newfoundland and Labrador Hydro, March 17, 2020.

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