newfoundland labrador hydro
a nalcor energy company

Hydro Place. 500 Columbus Drive.
P.O. Box 12400. St. John's. NL
Canada A1B 4K7
t. 709.737.1400 f. 709.737.1800
www.nlh.nl.ca

November 18, 2020

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: Newfoundland and Labrador Hydro – 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 is unable to complete the interconnection of the six-kilometre transmission line extension ("L1303")[1] prior to the winter 2020–2021 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 upcoming winter season, similar to that which was in place during the 2019–2020 winter season. In its September 30, 2020 correspondence, Hydro committed to provide 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 MW and an additional approximately 29 MW are available from the Happy Valley Gas Turbine and North Plant for peak loading conditions.

Hydro's November 2020 update on the components of its Labrador East Reliability Plan follows.

i. Happy Valley Gas Turbine

Status: Complete

Update: All winter readiness activities are complete. There are eight remaining Integrated Annual Work Plan ("IAWP") activities that are not required for winter readiness and do not impact reliability. The gas turbine has been fully tested and most recently was successfully run up to 25 MW on November 5, 2020.

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

ii. North Plant

Status: Complete

Update: All winter readiness activities are complete. There is one IAWP activity remaining that is not required for winter readiness and does not impact reliability. The diesel units at the North Plant have been operated several times since August 2020. The most recent run up of the units was successfully completed on November 6, 2020.

iii. L1301/L1302 Inspections

Status: Ongoing

Update: Hydro completed its most recent inspection of L1301/L1302 on November 8, 2020. No defects were found during the inspection, and no issues have occurred on the lines since that time. The next inspection is planned for the week of December 14, 2020, as per the six-week inspection frequency.

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 Order No. P.U. 31(2020).

v. Operations Protocol

Status: Complete

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

1. Sectionalisation 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 – 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 implementation is underway. A copy is attached.

---

[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 P.U. 34(2019),[4] remains in effect and limits large[5] load additions in Labrador East and West. Hydro will continue to consider any new applications for load in light of this restriction.

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 using 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 the coming winter, overloads that might arise from a power transformer failure in this station would be avoided by the operation of the Happy Valley Gas Turbine and the North Plant.

Hydro is not aware of any other items that could impact the reliability of the Labrador East Interconnected System during 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/kd

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

Newfoundland Power
Gerard Hayes
Kelly C. Hopkins
Regulatory 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.

Consumer Advocate
Dennis M. Browne, Q.C., Browne Fitzgerald Morgan & Avis
Stephen F. Fitzgerald, Browne Fitzgerald Morgan & Avis
Sarah G. Fitzgerald, Browne Fitzgerald Morgan & Avis
Bernice Bailey, Browne Fitzgerald Morgan & Avis

Industrial Customer Group
Paul L. Coxworthy, Stewart McKelvey
Denis J. Fleming, Cox & Palmer
Dean A. Porter, Poole Althouse

Iron Ore Company of Canada
Gregory A.C. Moores, Stewart McKelvey

Labrador Interconnected Group
Senwung Luk, Olthuis Kleer Townshend LLP
Julia Brown, Olthuis Kleer Townshend LLP

Advance Notification Protocol

Labrador East Implementation

Communications Plan

Update: October 2020

INTRODUCTION

In an effort to ensure that customers in Labrador East have timely notification of any anticipated supply shortages, the Advance Notification Protocol will be implemented in advance for winter 2020-2021. The Advance Notification Protocol is an alert system, originally developed in partnership with Newfoundland Power in 2014 for the Island Interconnected System. Alerts are designed to advise customers of the status of power supply in order for customers to be better informed and be prepared for potential impacts or outages.

COMMUNICATIONS OBJECTIVES

- To build awareness among customers and stakeholders in Labrador East of the Advance Notification Protocol.
- To educate residential and business customers on specific conservation measures/actions required during supply shortages.
- To ensure Hydro employees in Labrador are familiar with the Advanced Notification Protocol and able to assist with implementation.

COMMUNICATIONS APPROACH

Customer Focused
The over-arching communications approach is to ensure a customer focus – with information that is helpful and valuable to customers, while demonstrating empathy and concern for the impact potential outages, particularly rotating outages, have on customers.

Forthright, Simple and Helpful Tone
The tone of messaging will be a straight forward and helpful one that assists customers and key stakeholders in understanding the important role they play in terms of conservation and reducing demand on the electricity system during supply shortages. Clear and specific conservation actions will be communicated directly to customers.

Responsive
Communications will be executed swiftly when an alert level is triggered, with a responsive and open approach to customer questions or concerns.

KEY MESSAGES

Specific messaging has been developed for the Advance Notification Protocol based on the customer actions required, as outlined below.

Advance Notification Protocol

The Advance Notification Protocol is a three level, public alert system to advise customers of the status of the power supply in order to be prepared for any potential impacts. There are three levels of notification:

1. Power Watch
    - Message: No immediate action required. Electricity system being watched closely. Be prepared to conserve electricity if asked.
2. Power Warning
    - Message: Conserve electricity. This is a warning that current day electricity supply is getting close to maximum capacity. Be prepared for rotating power outages.
3. Power Emergency
    - Message: Rotating power outages in effect. Conserve electricity. Safety should remain your highest priority when using alternate sources of power, heat or light in your homes.

Conservation messaging has been developed for both residential and business customers.
Conservation at home:

- Key Message: Knowing how your home uses energy and following these tips will help you do your part to conserve electricity, if required.
    - Reduce heat by a few degrees
    - Avoid using appliances, electronics and hot water
    - Turn off unnecessary lighting

Business Conservation

- Key Message: During a call for conservation, your business can help. When electricity demand is greater than the available supply, businesses have a big role to play. Here's how you can help:
    - Reduce heat by a few degrees
    - Turn off outdoor lighting not needed for safety or security
    - Avoid using unnecessary equipment such as computers, monitors or other equipment not required
    - Stagger equipment start up

Rotating Outages

- During a Power Emergency, messaging will focus on duration and frequency of rotating outages.
- Power outage safety messaging will be critical.
- Messaging and infographics explaining cold load pick up will be shared.

COMMUNICATIONS TACTICS

An education program was executed in 2018 and in 2019 for Labrador East. As was done in previous years, information will be provided to customers prior to winter in Labrador East public/media relations, social media, digital and website content, and direct customer outreach through key stakeholder groups, bill information and other tactics as required. Existing infographics and videos, previously proven to be successful in creating understanding, will continue to be used to simplify and visually present information.

External

- Key Stakeholder Presentations:
  - Town of Happy Valley Goose Bay
  - Happy Valley Goose Bay Chamber of Commerce
  - Town of North West River
  - Sheshatshiu First Nation
  - 5 Wing Goose Bay
  - MHA, Perry Trimper
  - Key customers (as required)

- Customer Communications:
  - December e-bill and bill footnote
  - Digital content on website
  - Social media

Internal

- Information session for TRO Labrador
- Customer Service Centre Q&A

Materials

Hydro will leverage existing communications materials developed for the Advance Notification Protocol implementation on the island such as:

- Infographics – What to do – Power Watch, Power Warning, Power Emergency
- Video – Advance Notification Protocol – keeping customers informed
- Infographic – How to conserve at home
- Infographic – How to conserve at your business
- Video – How to conserve energy
- Infographic – Communications during an outage
- Infographic – Cold Load Pickup

Timing

	Deliverable	**Responsible**
Week of November 2	Review protocol with System Operations &TRO Staff	TRO Lab Regional Manager
Week of November 9	Book Stakeholder Meetings	TRO Lab Regional Manager
Week of November 16	Social Media & Web Info	Corporate Communications

EVALUATION

Evaluation will focus on the understanding of the Advance Notification Protocol among Labrador East customers and stakeholders.

Evaluation will include discussions with key stakeholders and customers, traditional media monitoring, social media monitoring, public sentiment, visits to website, and calls to customer call center.

Of note, during winter 2018-19, there was one ANP alert (Power Watch) which overall was well received and understood by customers in the region. There were no ANP alerts during winter 2019-2020.