newfoundland labrador hydro
a nalcor energy company

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March 30, 2017

The 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 Corporate Services & Board Secretary

Dear Ms. Blundon:

Re: Investigation and Hearing into Supply Issues and Power Outages on the Island Interconnected System -- Directions further to the Board's Phase One Report

Further to the Board's correspondence dated October 13, 2017, attached please find:

1. A report entitled "*Establishing a Robust Operational Philosophy and Enhancing Skills and Capabilities Relating to Systems Reliability and Analysis*" outlining the actions taken in response to each of Liberty's recommendations in its report dated October 22, 2015 on the March 2015 Outage; and

2. A report entitled "*Improving the Transparency of the Designation of Critical Customers*" detailing improvements to the transparency of the designation of critical customers.

We trust the foregoing is satisfactory. If you have any questions or comments, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

Tracey L. Pennell
Senior Counsel, Regulatory

TLP/bs

cc: Gerard Hayes – Newfoundland Power
Paul Coxworthy – Stewart McKelvey Stirling Scales
Roberta Frampton Benefiel – Grand Riverkeeper Labrador
Dennis Browne, Q.C. – Consumer Advocate
Danny Dumaresque

ecc: Denis Fleming- Vale Newfoundland & Labrador Limited
Larry Bartlett – Teck Resources Ltd.

Improving the Transparency of the Designation of Critical Customers

March 30, 2017

A Report to the Board of Commissioners of Public Utilities

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1.0 Introduction

On October 13, 2016, the Board of Commissioners of Public Utilities (the Board) requested that Newfoundland and Labrador Hydro (Hydro) file a report that details improvements to the transparency of the designation of critical customers.

Hydro is committed to providing timely and accurate information to its customers and to the general public for planned and unplanned power interruptions. Hydro has a comprehensive communications strategy for communicating power interruptions and power alerts to its customers and has regional plans for communicating with critical customers. Hydro designates critical customers on the basis of health, safety and welfare of the communities serviced by Hydro.

In an effort to standardize communications with customers, leverage the existing communication planning wherever possible, and improve the identification of critical care residential customers, Hydro has developed a list of improvements for managing critical care residential customers. These improvements include: an improved centralized management critical care customer lists; tailored communications during power interruptions and rotating power outages; and an improved and targeted communications strategy.

The schedule for these improvements is included in this report and Hydro expects the improvements to be implemented by the end of September 2017. Hydro will provide an update to the Board on the status of these improvements in its subsequent quarterly report to the Board.

2.0 Customers Defined

Hydro has two broad classifications of critical customers that require timely and accurate information during both planned and unplanned power outages.[1] These include:

1. **Critical Care Residential Customers** - A Hydro residential customer that has a person permanently residing at the residential address who has been diagnosed by a physician as having medical conditions that require life-sustaining assistance from electricity-dependent equipment.
2. **Public Authorities/Regional Commercial Entities** – Customers include government departments, agencies, and other public funded organizations, including schools and emergency/medical facilities. Businesses with a delivery point less than 69kV, but critical to regional economies, such as fish plants, are included in this category.

Public authorities, regional commercial entities, and critical care residential customers are currently identified in the regions. Critical care residential customers now self-identify by contacting the regional offices and the regional Hydro offices also reach out to regional health authority offices to request information on patients with medical conditions that require life-sustaining assistance from electricity-dependent equipment. Hydro views the identification of critical residential customers as an area for immediate improvement, which is addressed in section 5.0 of this report.

2.1 Outage Definition

Planned power outages occur when Hydro needs to make necessary repairs, installations or upgrades to its system and must de-energize the system so that work can be performed in a safe and timely manner. This causes a planned power interruption for customers. The planning schedule for planned power outages is known in advance of the interruption or service.

[1] Hydro recognizes that its Industrial Customers are key customers and these customers are managed by Hydro's Manager, Key Accounts who is accountable for the overall relationship with industrial customers across the Province and is the single point of contact for overall service and communications.

Unplanned power outages occur when there is an interruption in the generation, transmission, or distribution of energy which Hydro did not schedule. Unplanned power outages are caused by events such as high winds, snow and ice storms, equipment problems, fallen trees, equipment failure or other incident beyond Hydro's control.

3.0 Communicating with Customers

3.1 Hydro's Customer Communications Plan

Hydro has developed a comprehensive strategy for communicating with customers. As described in Appendix A, Hydro communicates with its customers for planned and unplanned outages using the following tools:

- Direct Updates to Media, Mayors, MHAs, etc.;
- Radio Notices;
- MyHydro Application;
- Newfoundland and Labrador Hydro Website; and,
- Social Media (Twitter and Facebook).

The communication plan targets all customers and the general public and allows Hydro to inform customers about all planned and unplanned outages and update customers when one of the advanced notification protocols is triggered.[2]

Hydro, along with Newfoundland Power Inc., has also developed three levels of alerts (Power Watch, Power Warning and Power Emergency) to advise customers of the status of the power supply in the province. The goal of the advanced notification protocol is to keep customers better informed about the inner workings of the provincial electricity grid and better prepare them for any potential impacts. The power alert levels found in the advanced notification protocol provide customers with early indicators of power issues which allow them to take proactive actions.

[2] http://www.nlhydro.com/winter/advance-notification-protocol/

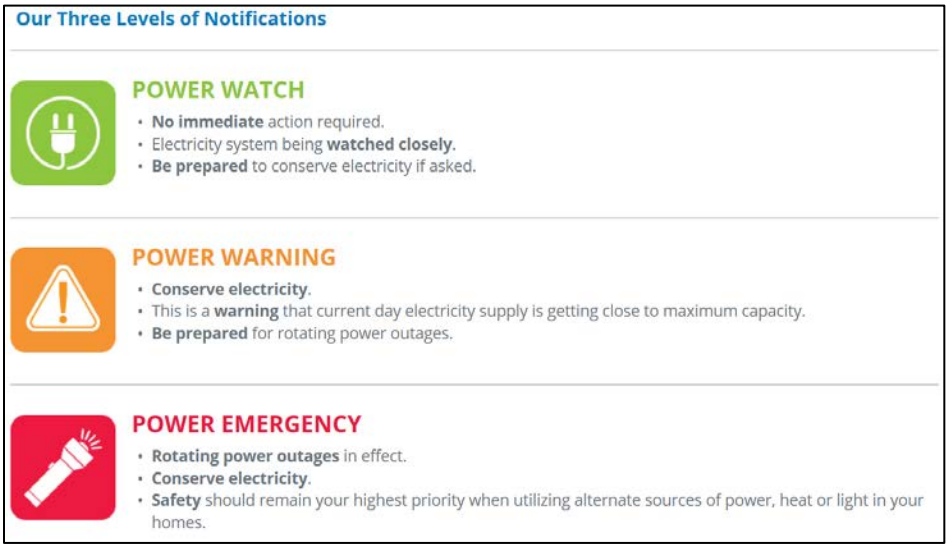

Figure 1: Advanced Notification Protocols – Levels of Notification

3.2 Public Authorities/Regional Commercial Entities

Communications with public authorities/ regional commercial entities are managed by Hydro's Regional Operations Offices. When a planned power interruption is required, the regional office determines and documents information associated with the power interruption (location, date, time, duration, line number, work order, etc.). As shown in Appendix B, a Planned Power Interruption Notice is prepared by regional staff. Upon approval, regional staff will have the power interruption announced within a 24 hour window time frame to the radio stations and sent to those who have requested to be on Hydro's e-mail list. There are two e-mails distribution lists, one for radio stations and another for residential customers and businesses that have requested to be notified (for that region).

When an unplanned power outage occurs, the regional operation's staff prepares an Unplanned Power Interruption Notice. Once approved, it is emailed to those who have requested to be on Hydro's e-mail lists.[3] The regional staff will also send the notice to radios stations to have the power interruption announced on air.

[3] Including the e-mail list for the radio stations and the list for residential customers and businesses.

Through its communication with customers, they are encouraged to check radio stations, social media, Hydro's web site and other channels described in Section 3.1 to get information, and updates on outages.

3.3 Critical Care Residential Customers

Hydro's current process for communicating with critical care residential customers is very similar to current process used to communicate with public authorities and regional commercial entities. Communications with critical care residential customers are managed by Hydro's Regional Operations Offices.

When a planned power interruption is required, the regional office determines and documents information associated with the power interruption (location, date, time, duration, line number, work order, etc.). A Planned Power Interruption Notice, as referenced in Appendix B, is prepared by regional staff. Upon approval, regional staff will have the power interruption announced within a 24 hour window time frame to the radio stations and sent to those residential customers who have requested to be on Hydro's e-mail list.

The regional office staff will personally contact all identified critical care residential customers (as per established lists in each region). As described in section 2.0, the critical care residential customer lists are developed and maintained in the regions. Customers self-identify and the regional office staff reaches out to regional health authorities for customers with medical conditions requiring life sustaining electronic devices. The purpose of this communication is to give customers time to prepare for the outage and make alternate arrangements for treatment, if necessary. When an unplanned power outage occurs, the regional operation's staff prepares an Unplanned Power Interruption Notice which is emailed to radio stations and customers (as per section 3.3). The regional office staff will also strive to personally contact each critical care residential customer (as per established lists in each region) directly by phone.

Through its communication with customers, they are encouraged to check radio stations, social media and Hydro's web site, and other channels described in Section 3.1, to get information and updates on outages.

4.0 System Planning and Design Considerations

The Systems Operations Department has created operating instructions "[IIS] Generation Reserves (T-001)" and "Avalon Capability and Reserves (T-096)" to maintain sufficient generation reserves to meet current and anticipated customer demands on the Island Interconnected System (IIS) and Avalon Peninsula Region.

In conjunction with T-001 and T-096, operating instruction "Rotating Outages (T-042)", as outlined in Appendix C, is used to prioritize customers in the event of a generation shortfall. To determine the priority, Hydro reviews its feeders[4] in each service territory to determine what sequence of service interruption would have the least impact on customers. The critical care residential customer designation is part of this review and influences the development of the feeder rotation list contained in operating instruction T-042.

5.0 Improvements

Hydro has identified the need for immediate improvements in the procedures used to identify and communicate with critical residential customers.

Hydro intends to standardize its communication with customers, leveraging existing communication plans wherever possible, to ensure that all customers receive consistent and accurate messaging from a single source.

To this end, Hydro plans to centralize the management of critical care residential customers within its Customer Service Department. Customer Service will work with the Communications

[4] A feeder is part of the electric distribution network that distributes power from a substation to individual customer (residential and commercial) premises.

Department to develop a communications strategy aimed at critical care residential customers. Customer Service will make improvements to the methods used to capture and retain information on these critical care residential customers and will tailor communications for planned and unplanned outages to this group. The details of these improvements, along with timelines are described in the following sections. Hydro will provide an update to the Board on the status of these improvements in its subsequent quarterly report to the Board.

5.1 Identification of Critical Care Residential Customers

Hydro will improve how it communicates with its customers and the general public to identify critical care residential customers.

Hydro will create a communications strategy encouraging residential customers who have individuals permanently residing at their residential address, diagnosed by a physician as having medical conditions that require life-sustaining assistance from electricity-dependent equipment to contact customer service and sign-up for Hydro's critical care residential customer program. This strategy will include:

- Inclusion of mail-outs in customer bills,
- Website, social media and digital communication tactics,
- Creation and placement of posters in regional health care facilities, and
- Sign up form on Newfoundland and Labrador Hydro Website.

In an effort to centralize the management of critical care residential customer, the regional offices will transfer their critical care customer lists to Customer Service and Customer Service will follow-up with all residential customers on the regional critical care residential customer lists to confirm critical care status. In support of this, Customer Service will modify its new account registration/activation process to account for critical care residential customers.

5.2 Tracking Critical Care Residential Customers

Hydro considers the maintaining of a current critical care residential customer list as an important service. To this end, Customer Service will implement a bi-annual process for confirming and updating a customer's status on critical care residential list.

To better manage its current critical care residential list, Hydro will only certify customers on the critical care list for up to two years at a time, following which re-registration will be required. Customer Service will notify customers three months in advance of this expiry date. At this time, Hydro will not seek medical confirmation from customers. This policy will be monitored on an annual basis.

Customer Service will maintain the critical care residential customer lists on secured storage locations within Customer Service. Hydro is in the process of implementing a new customer management software application and has confirmed that the new application has the functionality to store and identify critical care residential customers. Customer Service will migrate all lists containing critical care residential customers to the new system when it is installed.

Customer Service will create an application form for Hydro customers to complete for the Critical Care Residential Customer designation. This form will be available on the Hydro website for download and will be available for mail-out by Customer Service.

5.3 Communicating Outages to Critical Care Residential Customers

As discussed in Section 3.1, Hydro communicates with its customers using the following tools:

- Direct Updates to Media, Mayors, MHAs, etc.;
- Radio Notices;
- MyHydro Application;
- Newfoundland and Labrador Hydro Website; and
- Social Media (Twitter and Facebook).

Hydro will encourage critical care residential customers to monitor existing communication channels for information on planned and unplanned outages in its marketing communications to critical care customers. Hydro will also add new communication messages to its existing media platforms specifically targeted at critical care residential customers.

For planned outages, critical care residential customers will be encouraged to subscribe to the *MyHydro* application which can provide text and email notifications for planned power outages. The Customer Service Team will also use an outbound calling system to target critical care residential customers and phone call and/or voice messages for planned outages and encourage them to contact Hydro for additional information.

For unplanned outages, critical care residential customers will be encouraged to subscribe to the *MyHydro* application and register to receive text and email notifications for unplanned power outages. Critical care residential customers will also be instructed to contact Hydro for additional information. Customer Service representatives and Hydro's after-hour call service will be provided additional information and instruction for communicating with critical care customers.

5.4 Communicating in Advance of Rotating Outages

As referenced in section 4.0, system operating instruction "Rotating Outages (T-042)" is used to prioritize customers in the event of a generation shortfall. To determine the priority, Hydro reviews its feeders in each service territory to determine what sequence of service interruption would have the least impact on customers. The critical care residential customer is part of this review and influences the development of the feeder rotation list.

Customer Service will develop a new process for notifying critical care residential customers when they will be impacted by rotating outages. Using the feeder rotation list contained in operation instruction T-042, Customer Service and the Energy Control Center can identify customers who will be impacted by rotating outages. An additional service will be created for

critical care residential customers that send them targeted voice messages for any upcoming rotating outages, including details of the outage.

5.5 Improvements Schedule

The following table summarizes the actions that Hydro will take to improve the transparency of the designation of critical customers listed in this report. It includes groups responsible for each action and the timeframe for implementation.

#	Improvement Task	Group Responsible	Completion Date (planned)
1	Creation of communications strategy targeting critical care residential customers. Strategy to include: • Creation and inclusion of mail-outs in customer bills. • Website, social media and digital communications tactics. • Creation and placement of posters in regional health care facilities. • Sign up form on Newfoundland and Labrador Hydro Website.	Communications	July 2017
2	Develop process for recertifying critical care residential customers on a bi-annual basis. Process will include the identification of expiring critical care customers, notification to these customers and recertification process.	Customer Service	September 2017
3	Transfer of critical care residential customer lists to Customer Service.	Regional Offices	July 2017
4	Contact all residential customers on the regional critical care residential customer lists received from regional offices to confirm critical care status.	Customer Service	July 2017
5	Develop process for maintaining the critical care residential customer lists on secured storage locations within customer service.	Customer Service	September 2017
6	Modify the new account registration/activation	Customer Service	September 2017

#	Improvement Task	Group Responsible	Completion Date (planned)
	process to account for critical care residential customers.		
7	Create application form for critical care residential customers. Place form on Website and within MyHydro Application.	Communications Communications	June 2017 June 2017
8	Develop process for notifying critical residential customers about upcoming planned outages.	Customer Service	September 2017
9	Develop process for updating critical care residential customers during extended unplanned outages.	Customer Service	September 2017
10	Develop process for notifying critical care residential customers when impacted by rotating outages.	Customer Service	September 2017
11	Updated status report to the Board.	Regulatory Affairs	Quarterly Board Reporting (post September 2017)

6.0 Public Agencies and Regional Commercial Entities

Public agencies and regional commercial entities are currently designated and identified by regional operations. Regional operations will continue to identify and manage the communications with public agencies and regional commercial entities with regional staff responsible for contacting customers on these lists to communicate planned and unplanned outages.

Public agencies and regional commercial entities will be encouraged to take advantage of Hydro's other methods of communication of planned and unplanned outages, as described in Appendix A. This process will be reviewed once the critical care residential customer improvements described below have been implemented and evaluated with consideration given to a centralized approach.

7.0 Conclusion

Hydro has two classes of critical customers that receive targeted communication during planned and unplanned outages, including critical care residential customers, and public agencies and regional commercial entities.

Hydro has a comprehensive and robust plan for communicating with all of its customers and the general public that includes radio notices, the *MyHydro* application, the Hydro Websites, social media and direct updates to Media, Mayors, MHAs, etc. Hydro will utilize these tools with additional tools and process improvements to target communications on planned and unplanned outages to critical care residential customers.

The identification of critical care residential customers is fundamental to developing communications strategies targeting those customers. Management of the critical care residential customer is currently regionalized, with each responsible for the identification and communications to these customers. In recent years, regional office staff has had varying levels of success in gathering information on critical care residential customers. To improve the identification of critical care residential customers, Hydro will centralize the management of these customers inside Customer Service and Hydro's Communications Department will create a communications strategy aimed at critical care residential customers.

The plan to centralize management of the critical care residential customers, create the communications strategy and implement communication process changes curing planned and unplanned outages will be completed by September 30, 2017, and Hydro will provide an update to the Board on the status of these improvements in its subsequent quarterly report to the Board.

Based on the success of the designation of critical care residential customers, Hydro will update and implement similar processes for the identification and designation of public authorities and regional commercial entities.

Appendix A

Outage Communications

Hydro has a comprehensive and robust plan for communicating with customers. Hydro communicates with its customers using the media platforms described below.

1. **Updates to Media, Mayors, MHAs**

   Hydro's Communications Department will send notices to various provincial media outlets and the various Mayors and Members of the House of Assembly during extended outages.

2. **Radio Notices**

   Hydro's Regional Operations Departments will send planned outage notices to radio stations within their jurisdiction to improve outage notification to the public.

3. **MyHydro Application**

   The MyHydro application allows registered users to access their account information from their mobile device, view and report power outages online, subscribe to text and email notifications for planned and unplanned power outages, and complete many other customer service tasks related to their Hydro account.

   As subscribers of MyHydro, customers receive text messages to their mobile device, or emails to their email account for upcoming planned outages.

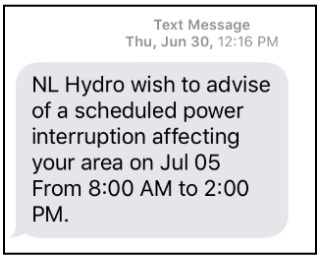

Figure1: MyHydro – Planned Power Interruption Text

   If the planned outage restoration time changes, Hydro updates its MyHydro subscribers via text and email.

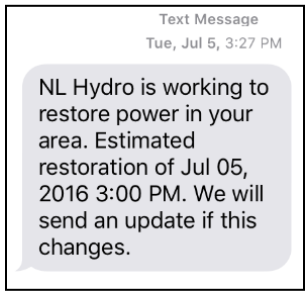

Figure 2: MyHydro – Restoration Update Text

MyHydro subscribers also receive text messages on their mobile devices, or emails to their email account for unplanned outages.

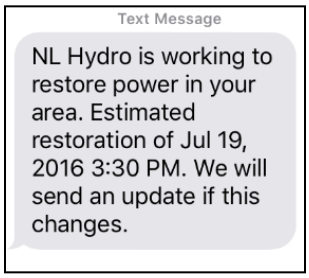

Figure 3: MyHydro – Unplanned Power Interruption Text

Hydro will also update customers MyHydro subscribers via text messages on their mobile devices, or emails to their email account when service has been restored for unplanned outages.

Figure 4: MyHydro – Power Restoration Text

4. Newfoundland and Labrador Website

Hydro posts all planned and unplanned outages on its website. The website also includes an alert banner on the main page advising customers of system events and

includes a display pop-up which opens and display on the main page of the website that advises customers of power alerts.

The "Outages" button on the front page of the Hydro's website links to the distribution customer Power Outage and Emergency System. Its displays information related to all posts all planned and unplanned outages, including the region/community of the outage, the description of outage and estimated restoration time.

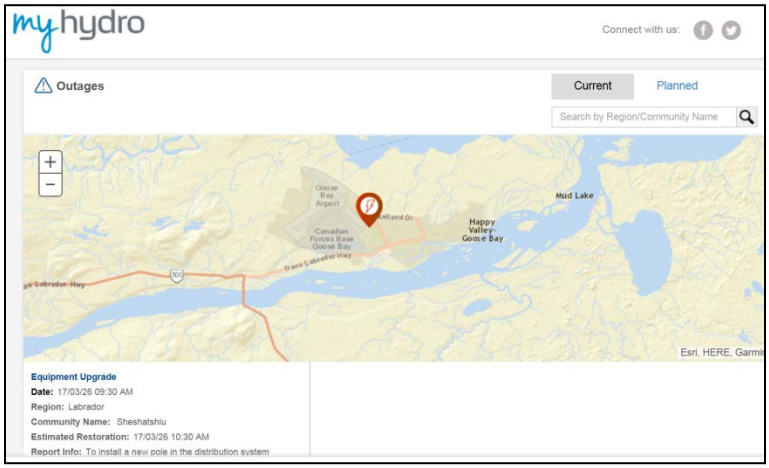

Figure 5: Hydro Website – Outages Screen

A red alert banner is displayed on the main page of the Website (right above main navigation icons) that advises customers of system events that could impact service continuity.

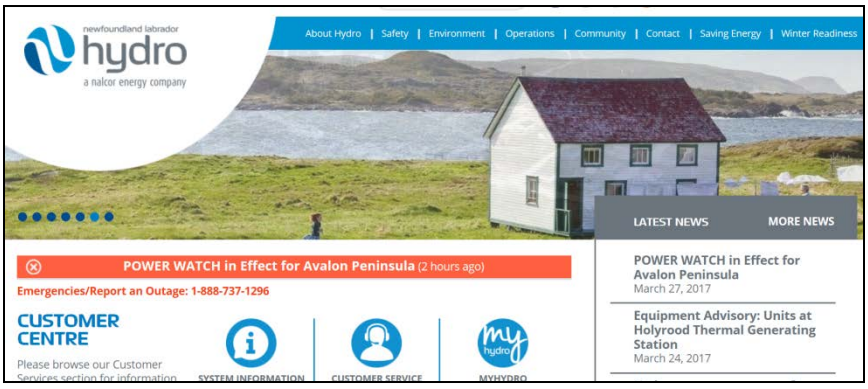

Figure 6: Hydro Website – Alert Banner

The website also includes functionality that creates a pop-up display on the main page of the website that advises customers of power alerts. Customers must close this pop-up before they can access the rest of the site, which ensures that anyone visiting Hydro's website is made aware of a power alert in effect.

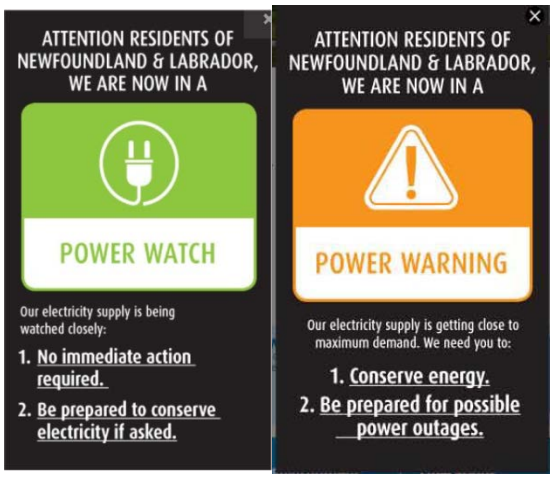

Figure7: Hydro Website – Power Alert Pop-ups

5. Social Media

Hydro also communicates planned and unplanned outages, along with their current status on Twitter and Facebook.

Figure 1: Twitter – Outage Update Communication

Appendix B

Planned Power Interruption Notice

POWER OUTAGE ADVISORY: UPPER LAKE MELVILLE AREA (DEC 18)

December 14, 2016

Newfoundland and Labrador Hydro is advising that emergency repair work will be completed on a disconnect switch in the Churchill Falls switchyard in order to ensure reliability this winter.

This work will impact Hydro customers in the Upper Lake Melville Area. The work will be completed overnight Sunday (December 18) starting at 11:00 pm into Monday (December 19) ending at approximately 5:00am.

Crews attempted to complete this work without a customer outage a few weeks ago, however in order to successfully and reliably make the repair, it has now been determined that a customer outage is required. Hydro is able to provide power to the majority of residential customers in the HVGB area with back-up emergency generation. Unfortunately, given the load this time of year, some customers will remain off for the duration of the work.

We apologize for the inconvenience this power interruption may cause. This work is essential in terms of ensuring system reliability.

Customers in the following areas will be affected:

- In Happy Valley- Goose Bay, the following streets will be affected:
  - Birch Island Rd
  - Broomfield Street
  - Cabot Cres (K St to Grenfell St)
  - Courte Manche Rd
  - Goose Ave
  - Grenfell Street (Grand St To Hamilton River Rd)
  - Hamilton River Rd (residences between the Fire Hall and the United Church. However, both facilities will not be impacted.)
  - Hillcrest Rd
  - K Street
  - Pallister Cres (Goose Ave to Hamilton Rd)
  - Royal Street
  - Strathacona Street
  - Tenth St (Hamilton River Rd to Hunt St)
  - Terrington Ln
- CFB 5 Wing Goose Bay Base and the German Hangar
- Lower Tank Farm including DND Tower
- All Customers on Churchill Falls Rd up to and including Dome Mountain

- All customers from M.O.T. Hill to and including Spruce Park

Visit our website for information on how to prepare and stay safe during power outages – http://www.nlhydro.com/system-information/power-outage-safety/ and follow our social media sites – www.twitter.com/NLHydro and www.facebook.com/NLHydro for additional information.

Media Contact:

Erin Squires
Manager of Communications, NL Hydro
Regulatory Affairs and Corporate Services
Newfoundland and Labrador Hydro - a Nalcor Energy company
t. **709 737-1311** c. **709 697-1186**
e. **ErinSquires@nlh.nl.ca**
w. **www.nlh.nl.ca**

Appendix C

Rotating Outages (T-042)

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SYSTEM OPERATING INSTRUCTION

STATION:	ERP, GENERAL	**Inst. No.**	T-042
TITLE:	ROTATING OUTAGES **	**Page** 1	**of** 4

Introduction

As part of system operating instruction T-001, rotating outages may be implemented if generation spinning reserves decrease below the minimum level and continue to decline. In order to minimize outages to customers, spinning reserves will be utilized as much as possible, with rotating outages used to maintain the system frequency at 59.8 Hz.

Instruction

Rotating Outage Procedure

The following procedure will be implemented for rotating outages:

1. Request Newfoundland Power (NP) to shed load by rotating feeders. Advise them of the expected generation deficit, the expected duration of the rotations and that the frequency needs to be maintained at 59.8 Hz.
2. Inform Corporate Relations and Customer Services that rotating outages will commence and that each feeder rotation will last 1 hour.
3. Refer to the Feeder List (below) to determine the feeder to be interrupted and the order in the rotation.
4. Open the appropriate feeder (remotely or locally)[1] and record the time in the ECC diary.
5. When 1 hour has elapsed, open the next feeder on the Feeder List (remotely or locally) and record the time in the ECC diary.
6. Restore / close the previously opened feeder (remotely or locally) and record the time in the ECC diary.
7. Throughout steps 4-6, monitor the system frequency, maintain communication with NP (Control Room), Corporate Relations and Customer Services. Advise NP if there are any concerns with system reliability (frequency and voltage) and provide updates to all stakeholders on the status of the generation deficit.

[1] For feeder rotations completed locally, ECC will dispatch crews to the station and direct the operation.

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SYSTEM OPERATING INSTRUCTION

STATION:	ERP, GENERAL	**Inst. No.**	T-042
TITLE:	ROTATING OUTAGES **	**Page** 2	**of** 4

Instruction (cont'd.)

8. Continue steps 4 – 7 until there is no longer a generation deficit and the system frequency is stable at 59.8 Hz.

Restoration of remaining load

When rotating outages are no longer required, restoration of disconnected feeders will be completed as follows:

1. Advise NP that rotating outages are no longer required and remaining load restoration can begin shortly.
2. Inform Corporate Relations and Customer Service that rotating outages are no longer required and load restoration will begin shortly.
3. Coordinate the restoration of any remaining load between both utilities. Load should be restored in 20 – 25 MW blocks while maintaining system frequency.

Feeder List[2]

On the Island Interconnected System, there are a total of 44 feeders. Each was evaluated to determine if they would be used in the rotating outage process. Through this evaluation, it was determined there are 31 feeders that will be interrupted. The remaining feeders will not be interrupted for the following reasons:

- Given priority due to the customers being supplied by the feeder.
- Not feasible to send crews to locations as the load on the feeders is very low and would not be material.

[2]Depending on system requirements, the ECC may be required to open more than one feeder at a time.

SYSTEM OPERATING INSTRUCTION

STATION:	ERP, GENERAL	**Inst. No.**	T-042
TITLE:	ROTATING OUTAGES **	**Page** 3	**of** 4

Feeder List[2] (cont'd)

The following is the list of feeders that will be interrupted, in the order shown, as a part of the rotating outage process:

1. South Brook Terminal Station – Line 7: SB7 – R1
2. St. Anthony Diesel Plant Terminal Station – Line 2: SA2 – R1
3. Plum Point Terminal Station – Line 2: PP2 – R1
4. St. Anthony Diesel Plant Terminal Station – Line 1: SA1 – R1
5. South Brook Terminal Station – Line 1: SB1 – R1
6. Cow Head Terminal Station – Line 1: CH1 – R1
7. Plum Point Terminal Station – Line 1: PP1 – R1
8. Bay d'Espoir Terminal Station – Line 1: BDE – R1 (Local Control Only)
9. Bear Cove Terminal Station – Line 4: BC4 – R1
10. Deer Lake Terminal Station – TL226[3]: B2L26
11. Grandy Brook Terminal Station – Line 1: GB1 – R1
12. Bay d'Espoir Terminal Station – TL220[4]: B13L20
13. Bottom Waters Terminal Station – Line 3: BW3 – R1 (Local Control Only)

[3]There are five feeders interrupted when TL226 is taken out of service.

[4]There are four feeders interrupted when TL220 is taken out of service.

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SYSTEM OPERATING INSTRUCTION

STATION:	ERP, GENERAL	**Inst. No.**	T-042
TITLE:	ROTATING OUTAGES **	**Page** 4	**of** 4

Feeder List[2] (cont'd)

14. Bottom Waters Terminal Station – Line 2: BW2 – R1 (Local Control Only)
15. Bottom Waters Terminal Station – Line 1: BW1 – R1 (Local Control Only)
16. Roddickton Terminal Station – Line 1: RO1 – R2
17. Bear Cove Terminal Station – Line 6: BC6 – R1
18. Hawkes Bay Terminal Station – Line 3: HB3 – R1
19. St. Anthony Diesel Plant Terminal Station – Line 3: SA3 – R1
20. Parsons Pond Terminal Station – Line 1: PP1 – R1 (Local Control Only)
21. Hawkes Bay Terminal Station – Line 1: HB1 – R1
22. Roddickton Terminal Station – Line 4: RO4 – R1
23. Daniels Harbour Terminal Station – Line 1: DH1 – R1
24. Roddickton Terminal Station – Line 3: RO3 – R2

** Part of the Emergency Response Plan

REVISION HISTORY

Version Number	Date	Description of Change
0	2014-09-26	Original Issue

PREPARED: J. Tobin	**APPROVED:**