

October 7, 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: *Reliability and Resource Adequacy Study Review – Labrador-Island Link Monthly Update – September 2021***

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.<sup>1</sup> Enclosed please find the update as requested.

The Lower Churchill Project (“LCP”) and its contractors continue to follow all COVID-19 Health and Safety measures as per the established guidelines. The LCP will continue to closely monitor the COVID-19 pandemic and follow advice from medical experts and Public Health guidance.

## **1.0 LABRADOR-ISLAND LINK**

### **1.1 Commissioning Activities**

#### **1.1.1 Bipole Commissioning**

GE Canada (“GE”) continues to progress through the Full Function Bipole Software testing stages slower than planned due to increased time required to resolve punches, which are primarily software bugs. An initial Factory Acceptance Test (“FAT”) started on September 13, 2021, and was complete on September 18, 2021. After review of the FAT1 results it was determined that the software contained critical bugs that require resolution before it can be released to site for dynamic commissioning. GE is now working to resolve critical bugs, including both bugs known before the start of FAT, as well as critical bugs

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<sup>1</sup> 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.

discovered during FAT. After GE resolves the critical bugs, regression testing will be completed on the next version of software, followed by a second round of FAT, before releasing it to site for dynamic commissioning activities and the start of Trial Operations. GE has not provided a detailed schedule for the next release of software, but has indicated that they are working to complete the second FAT by mid November 2021.

### **1.1.2 Soldiers Pond Synchronous Condensers**

GE Power is continuing with completions and commissioning work at the Soldiers Pond Synchronous Condenser (“SC”) Site. Dynamic Commissioning for SC1 is ongoing; on-load testing is complete. Trial Operations started on September 30, 2021. The schedule for completion of SC1 is still October 31, 2021.

Both SC2 and SC3 are in operation and have supported the LIL power transfer. The LCP is working with Power Supply on turnover of the units.

## **1.2 Operations**

As previously reported, the LIL was re-energized on September 3, 2021 after Power Supply completed the repairs required as a result of the January 2021 ice storm. On September 15, 2021, tests were performed on the LIL to increase power transfer levels; the new maximum limit for the LIL is now set at 312 MW.

GE completed live testing of the LIL Line Fault Locator from September 8 to 13, 2021, followed by live testing of the Electrode Line Fault Locator (“ELFL”) on the island portion of the LIL from September 20 to 23, 2021. The Labrador portion of ELFL testing is planned for early October 2021.

The LIL was taken offline on September 25, 2021 to allow GE to do a series of static checks with the Full Function Bipole software from FAT1 in order to identify any site issues that need to be resolved in the next version of software and to minimize testing time for the software when it is received. The LIL will remain offline until two units are available at Muskrat Falls. Currently, Muskrat Falls Units 1 and 2 are planned to be online the second week of October 2021.

## **1.3 Outages**

On September 11, 2021, the synchronous condensers at Soldiers Pond tripped during Hurricane Larry. This led to an over voltage state on the system. There were no other outages during the month.

## **2.0 MUSKRAT FALLS GENERATION**

### **2.1 Commissioning Activities**

#### **2.1.1 Unit 1**

Unit 1 was released for service and transferred to Operations on December 22, 2020. Andritz and Operations are currently working to close out open punches; further details are noted in Section 2.2.

### 2.1.2 Unit 2

Unit 2 was released for service and transferred to Operations on June 12, 2021. In late September 2021, the unit tripped several times due to vibration. The unit is currently dewatered and inspections are ongoing to determine the root cause and any required remedial work.

### 2.1.3 Unit 3

Unit 3 was released for service and transferred to Operations on August 14, 2021. The Unit is currently operating. Planning is ongoing with Andritz and Operations to complete remaining punch list items.

### 2.1.4 Unit 4

Unit 4 commissioning activities ongoing; water up and first turn are complete. Overspeed testing is ongoing. The forecast for Release for Service is October 31, 2021; however, unforeseen events during commissioning could shift the completion to early November 2021.

## 2.2 Operations

Andritz and Power Supply completed the Unit 1 generator stator bar replacement in September 2021. During routine operations maintenance of Unit 1 there was a release of oil within the unit. While no oil was released into the environment, cleanup within the unit is required; the unit is expected to be offline until mid-October 2021 in order to complete this work, as well as some other warranty work.

## 3.0 MUSKRAT FALLS PROJECT OVERALL SCHEDULE

As outlined in Section 1.1.1, GE has not provided a detailed schedule for resolution of software bugs, but has provided a general estimate for the completion of the second FAT, which is provided in Table 1.

The forecast completion schedule for the Muskrat Falls Generating Units outlined in Table 2 has been provided to the LCP by Andritz.

Due to the further delays by GE, the overall Project completion date of November 26, 2021, is not achievable. A revised date will be provided when the LCP receives a detailed schedule from GE.

**Table 1: LIL Final Bipole Software Commissioning Schedule**

<b>Milestones</b>	<b>GE Schedule</b>	<b>LCP Schedule</b>
FAT Complete	September 16, 2021	Mid-November 2021
Dynamic Commissioning: Complete	September 30, 2021	Early December 2021
Trial Operations: Start (at available power) <sup>2</sup>	September 30, 2021	Early December 2021

<sup>2</sup> Trial Operations is complete after 30 consecutive days of power transfer without a trip attributed to the HVdc system.

**Table 2: Muskrat Falls Generation Commissioning Schedule**

<b>Generating Unit</b>	<b>Completion of Commissioning and Released for Service</b>	<b>Status</b>
Unit 1	December 22, 2020	Released for service
Unit 2	June 12, 2021	Released for service
Unit 3	August 14, 2021	Released for Service
Unit 4	October 31, 2021	

#### **4.0 CF(L)CO<sup>3</sup> MULTI-PARTY POOLING AGREEMENT AND HYDRO-QUÉBEC IOA<sup>4</sup>**

In September 2021, weekly discussions to progress the IOA continued between the Newfoundland and Labrador System Operator and Hydro-Québec (with CF(L)Co as an observer). The parties are currently debating which legal entities should be parties to the eventual IOA. Overall, the target date to complete the IOA remains on track for January 2022.

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

Yours truly,

#### **NEWFOUNDLAND AND LABRADOR HYDRO**



Michael S. Ladha  
General Counsel, Corporate Secretary & Commercial  
MSL/sk

**ecc: Board of Commissioners of Public Utilities**

Jacqui H. Glynn  
Maureen P. Greene, Q.C.  
PUB Official Email

**Newfoundland Power**

Dominic J. Foley  
Lindsay S. A. Hollett  
Regulatory Email

**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  
Bernard M. Coffey, Q.C.

<sup>3</sup> Churchill Falls (Labrador) Corporation (“CF(L)Co”).

<sup>4</sup> Interconnection Operators Agreement (“IOA”).

**Industrial Customer Group**

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

**Labrador Interconnected Group**

Senwung F. Luk, Olthuis Kleer Townshend LLP  
Julia K.G. Brown, Olthuis Kleer Townshend LLP