

September 2, 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 – August 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 Eighth Quarterly Monitoring Report on the Integration of Power Supply Facilities to the Island Interconnected System. In its response, Hydro committed to providing 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.¹ The requested updates are reflected herein.

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

As previously reported, GE Canada (“GE”) is progressing through the Final Bipole Software testing stages slower than planned due to increased time required to resolve open punches, which are primarily software bugs. GE has provided a schedule update based on their current status. Completion of Factory Acceptance Testing (“FAT”) has moved from August 30, 2021 to September 16, 2021. Table 1 in Section 3.0 has been updated to reflect this schedule delay.

As previously reported, LIL was offline from August 5, 2021 to August 16, 2021, to allow GE to complete some punch list items prior to completion of Pole 1 beam replacement, as well as to allow Power Supply

¹ 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.

to execute its planned transmission line maintenance and repair work on the Labrador portion of the LIL. LIL was re-energized from August 17, 2021 to August 22, 2021; during that time GE conducted a series of Pole 1 and bipole tests. Power transfer levels for the period ranged from 50–225 MW. As planned, LIL was taken offline on August 23, 2021, in order for Power Supply to finish repairs on the Labrador portion of LIL. This work is scheduled to be complete by September 5, 2021. After completion of the transmission line work, LIL is planned to be re-energized for continuation of commissioning activities.

1.1.2 Soldiers Pond Synchronous Condensers

GE Power is continuing with completions and commissioning work at the Soldiers Pond Synchronous Condenser Site. Dynamic Commissioning for SC1² is ongoing; the unit has been rotated at its maximum speed of 900 rpm and balancing of the unit is complete. Testing of the controls system has started. The schedule for completion of SC1 is still October.

Dynamic Commissioning, followed by Trial Operations and Special Field Tests for SC2³ and SC3⁴ were completed earlier this year; SC3 and SC2 were released for commercial operations on May 25, 2021 and June 24, 2021, respectively. Both units are in operation and have supported LIL power transfer. LCP is working with Power Supply on turnover of the units.

1.2 Operations

1.2.1 Labrador-Island Link Damage

As previously reported, Power Supply is completing maintenance and repair work, related to the 2021 ice storm, on the Labrador portion of the LIL that was planned for summer 2021, as well as upgrades as a result of the Root Cause Investigation. Work is planned to be complete on September 5, 2021, as per the schedule. As noted in last month's report, the transmission line work includes replacement of dampers and armor rods, installation of air flow spoilers, secure turnbuckles, electrode arm repairs, conductor splicing and patching, installation of vibration monitors, and adjustment of insulator suspension clamps.

1.2.2 Outages

There were no system outages during the reporting period.

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 Synchronous Condenser 1 ("SC1").

³ Synchronous Condenser 2 ("SC2").

⁴ Synchronous Condenser 3 ("SC3").

2.1.2 Unit 2

Unit 2 was released for service and transferred to operations on June 12, 2021. Unit 2 is currently operating. Planning is ongoing with Andritz and Operations to complete remaining punch list items.

2.1.3 Unit 3

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

2.1.4 Unit 4

Unit 4 static commissioning activities are ongoing; water up, followed by wet commissioning activities are expected in mid-September. Release for service is expected in October 2021.

2.2 Operations

As previously noted, Unit 1 was turned back to LCP in early July 2021 to complete the welding rework and head cover modifications; this work is now complete. Andritz and Power Supply have commenced work for the Unit 1 generator stator bar replacement with a forecast completion by mid-September.

The programming and firmware changes to Unit 3 and Unit 4 that were noted in last month's report will be made on Unit 1 before it is returned to service. These changes were made on Unit 2 during the LIL planned outage between August 23, 2021 and September 5, 2021.

3.0 MUSKRAT FALLS PROJECT OVERALL SCHEDULE

GE's current schedule for the Final Bipole Software is outlined in Table 1. As noted in Section 1.1.1, GE has advised that the updated FAT completion is by September 16, 2021. GE is looking at ways to mitigate the delay on subsequent milestones by assessing opportunities to compress the schedule to meet the overall Project completion date of November 26, 2021. The LCP schedule continues to reflect that of GE.

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

Table 1: LIL Final Bipole Software Commissioning Schedule

Milestones	GE Schedule	LCP Schedule
FAT Complete	September 16, 2021	September 16, 2021
Dynamic Commissioning: Complete	September 30, 2021	September 30, 2021
Trial Operations: Start (at available power)	September 30, 2021	September 30, 2021

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

Table 2: Muskrat Falls Generation Commissioning Schedule

Generating Unit	Completion of Commissioning and Released for Service	Status
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 15, 2021	

The overall Muskrat Falls Project completion date remains November 26, 2021.

4.0 CF(L)CO⁵ MULTI-PARTY POOLING AGREEMENT AND HYDRO-QUÉBEC INTERCONNECTION OPERATORS AGREEMENT

Over the month of August fewer weekly discussions were held as a result of stakeholder vacations, but progress on the Interconnection Operators Agreement (“IOA”) continued to be made between the Newfoundland and Labrador System Operator and Hydro-Québec (with CF(L)Co as an observer). The target date to complete the IOA remains on track for January 2022, and no material hurdles to its completion have arisen or are currently envisioned.

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

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO



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Vice President, General Counsel, Corporate Secretary & Commercial
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⁵ Churchill Falls (Labrador) Corporation (“CF(L)Co”).

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