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a nalcor energy company

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April 12, 2021

Board of Commissioners of Public Utilities
Prince Charles Building
120 Torbay Road, P.O. Box 21040
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Attention: Ms. Cheryl Blundon
Director of Corporate Services & Board Secretary

Dear Ms. Blundon**:**

Re: *Reliability and Resource Adequacy Study Review* – Labrador-Island Link Reliability Assessment – Board Questions – Hydro's Response

On March 25, 2021, Newfoundland and Labrador Hydro ("Hydro") received correspondence from the Board of Commissioners of Public Utilities ("Board") in response to Hydro's letter of March 16, 2021 regarding its *Reliability and Resource Adequacy Study Review* – 2021 Update to the Reliability and Resource Adequacy Study.

In its correspondence, the Board requested that Hydro respond to specific questions with respect to timelines and schedules associated with the filing. The questions and Hydro's responses thereto, are as follows.

1. Confirm the schedule for each of the additional reports on the February, 2021 LIL icing events and the electrode damage events, with critical milestones for the work of the study identified. Please explain why each of these reports cannot be completed earlier.

Response:

Nalcor Energy ("Nalcor") currently has two failure investigations underway from two separate failure events in the winter of 2021:

- An investigation into the electrode conductor system failures that occurred during a significant icing event in Central Labrador during January of 2021; and
- An investigation on failure of a hardware component on pole conductor assemblies that occurred in Southern Labrador in February 2021.

As per the information provided by Nalcor and shared by Hydro in its March 30, 2021 correspondence,[1] both investigation reports are expected to be completed in mid-Q2 of 2021. The critical milestone driving completion of these reports is the ongoing material testing from both incidents at multiple external testing facilities which is anticipated to be completed during Q2. It is not possible to advance completion of either report given the timelines required for external testing of multiple transmission components and the various analyses to be completed to verify failure patterns, as well as the importance of the material testing to the conclusions of the report.

[1] Newfoundland and Labrador Hydro, "Reliability and Resource Adequacy Study Review – Labrador Island Link Monthly Update – March 2021 – Board Questions – Hydro's Response," letter, March 30, 2021.

2. Explain why the report on the potential long-term viability of the Holyrood generating plant cannot be completed earlier than the first quarter of 2022.

Response:

The work effort supporting a completion timeframe of Q1 2022 for the Holyrood Thermal Generating Station ("Holyrood TGS") assessment is based on a compressed schedule that is aligned with Hydro's master outage schedule that provides for units to undergo annual critical maintenance for reliable service.

In order to complete the assessment, Hydro employees and consultant staff are required to access and assess the interiors of equipment; this work must be completed during each of the three unit's annual outage period. The 2021 outage period for the units has commenced with Unit 3 out of service at this time for maintenance and at least one unit at a time will be out of service until October 2021 for maintenance and the required assessment work. The long-term viability report schedule reflects a planned return to service for the final unit under maintenance, Holyrood TGS Unit 2, in mid-October 2021.

While reports pertaining to the work will be drafted in parallel with required site inspections, time will be required following final inspections to fully review and validate findings prior to issuance of the final report. Hydro also recognizes that there is risk associated with the on site work due to the COVID-19 pandemic and scheduling resources, particularly in consideration of the current isolation requirements for out-of-province resources.

The completion of this work is a priority matter for Hydro and work is being planned and executed on that basis. Hydro is confident that this schedule reflects the time required to ensure that the assessment will provide the necessary information to permit a final determination on the Holyrood TGS's ability to either economically and technically provide support to the system in the near-term while incremental resources are constructed (if required), or play a longer-term role in economically and technically satisfying system reliability requirements in the future.

3. Explain why it is not possible at this time to update certain long-term matters, including additional generation alternatives for the Island in the event that it is required. Given the current forecast in-service of the LIL for November, 2021, the long lead times associated with certain generation alternatives, the current plan to remove Holyrood from service in March, 2023 and the continuing questions on the reliability of the LIL, the update of potential alternatives identified in the Reliability and Resource Adequacy Study appears to be appropriate to allow the necessary planning to proceed.

Response:

While Hydro could update certain long-term matters, such as the base case load forecast, at this time, Hydro notes that such items are not likely to result in significant changes to the plan issued as part of Hydro's 2019 Update to the Study. However, the ongoing matters outlined in Hydro's correspondence of March 16, 2021 could all have material impact on the plan results; these include the continued assessments with regards to the reliability of the Labrador-Island Link ("LIL"), the assessment to determine the potential long-term viability of Holyrood TGS, and the implementation of the Labrador Network Additions Policy. Given the high costs associated with resource expansion, Hydro's intention is to ensure that it provides stakeholders with a fulsome view to the impact of these matters on provincial reliability to support informed opinions and decision making. Hydro believes that given the likely material impact of the noted matters on the outcomes of Hydro's planning assessments, deferring the filing of Volumes I and Volumes III was the most appropriate decision.

4. Provide an overall schedule of all activities and reports that, in Hydro's opinion, impact the schedule for the assessment of the Reliability and Resource Adequacy Study.

Response:

Hydro believes the table presented in its letter of March 16, 2021 provides an accurate summary of the remaining activities and reports known at this time that impact the schedule for the assessment of the Reliability and Resource Adequacy Study. This table is reproduced below with some additional detail related to the reports pertaining to the LIL icing incident experienced in the winter of 2020–2021. As Hydro needs to understand both the effort and expertise required for the additional considerations regarding LIL reliability recommended by Haldar & Associates, further information on the plans for the assessment is anticipated to be available by April 30, 2021. Hydro will provide the Board with an updated schedule including that information at that time.

With respect to the Board's interest in ensuring that these matters are proceeding as expeditiously as possible, Hydro believes there are a number of matters related to system planning criteria that can be resolved that are not impacted by the reliability of the LIL and thus are ready for the parties' full consideration. Hydro plans to engage the Board in the near term to assess the readiness of such matters for determination and appropriate regulatory process.

Table 1: Anticipated Timing of Filings

Filing	Anticipated Timeframe for Completion
Plan for Assessment of Additional Considerations Regarding LIL Reliability recommended by Haldar & Associates	April 30, 2021
Failure Investigation – L3501/2 Tower and Electrode Conductor Damage (Icing Event January 2021)	Q2 2021
Failure Investigation – L3501/2 Pole Conductor Failure (Hardware Assembly February 2021)	Mid Q2 2021
Update Regarding the Design Review Pertaining to L'Anse au Diable Electrode Site	Q3 2021
Implementation of Network Additions Policy and Implications for Labrador Load	Q4 2021
Assessment to Determine the Potential Long Term Viability of the Holyrood TGS	Q1 2022

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

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

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