

December 4, 2023

Via E-Mail

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Newfoundland and Labrador Board of Commissioners of Public Utilities 120 Torbay Road P.O. Box 21040 St. John's, NL A1A 5B2

Attention: Jo-Anne Galarneau, Board Secretary

Dear Ms. Galarneau:

Re: Newfoundland and Labrador Hydro 2023-2024 Winter Readiness Planning Report

dated November 10, 2023 (the November 10 Report) and 2023 Near Term

Reliability Report dated November 15, 2023 (November 15 Report)

Further to the Board's correspondence dated November 28, 2023, these are the comments of the Island Industrial Customer Group (Braya Renewable Fuels (Newfoundland) LP, Corner Brook Pulp and Paper Limited, and Vale Newfoundland and Labrador Limited) on the above Reports.

Winter 2023-2024

The Board in its November 28, 2023 correspondence noted that Hydro's LOLH reliability criteria are exceeded in all but one of the assessment scenarios set out in the November 15 Report. The Board also expressed its particular concern in relation to the potential implications of the unavailability of Holyrood Unit 2 for this coming winter and reliance on the Labrador Island Link for the first winter season since commissioning.

The Island Industrial Customer Group share the Board's concerns.

It is not immediately apparent what can be done, with the winter season already upon us, to improve reliability of service for winter 2023-2024. Having said this, the Island Industrial Customer Group submit that there are 2 lines of inquiry of, and due diligence and prudence by, Hydro, which should be considered:

1. Holyrood TGS Unit 2: At page 24, lines 6-7 of the November 10 Report, Hydro stated, in relation to Holyrood TGS Unit 2, that "The return to service date for this unit is tentatively scheduled for mid-March 2024 due to lead times for specialized parts and services." At page 12, lines 21-25 of the November 15 Report, Hydro stated that "As a result, the turbine is now scheduled to return to site in late-December 2023 with Unit 2 expected to return-to-service by mid-March 2024." [underlining added]. It is not clear whether the anticipated late-December 2023 turbine delivery date is new information, not known for the November 10 Report, which gives Hydro a higher degree of confidence that a return-to-service is expected by mid-March 2024. Without intending to minimize

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the complexity of the procedures necessary to bring Unit 2 back to service, it is not clear why it is expected that 2 ½ months will be needed after delivery of the turbine to achieve return-to-service. What other "specialized parts and services" are needed and what options have been considered by Hydro to accelerate their delivery? In short, can Hydro demonstrate (and not merely state) that the return-to-service of Unit 2 is being treated, by allocation of resources and personnel (internal and external), as a matter of urgency, with the objective of the very earliest return-to-service date?

2. **Hydro's Contingency Planning**. It is to be hoped that the availability of power over the LIL this coming winter will prove reliable, Hydro having acknowledged that this is "essential to system reliability". However, as the Board has noted, this will be the first winter since commissioning that such a high degree of reliance will have to be placed on the LIL. Hydro has itself repeatedly stated that "multiple years" of operational experience for the LIL will be needed to better inform the selection of a bipole forced outage rate². To date, there has been only 8 months of reliable LIL operation³, none of which has been during the critical winter period. Assumptions that the LIL operational experience will smoothly follow the "bathtub curve" and that we have emerged from the "early failures" period for the LIL⁴ may not be prudent, based on the pre commissioning and post commissioning experience to date. Similar concerns, from the other end of the "bathtub curve", arise out of Hydro's aging generation infrastructure, most acutely, and as has been long-recognized, for the Holyrood TGS.⁵

As a result, it is incumbent on Hydro to robustly plan for the worst case contingency, during this upcoming winter season and the following ones, of a total disruption of LIL availability (from whatever cause - transmission or other infrastructure failure, software failure) for an extended period, as well for high impact contingencies such as failure of a Bay D'Espoir penstock or of (another) Holyrood thermal generation unit. Such planning should not only comprise planning for the mobilization of material and personnel to rectify such a high impact failure of a critical system component but also a plan to mitigate the impact on Hydro's customers of the non-availability of power during the restoration period (3-7 weeks "depending on the scenario including logistics and line location" in the case of a LIL failure⁶; at least 5-6 weeks for a transformer change on a Holyrood unit⁷; 13-to-23 day repair timeline "depending on the circumstances" for a Bay D'Espoir penstock failure⁸). This should include a robust communication plan for Hydro's customers to prepare them, where power availability restrictions or disruptions can be anticipated, for calls to reduce peak usage and possible rotating outages, and to keep them informed in the midst of an unanticipated power disruption as to what measures are being taken by Hydro, and which may be able to be taken by them, to mitigate impacts and facilitate restoration.

¹ November 15 Report, page 46, lines 16-17.

² Most recently, in the November 15 Report, footnote 103.

³ November 15 Report, page 20, line 3.

⁴ November 15 Report, page 25, line 8

⁵ November 15 Report, page 15, lines 19-25.

⁶ RRAS Additional Considerations of the LIL Reliability Assessment and Outcomes of the Failure Investigation Findings dated December 22, 2021, page 6, line 22 to page 7, line 3.

⁷ November 15 Report, page 29, lines 18-23 and footnote 64

⁸ November 15 Report, page 6, lines 10-12

After Winter 2023-204

As already noted above, the aging Holyrood TGS assets are a particularly acute concern. Hydro projects a "Bridging Period" until 2030 (or "until such time as sufficient alternative generation is commissioned") during which the Holyrood TGS will need to be available. Hydro recognizes that as the majority of the Holyrood TGS assets are 40-50 years old, there is an increased risk of inservice failures. Hydro has attempted to mitigate this risk by ongoing condition assessments and overhaul programs. Despite these efforts, and the very substantial capital expenditures incurred, circumstances such as Unit 2 being out-of-service during the critical winter season are occurring. In that regard, it cannot be said with any degree of confidence that the current Unit 2 failure can be expected to be an "outlier" event. Hydro itself has cautioned that, depending on the results of a 2024 inspection, there is a risk that Holyrood Unit 3 may not be available for the December 1, 2024 Winter Readiness Date. 10

In light of the above, it is to be questioned whether it is reasonable, or prudent, for Hydro to assume, for reliability modelling purposes (with the sole exception of this 2023-2024 winter operating season) that all three Holyrood units will be available, through to 2028,¹¹ let alone for the "Bridging Period". The Island Industrial Customer Group would submit that consideration should be given to whether more robust and prudent reliability modelling should assume at least one Holyrood unit to be unavailable for the upcoming winter seasons during the Bridging Period.

The Island Industrial Customer Group, on every occasion that it has been given the opportunity, has voiced the concerns that the completion of Hydro's assessment of "sufficient alternative generation" to replace the Holyrood TGS needs to be accelerated. The current circumstance of the unavailability of a Holyrood unit for the upcoming winter should not be considered, tacitly, as a prudent, tolerable or necessary risk for each of the following winters during the Bridging Period.

The Island Industrial Customers have also previously proposed that Hydro's Winter Readiness Date, and Hydro's associated reporting to the Board, should be moved up to earlier in the Fall (early to mid November), to create the conditions for the earlier identification of reliability issues and for their potential rectification before or earlier within the winter season.

We trust these comments will be found to be in order.

⁹ November 15 Report, page 15, lines 19-25.

¹⁰ November 15 Report, page 11, lines 15-19.

¹¹ November 15 Report, page 28, lines 17-20.

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Yours truly,

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