

August 29, 2024

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

Attention: Jo-Anne Galarneau  
Executive Director and Board Secretary

Dear Ms. Galarneau:

**Re: Newfoundland and Labrador Hydro – Reliability and Resource Adequacy Study Review – 2024 Resource Adequacy Plan – Issues List – Newfoundland Power's Comments**

## **A. Introductory**

Newfoundland and Labrador Hydro's ("Hydro") *2024 Resource Adequacy Plan* (the "2024 Plan") was filed with the Newfoundland and Labrador Board of Commissioners of Public Utilities (the "Board") on July 9, 2024. The Board has proposed a review process and schedule for the 2024 Plan. By letter dated August 22, 2024, the Board circulated a list of issues for consideration during the review process (the "Issues List") and invited parties to file comments with respect to the Issues List. These are Newfoundland Power's comments.

## **B. Specific Issues**

### *Supply Reliability*

In the *Reliability and Resource Adequacy Study: 2022 Update* ("2022 Update"), Hydro identified the need to establish back-up generation for the Labrador-Island Link ("LIL") as a result of concerns with LIL reliability. To address the immediate need to back up the LIL, Hydro has extended the operation of the 50-year-old Holyrood Thermal Generating Station ("Holyrood"), Hardwoods Gas Turbine, and Stephenville Gas Turbine through 2030. As noted by Hydro's consultant, Daymark, the continued reliance on aging facilities is a growing concern.<sup>1</sup> Continued reliance on Holyrood also comes with significant cost implications for customers. Capital, operating and fuel costs are estimated at approximately \$150 million annually or approximately \$1 billion between 2024 and 2030.<sup>2</sup>

In comments filed with the Board on December 6, 2023, Newfoundland Power observed that, for the 2023-2024 winter season, customers on the Island Interconnected System were exposed to an elevated supply risk. The elevated supply risk stemmed primarily from reliance

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<sup>1</sup> 2024 Plan, Appendix A, page 9.

<sup>2</sup> 2022 Update, Volume III: Long-Term Resource Plan, page 26, tables 8 and 9.

upon the LIL as a source of firm supply for the Island Interconnected System as well as the use of Holyrood as a source of back-up for the LIL. Newfoundland Power further observed that near-term supply challenges for customers on the Island Interconnected System are expected to persist into future winter seasons. Newfoundland Power continues to hold this view as the 2024-2025 winter season approaches.

In the 2024 Plan, Daymark stated, "*Strong consideration should be given to accelerating the replacement of Holyrood TGS, Hardwoods GT, and Stephenville GT prior to 2030.*"<sup>3</sup> Newfoundland Power concurs with this view. In the Company's view, the earliest possible replacement for Holyrood capacity would provide immediate reliability and cost benefits to customers. The Company observes that this issue aligns with items identified in the Issues List.<sup>4</sup>

### LIL Energy Shortfall

The relationship between the LIL and the Maritime Link is explained in the 2024 Plan.<sup>5</sup> The requirement to maintain an adequate amount of underfrequency load shedding on the Island Interconnected System limits the amount of firm energy deliverable to the Island in low load hours. This will result in an annual restriction on the amount of firm energy that can be delivered to the Island, with the highest impact in the summer months.<sup>6</sup> Energy that cannot be delivered to the Island is exported over the Maritime Link and sold at market rates.

The 2024 Plan makes reference to the integration of a number of wind developments on the Island. Hydro states that these projects may provide a means of meeting Hydro's future energy requirements. Hydro indicates that it is collaborating with existing wind energy providers and engaging new proponents. Hydro plans to issue an expression of interest for energy provision in 2025.<sup>7</sup>

In Newfoundland Power's view, the Board's review process for the 2024 Plan provides an opportunity to examine whether the potential provision of energy from proposed wind developments would be a prudently incurred cost in light of the export and sale of energy from Muskrat Falls at market rates. The Company observes that this issue aligns with items identified in the Issues List.<sup>8</sup>

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<sup>3</sup> 2024 Plan, Appendix A, page 9.

<sup>4</sup> Issue 6 includes the possibility of accelerating Hydro's Bridging Period. Issue 7 focuses on Hydro's expansion plans and appropriate next steps.

<sup>5</sup> 2024 Plan, Appendix B, section 5.1.4.3, page 36.

<sup>6</sup> Ibid., Appendix B, page 37, lines 1-7.

<sup>7</sup> 2024 Plan, Overview, page 27, lines 4-10.

<sup>8</sup> Issue 6 includes the relationship between the LIL and the Maritime Link. Issue 7 includes Hydro's proposed expression of interest process for wind energy.

Requirement for On-Avalon Load Rotation

In the 2024 Plan, Hydro's recommended transmission upgrades allow for a permitted supply shortfall of 100 MW on the Avalon Peninsula. Hydro states, "*This limit ensures that shortfalls are within the range of what Newfoundland Power demonstrated the ability to rotate during the loss of load event in 2014.*"<sup>9</sup>

The loss of load event in 2014 is commonly referred to as #DarkNL. #DarkNL demonstrated Newfoundland Power's emergency capability to rotate distribution feeders in response to a supply shortfall. However, #DarkNL also demonstrated that rotating outages create considerable challenges for customers and Newfoundland Power's operation of the distribution system. The extent to which customer load is rotated and the duration of customer load rotations are dependent on a number of dynamic factors including availability of supply, customer load, and weather conditions. While Newfoundland Power has worked to improve its emergency capabilities with respect to load rotation since 2014, the operation of the distribution system during such periods is not considered routine or predictable.

As a result, Newfoundland Power does not consider a 100 MW supply shortfall on the Avalon to be an appropriate planning criterion. The Company observes that this issue aligns with items identified in the Issues List.<sup>10</sup>

### **C. Concluding**

On June 13, 2023, Newfoundland Power submitted comments to the Board on Hydro's Report of Ongoing and Future Work. At that time, Newfoundland Power identified issues and topics it wishes to raise or see addressed as part of the Reliability and Resource Adequacy Study. In general, Newfoundland Power's areas of concern are broadly the same as those identified by the Company in 2023. These include whether the LIL should be treated as an energy-only line in consideration of the need to balance costs and reliability and whether Hydro's probabilistic criteria are appropriate given the uniqueness of the Island Interconnected System. In addition to these, as stated, Newfoundland Power observes that the earliest possible replacement of Holyrood capacity could have immediate reliability and cost benefits for customers.

Newfoundland Power and Hydro are in agreement that a clear and efficient process is required in order to determine future supply requirements on the Island Interconnected System. In relation to the proposed review process for the 2024 Plan, the Board has proposed four technical meetings/conferences at which items in the Issues List are to be discussed.<sup>11</sup>

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<sup>9</sup> 2024 Plan, Appendix C, page 123, lines 12-14.

<sup>10</sup> Issue 2 includes consideration of a LIL bipole outage as the single largest contingency for planning purposes. Issue 3 includes consideration of the appropriate LOLH for the LIL and whether the LIL should be considered an energy-only line for planning purposes.

<sup>11</sup> The Board has also indicated that the final number of conferences and their scheduling will be determined after the Issues List is finalized.

While Newfoundland Power views the proposed number of meetings as adequate, there is a possibility that four technical meetings/conferences may not allow for a fulsome review of all of the subtopics identified in the Board's Issues List. As a result, a condensed focus may be conducive to a more efficient process. The Company submits that priority should be given to discussions related to Hydro's planning criteria for LIL reliability as well as items in the Issues List that advance efforts to accelerate the integration of a source of back-up supply that replaces Holyrood capacity.

We trust this is in order. If you have any questions regarding the enclosed, please contact the undersigned.

Yours truly,



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