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January 19, 2023

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

Attention: Jo-Anne Galarneau Executive Director and Board Secretary

Re: *Reliability and Resource Adequacy Study Review* – Planned Reports, Studies, and Analyses – Response to Further Comments and Directions

In correspondence dated May 25, 2023,¹ in response to direction from the Board of Commissioners of Public Utilities ("Board"),² Newfoundland and Labrador Hydro ("Hydro") filed a list of reports, studies, and analyses underway or planned with respect to issues in the ongoing *Reliability and Resource Adequacy Study Review* proceeding.

In response to Hydro's May 25, 2023 filing, Newfoundland Power Inc. ("Newfoundland Power"), the Island Industrial Customer Group ("IIC Group"), and the Labrador Interconnected Group provided comments on these reports, studies, and analyses and proposed additional issues to be addressed.³ On August 28, 2023, the Board issued correspondence that provided direction to Hydro on actions to be taken and reports to be developed.⁴ Hydro responded to the Board's directions on September 22, 2023.⁵ The Board considered Hydro's responses and, on October 12, 2023, provided further comments and directions.⁶ Hydro's responses to those further directions follow.

¹ "*Reliability and Resource Adequacy Study Review* – List of Planned Reports, Studies, and Analyses," Newfoundland and Labrador Hydro, May 25, 2023.

² As per "Newfoundland and Labrador Hydro – Reliability and Resource Adequacy Study Review – To Parties – Further Process," Board of Commissioners of Public Utilities, May 5, 2023, in it's May 25, 2023 filing, Hydro provided a comprehensive list of all reports, studies, and analyses currently underway or planned with respect to the reliability of the Labrador-Island Link ("LIL"), potential alternative generation resources, the load forecast, and other issues raised in the "Reliability and Resource Adequacy Study – 2022 Update," Newfoundland and Labrador Hydro, October 3, 2022 ("2022 Update").

³ "Newfoundland and Labrador Hydro – Reliability and Resource Adequacy Study Review – 2022 Update – Further Process – Newfoundland Power's Comments," Newfoundland Power Inc., June 13, 2023; "*Reliability and Resource Adequacy Study Review* – Listing of Planned Reports, Studies, and Analyses," Labrador Interconnected Group, June 7, 2023; and "Newfoundland and Labrador Hydro – Reliability and Resource Adequacy Study Review – 2022 Update – Further Process – Island Industrial Customer Group's Comments," Island Industrial Customer Group, June 20, 2023.

⁴ "Newfoundland and Labrador Hydro - Reliability and Resource Adequacy Study Review Planned Reports, Studies and Analyses," Board of Commissioners of Public Utilities, August 28, 2023.

⁵ "Reliability and Resource Adequacy Study Review – Planned Reports, Studies and Analyses – Response to Directions from Board of Commissioners of Public Utilities," Newfoundland and Labrador Hydro, September 22, 2023.

⁶ "Newfoundland and Labrador Hydro - Reliability and Resource Adequacy Study Review Planned Reports, Studies and Analyses – Further Comments and Directions," Board of Commissioners of Public Utilities, October 12, 2023.

1. The Board directed Hydro to extend its study period beyond 2030 for a reasonable period to reflect certain reliability and resource adequacy issues.

This direction was prefaced by the Board noting that

... as the study period [for Holyrood Thermal Generating Station] provided by Hydro to date covers up to 2030, it does not include information on the implications for reliability and resource adequacy issues for the period beyond 2030 when Hydro forecasts a need for new generation but its proposed schedule does not provide for the completion of a new generation source by that date and there is insufficient information on the implications of the continuation of the Holyrood Plant beyond 2030.⁷

Hydro will address this concern. The analysis completed by Hatch Ltd. noted that the Holyrood Thermal Generating Station ("Holyrood TGS") is a technically viable supply option through 2030.^{8,9} Hydro is in the process of engaging a consultant to assess the cost and viability of the operation of the facility until 2035. Hydro notes that it does not intend to keep the Holyrood TGS in operation for this full period. Rather, the analysis will inform supply options in the event that some supply from Holyrood TGS is needed in advance of the new generation. Completion of this analysis is expected by the fourth quarter of 2024.

2. The Board directed Hydro to consider and report on supply options available on a short-term basis, including consideration of the expedited placement of a combustion turbine as a near-term and a potential long-term option.

Hydro is in the process of examining potential options that may exist to expedite the addition of a capacity resource on the Island Interconnected System. Hydro will provide the Board with its findings as part of its 2024 Resource Adequacy Plan, to be filed in the second quarter of 2024.

3. The Board reiterated its direction to Hydro to file a report in the first half of 2024 on the actions and activities it has undertaken or plans to undertake in response to the recommendations in the reports by Haldar & Associates Inc. ("Haldar"). The Board also indicated that this report should include an update on the further work Hydro summarized was being undertaken in its October 4, 2023 reports,¹⁰ including the scope and schedule for the planned work on studying potential enhancements for the LIL. Hydro had previously proposed that a discussion of these issues would be included in the 2024 Resource Adequacy Plan; however, the Board asserted its belief that a separate report should be filed, given the significance of the issues and the preliminary findings detailed in previously filed reports.

Hydro will provide a separate report in the second quarter of 2024 on the completed and ongoing actions and activities it has taken in response to the recommendations in the Haldar reports as well as the L3501/2 Failure Investigation reports.

⁷ Ibid., p. 2.

⁸ "Reliability and Resource Adequacy Study Review – Assessment to Determine the Potential Long-Term Viability of the Holyrood Thermal Generating Station," Newfoundland and Labrador Hydro, March 31, 2022, atts. 1, 2, and 3.

⁹ In the 2022 Update, Hydro committed to have the units at the Holyrood TGS available until 2030, or until such time that sufficient alternative generation is commissioned, adequate performance of the LIL is proven, and generation reserves are met. ¹⁰ "Reliability and Resource Adequacy Study Review – Summary of Findings from L3501/2 Failure Investigations," Newfoundland and Labrador Hydro, October 4, 2023.

4. The Board directed Hydro to file the assumptions for each load forecast scenario as soon as possible and by the end of the first quarter of 2024 at the latest.

Hydro will provide the assumptions for each load forecast scenario in the first quarter of 2024. This filing will provide the Board and parties with perspective on the assumptions inputted into the analysis that will be presented in the 2024 Resource Adequacy Plan.

5. The Board directed Hydro to include information in the next Reliability and Resource Adequacy Study on the potential for short-term sales to Quebec.

Hydro has a 265 MW block of transmission rights through Quebec that enables exports of surplus Recapture Energy to customers in Quebec, Ontario, and the Maritimes (via New Brunswick) as well as the open markets in the northeastern United States. Hydro is currently maximizing its sales from its Recapture Energy entitlement.

Hydro is not currently able to export surplus energy from the Muskrat Falls Hydroelectric Generating Station ("Muskrat Falls") directly to customers via the Quebec path because Hydro does not have transmission service for that external path for this source of supply.

Hydro continues to pursue commercial opportunities to maximize sales of surplus Muskrat Falls energy to customers via the Maritime Link and to customers in the province. For example, in 2022, Hydro began purchasing surplus Muskrat Falls energy for use in Labrador. This allowed Recapture Energy that would otherwise have been required for Labrador customers to be exported via the Quebec path. There is no impact on Labrador customers as a result of these commercial arrangements, which permit increased Recapture Energy exports while minimizing spill at Muskrat Falls.

Once an Interconnection Operators Agreement with Hydro-Québec is in place, Hydro will be in a position to further explore commercial opportunities for short-term sales of surplus Muskrat Falls energy to customers via the Quebec path. Hydro has requested the Board reconsider its direction to Hydro to provide further information on this topic in its 2024 Resource Adequacy Plan.

Updated Listing of Reports, Studies and Analyses

Since the May 2022 technical conference, Hydro has filed eight of the reports and studies committed in its listing of planned reports, studies, and analyses. Hydro is allocating resources and prioritizing reports that support the 2024 Resource Adequacy Plan and the additional generation application(s).

Hydro has advanced planning with its engineering consultants and proposes the updated, prioritized timelines on deliverables provided in Table 1.¹¹ As indicated, Hydro remains on track for filing its 2024 Resource Adequacy Plan in the second quarter of 2024. Hydro also remains on track for filing additional generation application(s) in the fourth quarter of 2024. Other filings have been scheduled based on Hydro's continued efforts to expedite deliverables from its consultants.

¹¹ Further information on each study is provided in "Reliability and Resource Adequacy Study Review - Listing of Reports, Studies, and Analyses", Newfoundland and Labrador Hydro, May 25, 2022.

Table 1: 2024 Planned Reports, Studies, and Analyses¹²

Title	Estimated Filing Date (2024)
2024 Resource Adequacy Plan and Supporting Filings	
Load Forecast Assumptions	First Quarter
2024 Resource Adequacy Plan	
 Impact of Prolonged Loss of the LIL on Reservoir Levels¹³ 	Second Quarter
 Short-Term Supply Options¹⁴ 	
Future Generation Applications and Supporting Filings Fuel Market Study Pre-Winter Impact of Lower Reservoir Levels with the Addition of Bay d'Espoir Unit 8	Second Quarter Fourth Quarter
Application(s) for Approval of Construction of Additional Generation ¹⁵	Fourth Quarter
Future Reliability and Resource Adequacy Study Updates and Supporting Filings	
Bay d'Espoir ¹⁶ Unit 7 Uprate Study	Second Quarter
Summary of Actions from Haldar Recommendations and L3501/2 Failure Investigation Reports	Second Quarter
Island Hydroelectric Supply Refresh Study	Third Quarter
Incremental Capacity/Efficiency Potential from Existing Hydro Units	Fourth Quarter

Fourth Quarter

Fourth Quarter

Beyond 2030 Pumped Storage Feasibility at Greenfield Sites

In its October 12, 2023 correspondence, the Board restated its position that

Holyrood TGS Condition Assessment and Life Extension Study – Capital Investment Required

... it is critical that Hydro act expeditiously to complete the reports and analyses required to support a full, transparent and thorough process for the RRAS review, including those directed by the Board to allow for a full, careful and prudent consideration of the reliability and resource adequacy of the current and future electrical system in the Province.¹⁷

Hydro is cognizant of and sensitive to the time constraints and concerns of the Board, parties, and Hydro's customers and agrees that an expeditious process is needed. Hydro continues to work diligently on all fronts to ensure that all relevant information is gathered, analyzed, and incorporated, as quickly as is prudently possible, into the larger examination of the viable solutions available to ensure safe,

¹² While Hydro endeavours to meet the timeframes outlined herein, the estimated filing dates are subject to change and include an allocation of time for Hydro to review reports completed by third parties and to develop any summary documentation that may be required.

 $^{^{\}rm 13}$ To be included as part of the 2024 Resource Adequacy Plan.

¹⁴ To be included as part of the 2024 Resource Adequacy Plan.

¹⁵ Appropriate front-end engineering design documentation will be filed with the application(s).

¹⁶ Bay d'Espoir Hydroelectric Generating Facility ("Bay d'Espoir").

¹⁷ "Newfoundland and Labrador Hydro - Reliability and Resource Adequacy Study Review Planned Reports, Studies and Analyses

⁻ Further Comments and Directions," Board of Commissioners of Public Utilities, October 12, 2023, p. 4.

reliable, least-cost, environmentally responsible service to the province. Once the necessary review is complete, Hydro will proceed with the application(s) for solution(s) that would best meet those needs.

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

Shirley A. Walsh Senior Legal Counsel, Regulatory SAW/sk

Encl.

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