Newfoundland and Labrador Hydro
Hydro Place. 500 Columbus Drive
P.O. Box 12400. St. John's. NL
Canada A1B 4K7
t. 709.737.1400 I f. 709.737.1800
nlhydro.com

March 12, 2025

Newfoundland Power Inc.
Dominic J. Foley
55 Kenmount Road
PO Box 8910
St. John's, NL A1B 3P6

Consumer Advocate
Dennis M. Browne, KC
Browne Fitzgerald Morgan & Avis
Terrace on the Square, Level 2
PO Box 23135
St. John's, NL A1B 4J9

Island Industrial Customer Group
Paul L. Coxworthy
Stewart McKelvey
Suite 1100, Cabot Place
100 New Gower Street
PO Box 5038
St. John's, NL A1C 5V3

Labrador Interconnected Group
Senwung Luk
250 University Avenue, 8th Floor
Toronto, ON M5H 3E5

Re: Application for Early Execution Capital Work for Bay d'Espoir Unit 8 and Avalon Combustion Turbine – Refile – Redacted

Newfoundland and Labrador Hydro's ("Hydro") refiled application for the capital expenditures related to early execution capital work for Bay d'Espoir Unit 8 ("BDE Unit 8") and Avalon Combustion Turbine ("Avalon CT") ("Early Execution Application") is enclosed.

Hydro filed its initial Early Execution Application on February 27, 2025. The Board of Commissioners of Public Utilities ("Board") issued correspondence setting the review schedule for the application on March 4, 2025. On March 7, 2025, the Board issued correspondence stating that the Early Execution Application did not include the necessary evidence required in support of such an application and that the evidence was inadequate to allow for an efficient and effective review. The Board did not accept the application as filed. The Board advised that Hydro may refile the application with additional evidence.

The Early Execution Application, as filed on February 27, 2025, provided substantive support for the request to proceed with certain expenditures in advance of the approval of the overall projects in the best interest of ratepayers. The *Electrical Power Control Act, 1994* mandates as the policy of the province, that power be delivered to consumers in the province at the lowest possible cost, in an environmentally responsible manner, consistent with reliable service. The utilities, the Board, and the parties to applications relating to the service of customers are required to work to meet this mandate. The Early Execution Application was and is intended to meet those objectives.

Hydro is not seeking cost recovery for the expenditures proposed in the Early Execution Application. This is to allow for as expedient of a review process as possible, to comply with the existing legislative obligations as well as in the interests of regulatory efficiency and minimization of costs to ratepayers. Hydro will seek approval for the capital expenditures related to BDE Unit 8 and the Avalon CT, as the minimum investment necessary to meet the Slow Decarbonization load forecast set out in Hydro's 2024 Resource Adequacy Plan, in a build application to be filed in March 2025 ("2025 Build Application"). The

early execution expenditures will be included in the overall costs presented in the 2025 Build Application.

The planning, construction, and integration of these new generating resources, including the Early Execution procurement of long-lead critical equipment required for project advancement, will take years. Project estimates are time sensitive and supply chain pressures continue to increase; therefore, any delay impacting project execution increases the risk of higher costs to ratepayers, underscoring the need for expedient action. Hydro's Early Execution Application is made in consideration of these risks and implications. Efficient and expedient review and decisions are critical.

In correspondence on September 12, 2024, the Board noted that Hydro had indicated in its 2024 Resource Adequacy Plan, filed as part of the *Reliability and Resource Adequacy Study Review* proceeding ("*RRA Study Review*"), that it would file a capital budget application in late 2024 or early 2025 seeking approval of new generation sources. The Board decided that, in light of Hydro's proposed imminent capital budget application, they should commence the process to review the 2024 Resource Adequacy Plan to consider the requirement for and timing of new generation sources identified by Hydro, and the implications for the future of the Island Interconnected System raised in that proceeding.

The review of the 2024 Resource Adequacy Plan, through the process set out in the Board's September 12, 2024 correspondence, enabled the analysis and recommendations for the proposed BDE Unit 8 and an Avalon CT projects to be discussed and dissected by Intervenors and Board staff, as well as their consultants and legal counsel. The Early Execution Application, and the 2025 Build Application to come, are extensions of that proceeding. Hydro believes that the record provides fulsome context and additional support for the projects outlined in Hydro's Early Execution Application. However, to enable an expedient review of Hydro's Early Execution Application and reduce the impact on the schedule and related costs, Hydro's refiled application is provided along with additional documentation as is described further below.

Hydro requests that the Board consider the Early Execution Application in the context of the evidence filed in the Early Execution Application, as well as the substantial record from the ongoing in-depth *RRA Study Review* that supports BDE Unit 8 and the Avalon CT as the least-cost supply alternatives required for the Island Interconnected System.

Since filing the 2024 Resource Adequacy Plan, Hydro has presented and answered detailed questions at four technical conferences followed by Requests for Information ("RFI") filed by the Board and Intervenors. The overall R*RA Study Review* has had a significant record; since the November 2022 update to the initial reliability and resource adequacy filing alone, there have been in excess of 200 responses to RFIs and more than 12 reports that substantiate the current justification for supply needs. These documents and all the analyses and responses to questions from the parties and the Board are on the record and posted to the Board's website.[1]

To allow the Early Execution Application to continue, and to mitigate schedule and cost estimate risk, Hydro requests the *RRA Study Review* be formally placed on the record of the Early Execution Application.

The filings associated with the 2024 Resource Adequacy Plan review in particular that provide the most direct support are:

[1] http://pub.nl.ca/applications/NLH2018ReliabilityAdequacy/index.php.

- 2023 Load Forecast[2]
- 2024 Resource Adequacy Plan[3]
- Requests for Information[4]
  - PUB-NLH-311 to PUB-NLH-340
  - IIC-NLH-009 to IIC-NLH-022
  - NP-NLH-095 to NP-NLH-104
  - CA-NLH-061 to CA-NLH-067
- Technical Conference ("TC") Presentations
  - TC 1 (Load Forecast/Reliability Planning Criteria)[5]
  - TC 2, Day 1 (Existing Generation and Transmission)[6]
  - TC 2, Day 2 (Resource Supply Options)[7]
  - TC 3 (Scenarios and Sensitivities/Modelling Approach and Considerations)[8]
  - TC 4 (Expansion Plan, Insights and Next Steps)[9]
- Reports from the Board's consultant, Bates White
  - Assessment of Newfoundland and Labrador Hydro's 2024 Resource Adequacy Plan[10]
  - Assessment of Newfoundland and Labrador Hydro's Long-Term Load Forecast Report – 2023.[11]

The above documents provide specific discussion and support for the references in Hydro's attached Early Execution Application, in particular, Section 1 of Schedule 1 of the application, to the 2024 Resource Adequacy Plan. They provide further explanation of the Reference Case, Slow Decarbonization,

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[2] http://www.pub.nl.ca/applications/NLH2018ReliabilityAdequacy/reports/From%20NLH%20-%202023%20Long-Term%20Load%20Forecast%20Report%20-%202024-03-28.PDF.
[3] http://www.pub.nl.ca/applications/NLH2018ReliabilityAdequacy/correspondence/From%20NLH%20-%202024%20Resource%20Adequacy%20Plan%20-%20REVISION%202%20-%20REDACTED%20-%202024-08-26.PDF.
[4] http://pub.nl.ca/applications/NLH2018ReliabilityAdequacy/responses.php.
[5] http://www.pub.nl.ca/applications/NLH2018ReliabilityAdequacy/reports/From%20NLH%20-%20Presentation%20-%20Technical%20Conference%201%20Load%20Forecast%20-%20Reliability%20Planning%20Criteria%20-%202024-09-17.PDF.
[6] http://www.pub.nl.ca/applications/NLH2018ReliabilityAdequacy/correspondence/From%20NLH%20-%20Presentation%20-%20Technical%20Conference%202%20-%20Issue%203%20-%20Existing%20Generation%20and%20Transmission%20-%202024-10-01.PDF.
[7] http://www.pub.nl.ca/applications/NLH2018ReliabilityAdequacy/correspondence/From%20NLH%20-%20Presentation%20-%20Technical%20Conference%202%20-%20Issue%204%20%20-%20Resource%20Supply%20Options%20-%202024-10-02.PDF.
[8] http://www.pub.nl.ca/applications/NLH2018ReliabilityAdequacy/correspondence/From%20NLH%20-%20Presentation%20-%20Technical%20Conference%203%20-%20Scenarios%20and%20Sensitivities%20-%20Modelling%20Approach%20and%20Considerations%20-%202024-10-16.PDF.
[9] http://www.pub.nl.ca/applications/NLH2018ReliabilityAdequacy/correspondence/From%20NLH%20-%20Presentation%20-%20Technical%20Conference%204%20-%20Expansion%20Plan,%20Insights%20and%20Next%20Steps%20-%202024-10-29.PDF.
[10] http://www.pub.nl.ca/applications/NLH2018ReliabilityAdequacy/reports/Bates%20White%20-%20Expert%20Report%20-%20Assessment%20of%20NLHs%20-%202024%20Resource%20Adequacy%20Plan%20-%202024-08-30.PDF.
[11] http://www.pub.nl.ca/applications/NLH2018ReliabilityAdequacy/reports/Bates%20White%20Load%20Forecast%20Review%20Report%20-%20Final%202024.07.25.pdf.

and Accelerated Decarbonization forecasts that were developed and described within the 2024 Resource Adequacy Plan; and further explain the development of and basis for Hydro's Expansion Model, also referenced in Section 1 of Schedule 1 of the attached application. Hydro's Minimum Investment Expansion Plan is discussed in depth throughout the 2024 Resource Adequacy Plan, the RFI responses, and the Technical Conference presentations.

Hydro is also providing, as Schedule 2 to the application, charts of the BDE Unit 8 and Avalon CT demonstrating each project's key activity critical path and early execution timeline. While these charts do not show the full project schedule with all activities, they show the critical path for each project, the early execution work planned in 2025, and key long lead supply packages.

In project management, the critical path is the longest sequence of tasks that must be completed on time for the entire project to stay on schedule. If any task on the critical path is delayed, the final project completion date is also delayed unless adjustments are made. Identifying the critical path helps teams prioritize the most time-sensitive activities and allocate resources effectively. The documents in Schedule 2 show high-level milestones, the regulatory process, and the key long-lead equipment activities that are forecast to progress in 2025.

Additional clarification that may be necessary can, in Hydro's view, be addressed through the use of RFIs.

Attached as Schedule 3 to the application is a Settlement Agreement in which Hydro, the Consumer Advocate, Newfoundland Power Inc., and the Island Industrial Customer Group have agreed that various issues arising regarding the *RRA Study Review* and the 2024 Resource Adequacy Plan have been settled by negotiations between them, which issues are detailed in Attachment 1 to the Settlement Agreement ("Settled Issues"). The Settled Issues include agreement that the recommendation to build a new 154 MW unit at Bay d'Espoir and a 150 MW combustion turbine on the Avalon Peninsula, which is based on the Slow Decarbonization Case, is appropriate as part of the first step in addressing the requirements for additional capacity for the Island Interconnected System and applications for these projects should be filed for evaluation at this time.[12]

The parties agreed that Hydro analyzed an appropriate range of scenarios and sensitivities for the analysis included in the 2024 Resource Adequacy Plan to determine Hydro's recommendations regarding the minimum investment required being Bay d'Espoir Unit 8 and the Avalon CT; they further agreed that the 2023 Load Forecast and the reliability planning analysis outlined in the 2024 Resource Adequacy Plan demonstrate that additional capacity is required for the Island Interconnected system in the period 2031–2034 with the amount of capacity depending on the case and scenario analyzed. The Reference Case results indicate that approximately 525 MW of capacity is required by 2034. The Minimum Investment Expansion Plan which is based on the Slow Decarbonization load forecast results indicate a minimum of 385 MW of new capacity is required by 2034.

With that context, and on that basis, Hydro has refiled the Early Execution Application and requests that the Board proceed with the review of this application as expeditiously as possible to protect project schedules and budgets.

[12] The Labrador Interconnected Group would be signing only to the extent to reflect agreement to item 1 in the Settled Issues List that forms part of the Settlement Agreement. That item does not have implications for the proposals in the attached application; the fully executed Settlement Agreement will be filed on the record of the *Reliability and Resource Adequacy Study Review* proceeding once received.

This application contains commercially sensitive information on the details of the budget for those projects, as the proposed expenditures have not yet begun the procurement process. A version in which this information has been redacted is enclosed. The Board has been provided with a complete copy as well as a copy of the redacted version. Hydro requests that this information be kept confidential, not be made publicly available, and that the Board use the redacted version for posting to its website.

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

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

Encl.

ecc:

Board of Commissioners of Public Utilities
Jo-Anne Galarneau
Jacqui H. Glynn
Maureen Greene, KC
Board General

Labrador Interconnected Group
Nicholas E. Kennedy, Olthuis Kleer Townshend LLP

Newfoundland Power Inc.
Douglas W. Wright
Regulatory Email

Island Industrial Customer Group
Denis J. Fleming, Cox & Palmer
Glen G. Seaborn, Poole Althouse

Consumer Advocate
Stephen F. Fitzgerald, KC, Browne Fitzgerald Morgan & Avis
Sarah G. Fitzgerald, Browne Fitzgerald Morgan & Avis
Bernice Bailey, Browne Fitzgerald Morgan & Avis

Early Execution Capital Work

Bay d'Espoir Unit 8 and Avalon Combustion Turbine

March 12, 2025

An application to the Board of Commissioners of Public Utilities

newfoundland labrador hydro

IN THE MATTER OF the *Electrical Power Control Act, 1994*, SNL 1994, Chapter E-5.1 ("*EPCA*") and the *Public Utilities Act*, RSNL 1990, Chapter P-47 ("*Act*"), and regulations thereunder; and

IN THE MATTER OF an application by Newfoundland and Labrador Hydro ("Hydro") for an Order approving the capital expenditures necessary for certain capital related to the future construction of Bay d'Espoir Hydroelectric Generating Facility ("BDE") Unit 8 and the Avalon Combustion Turbine ("Avalon CT"), pursuant to Section 41(3) of the *Act*.

To: The Board of Commissioners of Public Utilities ("Board")

THE APPLICATION OF HYDRO STATES THAT:

A. Background

1. Hydro is a corporation continued and existing under the *Hydro Corporation Act, 2024*, is a public utility within the meaning of the *Act*, and is subject to the provisions of the *EPCA*.

B. Application

2. Hydro's 2024 Resource Adequacy Plan[1] developed three load forecasts to reflect the range of forecasted Island Interconnected System load requirements—the Reference Case (the expected load), Slow Decarbonization (which assumes a lower load than expected), and Accelerated Decarbonization (which assumes a higher than expected load). Hydro's Expansion Model identified the least-cost options to reliably meet the requirements of the system under each scenario.

[1] http://pub.nl.ca/applications/NLH2018ReliabilityAdequacy/correspondence/From%20NLH%20-%202024%20Resource%20Adequacy%20Plan%20-%20REVISION%202%20-%20REDACTED%20-%202024-08-26.PDF.

3. Hydro's analysis of the Reference Case determined that approximately 525 MW of new generation to address Island Interconnected System reliability requirements would be required by 2034.

4. Inaction and failing to advance solutions when there is forecasted growth present significant risks to system reliability. However, planning for the highest growth scenarios without sufficient certainty could lead to overbuilding, unnecessarily increasing customer rates. To mitigate this risk, Hydro has utilized the Slow Decarbonization load forecast to progress a plan involving the minimum investment that is required at this time ("Minimum Investment Expansion Plan") while continuing to progress planning for the Reference Case.

5. Section 41(3) of the *Act* prohibits a utility from proceeding with the construction, purchase, or lease of improvements or additions to its property that exceed the amount prescribed in regulations, at this time being $750,000, without prior approval from the Board. In advance of Hydro's build application for both BDE Unit 8 and the Avalon CT to be filed in March 2025 ("2025 Build Application"), Hydro has been completing its front-end engineering and design ("FEED"); however, to ensure that the timelines for construction that are necessary and will be proposed are met in the 2025 Build Application, Hydro must continue in the interim period in advance of application approval to begin certain advance work and analysis that will allow the project to proceed as planned. Pausing this work to await approval of the 2025 Build Application would have significant implications for the proposed projects' schedules and costs.

6. Schedule 1 to this application provides the description of certain capital expenditures that are necessary, before full approval of the 2025 Build Application can be available, to allow the BDE Unit 8 and Avalon CT projects to be able to meet the proposed cost and schedule once they are approved ("Early Execution"). Hydro is proposing to defer the determination of whether the expenditures can be recovered from customers to the 2025 Build Application to be filed in March 2025.

7. The Early Execution scope related to the Avalon CT is estimated to be $30,710,000, with the cost of the Early Execution scope related to BDE Unit 8 estimated to be $16,670,000, for a total expenditure of $47,380,000 in 2025 for both projects.

8. For both projects, the ability to engage the EPCM[2] consultant and turbine generator original equipment manufacturer ("OEM") during this Early Execution phase affords an opportunity to coordinate interfaces between the OEM equipment designs and the remaining facility designs, as well as minimize schedule risk associated with the long lead times of certain equipment. This is a major benefit for mitigating interface and schedule issues, which could lead to late design changes and associated construction delays and costs.

9. The ability to proceed with this work in advance of approval of the 2025 Build Application will provide risk mitigation by maintaining the overall project schedule and budget that were established during FEED. If the critical activities outlined are not advanced as planned in 2025, the overall project will be delayed and project costs will increase. This is further described in Section 4 of Schedule 1.

10. The critical path of a project is the longest sequence of tasks that must be completed on time for the entire project to stay on schedule. If any task on the critical path is delayed, the final project completion date is also delayed unless adjustments are made. Identifying the critical path helps teams prioritize the most time-sensitive activities and allocate resources effectively. The documents in Schedule 2 show high-level milestones, the regulatory process, and the key long-lead equipment activities that are forecast to progress in 2025.

11. Hydro has also attached, as Schedule 3, a copy of the signed Settlement Agreement from the *Reliability and Resource Adequacy Study Review* proceeding ("*RRA Study Review*") in which Hydro, the Consumer Advocate, Newfoundland Power Inc. ("Newfoundland Power"), and the Island Industrial Customer ("IIC") Group jointly advise the Board that various issues arising regarding the *RRA Study Review* and the 2024 Resource Adequacy Plan have been settled by negotiations between them.[3]

12. In particular, Hydro, the Consumer Advocate, Newfoundland Power, and the IIC Group agree that the recommendation to build a new 154 MW unit at Bay d'Espoir and a 150 MW combustion turbine on the Avalon Peninsula, which is based on the Slow Decarbonization Case,

[2] Engineering, Procurement, Construction Management ("EPCM").

[3] The Labrador Interconnected Group would be signing only to the extent to reflect agreement to item 1 in the Settled Issues List that forms part of the Settlement Agreement. That item does not have implications for the proposals in the attached application; the fully executed Settlement Agreement will be filed on the record of the *RRA Study Review* once received.

is appropriate as part of the first step in addressing the requirements for additional capacity for the Island Interconnected System and application for these projects should be made for evaluation at this time.

C. Newfoundland and Labrador Hydro's Request

13. Hydro requests that the Board make an Order approving the capital expenditures necessary for capital work related to the future construction of BDE Unit 8 and the Avalon CT.

D. Communications

14. Communications with respect to this application should be forwarded to Shirley A. Walsh, Senior Legal Counsel, Regulatory for Hydro.

DATED at St. John's in the province of Newfoundland and Labrador on this 12th day of March 2025.

NEWFOUNDLAND AND LABRADOR HYDRO

Shirley A. Walsh
Counsel for the Applicant
Newfoundland and Labrador Hydro
500 Columbus Drive, P.O. Box 12400
St. John's, NL A1B 4K7
Telephone: (709) 685-4973

Schedule 1

Early Execution Capital Work for Bay d'Espoir Unit 8 and Avalon Combustion Turbine

Contents

1.0 Introduction

For the 2024 Resource Adequacy Plan, three forecasts were developed to reflect the range of forecasted Island Interconnected System load requirements—the Reference Case (the expected load), Slow Decarbonization (which assumes a lower load than expected), and Accelerated Decarbonization (which assumes a higher than expected load). Hydro's Expansion Model has identified the least-cost options to reliably meet the requirements of the system under each scenario. Hydro's analysis of the Reference Case determined that approximately 525 MW of new generation to address Island Interconnected System reliability requirements would be required by 2034.

Inaction and failing to advance solutions when facing forecasted growth present significant risks to system reliability. However, planning for the highest load growth scenarios without sufficient certainty may lead to overbuilding, unnecessarily increasing customer rates. To mitigate this risk, Hydro has utilized the Slow Decarbonization load forecast to progress a plan involving the minimum investment that is required at this time ("Minimum Investment Expansion Plan") while continuing to progress planning for the Reference Case.

Hydro's proposed Minimum Investment Expansion Plan includes:

- Construction of a new 150 MW[1] hydroelectric unit ("BDE Unit 8") at the Bay d'Espoir Hydroelectric Generating Facility ("BDE");
- Construction of a new 150 MW Combustion Turbine ("CT") resource with renewable fuel capabilities on the Avalon ("Avalon CT"); and
- Integration of 400 MW installed capacity of wind generation.

BDE Unit 8 and the Avalon CT form the basis of both the Minimum Investment and Reference Case expansion requirements as shown in Figure 1 below, and Hydro will seek approval for both BDE Unit 8 and the Avalon CT in a build application to be filed in March 2025 ("2025 Build Application").[2]

[1] All references to capacity are in nominal terms.

[2] The 2024 analysis identified a requirement for 400 MW of energy; however, Hydro is pursuing alternatives to decrease this requirement. Hydro will continue to advance solutions, including wind generation; however, wind will not form part of Hydro's 2025 Build Application.

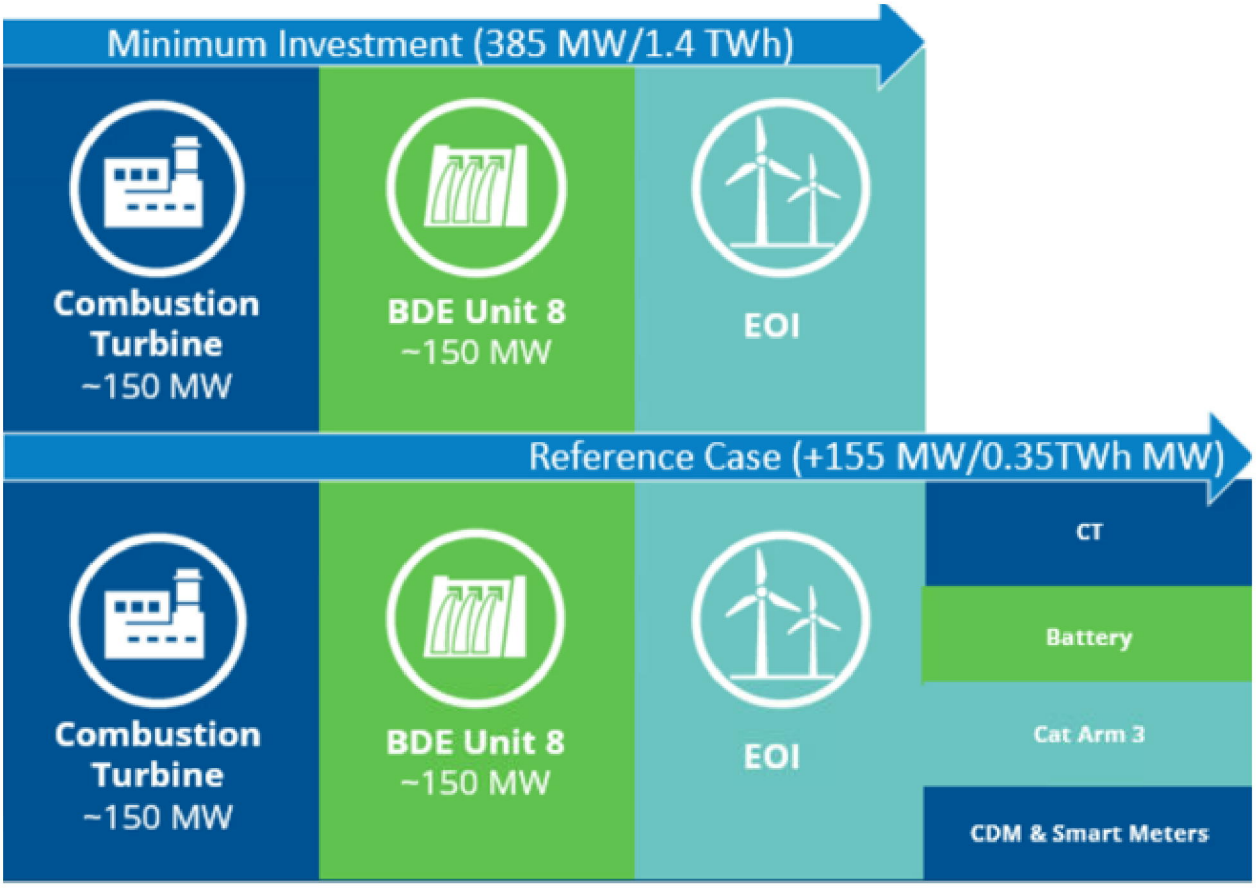


Figure 1: Minimum Investment Required and Reference Case Requirements

Hydro's 2025 Build Application will be based on good utility practice, incorporate lessons learned from the Muskrat Falls Inquiry, and incorporate what other Canadian utilities are doing for major projects. In advance of that filing, Hydro has been completing its front-end engineering and design ("FEED"). In the interim, Hydro must continue in advance of approval of the 2025 Build Application to begin certain advance work and analysis that will allow the project to proceed as planned. This will help ensure that the timelines for construction that are necessary and will be proposed are met. Project estimates are time sensitive and supply chain pressures continue to increase; therefore any delay during the regulatory proceeding schedule or during project execution increases risk of higher costs to rate payers.[3] Pausing this work while the overall application is being considered would have significant implications for the proposed projects' schedules and costs.

[3] In the absence of a Board Order on the 2025 Build Application by the end of this year, to maintain project schedule, Hydro would be required to file a second Early Execution application in the fourth quarter of 2025 with a more substantial budget than the current Early Execution application.

Section 41(3) of the *Public Utilities Act ("Act")* prohibits a utility from proceeding with the construction, purchase, or lease of improvements or additions to its property that exceed the amount prescribed in regulations, at this time being $750,000, without prior approval from the Board of Commissioners of Public Utilities ("Board"). The details herein support Hydro's application for approval of the capital expenditures that are necessary, even before full approval of the 2025 Build Application can be available, to allow the BDE Unit 8 and Avalon CT projects to be able to meet the proposed cost and schedule once they are approved ("Early Execution"). Hydro is proposing to defer the determination of whether the expenditures can be recovered from customers to the 2025 Build Application to be filed in March 2025.

2.0 Avalon CT

2.1 Components of Project

The Avalon CT will have several components:

- Generation Facility
  - A new powerhouse with multiple CT generating units for a total capacity of 150 MW, transformers, auxiliary mechanical and electrical equipment, control and protection equipment, fire protection system, demineralized water plant, compressed air, black start generator system, etc.
- Raw Water System
  - A new raw water intake and pumphouse will supply water for both domestic use and the demineralized water plant.
- Fuel Offloading System
  - A new fuel tank farm and truck offloading and handling system for supply to the powerhouse.
  - A fuel line to the existing Holyrood Marine Terminal.
- Transmission and Terminal Facilities
  - A new high high-voltage 230 kV terminal station supplied from the Generator Step-up ("GSU") transformers.

- Modifications and re-routing of existing transmission line TL218 into the new terminal station.
- Re-routing existing Newfoundland Power Inc. transmission lines to facilitate site construction.

In 2023, Hatch Ltd. ("Hatch") conducted a concept design study for Hydro to evaluate the feasibility of installing a CT as a source of fuel-fired backup generation on the Avalon. In 2024, FEED and Front-End Planning ("FEP") progressed to develop key documents to support the 2025 Build Application and Hatch was re-engaged to build on the 2023 work and progress the development of an Association for Advancement of Cost Engineering ("AACE") Class 3 Cost Estimate. Hydro's 2025 Build Application will propose the overall project schedule, with the commencement of the transformer contract in the second quarter of 2025, Engineering, Procurement, and Construction Management ("EPCM") contract award in the third quarter of 2025 and main on-site construction works commencing in 2026, with an energization date of 2029. The early execution scope will enable project continuity through 2025, as due to the limited period of time that estimates remain valid, certain work is necessary at this time and throughout the review process of the 2025 Build Application to maintain the overall project schedule.[4]

2.2 Early Execution Scope for Avalon CT

The Early Execution scope will include the following work necessary to bridge the period of time between the completion of FEED and receiving project approval from the Board:

- Critical Path Request for Proposal ("RFP") preparation, issuance and award for CT and GSU transformers. This entails the detailed engineering and fabrication scheduling necessary to complete the work and includes firm confirmation of the final supply and install pricing and schedule.
- Complete Environmental Assessment ("EA") Report and Registration and continue with the stakeholder engagement process.
- Engage Engineering Support from an EPCM Contractor to support the following activities:

[4] Hydro has requested Board approval of the Early Execution application to allow for the time necessary for the overall regulatory proceeding. The project schedule assumes time for a thorough review and evaluation of the project through a 2025 Build Application regulatory proceeding necessary to obtain Board approval by the end of the fourth quarter of 2025.

- Complete geotechnical investigations and surveys needed to support the execution phase; and
- Detailed execution planning activities, such as establishing project execution plan, contracting plan, and other planning documentation.

- Avalon CT interface optimization assessments in areas such as fire water supply, overall site fuel utilization, etc.
- Preparation of Early Execution RFP and engage with Early Execution contractors to complete initial geotechnical work and minor excavations in preparation to support line relocation and new line installations to ensure the overall schedule can be maintained.

2.3 Early Execution Budget

The costs associated with this early execution scope totals $30,710,000, the details of which are set out in Table 1:

Table 1: Early Execution Budget for Avalon CT ($000)[5]

Description	Amount
EPCM Support and Internal Project Management	[redacted]
Combustion Turbine Procurement	
Early Site Works and Geotechnical Study	
GSU Transformer Procurement	
Environmental Assessment Registration	
Contingency	
Interest During Construction and Escalation	
Total	**30,710**

The contracting strategy for the Early Execution will include mechanisms, where appropriate, to enable Hydro to limit or cancel the services or procurement in the event Board approval is not provided on the 2025 Build Application. Hydro is cognizant that given the current market conditions and the demand for services and equipment, there is risk associated with issuing RFP packages with cancellation clauses. Inclusions of cancellation conditions could provide disincentive for vendors to participate, and result in a lack of competition within the process, which may ultimately increase costs to customers. The proposed

[5] Numbers may not add due to rounding.

approach to be utilized for the procurement of the CT and GSU transformers is forecasted limit the cost exposure for those particular items to [redacted] (which represents the procurement required for combustion turbines and transformers shown in Table 1). The approach for contracting for the EPCM Support services will be largely based on a time and materials structure, which is forecasted to limit the cost exposure to [redacted] in the event that regulatory approval of the 2025 Build Application has not been received by the end of 2025. The scope of the Early Execution RFP and geotechnical work has limited cost [redacted] and is executed in a short period of time; therefore, it was not deemed necessary to customize a contracting strategy. Similarly, other project specific internal labour and miscellaneous costs are expected to total approximately [redacted] in 2025 (including but not limited to EA registration, Internal Project Management, and Interest During Construction). Due to the linear nature of these costs and Hydro's option to terminate agreements at its discretion, it was not deemed necessary to customize a contracting strategy.

The budget for the above noted work without incorporation of limits to mitigate cost exposure, in contemplation of the approval of the 2025 Build Application, will be set out in the 2025 Build Application for consideration along with the full project budget.

2.4 Least-Cost Evaluation

The scope identified in this application represents the execution of one segment of work associated with an overall plan for construction that has been analyzed and developed as the least cost solution. This is reflected in the Avalon CT project budget and schedule that will be presented in the 2025 Build Application as the least cost solution to provide safe, reliable, environmentally responsible service to customers.

3.0 BDE Unit 8

3.1 Components of Project

An additional unit at BDE was identified as one of the preferred, least-cost, environmentally responsible resource options required to support forecasted load growth and system reliability. The existing development at BDE has a 600 MW capacity and includes a reservoir, a spillway, and two powerhouses. The BDE Unit 8 project will supplement the existing Bay d'Espoir Hydroelectric Development, via the use of the existing reservoir and Powerhouse 2. BDE Unit 8 is expected to have a capacity of 150 MW, which will help meet the system's requirement for additional capacity.

The components of the BDE Unit 8 project are:

- Generation Facility
  - Extension of existing Powerhouse 2, with a 150 MW Francis turbine and generator, GSU transformer, isolated phase bus, auxiliary mechanical and electrical equipment, control and protection equipment, fire protection system, hydro-mechanical equipment, and other features.
  - The new unit will be built in an existing excavation, upstream of the Unit 8 Draft Tube Outlet, which was built as a part of the construction of the original powerhouse.
  - The new generating unit will utilize the existing powerhouse forebay at Bay d'Espoir and does not require the construction of any new dams.
- Water Conveyance System
  - A new headrace channel and intake, buried steel penstock, widening of the tailrace, and installation of further erosion protection in the tailrace channel.
- Transmission and Terminal Station Facilities
  - A new 950 m long high-voltage 230 kV line from a Unit 8 GSU transformer to the existing Terminal Station 2.
  - Expansion of Terminal Station 2 to accept the new transmission line interconnection.

Feasibility and planning activities were initiated in 2017–2018 with the completion of a study to assess potential options for the addition of an eighth unit to Powerhouse 2 at BDE. The study identified the preferred option and provided a foundation for future planning and project implementation.

In 2023–2024, FEED and FEP progressed to develop key documents to support the 2025 Build Application and an AACE Class 3 cost estimate. Hydro's 2025 Build Application will propose the overall project schedule, with the commencement of the Turbine contract in the fourth quarter of 2025, transformer contract in 2026 and main civil works commencing in 2027. The overall project completion date is planned for 2031. The early execution scope will enable project continuity through 2025; as with the Avalon CT, certain work is necessary at this time and throughout the review process of the 2025

Build Application to maintain the overall project schedule.[6] Project estimates are time sensitive and supply chain pressures continue to increase; therefore, any delay during the regulatory proceeding schedule or during project execution increases risk of higher costs to rate payers.

3.2 Early Execution Scope for BDE Unit 8

The Early Execution scope will include the following work necessary to bridge the period of time between the completion of FEED and receiving project approval from the Board:

- Engage EPCM contractor to support the following activities:
  - Complete geotechnical investigations and surveys that are needed to support execution phase. Engineering and specifications for long lead or early equipment, such as Turbine and Generator Package, GSU transformer, draft tube stop logs, and 230 kV breakers.
  - Detailed execution planning activities, such as establishing project execution plan, contracting plan, and other planning documentation.
- Engage Turbine Generator original equipment manufacturers ("OEM") to complete Computational Fluid Dynamics modeling and model testing. The work would also include confirmation of the final supply and install pricing and schedule.
- Complete Environmental Assessment Registration and continue with stakeholder engagement process.

3.3 Early Execution Budget

The costs associated with this early execution scope totals $16,670,000, the details of which are set out in Table 2:

[6] Hydro has requested Board approval of the Early Execution application to allow for the time necessary for the overall regulatory proceeding. The project schedule assumes time for a thorough review and evaluation of the project through a 2025 Build Application regulatory proceeding necessary to obtain Board approval by the end of the fourth quarter of 2025.

Table 2: Early Execution Budget for BDE Unit 8 ($000)

Description	Amount
EPCM Support and Internal Project Management	[redacted]
Turbine Generator Procurement	
Environmental Assessment Registration	
Contingency	
Interest During Construction and Escalation	
Total	**16,670**

As with the contracting strategy for the Avalon CT Early Execution, the contracting strategy for BDE Unit 8 Early Execution will include mechanisms, where appropriate, to enable Hydro to limit or cancel the services or procurement in the event Board approval is not provided on the 2025 Build Application. Hydro is cognizant that given the current market conditions and the demand for services and equipment, there is risk associated with issuing RFP packages with cancellation clauses. Inclusions of cancellation conditions could provide disincentive for vendors to participate, and result in a lack of competition within the process, which may ultimately increase costs to customers. The proposed approach to be utilized for the costs related to the procurement of the Turbine Generator is forecasted to limit the cost exposure for those particular items to [redacted]. The approach for contracting for the EPCM Support services will be largely based on a time and materials structure, which is forecasted to limit the cost exposure in the event that regulatory approval of the Build Application is not received by the end of 2025. Other project specific internal labour and miscellaneous costs have a linier nature and contain an option for Hydro to terminate agreements at its discretion; for those costs it was not deemed necessary to customize a contracting strategy.

The budget for the above noted work without incorporation of limits to mitigate cost exposure, in contemplation of the approval of the 2025 Build Application, will be set out in the 2025 Build Application for consideration along with the full project budget.

3.4 Least-Cost Evaluation

The scope identified in this application represents the execution of one segment of work associated with an overall plan for construction that has been analyzed and developed as the least cost solution. This is reflected in the BDE Unit 8 project budget and schedule that will be presented in the 2025 Build

Application as the least cost solution to provide safe, reliable, environmentally responsible service to customers.

4.0 Benefits of Approval of Early Execution

The planning, construction, and integration of new generating resources will take years, underscoring the need for expedient action. Project estimates are time sensitive and supply chain pressures continue to increase; therefore, any delay during the regulatory proceeding schedule or during project execution increases risk of higher costs to rate payers. Hydro's Early Execution application was made with these risks and implications in mind.

The ability to proceed with this work in advance of approval of the 2025 Build Application will provide risk mitigation by maintaining the overall project schedule and budget that were established during FEED. If the critical activities outlined are not advanced as planned in 2025, the overall project will be delayed and project costs will increase.

As Hydro has previously noted, [7] the recently announced planned work for the Churchill Falls Expansion and Upgrades, and the Gull Island Project will introduce market pressures on labour, engineering, equipment, and materials. A significant risk mitigation for the BDE Unit 8 and Avalon CT projects would be to maintain the planned project schedule, which would minimize the overlap with these newly announced projects, and minimize the associated cost/schedule impacts associated with potential market pressures. The impact to the BDE Unit 8 project would be greater, given the similarities in equipment, resources, and specialized skills required for hydroelectric construction projects; however, the impact for the Avalon CT would still be material.

For both projects, the ability to engage the OEMs during this phase affords an opportunity to coordinate interfaces between the OEM equipment designs and the remaining facility designs. This is a major

[7] *"Reliability and Resource Adequacy Study Review – Request for Additional Information – Reply,"* Newfoundland and Labrador Hydro, January 10, 2025.

benefit for mitigating interface issues, which could lead to late design changes and associated construction delays and costs.

Further, by continuing with the necessary work described above, Hydro will be able to ensure continuity of key project staff, improving continuity across the project phases. This work will also enable a smooth transition to the subsequent post-approval phases of the project.

5.0 Conclusion

Hydro's 2025 Build Application, to be filed in March 2025, will request approval for the capital expenditures necessary to procure and construct BDE Unit 8 and the Avalon CT. Hydro is conscious of the risks implicit in these large projects, and particularly how the impacts to schedule can result in: delays in implementation; subsequent delays in retiring Hydro's current thermal generation; and, increased costs which could have a substantial impact on customers. Hydro has considered what work must continue in the time pending the filing and review of the 2025 Build Application to allow for the proposed schedule for both projects to continue with as little impact as possible. Hydro's application for approval of Early Execution for both BDE Unit 8 and the Avalon CT, in compliance with section 41(3) of the *Act*, is intended to balance compliance with legislative requirements, the requirement for the Board and parties to review and understand the work and expenditures necessary, and the need to ensure wherever possible that schedule and costs are being managed prudently to allow for the provision of safe, reliable, environmentally responsible power at the lowest possible cost to customers.

Schedule 2

Gantt Charts

Redacted

Redacted

Schedule 3

Settlement Agreement

IN THE MATTER OF the *Electrical Power Control Act, 1994*, SNL 1994, Chapter E-5.1 ("*EPCA*") and the *Public Utilities Act*, RSN 1990, Chapter P-47 ("*Act*");

AND IN THE MATTER OF the Reliability and Resource Adequacy Study Review ("RRA Study Review") and the 2024 Resource Adequacy Plan dated July 9, 2024, and Revision 1 dated July 11, 2024 and Revision 2 dated August 26, 2024, filed by Newfoundland and Labrador Hydro.

SETTLEMENT AGREEMENT

WHEREAS Newfoundland and Labrador Hydro ("Hydro") filed its initial Reliability and Resource Adequacy Study with the Board of Commissioners of Public Utilities ("Board") in November 2018, with updates of that study filed in 2019, 2020, 2021 and 2022, and a 2024 Resource Adequacy Plan filed in November 2024; and

WHEREAS the ongoing RRA Study Review is intended to address Hydro's long-term approach to providing continued reliable service for its customers, and the 2024 Resource Adequacy Plan provides an in-depth analysis of the amount of electricity customers will need over the next ten years, identifies system requirements, and recommends a minimum investment required expansion plan to ensure the continued reliability of the Island Interconnected System;

WHEREAS the participants in the review are the Consumer Advocate; Newfoundland Power Inc. ("Newfoundland Power"); Corner Brook Pulp and Paper Limited, NARL Refining LP and Vale Newfoundland and Labrador Limited (the "IIC Group"), and the Labrador Interconnected Group, which consists of the Sheshatshiu Innu First Nation and the Towns of Happy Valley-Goose Bay, Wabush, and Labrador City; and

WHEREAS the Consumer Advocate, Newfoundland Power, the IIC Group, and the Labrador Interconnected Group have issued and Hydro has answered Requests for Information regarding the filings in the RRA Study Review including the 2024 Resource Adequacy Plan and has attended numerous technical conferences and other briefings; and

WHEREAS Hydro, the Consumer Advocate, Newfoundland Power, the IIC Group, with participation by Board Hearing Counsel, have engaged in negotiations regarding Hydro's 2024 Resource Adequacy Plan and its specific application to the Island Interconnected System;

TERMS OF AGREEMENT

1. Hydro, the Consumer Advocate, Newfoundland Power, the IIC Group, and the Labrador Interconnected Group, have agreed that planning for the Island and Labrador should continue to be completed separately.

2. Hydro, the Consumer Advocate, Newfoundland Power, and the IIC Group jointly advise the Board that various issues arising regarding the RRA Study Review and the 2024 Resource Adequacy Plan have been settled by negotiations between them in accordance with this

Settlement Agreement, which issues are detailed in Attachment 1 to this Settlement Agreement (the "Settled Issues").

3. Hydro, the Consumer Advocate, Newfoundland Power, and the IIC Group recommend that the Board accept the agreement of the Consumer Advocate, Newfoundland Power, and the IIC Group regarding the Settled Issues during the Board's evaluation of Hydro's application to construct a new 154 MW unit at Bay d'Espoir and a 150 MW combustion turbine on the Avalon Peninsula and any applications related thereto.

4. Hydro, the Consumer Advocate, Newfoundland Power, and the IIC Group consent to the admission in the record of matter of all pre-filed testimony, exhibits and responses to requests for information pertaining to the Settled Issues.

5. At any hearing pertaining to any proceeding filed to implement the 2024 Resource Adequacy Plan recommendations to proceed with the addition of Bay d'Espoir Unit 8 and the Avalon CT, Hydro, the Consumer Advocate, Newfoundland Power, and the IIC Group do not intend to present evidence, examine, cross-examine or present argument in relation to the Settled Issues beyond that which is reasonably necessary to assist the Board's understanding, and to explain or clarify Hydro, the Consumer Advocate, Newfoundland Power, and the IIC Group's agreement concerning the Settled Issues.

6. This Settlement Agreement does not preclude the parties from making inquiries, presenting evidence, examining, cross-examining or presenting argument in the applications for Bay d'Espoir Unit 8 and the Avalon CT on issues other than the Settled Issues to evaluate whether those proposed projects are the least-cost alternatives that are in the best interests of customers.

7. This Settlement Agreement represents a reasoned consensus on the Settled Issues and the agreements on individual issues are not intended to be severable.

8. This Settlement Agreement is without prejudice to the positions Hydro, the Consumer Advocate, Newfoundland Power, and the IIC Group may take in proceedings other than those capital budget and related applications intended to implement the recommendations in the 2024 Resource Adequacy Plan to proceed with the addition of Bay d'Espoir Unit 8 and the Avalon CT. It sets no precedent for any issue addressed in this Settlement Agreement in any future proceeding or forum, including, for greater certainty, in future Resource Adequacy Plans.

9. This Settlement Agreement removes the requirement for the experts retained by Hydro, the Consumer Advocate, Newfoundland Power, and the IIC Group to appear before the Board regarding the Settled Issues.

Agreed to as of the 12 day of March, 2025.

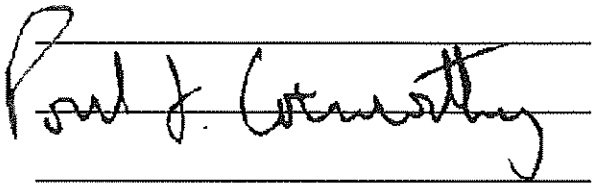
For Newfoundland and Labrador Hydro: DWalsh

For the Consumer Advocate:

Stephen Fitzgerald, KC
Barrister, NL

For Newfoundland Power:

For the Island Industrial Customer Group:



For the Labrador Interconnected Group:
(Signing only to the extent to reflect agreement to Item 1 in the attached Settled Issues List, and without prejudice to any positions taken in future with respect to Labrador)

For Board Hearing Counsel:

For Newfoundland Power: Dominic J. Foley
Barrister, Solicitor, Notary Public (NL)

For the Island Industrial Customer Group: _____

For the Labrador Interconnected Group: _____
(Signing only to the extent to reflect agreement to Item 1 in the attached Settled Issues List, and without prejudice to any positions taken in future with respect to Labrador)

For Board Hearing Counsel: _____

For Newfoundland Power: _____

For the Island Industrial Customer Group: _____

For the Labrador Interconnected Group: _____
(Signing only to the extent to reflect agreement to Item 1 in the attached Settled Issues List, and without prejudice to any positions taken in future with respect to Labrador)

For Board Hearing Counsel: Maureen P. Greene

Attachment 1

Reliability and Resource Adequacy

Settled Issues

March 11, 2025

1. Planning for the Island and Labrador should continue to be completed separately.

2. The load forecast methodology used by Newfoundland and Labrador Hydro (Hydro) in the Long - Term Load Forecast for the Island Interconnected System completed in 2023 and filed with the Board on March 28, 2024 (the 2023 Load Forecast) is consistent with utility industry standards.

3. The 2023 Load Forecast for the Island Interconnected System provides a reasonable range of provincial load growth over the 2023-2034 period. The 2023 Load forecast for the Island Interconnected System will be updated for 2024 and filed with the Board in the first quarter of 2025.

4.

   (1) In developing its recommendations, Hydro developed a range of planning criteria and a range of load forecasts that are used in relevant scenarios for the Island Interconnected System. The range of planning criteria applied by Hydro, while they continue to be subject to review, are adequate to employ at this time for resource adequacy and reliability planning for the Island Interconnected System. The scenarios outlined in the 2024 Resource Adequacy Plan demonstrate the need for new capacity on the Island Interconnected System.

   (2) Hydro's system planning criteria will continue to be studied for appropriateness for future system planning purposes. Hydro will review the criteria and report on the criteria applicability for planning purposes in its 2026 Resource Adequacy Plan

5. Holyrood Thermal Generating Station and Hardwoods and Stephenville Gas Turbines are required in the near term, as part of the Bridging Plan, until new generation has been reliably integrated into the Island Interconnectedsystem.

6. The potential feasible supply options identified and modelled within Hydro's supply stack as outlined in the 2024 Resource Adequacy Plan are an appropriate basis for Hydro to proceed with an application in 2025 for approval for new capacity including an application for Bay d'Espoir Unit 8 and the Avalon CT. Hydro will further study potential feasible supply options for the 2026 Resource Adequacy Plan to meet the Reference Case.

7. Hydro's use of Class 5 cost estimates is reasonable for the analysis of resource options within the 2024 Resource Adequacy Plan.

8. Hydro analyzed an appropriate range of scenarios and sensitivities for the analysis included in the Resource Adequacy Plan to determine its recommendations regarding the minimum investment required being Bay d'Espoir Unit 8 and the Avalon CT.

9. The 2023 Load Forecast and the reliability planning analysis outlined in the 2024 Resource Adequacy Plan demonstrate that additional capacity is required for the Island Interconnected system in the period 2031-2034 with the amount of capacity depending on the case and scenario analyzed. The Reference Case results indicate that approximately 524 MW of capacity is required by 2034. The Minimum Investment Expansion Plan which is based on the Slow Decarbonization load forecast results indicate a minimum of 385 MW of new capacity is required by 2034.

10.

(1) The recommendation to build a new 154 MW unit at Bay d'Espoir and a 150 MW combustion turbine on the Avalon Peninsula, which is based on the Slow Decarbonization Case, is appropriate as part of the first step in addressing the requirements for additional capacity for the Island Interconnected system and applications for these projects should be evaluated at this time. Hydro will file an application in the first quarter of 2025 for approval of new generation for a new 154 MW unit at Bay d'Espoir and a 150 MW combustion turbine on the Avalon Peninsula.

(2) Hydro will report to the Board semi-annually on all work ongoing relating to planning for the reliability and resource adequacy for the Island Interconnected system. The first semi-annual report will be filed in Q4 of 2025, and in Q2 and Q4 of each year thereafter. A 2026 Resource Adequacy Plan will be filed with the Board in the fourth quarter of 2026.

(3) The inclusion of wind energy for meeting firm energy requirements will continue to be studied. Hydro will report to the Board in the semi-annual report filed in the fourth quarter of 2025 on the status of ongoing analysis and the EOI which Hydro plans on undertaking in 2025.

(4) Hydro will continue to plan for the current and future reliability and resource adequacy for the Island Interconnected system and will continue to file with the Board the studies listed in the attached Schedule A as the studies are completed unless noted in the Schedule. Hydro will advise the Board on the status of the studies listed in Schedule A in its semi-annual report, including identifying any new study being undertaken.

11. The terms used in this Issues List have the same meaning as in the 2024 Resource Adequacy Plan.

Currently Planned Studies to Meet Reference Case Requirements

Driver	Key Activity	Description	Anticipated Completion Date[1]	Notes
Minimum Investment Expansion Plan	BDE Unit 8 and On-Avalon CT Capital Budget Application	The application to build BDE Unit 8 and the On-Avalon CT form the baseline to meet the Reference Case requirements.	Q1 2025	As per Hydro's response to PUB-NLH-336 of the2024 Resource Adequacy Plan proceeding, Hydro intends to file the application no later than March 31, 2025.
	Supply EOI Process	This process, which encompasses both the Supply EOI and a Request for Proposal process, is anticipated to be a multi-year process, depending on the number of applicants, and commercial negotiations. However, it is anticipated that by Q1 2026, PPA cost information will be available for inclusion into the 2026 Reliability and Resource Adequacy analysis.	Q4 2026	Due to commercial considerations, Hydro does not intend to file its Supply EOI Evaluation on the record; however, it will ensure the Board of Commissioners of Public Utilities and the parties are informed of the outcomes and next steps through the agreed upon semi-annual reporting.
Bridging Period Timeline	Holyrood Thermal Generating Station Bridging Plan Refresh	This study will provide a refresh on the capital and operating costs for Holyrood up to 2035.	Q1 2025	The results of this study will be filed upon its completion and internal review[2] by Hydro.
Transmission Planning	The Final Lower Churchill Project Operational Study (Stage 4F)	This study is the final stage of a series of studies with the primary objective of establishing the "Final UFLS[3] Scheme" and developing the LIL transfer limits based on this proposed scheme	Q2 2025	The results of this study will be filed upon its completion and internal review by Hydro.

[1] This date is subject to change depending on a variety of factors. Hydro will report to the Board, copied to the Parties, semi-annually on all work ongoing relating to planning for the reliability and resource adequacy for the Island Interconnected system. The first semi-annual report will be filed in Q4 of 2025, with the following reports filed in Q2 and Q4 of each year thereafter.

[2] Hydro's internal review, as referenced herein, will be completed within 45 days of the completion of the report. Should additional time be required to complete the internal review, Hydro will advise the Board and the parties of the amount of additional time needed, and the reasons for the additional time.

[3] Under Frequency Load Shedding ("UFLS").

Driver	Key Activity	Description	Anticipated Completion Date[1]	Notes
	Evaluation of BESS for Frequency Support	This study will evaluate the feasibility of a BESS in the their ability to provide frequency support to the Island system in an attempt to improve the LIL to Maritime Link relationship	Q4 2025	The results of this study will be filed upon its completion and internal review by Hydro.
	Evaluation of a Remedial Action Scheme ("RAS") for the Avalon 230 kV Corridor	This study will evaluate the feasibility of a RAS that aims at mitigating thermal overloads and low voltage conditions that limit BDE to SOP flow when the LIL is out of service.	Q4 2025	The results of these studies have directly related implications. They will be filed together once complete and after an internal review by Hydro. If the results indicate that a Transmission Expansion Application is necessary, the studies will accompany the application; otherwise they will be provided as an independent filing.
	Transmission Expansion Feasibility Study	BDE to SOP Transmission Capacity Expansion	Q4 2025	
Long-Term Fuel Supply Security	Marine Terminal Station FEED[4]	FEED work to support a capital budget application for a Marine Terminal. Such FEED work could (i) reduce fuel supply constraints for a future CT addition within the Reference Case Expansion Plan; and, (ii) provide increased efficiency in fuel delivery for Hydro's recommended 150 MW CT as a part of the Minimum Investment Expansion Plan.	Q3 2025	As is the practice with FEED work, this analysis will be filed with the Marine Terminal Station Capital Budget Application, if necessary, and not as stand-alone reporting.
Reference Case Expansion Plan	CDM Potential Study	Hydro will assess the recommendations of the 2024 CDM Potential Study to develop the next multi-year plan for ECDM.[5] Hydro will evaluate incorporation of CDM programming as a supply stack option in the next Resource Adequacy Plan.[6]	Q2 2025	Joint Utility ECDM 2026–2030 Plan[7]

[4] Front-End Engineering and Design (FEED").
[5] Anticipated to be filed in the fourth quarter of 2025.
[6] The feasibility of ECDM as a supply stack option is dependent on the findings of the ECDM Potential Study.

Driver	Key Activity	Description	Anticipated Completion Date[1]	Notes
	ELCC Study	To inform the 2026 Resource Adequacy Plan supply stack, the ELCC Study will determine the ELCC of batteries, wind, solar, and may also include demand response measures.	Q4 2025	The results of this study will be filed upon its completion and internal review by Hydro.
	2025 Load Forecast Update	The 2025 load forecast will form the baseline for the next Resource Adequacy Plan analysis and the Reference Case Expansion Plan.	Q4 2025	This document will be filed upon its completion and internal review by Hydro.
	Battery Feasibility Study	To inform the 2026 Resource Adequacy Plan supply stack, Hydro will advance the BESS project to the feasibility stage. The practicality and viability of the project will be examined and engineering will be advanced to a level appropriate to commence FEED if the project is deemed viable.	Q1 2026	The results of this study will be filed upon its completion and internal review by Hydro.
	Cat Arm Unit 3 Feasibility Study	To inform the 2026 Resource Adequacy Plan supply stack, Hydro will advance the Cat Arm Unit 3 project to the feasibility stage. The practicality and viability of the project will be examined and engineering will be advanced to a level appropriate to commence FEED if the project is deemed viable.	Q1 2026	The results of this study will be filed upon its completion and internal review by Hydro.

Affidavit

IN THE MATTER OF the *Electrical Power Control Act, 1994*, SNL 1994, Chapter E-5.1 ("*EPCA*") and the *Public Utilities Act*, RSNL 1990, Chapter P-47 ("*Act*"), and regulations thereunder; and

IN THE MATTER OF an application by Newfoundland and Labrador Hydro ("Hydro") for an Order approving the capital expenditures necessary for certain capital related to the future construction of Bay d'Espoir Hydroelectric Generating Facility ("BDE") Unit 8 and the Avalon Combustion Turbine ("Avalon CT"), pursuant to Section 41(3) of the *Act*.

AFFIDAVIT

I, Robert Collett, of St. John's in the province of Newfoundland and Labrador, make oath and say as follows:

1) I am Vice President, Engineering and Newfoundland and Labrador System Operator for Newfoundland and Labrador Hydro, the applicant named in the attached application.
2) I have read and understand the foregoing application.
3) To the best of my knowledge, information, and belief, all of the matters, facts, and things set out in this application are true.

SWORN at St. John's in the province of Newfoundland and Labrador this 12th day of March 2025, before me:

Kimberley Duggan
Commissioner for Oaths, Newfoundland and Labrador

KIMBERLEY DUGGAN
A Commissioner for Oaths in and for
the Province of Newfoundland and Labrador.
My commission expires on December 31, 2027.

R. Collett
Robert Collett