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February 27, 2025

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

### **Consumer Advocate**

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250 University Avenue, 8th Floor Toronto, ON M5H 3E5

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

Please find enclosed Newfoundland and Labrador Hydro's ("Hydro") application for the capital expenditures related to early execution capital work for Bay d'Espoir Unit 8 ("BDE Unit 8") and an Avalon Combustion Turbine ("Avalon CT").

Hydro will seek approval for the total 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"). However, the planning, construction, and integration of these new generating resources will take years. Project estimates are time sensitive and supply chain pressures continue to increase; therefore, any delay impacting project execution increases risk of higher costs to rate payers, underscoring the need for expedient action. Hydro's application, within, for approval to proceed with certain expenditures in advance of the approval of the overall projects is made with these risks and implications in mind.

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"). Hydro believes that expeditious review of the proposed initial expenditures, resulting in approval pursuant to the *Act* to proceed with the proposed 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 front-end engineering and design. If the critical activities outlined are not advanced as planned in 2025, the overall project will be delayed and project costs will increase.

The description of the expenditures and the associated costs are described in Schedule 1 to the enclosed application. The expenditures provide for project continuity through 2025 with the commencement of the transformer contract in the second quarter of 2025, and the Engineering, Procurement, and Construction Management contract award for the Avalon CT in the third quarter of 2025. As Hydro

notes in the application, Hydro is proposing to defer the determination of whether the expenditures can be recovered from customers to the 2025 Build Application.

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.

In setting the schedule for the regulatory review of this application, Hydro requests that the Board consider the criticality of the schedule for undertaking procurement of equipment on each project's critical path, among other activities as noted in Schedule 1, and set a schedule that is as expeditious as possible while allowing for the required review.

Should you have any questions, please contact the undersigned.

Yours truly,

### NEWFOUNDLAND AND LABRADOR HYDRO

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

Encl.

ecc:

#### Board of Commissioners of Public Utilities Jo-Anne Galarneau Jacqui H. Glynn Board General

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

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

**Consumer Advocate** Stephen F. Fitzgerald, KC, Browne Fitzgerald Morgan & Avis Sarah G. Fitzgerald, Browne Fitzgerald Morgan & Avis Bernice Bailey, Browne Fitzgerald Morgan & Avis Newfoundland Power Inc. Douglas W. Wright Regulatory Email **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 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.
- 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 presents 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 *Public Utilities 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<sup>1</sup> and Turbine Generator original equipment manufacturers ("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

<sup>&</sup>lt;sup>1</sup> Engineering, Procurement, Construction Management ("EPCM") consultant.

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.

### C. Newfoundland and Labrador Hydro's Request

10. 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

11. 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 27th day of February 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





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### 1 **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.

9 Inaction and failing to advance solutions when facing forecasted growth present significant risks to

10 system reliability. However, planning for the highest load growth scenarios without sufficient certainty

11 may lead to overbuilding, unnecessarily increasing customer rates. To mitigate this risk, Hydro has

12 utilized the Slow Decarbonization load forecast to progress a plan involving the minimum investment

13 that is required at this time ("Minimum Investment Expansion Plan") while continuing to progress

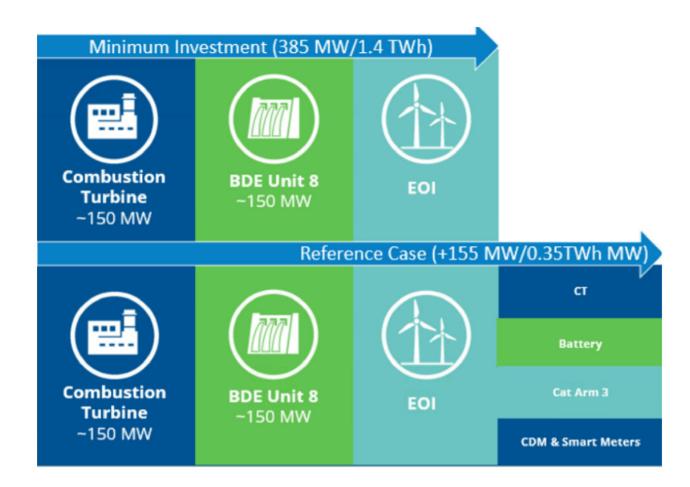
14 planning for the Reference Case.

- 15 Hydro's proposed Minimum Investment Expansion Plan includes:
- Construction of a new 150 MW<sup>1</sup> 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
- 20 Integration of 400 MW installed capacity of wind generation.
- 21 BDE Unit 8 and the Avalon CT form the basis of both the Minimum Investment and Reference Case
- 22 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").<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> 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.



<sup>&</sup>lt;sup>1</sup> All references to capacity are in nominal terms.



### Figure 1: Minimum Investment Required and Reference Case Requirements

1 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 2 advance of that filing, Hydro has been completing its front-end engineering and design ("FEED"). In the 3 4 interim, Hydro must continue in advance of approval of the 2025 Build Application to begin certain 5 advance work and analysis that will allow the project to proceed as planned. This will help ensure that 6 the timelines for construction that are necessary and will be proposed are met. Project estimates are 7 time sensitive and supply chain pressures continue to increase; therefore any delay during the 8 regulatory proceeding schedule or during project execution increases risk of higher costs to rate payers.<sup>3</sup> 9 Pausing this work while the overall application is being considered would have significant implications for the proposed projects' schedules and costs. 10

<sup>&</sup>lt;sup>3</sup> 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.



1 Section 41(3) of the *Public Utilities Act ("Act")* prohibits a utility from proceeding with the construction,

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

### 10 **2.0 Avalon CT**

### 11 2.1 Components of Project

- 12 The Avalon CT will have several components:
- 13 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.
- 18 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.
- 24 A fuel line to the existing Holyrood Marine Terminal.
- 25 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.
- 3 4

 Re-routing existing Newfoundland Power Inc. transmission lines to facilitate site construction.

5 In 2023, Hatch Ltd. ("Hatch") conducted a concept design study for Hydro to evaluate the feasibility of 6 installing a CT as a source of fuel-fired backup generation on the Avalon. In 2024, FEED and Front-End 7 Planning ("FEP") progressed to develop key documents to support the 2025 Build Application and Hatch 8 was re-engaged to build on the 2023 work and progress the development of an Association for 9 Advancement of Cost Engineering ("AACE") Class 3 Cost Estimate. Hydro's 2025 Build Application will 10 propose the overall project schedule, with the commencement of the transformer contract in the 11 second quarter of 2025, Engineering, Procurement, and Construction Management ("EPCM") contract 12 award in the third guarter of 2025 and main on-site construction works commencing in 2026, with an 13 energization date of 2029. The early execution scope will enable project continuity through 2025, as due 14 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.<sup>4</sup> 15

### 16 2.2 Early Execution Scope for Avalon CT

The Early Execution scope will include the following work necessary to bridge the period of timebetween 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:

<sup>&</sup>lt;sup>4</sup> 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.



- 1 • Complete geotechnical investigations and surveys needed to support the execution phase; 2 and 3 • Detailed execution planning activities, such as establishing project execution plan, 4 contracting plan, and other planning documentation. 5 Avalon CT interface optimization assessments in areas such as fire water supply, overall site fuel 6 utilization, etc. 7 Preparation of Early Execution RFP and engage with Early Execution contractors to complete 8 initial geotechnical work and minor excavations in preparation to support line relocation and 9 new line installations to ensure the overall schedule can be maintained.
- 10 2.3 Early Execution Budget
- 11 The costs associated with this early execution scope totals \$30,710,000, the details of which are set out
- 12 in Table 1:

### Table 1: Early Execution Budget for Avalon CT (\$000)<sup>5</sup>

| EPCM Support and Internal Project Management |        |
|--|--------|
|  |        |
| Combustion Turbine Procurement               |        |
| Early Site Works and Geotechnical Study      |        |
| GSU Transformer Procurement                  |        |
| Environmental Assessment Registration        |        |
| Contingency                                  |        |
| Interest During Construction and Escalation  |        |
| Total  | 30,710 |

- 13 The contracting strategy for the Early Execution will include mechanisms, where appropriate, to enable
- 14 Hydro to limit or cancel the services or procurement in the event Board approval is not provided on the
- 15 2025 Build Application. Hydro is cognizant that given the current market conditions and the demand for
- 16 services and equipment, there is risk associated with issuing RFP packages with cancellation clauses.
- 17 Inclusions of cancellation conditions could provide disincentive for vendors to participate, and result in a
- 18 lack of competition within the process, which may ultimately increase costs to customers. The proposed

<sup>&</sup>lt;sup>5</sup> Numbers may not add due to rounding.



- 1 approach to be utilized for the procurement of the CT and GSU transformers is forecasted limit the cost 2 exposure for those particular items to (which represents the procurement 3 required for combustion turbines and transformers shown in Table 1). The approach for contracting for 4 the EPCM Support services will be largely based on a time and materials structure, which is forecasted to limit the cost exposure to get the second seco 5 6 Build Application has not been received by the end of 2025. The scope of the Early Execution RFP and and is executed in a short period of 7 geotechnical work has limited cost time; therefore, it was not deemed necessary to customize a contracting strategy. Similarly, other 8 9 project specific internal labour and miscellaneous costs are expected to total approximately 10 in 2025 (including but not limited to EA registration, Internal Project Management, and Interest During 11 Construction). Due to the linear nature of these costs and Hydro's option to terminate agreements at its 12 discretion, it was not deemed necessary to customize a contracting strategy.
- 13 The budget for the above noted work without incorporation of limits to mitigate cost exposure, in
- 14 contemplation of the approval of the 2025 Build Application, will be set out in the 2025 Build Application
- 15 for consideration along with the full project budget.

### 16 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.

### 22 3.0 BDE Unit 8

### 23 3.1 Components of Project

- 24 An additional unit at BDE was identified as one of the preferred, least-cost, environmentally responsible
- 25 resource options required to support forecasted load growth and system reliability. The existing
- 26 development at BDE has a 600 MW capacity and includes a reservoir, a spillway, and two powerhouses.
- 27 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
- 29 will help meet the system's requirement for additional capacity.





1 The components of the BDE Unit 8 project are: 2 **Generation Facility** 3 Extension of existing Powerhouse 2, with a 150 MW Francis turbine and generator, GSU 4 transformer, isolated phase bus, auxiliary mechanical and electrical equipment, control and 5 protection equipment, fire protection system, hydro-mechanical equipment, and other features. 6 7 • The new unit will be built in an existing excavation, upstream of the Unit 8 Draft Tube 8 Outlet, which was built as a part of the construction of the original powerhouse. 9 • The new generating unit will utilize the existing powerhouse forebay at Bay d'Espoir and 10 does not require the construction of any new dams. 11 Water Conveyance System 12 • A new headrace channel and intake, buried steel penstock, widening of the tailrace, and 13 installation of further erosion protection in the tailrace channel. **Transmission and Terminal Station Facilities** 14 15 • A new 950 m long high-voltage 230 kV line from a Unit 8 GSU transformer to the existing 16 **Terminal Station 2.** 17 • Expansion of Terminal Station 2 to accept the new transmission line interconnection. 18 Feasibility and planning activities were initiated in 2017–2018 with the completion of a study to assess 19 potential options for the addition of an eighth unit to Powerhouse 2 at BDE. The study identified the 20 preferred option and provided a foundation for future planning and project implementation. 21 In 2023–2024, FEED and FEP progressed to develop key documents to support the 2025 Build 22 Application and an AACE Class 3 cost estimate. Hydro's 2025 Build Application will propose the overall 23 project schedule, with the commencement of the Turbine contract in the fourth quarter of 2025, 24 transformer contract in 2026 and main civil works commencing in 2027. The overall project completion 25 date is planned for 2031. The early execution scope will enable project continuity through 2025; as with 26 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.<sup>6</sup> Project estimates are time sensitive and 1
- 2 supply chain pressures continue to increase; therefore, any delay during the regulatory proceeding
- 3 schedule or during project execution increases risk of higher costs to rate payers.
- 4 3.2

### **Early Execution Scope for BDE Unit 8**

5 The Early Execution scope will include the following work necessary to bridge the period of time

- 6 between the completion of FEED and receiving project approval from the Board:
- 7 Engage EPCM contractor to support the following activities: 8 • Complete geotechnical investigations and surveys that are needed to support execution 9 phase. Engineering and specifications for long lead or early equipment, such as Turbine and 10 Generator Package, GSU transformer, draft tube stop logs, and 230 kV breakers. 11 • Detailed execution planning activities, such as establishing project execution plan,
- 12 contracting plan, and other planning documentation.
- 13 Engage Turbine Generator original equipment manufacturers ("OEM") to complete
- 14 Computational Fluid Dynamics modeling and model testing. The work would also include confirmation of the final supply and install pricing and schedule. 15
- 16 Complete Environmental Assessment Registration and continue with stakeholder engagement 17 process.
- 3.3 **Early Execution Budget** 18
- 19 The costs associated with this early execution scope totals \$16,670,000, the details of which are set out
- 20 in Table 2:

<sup>&</sup>lt;sup>6</sup> 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.



| Description                                  | Amount |
|--|--------|
| EPCM Support and Internal Project Management |        |
| 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

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

3 the services or procurement in the event Board approval is not provided on the 2025 Build Application. 4 Hydro is cognizant that given the current market conditions and the demand for services and 5 equipment, there is risk associated with issuing RFP packages with cancellation clauses. Inclusions of 6 cancellation conditions could provide disincentive for vendors to participate, and result in a lack of 7 competition within the process, which may ultimately increase costs to customers. The proposed 8 approach to be utilized for the costs related to the procurement of the Turbine Generator is forecasted 9 to limit the cost exposure for those particular items to . The approach for 10 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 11 12 not received by the end of 2025. Other project specific internal labour and miscellaneous costs have a 13 linier nature and contain an option for Hydro to terminate agreements at its discretion; for those costs it 14 was not deemed necessary to customize a contracting strategy. 15 The budget for the above noted work without incorporation of limits to mitigate cost exposure, in 16 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.

### 18 **3.4 Least-Cost Evaluation**

1

2

17

19 The scope identified in this application represents the execution of one segment of work associated with 20 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.

### **3 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.

9 The ability to proceed with this work in advance of approval of the 2025 Build Application will provide 10 risk mitigation by maintaining the overall project schedule and budget that were established during

11 FEED. If the critical activities outlined are not advanced as planned in 2025, the overall project will be

- 12 delayed and project costs will increase.
- 13 As Hydro has previously noted, <sup>7</sup> the recently announced planned work for the Churchill Falls Expansion
- 14 and Upgrades, and the Gull Island Project will introduce market pressures on labour, engineering,
- 15 equipment, and materials. A significant risk mitigation for the BDE Unit 8 and Avalon CT projects would
- 16 be to maintain the planned project schedule, which would minimize the overlap with these newly
- 17 announced projects, and minimize the associated cost/schedule impacts associated with potential
- 18 market pressures. The impact to the BDE Unit 8 project would be greater, given the similarities in
- 19 equipment, resources, and specialized skills required for hydroelectric construction projects; however,
- 20 the impact for the Avalon CT would still be material.
- 21 For both projects, the ability to engage the OEMs during this phase affords an opportunity to coordinate
- 22 interfaces between the OEM equipment designs and the remaining facility designs. This is a major

<sup>&</sup>lt;sup>7</sup> "Reliability and Resource Adequacy Study Review – Request for Additional Information – Reply," Newfoundland and Labrador Hydro, January 10, 2025.



1 benefit for mitigating interface issues, which could lead to late design changes and associated

2 construction delays and costs.

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

### 6 5.0 Conclusion

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



# 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 27th day of February 2025, before me:

Commissioner for Oaths, Newfoundland and Labrador

**Robert Collett** 

RENEE REARDON A Commissioner for Oaths in and for the Province of Newfoundland and Labrador. My commission expires on December 31, 2029.