Q. Reference: Avalon Combustion Turbine

In relation to the Avalon Combustion Turbine, please advise what decisions, if any, made during the Early Execution Capital Work may bind Hydro and limit other available options during the 2025 Build Application, for example entering a detailed procurement contract early in the build process. Please describe the potential impacts of these decisions.

A.

The Early Execution contracting and procurement approach for the Avalon Combustion Turbine ("CT") is described in Newfoundland and Labrador Hydro's ("Hydro") response to PUB-NLH-001 of this proceeding. As detailed in that response, the primary Early Execution Capital Work commitments include the engagement of the Engineering, Procurement and Construction Management ("EPCM") Consultant and the Award of the CT Package and the Generator Start Up ("GSU") Transformer Package. The total estimated expenditure for the Early Execution Capital Work is \$30,710,000, representing the anticipated limit of the commitment for the Early Execution Capital Work necessary to maintain cost and schedule.

The activities Hydro will undertake as part of the Early Execution Capital Work, such as initiating procurement of long lead equipment or securing engineering and permitting support, are essential to preserving project schedule and cost estimate. As the project schedule for the Avalon CT plans for the asset to become operational in 2029, two years ahead of the Bay d'Espoir 8 Unit comes online, both the capital expenditures and the work scope in Early Execution is more significant.

General Impacts on Project Options

The proposed expenditure would not limit the consideration of other options. Should another option involve a totally different generation alternative, Hydro would need to complete frontend planning for that alternative and submit a new application for approval. As outlined in the Settlement Agreement filed as Schedule 2 of the 2025 Build Application, the Consumer

1	Advocate, Newfoundland Power Inc., and the Island Industrial Customer Group agree that the
2	recommendation to build a new 150 MW CT on the Avalon Peninsula is appropriate as part of
3	the first step in addressing the requirements for additional capacity for the Island
4	Interconnected system.
5	For the Avalon CT project to achieve the appropriate accuracy of a cost estimate required for
6	approval, it must achieve a level of project definition per the Association for Advancement of
7	Cost Engineering guidelines. To achieve this level of project definition, key project decisions
8	must be made in the front end planning phase and prior to full project approval. These decisions
9	directly inform the basis of the project cost estimate.
10	During Early Execution, Hydro will advance detailed engineering and execution planning. As
11	detailed planning progresses, it is possible that certain aspects of the project execution may
12	change; however, Hydro does not expect fundamental changes that would impact the
13	commitments made through Early Execution.
14	While the Early Execution scope of work includes several activities where the decisions taken
15	will bind Hydro to contractual commitments, these activities are required to maintain the
16	project schedule and cost in line with current market conditions. In the event the Board
17	approval is not provided on the 2025 Build Application, please refer to Hydro's response to PUB-
18	NLH-002 of this proceeding, for discussion on how Hydro intends to utilize mechanisms to
19	mitigate Early Execution procurement risks.
20	Award of the GSU Transformer Package
21	The GSU Transformer Package is one of the critical path items for the Avalon CT project and
22	must be delivered in 2028 to meet the 2029 project in-service date. Based on current market
23	information this package must be procured in 2025. Hydro's current project schedule shows an
24	anticipated award date in June 2025.
25	The impact of the decision to award this package during the Early Execution period includes

commitment to the GSU manufacturer, size, and model of GSU transformers, including securing a manufacturing slot. A change in this decision would have both a cost and schedule impact. The

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likely cost impact has been included in the overall budget outlined in the Early Execution 1 2 application. 3 Award of the CT Package 4 Like the GSU transformer package, the CT package is one of the critical path items for the Avalon 5 CT project and must be delivered between May 2028 and January 2029 to meet the 2029 planned project in-service date. Based on current market information this package must be 6 7 procured in 2025. Hydro's current project schedule shows an anticipated award date in July 2025. 8 9 The impact of the decision to award this package during the Early Execution period includes 10 commitment to the turbine manufacturer, quantity, and model that make up the multi-unit, nominal 150 MW CT plant, including securing a manufacturing slot. A change in this decision 11 would have both a cost and schedule impact. The likely cost impact has been included in the 12 13 overall budget outlined in the Early Execution application. **Award of the EPCM Contract** 14 An EPCM consultant is required to complete the detailed design on this project. Detailed design 15 16 must be started in 2025 to meet the 2029 planned in-service date for the project. 17 The impact of the decision to award the EPCM within the Early Execution period includes commitment to the EPCM approach, and commitment to the selected EPCM contractor. While 18 19 this engagement is essential to advancing detailed planning and preserving project schedule, a 20 change in this decision would primarily result in schedule delays rather than significant sunk 21 costs, given the engineering-focused nature of the work. The likely cost impact has been 22 included in the overall budget outlined in the Early Execution application. 23 Site preparation in readiness for major civil works in 2026 24 Hydro's current project schedule to achieve a project in-service date of 2029 requires major civil 25 works to occur in 2026. Given the seasonal nature of civil works, getting the site ready for this

work in 2025 will increase the likelihood that planned work can be completed in 2026. This

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1 includes early site development to support relocation of transmissions lines that are located 2 within the project footprint. 3 The impact of the decision to award the site preparation scope within the Early Execution period 4 includes a commitment to the transmission line routing; however, the planned routing is the 5 only available routing to remain consistent within the easements provided and facilitates ease 6 of access for any geotechnical work required to confirm the major civil scope. A change in this 7 decision would have both a cost and schedule impact. The likely cost impact has been included 8 in the overall budget outlined in the Early Execution application. 9 **Limiting Cost Exposure** 10 Ordering long lead items early in the project lifecycle is a well-established project management strategy. This approach is commonly used in capital projects across the utility and energy sectors 11 12 to: Reduce procurement cycle time and help maintain project timelines; 13 Improve project schedule certainty by securing critical equipment early; 14 15 Mitigate risks associated with delays in equipment delivery; Enable strategic procurement (e.g., Company Furnished Mechanical Equipment) to 16 improve cost control and quality; and 17 18 Support advanced contracting models, such as novation, which streamline execution and handoffs. 1 19 20 These commitments are taken with deliberate consideration of cost, risk, and schedule and include safeguards to preserve flexibility wherever possible. Hydro's approach reflects industry-21

¹ As shown in case studies such as Hammad, M. A. (2006). Schedule improvement through innovative procurement strategies. Paper presented at PMI® Global Congress 2006—Latin America, Santiago, Chile. Newtown Square, PA: Project Management Institute.

standard major project execution strategies and is designed to protect customers from

unnecessary cost increases and schedule delays.

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