

1 Q. **Reference: Bay d'Espoir Unit B**

2 In relation to the Bay d'Espoir Unit 8, please advise what decisions, if any, made during the Early
3 Execution Capital Work may bind Hydro and limit other available options during the 2025 Build
4 Application, for example entering a detailed procurement contract early in the build process.
5 Please describe the potential impacts of these decisions.

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8 A. The Early Execution contracting and procurement approach for Bay d'Espoir Unit 8 ("BDE Unit
9 8") is described in Newfoundland and Labrador Hydro's ("Hydro") response to PUB-NLH-004 of
10 this proceeding. As detailed in that response, the primary Early Execution Capital Work
11 commitments include the engagement of the Engineering, Procurement and Construction
12 Management ("EPCM") Consultant and the Turbine Generator original equipment manufacturer
13 ("OEM"). The total estimated expenditure for the Early Execution Capital Work is \$16,670,000,
14 which represents the anticipated limit of the commitment required to maintain project schedule
15 and cost alignment.

16 The activities Hydro will undertake as part of the Early Execution Capital Work for BDE Unit 8,
17 such as engaging the EPCM Consultant, completing detailed engineering studies, and initiating
18 model testing for the Turbine Generator, are essential to preserving the project schedule and
19 cost estimate. As the planned in-service date for BDE Unit 8 is 2031, two years after the Avalon
20 Combustion Turbine is scheduled to come online, the Early Execution scope for BDE Unit 8 is
21 more heavily focused on technical design and detailed planning rather than capital
22 commitments for major procurement. As a result, both the capital expenditures and binding
23 commitments during Early Execution are comparatively lower.

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25 **General Impacts on Project Options**

26 The proposed expenditures for Early Execution would not prevent the consideration of
27 alternative supply options. However, if a supply alternative emerges, such as an entirely

1 different generation solution, Hydro would need to undertake new front-end planning and
2 feasibility studies and submit a new application for approval. As outlined in the Settlement
3 Agreement filed as Schedule 2 of the 2025 Build Application, the Consumer Advocate,
4 Newfoundland Power Inc., and the Island Industrial Customer Group agree that constructing a
5 new 154 MW unit at Bay d’Espoir is an appropriate first step to address future capacity needs
6 for the Island Interconnected system.

7 To achieve the appropriate accuracy of a cost estimate required for project approval, the project
8 must achieve a level of project definition per the Association for Advancement of Cost
9 Engineering guidelines. To achieve this level of project definition key project decisions must be
10 made in the front-end planning phase and prior to full project approval. These decisions directly
11 inform the basis of the project cost estimate.

12 During Early Execution, Hydro will advance detailed engineering and execution planning. As
13 detailed planning progresses, it is possible that certain aspects of the project execution may
14 change; however, Hydro does not expect fundamental changes that would impact the
15 commitments made through Early Execution.

16 While the Early Execution scope of work includes several activities where the decisions taken
17 will bind Hydro to contractual commitments, these activities are required to maintain the
18 project schedule and cost in line with current market conditions.

19 In the event the Board approval is not provided on the 2025 Build Application, please refer to
20 Hydro’s response to PUB-NLH-002 of this proceeding, for discussion on how Hydro intends to
21 utilize mechanisms to mitigate Early Execution procurement risks.

22 **Award of the EPCM Contract**

23 An EPCM consultant is required to support project planning and complete the detailed design
24 work necessary for BDE Unit 8. Engagement of the EPCM is anticipated to begin in the third
25 quarter of 2025 to align with project development timelines.

26 The impact of the decision to award this contract during the Early Execution period includes
27 commitment to the EPCM approach and the selected EPCM contractor. While this engagement
28 is essential to advancing detailed planning and preserving project schedule, a change in this

1 decision would primarily result in schedule delays rather than significant sunk costs, given the
2 engineering-focused nature of the work. The likely cost impact has been included in the overall
3 budget outlined in the Early Execution application.

4 **Engagement of the Turbine Generator OEM**

5 To inform the final Turbine Generator selection, Hydro will engage an OEM to undertake
6 Computational Fluid Dynamics modeling and scaled model testing. This work is expected to
7 begin in the third quarter of 2025 and is necessary before securing a manufacturing slot.

8 The impact of this engagement includes commitment to technical modeling assumptions that
9 will inform equipment sizing and design integration. Any required change in direction at this
10 stage would primarily result in schedule delays rather than significant sunk costs, given the
11 engineering-focused nature of the work. The likely cost impacts have been accounted for in the
12 Early Execution cost estimates.

13 **Continued Engineering and Design Studies**

14 Hydro will continue with ongoing engineering and interface studies to refine technical
15 requirements and prepare for future procurement. These activities form the foundation of
16 detailed project execution planning and interface coordination.

17 The impact of these studies includes investment in early design development and system
18 integration planning. These are necessary to maintain alignment with project timelines and to
19 ensure readiness for execution. As these activities are primarily preparatory, they offer flexibility
20 in the event of a change in project direction, with minimal exposure to cancellation costs.

21 **Preparation for Generator Step-Up (“GSU”) Transformer Procurement**

22 Hydro will initiate preparatory work in 2025 for the procurement of the GSU transformer, with
23 award planned in 2026. The GSU transformer is a critical path item for the project and will
24 require long lead time for manufacturing and delivery.

1 While this does not involve contract award during the Early Execution period, it sets the
2 foundation for timely procurement in 2026. Adjustments at this stage would have limited
3 financial impact but could affect procurement timelines and overall project schedule.

4 **Limiting Cost Exposure**

5 Ordering long lead items early in the project lifecycle is a well-established project management
6 strategy. This approach is commonly used in capital projects across the utility and energy sectors
7 to:

- 8 • Reduce procurement cycle time and help maintain project timelines;
- 9 • Improve project schedule certainty by securing critical equipment early;
- 10 • Mitigate risks associated with delays in equipment delivery;
- 11 • Enable strategic procurement (e.g., Company Furnished Mechanical Equipment) to
12 improve cost control and quality; and
- 13 • Support advanced contracting models, such as novation, which streamline execution
14 and handoffs.¹

15 These commitments are taken with deliberate consideration of cost, risk, and schedule and
16 include safeguards to preserve flexibility wherever possible. Hydro's approach reflects industry-
17 standard major project execution strategies and is designed to protect customers from
18 unnecessary cost increases and schedule delays.

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.