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

Schedule 1, Table 2, page 9. Please provide details of the scope of work required for each expenditure listed in Table 2. Include in the response why each scope of work is required to be completed at this time and when Hydro expects each of the expenditures to be made. In relation to the Turbine Generator Procurement, please detail what is included in the scope of work, for example, non-refundable deposits, reservations for a manufacturing time slot, initial payments on supply contracts, fees related to cancellation clauses, etc.

A. The primary driver(s) for initiating Early Execution specific work related to the Bay d'Espoir Unit 8 ("BDE Unit 8") project is to ensure that the project is completed in line with the current schedule and estimated costs. Delay in any of the proposed Early Execution Work will result in impacts on both cost and schedule for the BDE Unit 8 project.

Hydro's Early Execution application assumes that approval of the 2025 Build Application will be received by the end of the fourth quarter 2025. 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.

Each expenditure listed in Schedule 1, Table 2 has been scoped and timed to support critical project milestones and reduce risk to schedule slippage, as detailed below.

Engineering, Procurement, Construction Management Support and Internal Project Management

Details and Rationale

It is essential to engage an Engineering, Procurement, Construction Management ("EPCM") consultant as soon as practical during early execution so that engineering work packages associated with the long lead equipment are prepared in time to support the critical

procurement timelines, such as for the Turbine Generator ("TG"). The EPCM consultant will also finalize field data gathering that is required for detailed design and construction planning, including site survey control and additional geotechnical investigations. This will ensure that detailed design can begin immediately following project sanction and is required to mitigate schedule risk.

The EPCM consultant will also continue with detailed execution planning activities, such as establishing the final project execution plan, final contracting plan, and other planning documentation needed to maintain project progress.

The EPCM Consultant and the TG original equipment manufacturer will be engaged simultaneously during this phase, which affords an opportunity to coordinate interfaces between the TG equipment designs and the remaining facility designs. This is a major benefit for mitigating interface issues, which could lead to late design changes and associated construction delays and costs.

It is also important to maintain the established Project Management Team ("PMT") to support the Early Execution Scope. The PMT is fully engaged and up to speed on the project execution requirements and are essential for the preparation of technical and contractual documents required to continue with the project plan. Without the support of the existing PMT, the Early Execution scope could not proceed as planned. The PMT resources will also support the regulatory processes associated with the 2025 Build Application and the Environmental Assessment Registration. Gaps in activity or prolonged delays can lead to loss of key personnel due to uncertainty and inactivity, and re-building project teams can be costly and time consuming, which would impact the project's execution timeline and cost. Continuity of the PMT across the phases of the project enables a seamless transition into the Execution phase. This continuity is crucial to maintain project schedule and effectively manage risks.

Timeline for Expenditure

Costs related to the PMT are ongoing throughout 2025. Should the PMT not be maintained in 2025 it is projected that up to an additional 12 months could be added to the project schedule due to the loss of project-specific insight and the disruption caused by a stop-start execution

approach along with the needed to once again rebuild the project team with adequate resources. A lapse in continuity could erode momentum and commitment, making it unlikely that the project could be completed by the targeted in-service date of 2031.

The EPCM expenditures are expected to begin in the third quarter of 2025 once the EPCM consultant is engaged. The EPCM services are expected to be based primarily on a time and materials compensation model, so the amount of Early Execution expenditure will depend on the duration of the Build Application review process.

Turbine Generator Procurement

Details and Rationale

The Project critical path runs through the TG procurement process. 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.

The first key steps in the TG procurement process are initiating the prequalification process and preparing a Request for Proposal ("RFP") in 2025, which will drive the selection and awarding of the TG contract. This procurement process is crucial as it determines the timing of arrival of the TG materials and equipment on site. This is the main driver of the overall schedule, as it impacts the timing and coordination of all subsequent work, including the required construction work needed to support the TG installation. With the high demand in the hydroelectric industry, timelines for delivery have been quoted to be approximately 4 years, and the current schedule plans for the TG to be installed in 2030. Since the procurement and installation of the TG directly impacts the overall project schedule, delays in this process could delay the entire project. Therefore, keeping the TG procurement on track in 2025 is essential to maintaining the project timeline.

There are a limited number of large hydroelectric unit manufacturers in the world and the demand for new hydroelectric units is currently high. A delay in establishing a contract for this equipment could have a significant impact on the overall project schedule and cost. As Utilities modernize and construct new hydroelectric units to meet growing electricity demand, demand

for these units is projected to increase, and therefore supply costs would also be expected to escalate. It is essential to establish a procurement contract for this equipment as soon as possible.

Also, the recently announced planned work associated with the New Energy Partnership, including the Churchill Falls Expansion and Upgrades and the Gull Island Project, both significant hydroelectric projects, will introduce market pressures on labour, engineering, equipment, and materials. A significant risk mitigation for the BDE Unit 8 project 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.

Timeline for Expenditure

The contracting strategy for BDE Unit 8 Early Execution will follow a staged procurement process that provides off-ramp mechanisms to enable Hydro to limit cost commitments and cancel the services or procurement process in the event Board approval is not provided on the 2025 Build Application. The proposed procurement approach will provide off-ramps after the initial engineering stage, and then after the model testing stage. The expenditure for the initial engineering stage is anticipated to commence in the third quarter of 2025. The payment terms for the model testing phase have not yet been established.

Please refer to Newfoundland and Labrador Hydro's ("Hydro") response to PUB-NLH-002 of this proceeding, for discussion on how Hydro intends to utilize mechanisms to mitigate Early Execution procurement risks.

<u>Environmental Assessment Registration</u>

Details and Rationale

The Environmental Assessment ("EA") Registration and continuation of stakeholder engagement is also part of the Early Execution scope of work. Hydro is committed to facilitating opportunities for the community to contribute input into decisions that will affect them, and work to incorporate strategies that minimize potential disruptions to the quality of life for those that live

and work near the site. It is essential to continue with this work, which was initiated during the Front-End Planning phase of the project in 2024, to ensure that execution plans consider feedback received from the stakeholder engagement process and conditions of release from the Department of Environment on the EA registration. This would allow the PMT to have sufficient time to address any issues or requirements without affecting the overall schedule.

Timeline for Expenditure

Costs have been partially incurred with the start of development of the EA registration and stakeholder consultations in 2024 as part of front-end engineering design. The remaining expenditures are anticipated to be made between now and the third quarter of 2025.

Contingency

Details and Rationale

Contingency funding is included to address unforeseen circumstances or major changes that may arise during project execution. This allocation would be used only in the event of significant risks or events requiring a formal change management process to be initiated.

Timeline for Expenditure

Expenditures under this category will be determined if, and only if, a significant change management is triggered during the course of the project.

Interest during Construction and Escalation

Hydro has adopted International Accounting Standard or IAS 23 concerning the recognition of Interest During Construction on capital projects. The recognition of interest, in compliance with this standard, has been included in the estimate for Early Execution work.

Further, Hydro has included, where appropriate, escalation assumptions in cost estimates in compliance with corporate policies and industry best practices.