Q. **Reference: Reliability and Resource Adequacy Study 2022 Update, Volume III, Attachments 6 and 7.**

Explain:

a) the basis for the 70 month timeframe for Bay d'Espoir Unit 8 and the confidence level regarding this timeframe.

b) the timeframe for construction if an environmental review or environmental impact statement is required for Bay d'Espoir Unit 8.

c) the probability that a contractor would accept a fixed price EPC contract for the construction and commissioning of Bay d'Espoir Unit 8, and if not expected, pricing risk expected to be borne with respect to Bay d'Espoir Unit 8 planning and execution.

d) how Hydro would manage an EPCM contract if a contractor does not accept a fixed price EPC contract.

A. **a)** As part of the "Reliability and Resource Adequacy Study – 2022 Update,"[1] Newfoundland and Labrador Hydro ("Hydro") re-engaged SNC-Lavalin to escalate the 2018 cost estimate regarding construction of Unit 8 at the Bay d'Espoir Hydroelectric Generating Facility ("Bay d'Espoir Unit 8") to year-end 2022 and re-evaluate the construction timeline based on current market conditions.[2] The 70-month timeframe was the outcome of this assessment. SNC-Lavalin based this timeframe on experience for a typical brownfield project and incorporated the project schedule provided in the 2018 cost estimate with an additional 11 months for anticipated long-lead delivery times. It was assumed the environmental approval process would require 1 year, which resulted in the total estimated project duration being 5.8 years, approximately 70 months.

[1] "Reliability and Resource Adequacy Study," Newfoundland and Labrador Hydro, October 3, 2022.
[2] The "Evaluation of Island Hydroelectric Generation Expansion Alternatives," SNC-Lavalin, October 21, 2022, is included as Attachment 4 to Hydro's response to PUB-NLH-288 of this proceeding.

Hydro is now beginning the front-end execution planning process ("FEEP") to bring the project documentation to the required standard to allow for the preparation of an application for approval by the Board of Commissioners of Public Utilities. This will include the preparation of an AACE[3] Level 3 Construction Schedule and Basis, which will incorporate long-lead timelines provided by vendors and define the schedule confidence level.

b) The proposed project will trigger various aspects of the provincial environmental assessment process and permitting requirements. Within 45 days of receiving an environmental assessment registration, the Minister of Environment and Climate Change will advise the proponent of the decision on the undertaking. The following are possible decisions:

- Undertaking released (45 days from registration).
- Environmental Preview Report (estimated 1.5 years from registration).
- Environmental Impact Statement (estimated 3-3.5 years from registration).
- Undertaking rejected.

The requirements for the proposed Bay d'Espoir Unit 8 project, which is a brownfield project, are likely to consist primarily of permit applications and approvals. SNC-Lavalin has advised in its report that it is anticipated that the project will be released from further assessment under the provincial Environmental Assessment process. The anticipated length from registration to approval, including required permit approvals, is approximately six months; however, one year has been assumed for the environmental approval process at the current planning stage. A requirement to complete an environmental preview report or an environmental impact statement could extend the project schedule by the amounts indicated in herein.

The proposed project does not trigger application of the federal *Impact Assessment Act*.[4]

c) Part of the FEEP process includes the development of a contracting strategy, which details the project delivery model, compensation methods, and procurement strategy. Hydro is in

[3] American Association of Cost Engineering ("AACE").
[4] *Impact Assessment Act*, SC 2019, c 28, s 1.

the process of engaging a consultant to prepare a recommended contracting strategy that will include the evaluation of various contracting models such as EPC,[5] EPCM,[6] etc. The contracting strategy evaluation will consider the following constraints:

- Contracting capabilities/capacities;
- Current supply and demand;
- Other work in the region;
- Schedule constraints;
- Regulatory constraints;
- Operational constraints;
- Responsibility splits;
- Scope of work interfaces;
- Risk acceptance/avoidance; and
- Allocation of risk to the party best able to manage the risk.

d) Please refer to part c) of this response.

[5] Engineering, Procurement, and Construction ("EPC").
[6] Engineering, Procurement, and Construction Management ("EPCM").