Q. Reference: Application, Unit 7 Condition Assessment (2023) – Bay d'Espoir)

- a) Given that the inspection identifying excessive wear was conducted in 2019, why has Hydro waited until 2023 to conduct a detailed condition assessment?
 - **b)** Please explain how a ranking of 4 was determined for the likelihood of failure owing to deferment of a condition assessment.

- A. a) While executing planned work on Unit 7 in 2019, Newfoundland and Labrador Hydro ("Hydro") worked with the original equipment manufacturer to also complete the unplanned work necessary to ensure Unit 7 was reliable for the near term, as described in Section 3.0 of the project proposal.¹ The next planned major inspection and refurbishment for Unit 7, under Hydro's Hydraulic Unit Overhauls program, is planned for 2025. To confirm and plan the scope of work to be executed during the scheduled 2025 Unit 7 outage, Hydro has proposed that a level II condition assessment be completed in 2023. The 2023 assessment will further confirm and evaluate the condition of components to determine the recommended refurbishment requirements for the long-term reliability of Unit 7.
 - b) Failure to conduct the proposed condition assessment in 2023 would result in delays in the major inspection and refurbishment for Unit 7 planned for 2025. This planned major inspection and refurbishment is necessary to ensure the safe and reliable operation of the unit and is required to address issues identified but not addressed during the 2019 inspection. A delay in the timing of the major inspection and refurbishment is expected to significantly increase the likelihood of unit failure; as such, a likelihood ranking of 4 was assigned, which corresponds to probable failure within two years of the planned inspection.

¹ "2023 Capital Budget Application," Newfoundland and Labrador Hydro, July 13, 2022, vol. II, sch. 6, proj. 23, sec. 3.0, pp. 3–4.