Q. Reference: Newfoundland Power's 2027 Capital Budget Application, 3.1 Rose Blanche Hydro Plant Refurbishment

a) Explain how Newfoundland Power determined that the Rose Blanche Hydro Plant assets proposed for replacement have reached the end of their service life, having regard to the plant's age and the depreciable life of the assets.

b) What system risks and operational issues are the assets proposed for replacement causing?

c) Give details on the changes in existing infrastructure conditions responsible for advancing the project to 2027, as it was originally planned for 2029 in the 2026 CBA.

d) Provide reasons for the increase in cost from $859,000 as proposed in the 2026 CBA to $1,728,000.

e) Provide any asset-condition assessment reports of Newfoundland Power's hydroelectric plants completed during the last five years.

f) Explain how potential hydroelectric plant enhancement has been considered in the context of Newfoundland and Labrador Hydro's generation expansion plans.

A. a) The *Rose Blanch Hydro Plant Refurbishment* project consists of three main scopes of work: (i) governor system, (ii) protection and control system, and (iii) auxiliary power unit. The governor system and the auxiliary power system are justified on the basis that these systems do not effectively function as required for reliable Plant operation and are experiencing ambient temperature related issues. The protection and control system has reached the end of its service life due to system obsolescence. Neither of these scopes of work are required due to age related asset degradation nor the depreciable life of the hydro generation asset class.

b) The governor system is at risk of overheating, resulting in unit unavailability during warmer temperature operation. The protection and control system is at risk of failing in service, resulting in an extended Plant outage of approximately 18 months. The auxiliary power unit will provide inefficient heating of the Plant and, as a result, the unit is at risk of being unavailable during colder temperature operation.

c) Newfoundland Power's capital plan provides reasonable visibility of likely upcoming capital expenditures. Projects may be advanced, delayed, added or removed from the plan and costs may change as projects are developed over time and as the capital plan is reviewed and updated annually.

The *Rose Blanche Hydro Plant Refurbishment* project was originally identified in Newfoundland Power's *2023-2027 Capital Plan* for completion in 2027 at a cost

of $800,000.[1] The project has remained in Newfoundland Power's capital plans since that time. The project has been proposed in the *2027 Capital Budget Application* as sufficient engineering inspections and project scope and estimate development have occurred to proceed with the project.

d) Since the submission of the *2026 Capital Budget Application*, additional assessment and preliminary design have been completed, resulting in an increase in scope as well as updated pricing information from suppliers. These are the primary drivers of the increase in the proposed project budget.

e) Newfoundland Power conducts detailed asset condition assessment reports when operations surveillance and testing identify the requirement for capital investment. Asset condition assessment reports for Newfoundland Power's hydroelectric plants, in addition to the condition assessment filed as part of the *Rose Blanche Hydro Plant Refurbishment* project, submitted to the Board of Commissionaires of Public Utilities in the past five years are as follows.

(i) Mount Carmel Pond Dam Refurbishment[2]
(ii) Lookout Brook Hydro Plant Refurbishment[3]
(iii) Mobile Hydro Plant Surge Tank Refurbishment[4]
(iv) Sandy Brook Hydro Plant Generator Refurbishment[5]
(v) Mobile Hydro Plant Refurbishment[6]
(vi) Sandy Brook Plant Penstock Replacement[7]

f) Newfoundland Power continually assesses potential capital projects to assist in providing generation support to the Island Interconnected System ("IIS") in a manner that is least cost for customers.

Generation capacity from Newfoundland Power's hydro plants is included in Newfoundland and Labrador Hydro's ("Hydro") *Reliability and Resource Adequacy* proceeding, including Hydro's *2024 Resource Adequacy Plan*.[8] Generation capacity from Newfoundland Power's hydro plants is also factored into Hydro's Utility rate to Newfoundland Power in the form of a hydro generation credit.[9] In its *2026 General Rate Application*, Hydro estimated Newfoundland Power's hydro plants provide 64 MW of firm capacity to the IIS.[10] Enhancement of components of the Company's hydro plants that increase

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1 See Newfoundland Power's *2023-2027 Capital Plan*, filed with the *2023 Capital Budget Application.*
2 See the *2025 Capital Budget Application* report *4.1 Mount Carmel Pond Dam Refurbishment*.
3 See the *2024 Capital Budget Application* report *4.1 Lookout Brook Plant Refurbishment*.
4 See the *2024 Capital Budget Application* report *4.2 Mobile Hydro Plant Surge Tank Replacement Refurbishment*.
5 See the *2023 Capital Budget Application* report *4.1 Sandy Brook Hydro Plant Generator Refurbishment*.
6 See the *2023 Capital Budget Application* report *4.2 Mobile Hydro Plant Refurbishment*.
7 See the *2022 Capital Budget Application* report *1.2 Sandy Brook Plant Penstock Replacement*.
8 See Hydro's *2024 Resource Adequacy Plan, Appendix B*, page 26 of 57.
9 See Hydro's *2026 General Rate Application*, *Chapter 6: Rates and Regulations*, section *6.2.3 Generation Credit Provided to Newfoundland Power*.
10 *Ibid.*

capacity available during peak would be recognized in Hydro's resource adequacy plans and offset additional capacity resources that would be required on the IIS to the extent possible. For example, the Company is currently completing automation of upstream reservoir gates at Mount Carmel Pond, as part of the approved projects to refurbish the dam and construct new fibre.[11] The Board has also recognized that the completion of this work provides benefits to the IIS.[12]

Newfoundland Power will continue to seek approval of capital projects to address deteriorated and obsolete equipment in its hydro plants to continue to provide low-cost energy and capacity to the IIS, as well as enhancements to maximize winter on-peak availability as they are proven to be economically viable.

[11] See the *2025 Capital Budget Application*, report *4.1 Mount Carmel Pond Dam Refurbishment*. See also, the *2026 Capital Budget Application*, Schedule C, page 6.

[12] In Board Order No. P.U. 38 (2025), page 11, the Board stated, "*The Board finds that the evidence demonstrates that the automation of the Mount Carmel Pond gate provides benefits to the system, both operationally and financially. It eliminates the requirement for staff to travel to the remote location, provides an opportunity to maximize generation from the Mount Carmel Pond reservoir and in conjunction with the already approved refurbishment project, provides a net benefit to customers.*"