

1 Q. **Reference: Application**

2 According to Hydro’s December 9, 2025 Effective Load Carrying Capacity Study, Attachment 1,
3 page 20, Newfoundland Power has proposed refurbishing its Greenhill and Wesleyville plants in
4 2028 and 2029, raising their combined capacity from 28MW to 48MW.

5 a) If Newfoundland Power proceeds with those refurbishments, then how is the rationale
6 for the Avalon CT affected?

7 b) In developing its Build Application, what did Hydro assume regarding the future
8 availability of the Greenhill and Wesleyville plants?

9 c) Have the economics of increasing/decreasing the capacity of these units been studied to
10 determine the optimum level from the perspective of both Newfoundland Power and
11 Hydro customers?
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14 A. a) In short, the Avalon Combustion Turbine (“CT”) is still required if Newfoundland Power Inc.
15 (“Newfoundland Power”) proceeds with those refurbishments. The results of Newfoundland
16 and Labrador Hydro’s (“Hydro”) analysis, detailed below, continue to demonstrate that both
17 Bay d’Espoir Unit 8 (“BDE Unit 8”) and the Avalon CT continue to represent the least-cost
18 first steps to meeting the Reference Case reliability requirements, including under the
19 Labrador-Island Link (“LIL”) shortfall scenario.

20 As part of the Expansion Plans analysis in the 2024 Resource Adequacy Plan,¹ Hydro felt it
21 prudent to complete sensitivities to determine the impacts of a proposed un-restriction of
22 CT additions—namely from Newfoundland Power’s Wesleyville and Greenhill CTs. This
23 original analysis can be found in the 2024 Resource Adequacy Plan as the referenced
24 Scenario 1AEI (Reference Case),² as well as Scenario 4AEI (for the Minimum Investment

¹ “2024 Resource Adequacy Plan – An Update to the Reliability and Resource Adequacy Study,” Newfoundland and Labrador Hydro, rev. August 26, 2024 (originally filed July 9, 2024).

² *Supra*, f.n. 1, app. C, sec. 6.2.1.1.13, pp. 69–70 of 163.

1 Required).³ These were considered preliminary analyses subject to Board of Commissioners
2 of Public Utilities (“Board”) review, and were limited in terms of specificity surrounding:

- 3 ● The exact capacity that can be achieved by refurbishing and uprating the proposed
4 CTs;
- 5 ● Detailed costs of proposed CT refurbishment (not included in the net present value
6 calculations);
- 7 ● Forecasted emissions from Newfoundland Power CTs; and
- 8 ● Fueling supply and requirements for Newfoundland Power CTs.

9 Following submission of the 2025 Build Application,⁴ as part of the Board’s correspondence
10 on July 22, 2025,⁵ the Board requested Hydro model additional sensitivities surrounding CT
11 additions, subject to the analysis submitted by the Board’s expert consultant.⁶ An analysis of
12 the impact of Newfoundland Power’s planned CT refurbishment on Hydro’s recommended
13 Expansion Plan was also provided in Hydro’s response to the Board’s request for additional
14 information.⁷

15 Hydro’s analysis ultimately found that in every scenario, the initial resource selected as part
16 of the least-cost portfolio of resources remains BDE Unit 8. While the addition of 48 MW of
17 Newfoundland Power’s CT as an assumption in this analysis reduces the generation shortfall
18 statistics compared to a scenario where Newfoundland Power’s CTs were assumed to have
19 reached their end of life in 2030, neither scenario meets Hydro’s shortfall criteria. In
20 addition, the results continue to demonstrate that both BDE Unit 8 and the Avalon CT
21 continue to represent the least-cost first steps to meeting the Reference Case reliability
22 requirements, including under the LIL shortfall scenario. Further, the combination of assets

³ *Supra*, f.n. 1, app. C, sec. 6.2.2.1.12, p. 84 of 163.

⁴ “2025 Build Application – Bay d’Espoir Unit 8 and Avalon Combustion Turbine,” Newfoundland and Labrador Hydro, March 21, 2025.

⁵ “Newfoundland and Labrador Hydro - 2025 Capital Budget Supplemental Application - Application for Capital Expenditures for the Purchase and Installation of Bay d’Espoir Unit 8 and Avalon Combustion Turbine - To Parties – Request to Hydro to Provide Additional Information,” Board of Commissioners of Public Utilities, July 22, 2025.

⁶ “Expert Report of Vincent Musco and Collin Cain,” Bates White Economic Consulting, LLC, June 26, 2025.

⁷ “2025 Build Application – Request to Hydro to Provide Additional Information – Hydro’s Reply,” Newfoundland and Labrador Hydro, September 11, 2025.

1 provides diversity to the system and a holistic approach to balancing cost, reliability, and
2 environmental considerations.

3 **b)** For the purposes of the 2025 Build Application, Hydro assumed the retirement of
4 Newfoundland Power’s Greenhill and Wesleyville CTs, in accordance with Newfoundland
5 Power’s corporate plan at that time. In their 2026 Capital Budget Application,
6 Newfoundland Power included the refurbishment and expansion of these assets in their
7 five-year capital plan. Hydro subsequently, at the request of the Board, performed
8 additional analysis to assess the potential impacts of these investments on Hydro’s
9 recommended expansion plan, as described in part a) of this response.

10 **c)** Hydro has studied the impact of incremental additions of CT capacity to the system as part
11 of a separate expansion plan and LIL shortfall analysis. Hydro’s Expansion Plan modelling
12 selects resource additions on the basis of their capital, operating, and maintenance costs
13 and technical characteristics, regardless of asset ownership. Hydro believes that its
14 expansion plan modelling provided as part of the 2024 Resource Adequacy Plan, the 2025
15 Build Application, along with additional modelling directly assessing Newfoundland Power’s
16 proposed refurbishments, as well as generic 50 MW incremental CT additions filed with the
17 Board,⁸ fulsomely assess the resource requirements of the Island Interconnected System
18 under various scenarios, including the impacts of Newfoundland Power’s proposed CT
19 refurbishments. Hydro has not studied the economics of increasing/decreasing CT additions
20 to Newfoundland Power’s fleet. As Newfoundland Power’s proposed refurbishments are
21 geographically dispersed across the Island, further study would be required to assess their
22 impacts on the Island Interconnected System reliability, including the impact of any
23 transmission constraints and proposed solution. As stated in part a) of this response, the
24 results of Hydro’s analysis to date continue to demonstrate that both BDE Unit 8 and the
25 Avalon CT continue to represent the least-cost first steps to meeting the Reference Case
26 reliability requirements.

⁸ *Supra*, f.n. 7.