Q. **Reference: Application, Schedule 1: Upgrade Report – Penstock 1 Life Extension – Bay d'Espoir, Page 13, lines 5-8.**

> If a minor failure were to occur during peak winter demand, this would likely take longer to repair and remove 153 MW from the system when it is needed. Hydro estimated the cost to replace 153 MW with generation from the Holyrood Thermal Generating Station ("Holyrood TGS"), at a high level, would be approximately $120/MWh.

What other options are there for replacement generation other than the Holyrood TGS, and what is the estimated cost?

A. Newfoundland and Labrador Hydro ("Hydro") notes that the cost per MWh provided in Schedule 1.[1] A correction to the referenced statement follows

> Hydro estimated the cost to replace 153 MW with generation from the Holyrood Thermal Generating Station ("Holyrood TGS"), at a high level, would be approximately $252/MWh.[2]

The following are current options for replacement generation other than the Holyrood TGS:

- Standby Generation Sources: Holyrood Gas Turbine, Hardwoods Gas Turbine, and Stephenville Gas Turbine at a cost of approximately $295 per MWh.[3] The Holyrood Gas Turbine has a rated capacity of 120 MW and the Hardwoods and Stephenville Gas Turbines each have a rated capacity of 50 MW. The Stephenville Gas Turbine is currently planned for retirement on March 31, 2024. In the "Reliability and Resource Adequacy Study – 2022 Update,"[4] Hydro proposed the extension of the Hardwoods Gas Turbine until 2030, after which this unit is also expected to retire. In addition, Hydro has three diesel generating stations that can be called upon at Holyrood, Hawke's Bay, and

[1] "Application for Approval of Capital Expenditures for Section Replacement and Weld Refurbishment for Bay d'Espoir Hydroelectric Generating Facility Penstock 1," Newfoundland and Labrador Hydro, December 7, 2022, sch. 1, p. 13/5–8.
[2] This value is subject to change, depending on market fuel price.
[3] Rate is subject to change, depending on market fuel price.
[4] "Reliability and Resource Adequacy Study – 2022 Update," Newfoundland and Labrador Hydro, October 3, 2022.

St. Anthony that provide a total capacity of 23.2 MW at a cost of approximately $366 per MWh.[5]

- Corner Brook Pulp and Paper Capacity Assistance Agreement: From November 1 to April 30, Hydro has the ability to call upon Corner Brook Pulp and Paper Ltd ("CBPP") for capacity assistance up to 90 MW,[6] at a maximum cost of $260 per MW per hour. However, the duration of each request is limited to no more than six hours, no more than twice in a calendar day, and up to 250 hours during the winter period. The capacity assistance contract also has provisions for an extended duration capacity assistance to a maximum of 50 MW for two weeks; however, participation by CBPP is voluntary. Although the current contract is due to expire at the end of winter 2022–2023, since the winter of 2014–2015, CBPP has been willing to enter into mutually beneficial capacity assistance arrangements with Hydro. Hydro assumes that similar arrangements will continue.

- Firm Imports: Currently, there are no long-term firm import contracts in place, although there is a possibility that import contracts could become available at some point in the future. To date, Hydro has not secured any capacity support from external markets for a duration longer than one month and does not have the basis to assume that imports from external markets up to 150 MW would be available during peak winter demand.

[5] This value is subject to change, based on market fuel price.
[6] The Corner Brook Pulp and Paper Capacity Assistance Agreement allows for requests up to 105 MW or other amount as confirmed in a test prior to each winter period. The maximum request as per the 2022 test is 90 MW.