Q. **Reference: Hydro's 2027 CBA, Schedule 3, page 3)**

Hydro states "*In 2025, Holyrood TGS was responsible for approximately 11% of the Island's energy needs.*" Clarify. Was Holyrood "needed" to provide 11% of the Island's energy needs or could this energy have been provided from other sources if Holyrood had not been online and required to meet minimum loading requirements?

A. The capacity of the Holyrood Thermal Generating Station ("Holyrood TGS") is required to be available to support the Island Interconnected System from late fall to early spring during the "Bridging Period."[1] During this period, the main function of Holyrood TGS is to provide a backup for the loss of the Labrador-Island Link ("LIL") bipole.[2] In addition, Holyrood TGS supports operating reserves and provides an energy injection into the Island Interconnected System during periods of drought (i.e., sustained periods of below-average inflows), at times operating above minimum, if required. In order to balance cost versus reliability, Newfoundland and Labrador Hydro ("Hydro") has been endeavoring to maintain two units online operating at minimum during the winter peak load period, with one unit in standby. For these reasons, the Holyrood TGS thermal contribution in 2025 was approximately 11% of the Island Interconnected System's energy needs, compared to 40% that the facility is capable of providing when all units are in operation. To maintain the units at minimum, by default they would have to supply approximately 6.5% of the system's energy requirements in 2025, out of the 11% that was contributed in that same year.

If the Holyrood TGS units were not required to maintain system reliability, and if energy injection were the only requirement, then this energy can come from other sources, such as

[1] Hydro considers the Bridging Period to be from the present to 2030, or until such time that sufficient alternative generation is commissioned, adequate performance of the LIL is proven, and generation reserves are met. During the Bridging period, the system would rely primarily on existing sources of generation capacity to maintain reliability while new generation capacity is being built.

[2] Hydro protects against the loss of the LIL bipole such that if it were to occur, there is sufficient generation to restore customers within 30 minutes.

increased LIL deliveries to the Island, or increased hydro production on the Island, provided Hydro was not experiencing a critical dry sequence or similar drought period. At a significant increase in unit energy cost compared to Holyrood TGS, standby generation can also contribute energy to the Island Interconnected System.

In 2025, the Island experienced a drought from mid-summer until late fall. In order to support reservoir storage, as aggregate storage was approaching minimum storage limits,[3] Holyrood TGS Unit 1 was kept online at a maximum of 100 MW from September 18–20, 2025 to support reservoir storage. Unit 1 remained online in October 2025 for system requirements and to support reservoir storage. Unit 2 came online mid-October 2025, also supporting system requirements and reservoir storage. Holyrood TGS Units 1 and 2 were online during the month of November 2025 and operating above minimum until the third week of November for system requirements and to support reservoir storage. Beyond this timeframe, thermal injection was no longer required to support reservoir storage due to a series of rain events across Hydro's reservoir system, which resulted in an overall increase in system energy storage, and Holyrood TGS went back to two units operating at minimum. This resulted in a thermal injection of 130.5 GWh more than what was planned for September–November 2025. Therefore, out of the 11% contribution, approximately 17% of this amount was attributed to the drought conditions experienced on the Island. Standby generation was not used to support reservoir storage, and LIL deliveries to the Island were maximized to the extent possible. In addition, Hydro engaged Energy Marketing to seek non-firm Maritime Link imports to help support reservoir storage, resulting in an additional 21.7 GWh of energy into the Island Interconnected System during this period. Once Holyrood TGS is retired, additional energy is required in the Island Interconnected

[3] Minimum storage limits are developed annually to provide guidance in the reliable operation of Hydro's major reservoirs—Victoria, Meelpaeg, Long Pond, Cat Arm, and Hinds Lake. The minimum storage limit is designed to indicate the minimum level of aggregate storage required such that if there was a repeat of Hydro's critical dry sequence, or other less severe sequence, Hydro's load can still be met through the use of the available hydraulic storage supplemented with maximized deliveries of power from the Muskrat Falls Hydroelectric Generating Facility over the LIL. Hydro's long-term critical dry sequence is defined as January 1959 to March 1962. Other dry periods are also considered during this analysis to ensure that no other shorter-term historic dry sequence could result in insufficient storage.

System to meet Hydro's firm energy requirements with firm system capability,[4] as defined in the 2024 Resource Adequacy Plan.[5]

From a 2026 General Rate Application ("GRA") perspective, the production plan is produced utilizing average Island inflows, not below-average inflows that could be experienced during a drought period. Therefore, additional thermal injection to support reservoir storage is not a consideration of the 2026 GRA. Rather, it is assessed based on the number of Holyrood TGS units required to be online to support system reliability until new generation can be approved, constructed, and reliability integrated into the Island Interconnected System, which is beyond the scope of the 2027 Test Year. Under normal operating conditions, the energy injected into the system by Holyrood TGS is a direct result of that reliability requirement.

[4] Firm capability for the hydroelectric resources is the firm energy capability of those resources under the most adverse three-year sequence of reservoir inflows occurring within the historical record, defined as January 1959 to March 1962.
[5] "2024 Resource Adequacy Plan – An Update to the Reliability and Resource Adequacy Study," Newfoundland and Labrador Hydro, rev. August 26, 2024 (originally filed July 8, 2024), app. B.