Q. **Reference: CA-NLH-056**

It is stated that "*Hydro has stated that all three units would remain available through the Bridging Period, should they be required to mitigate against the potential for a Labrador-Island Link bipole outage and to ensure that system reliability remains within the acceptable limits of planning criteria*."

a) Please identify each bipole outage since the LIL was declared in service, including the date and time of the outage, the date and time the LIL was restored to service, the amount of lost load or load shedding during the event, and the role Holyrood TGS played during the outage including its impact on the amount of lost load or load shedding during the event.

b) Does Hydro's commitment to keep all 3 units available during the Bridging Period supersede its mandate to deliver power to consumers at the lowest possible cost, in an environmentally responsible manner, consistent with reliable service?

c) Please explain how the continued operation of all 3 units at Holyrood TGS is consistent with Hydro's mandate addressing its high cost, poor reliability and severe environmental impact.

A. **a)** Please refer to Table 1 for a summary of each bipole outage since the commissioning of the Labrador Island Link ("LIL") in April 2023.

Under-Frequency Load Shedding ("UFLS") is a protection and control mechanism that occurs automatically in response to a system event when required to maintain stability. It is the system's primary response to a bipole outage before Newfoundland and Labrador Hydro ("Hydro") dispatches further generation. It should be noted that the role of the Holyrood Thermal Generating Station ("Holyrood TGS") is not to avoid UFLS in the event of a bipole trip on the LIL; rather, it is intended to provide capacity to restore customers and ensure adequate system reserves for the duration of the outage.

Table 1: LIL Bipole Outage Events Since Commissioning

Date and Time of Event	Date and Time of Bipole Restoration	Load Shed (MW)	Role of Holyrood TGS
June 6, 2026, at 1137 hours	Bipole operation was restored on June 6, 2026, at 1317 hours.	185	All units offline on annual outage.
February 27, 2026, at 1120 hours	Bipole operation was restored on February 27, 2026, at 1641 hours.	596.5	Maximum output pre-event: 180 MW Maximum output post-event: 300 MW 3 units online, output maximized post-event.
February 13, 2026, at 1659 hours	Bipole operation was restored on February 14, 2026, at 1722 hours.	270	Maximum output pre-event: 113 MW Maximum output post-event: 198 MW 2 units online, output increased post-event.
January 13, 2025, at 1446 hours	Bipole operation was restored on January 13, 2025, at 2215 hours	-[1]	Maximum output pre-event: 70 MW (1 unit online) Maximum output post-event: 215 MW (2 units online) Output increased post-event.
October 18, 2024, at 1133 hours	Bipole operation was restored on October 18, 2024, at 1950 hours.	98	Maximum output pre-event: 102 MW Maximum output post-event: 242 MW 3 units online, output increased post-event.
July 28, 2024, at 1350 hours (Event 1); and at 1401 hours (Event 2)	Bipole operation was restored on July 28, 2024, at 2315 hours.	49 (Event 1), 225 (Event 2)	All units offline on annual outage.
July 5, 2023, at 1225 hours	Bipole operation was restored on July 5, 2023, at 1825 hours.	-[2]	All units offline on annual outage.
June 1, 2023, at 1651 hours	Bipole operation was restored on June 2, 2023, at 0000 hours.	-[3]	All units offline on annual outage.

The UFLS events noted in Table 2 are not attributed to a LIL bipole outage but were the result of a single pole trip while the LIL was operating in monopole operation due to ongoing maintenance, or operational issues on the other pole.

[1] This bipole trip did not result in a UFLS event.
[2] *Supra* f.n. 1.
[3] *Supra* f.n. 1.

Table 2: LIL Monopole UFLS Events Since Commissioning

Date and Time of Event	Date and Time of Bipole Restoration	Load Shed (MW)	Role of Holyrood TGS
October 7, 2025, at 1946 hours	Return to planned monopole operation on October 8, 2025, at 1829 hours. Return to bipole operation on October 15, 2025, at 2128 hours upon conclusion of planned outage.	103	Maximum output pre-event: 100 MW Maximum output post-event: 100 MW 1 unit online, no change in output as a result of the event.
September 20, 2025, at 0404 hours	Return to planned monopole operation on September 20, 2025 at 1426 hours. A planned bipole outage begun September 21, 2025, at 0720 hours, with return to bipole operation on September 30, 2025, at 1222 hours.	66	Maximum output pre-event: 70 MW Maximum output post-event: 72 MW 1 unit online, no change in output as a result of the event.
January 22, 2025, at 0318 hours	Bipole operation was restored February 9, 2025, at 1528 hours after the conclusion of tower peak repairs and multiple planned outages.	99	Maximum output pre-event: 140 MW Maximum output post-event: 295 MW 2 units online, output increased post-event.
February 9, 2024, at 1145 hours	Bipole operation was restored on February 9, 2024, at 2201 hours.	70	Maximum output pre-event: 216 MW Maximum output post-event: 233 MW 2 units online, output increased post-event.
August 21, 2023, at 1421 hours	Bipole operation was restored on August 21, 2023 at 1831 hours.	39	All units offline on annual outage.

b) Hydro's determination in the *Reliability and Resource Adequacy Study Review* that three Holyrood TGS units should be maintained during the Bridging Period does not supersede its statutory mandate; it is a direct application of it. The mandate requires Hydro to provide power at the lowest possible cost consistent with reliable service, in an environmentally responsible manner. The three aspects of the mandate, least cost, reliable, and environmentally responsible, are considered together. Hydro's reliability analysis has consistently shown that, until additional generating resources are in service and proven reliable, Holyrood TGS units must remain available for Hydro to meet its established reliability criteria, including during a LIL bipole outage. The February 2026 events in Table 1, when Holyrood output was increased to support customer restoration and system reserves, show this capacity being used.

Hydro has evaluated alternatives to the Holyrood TGS through its reliability and resource adequacy study and its 2025 Build Applications, both of which determined that the

proposed Avalon Combustion Turbine and Bay d'Espoir Unit 8 are the least cost, prudent options to allow the retirement of the Holyrood TGS. Keeping the Holyrood TGS units available until those resources are in service is therefore the least-cost means of providing reliable service during the Bridging Period and is fully consistent with Hydro's mandate.

c) Please see Hydro's response to part b). Keeping the Holyrood TGS units available[4] is necessary to meet Hydro's reliability criteria during the Bridging Period, and it is the least-cost means of doing so until the proposed replacement resources are in service. Hydro manages the operation of the Holyrood TGS to limit fuel consumption and emissions, operating units only as system requirements dictate, and remains committed to retiring the Holyrood TGS once sufficient replacement generation is in service.

[4] Holyrood TGS may be maintained as available generation capacity without being in operation. Availability reflects the ability to place the units into service when required, whereas operation refers to the units being online and generating electricity in response to system requirements.