

1 Q. **Reference: Application, Volume II, Exhibit 4, Load Forecast and Sources of Supply page 5.**

2 a) At lines 10-12, it notes “[...] *This change in the UFLS scheme has greatly reduced*
3 *constraints, and the capacity provided by the LIL can now fully support the Island*
4 *Interconnected System load, less firm contractual commitments to Nova Scotia*”. Please
5 explain the meaning of “fully support” in the context of this sentence.

6 b) Footnote 16 indicates: “*For clarity, the final UFLS scheme was not reflected in the 2027*
7 *Test Year as it was implemented after the production plan was developed*”. Please
8 provide:

9 i. (a comprehensive list of the 2027 GRA inputs, variables, assumptions, etc. that
10 would change if the final UFLS scheme was known and reflected in the GRA.

11 ii. an assessment of the direction of change of the estimate, and if possible, an
12 indication of the magnitude of the change.

13 c) Page 7 indicates: “*Since the commissioning of the LIL, the Holyrood TGS is not required to*
14 *provide energy to the system during average hydrological conditions.*” Please indicate if
15 the PLEXOS runs supporting the GRA are based on this same conclusion, or whether this
16 conclusion only arises after adoption of the final UFLS scheme, which was finalized after
17 the GRA was prepared.

18 d) Please update Slide 47 (Maritime Link-LIL Relationship) from Technical Conference #3
19 Resource Adequacy Plan dated October 16, 2024, based on the latest LIL capacity and
20 UFLS assumptions.

21 e) Please provide the latest Firm Energy Analysis to 2034 using the updated LIL capacity
22 and UFLS assumptions (e.g. as an update to Slides 56-58 of the Technical Conference #3
23 Resource Adequacy Plan dated October 16, 2024) based on existing and committed
24 resources. Please provide the same information for capacity.

1 A. a) The phrase “fully supported” is clarified below.

2 The revised Under-Frequency Load Shedding (“UFLS”) scheme has substantially reduced
3 constraints on the Labrador-Island Link (“LIL”), allowing transfers to reach the full 900 MW
4 bipole rating during peak load conditions (2,000 MW) under normal operations, with the
5 158 MW firm export commitment to Nova Scotia being served. This scenario maximizes Net
6 dc,¹ defined as the difference between LIL deliveries at Soldiers Pond and Maritime Link
7 exports, resulting in approximately 670 MW of net power being absorbed by the Island
8 Interconnected System when the 158 MW firm export commitment to Nova Scotia is being
9 delivered. This was an outcome resulting from the revised UFLS scheme, as it enables the
10 Island Interconnected System to absorb the maximum amount of power delivered over the LIL
11 during peak demand periods, when additional supply provides the greatest benefit.

12 b) i. The final UFLS scheme allows for an incremental amount of more energy to be delivered
13 to the Island via the LIL than the scheme that was used when completing the PLEXOS
14 runs for the 2027 Test Year. While the final UFLS scheme was implemented after the
15 production plan for Newfoundland and Labrador Hydro’s (“Hydro”) 2026 General Rate
16 Application (“GRA”) was developed, Hydro used a draft version of the final scheme.
17 Please refer to Chart 1 provided in part d) of this response, which compares the final
18 UFLS scheme and the UFLS scheme used for the GRA production plan.

19 ii. These changes in LIL modelling may have a small impact on the timing of exports, but
20 they do not have a significant impact on the amount of energy that would flow to the
21 Island or the thermal generation needed to serve domestic customers.

22 c) The quoted sentence is further elaborated in the sentence that follows:

23 Since the commissioning of the LIL, the Holyrood TGS is not required to
24 provide energy to the system during average hydrological conditions.
25 Therefore, as noted above, the units are typically run at their minimum
26 generation of 70 MW per unit unless they are required to generate above
27 this level to serve customer load.²

¹ Direct current (“dc”).

² “2026 General Rate Application,” Newfoundland and Labrador Hydro, May 27, 2026, vol. II, exh. 4, p. 7/1–4.

This passage indicates that the units are typically run at their minimum generation levels³ but are required to generate above these minimum levels for approximately 3% of the hours in the year to serve customer load.

The Holyrood Thermal Generating Station (“Holyrood TGS”) is not required to run above minimum generation for energy needs in the PLEXOS model used for the 2027 Test Year, with either the UFLS scheme that was used in the 2026 GRA production plan, or the final UFLS scheme that is implemented for use on the Island Interconnected System.

- d) The chart presented on Slide 47 of Hydro’s Technical Conference #3 of the Resource Adequacy Plan has been updated accordingly and is provided as Chart 1.

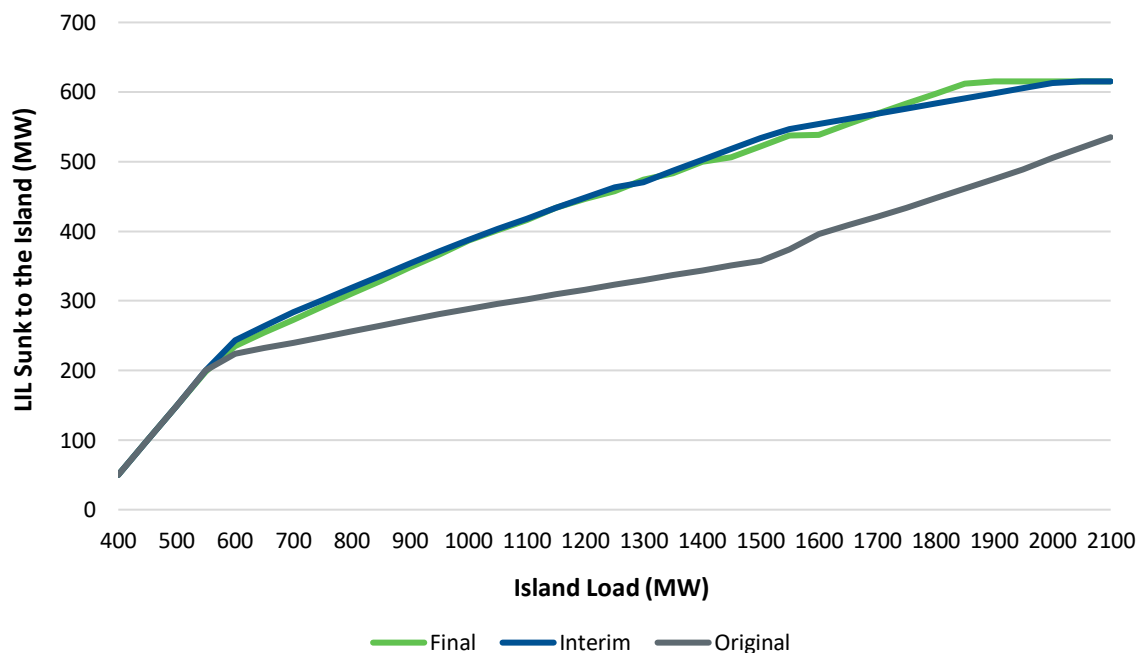


Chart 1: Maritime Link – LIL Relationship

- e) The requested information would be appropriately considered within the ongoing *Reliability and Resource Adequacy Study Review* proceeding before the Board of Commissioners of Public Utilities. It is Hydro’s opinion that the information requested is not necessary for a

³ 70 MW is the typical minimum for the Holyrood TGS units; however, they are forecasted to go to a minimum of 50 MW from March 15 through March 31.

- 1 satisfactory understanding of the matters to be considered in the 2026 GRA as required by
- 2 the *Board of Commissioners of Public Utilities Regulations, 1996*.