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November 17, 2025

The Board of Commissioners of Public Utilities Prince Charles Building 120 Torbay Road, P.O. Box 21040 St. John's, NL A1A 5B2

Attention: Jo-Anne Galarneau

Executive Director and Board Secretary

Re: Monthly Energy Supply Report for the Island Interconnected System for October 2025

Enclosed please find Newfoundland and Labrador Hydro's Monthly Energy Supply Report for the Island Interconnected System as directed by the Board of Commissioners of Public Utilities.

Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

Shirley A. Walsh Senior Legal Counsel, Regulatory SAW/mc

Encl.

ecc:

Board of Commissioners of Public Utilities Jacqui H. Glynn Ryan Oake

Board General

Consumer Advocate

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Monthly Energy Supply Report for the Island Interconnected System for October 2025

November 17, 2025

A report to the Board of Commissioners of Public Utilities



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1.0 Introduction

1

- 2 On February 8, 2016, the Board of Commissioners of Public Utilities ("Board") requested Newfoundland
- and Labrador Hydro ("Hydro") file a biweekly report containing, but not limited to, the following: 3
- 4 1) System Hydrology Report;
- 5 2) The thermal plant operated in support of hydrology;
- 6 3) Production by plant/unit; and
- 7 4) Details of any current or anticipated long-term derating.
- 8 In July 2016, the Board indicated that a monthly report would thereafter be sufficient. This report
- 9 provides data for October 2025.
- 10 Ownership of the Water Management function resides within Hydro in the Resource and Production
- 11 Planning department and is at all times guided by Hydro's operating instructions and environmental
- 12 standards. This group works in consultation with Energy Marketing to optimize the use of Hydro's
- 13 hydrologic resources through import/exports and to ensure that the security of supply for domestic load
- for Hydro's customers remains paramount in all decisions, ensuring the delivery of least-cost, reliable 14
- service in an environmentally responsible manner. 15

2.0 System Hydrology 16

- Reservoir inflows in October 2025 were 80% below the month's historical average. ¹ Table 1 summarizes 17
- 18 the aggregate storage position of Hydro's reservoirs at the end of the reporting period.

Table 1: System Hydrology Storage Levels

| Date | 2025 (GWh) | 2024 (GWh) | 20-Year Average (GWh) | Minimum Storage Limit (GWh) | Maximum Operating Level (GWh) | Maximum Operating Level (%) |
|-----------------|---------------|---------------|-----------------------------|-----------------------------------|-------------------------------|--------------------------------------|
| 31-October-2025 | 1,007 | 1,491 | 1,842 | 1,069 | 2,452 | 41 |

¹ Calculated in terms of energy [gigawatt hour ("GWh")].



- 1 The aggregate reservoir storage level on October 31, 2025 was 1,007 GWh, which is 59% below the
- 2 seasonal maximum operating level and 94% of the minimum storage limit.² Total system energy for the
- 3 month decreased by 187 GWh overall, resulting in a total system energy storage 835 GWh below the 20-
- 4 year average. Inflows to the reservoirs of the Bay d'Espoir Hydroelectric Generating Station ("Bay
- 5 d'Espoir") were 12% of average in October 2025. Inflows to the Hinds Lake Reservoir were 29% of
- 6 average and inflows to the Cat Arm Reservoir were 51% of average during the month.
- 7 From October 9 to 10, 2025, a total of 13 mm of rainfall was recorded at Burnt Dam Spillway, 25 mm at
- 8 Long Pond Intake, and 36 mm at Hinds Lake. A total of 51 mm of rain was record at the Cat Arm Intake
- 9 from October 9 to 11, 2025. From October 22 to 25, 2025, a total of 28 mm of rainfall was recorded at
- 10 Long Pond Intake.
- 11 Table 2 summarizes the unit outages experienced during October 2025.

Table 2: October 2025 Unit Outage Summary

| Unit Name | Date Offline | Return to Service | Outage type | Notes |
|---------------------------|--------------|----------------------|-------------|--------------------------------|
| Bay d'Espoir Unit 1 | March 31 | Ongoing | Planned | n/a |
| | | | outage | |
| Bay d'Espoir Unit 2 | March 31 | Ongoing | Planned | n/a |
| | | | outage | |
| Paradise River Unit | October 2 | October 2 | Planned | n/a |
| | | | outage | |
| Granite Canal Unit | October 6 | October 7 | Unplanned | Unit tripped due to a |
| | | | outage | communications issue. |
| Cat Arm Unit 2 | October 15 | October 16 | Unplanned | Unit failed to start remotely. |
| | | | outage | |
| Bay d'Espoir Unit 7 | October 17 | October 31 | Planned | n/a |
| | | | outage | |
| Granite Canal Unit | October 20 | October 21 | Unplanned | Unit tripped due to excessive |
| | | | outage | vibration when ramping down |
| | | | | generation. |

² 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 ("Muskrat Falls") over the Labrador-Island Link ("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.



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- 1 Figure 1 plots the 2024 and 2025 storage levels, minimum storage limits, maximum operating level
- 2 storage, and 20-year average aggregate storage for comparison. In addition to the 2024–2025 limits
- 3 presented in Figure 1, Hydro has established the minimum storage limits to April 30, 2026.³ Please note
- 4 that the minimum storage limits for 2025–2026 have been updated as of September 30, 2025 utilizing
- 5 the LIL transmission limits associated with the full or final under-frequency load shedding ("UFLS")
- 6 scheme as opposed to the previously presented and interim UFLS scheme, as work is ongoing with
- 7 Newfoundland Power Inc. to implement the final UFLS scheme this fall. The LIL final UFLS scheme allows
- 8 for incrementally more LIL energy to be brought to the Island without the need to export more energy
- 9 over the Maritime Link ("ML") export path. This resulted in a small adjustment downwards of the
- 10 monthly minimum storage limits.

³ The minimum storage methodology was updated to ensure Hydro's reservoirs could continue to provide reliable service to customers at the lowest possible cost, in an environmentally responsible manner. The 2025–2026 analysis assumed that only two units at the Holyrood Thermal Generating Station ("Holyrood TGS") would be online and operating at minimum load during the winter 2025–2026 period.



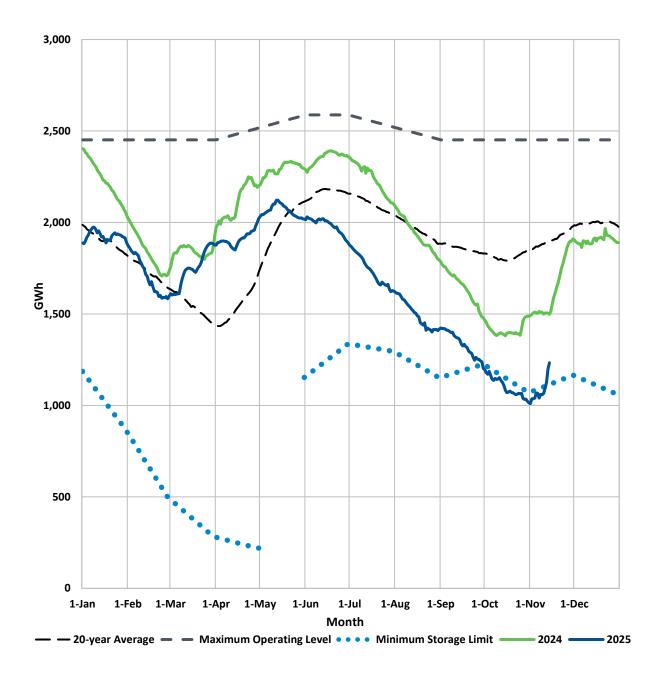


Figure 1: Total System Energy Storage^{4,5}

⁵ For the month of October, actuals fell below minimum storage limit; however, the graph has been extended beyond October 31 to demonstrate that levels have returned within limits in November 2025 due to precipitation events to be detailed in the next Monthly Energy Supply report.



⁴ Data points in Figure 1 represent storage at the beginning of each day. Table 1 reports the end-of-day storage values, which results in a small difference between the storage data presented in Table 1 and Figure 1.

2.1 **Ponding** 1

- 2 In Board Order No. P.U. 49(2018), the Board approved Hydro's application for approval of a Pilot
- 3 Agreement for the Optimization of Hydraulic Resources ("Pilot Agreement"). ⁶ The intent of the Pilot
- 4 Agreement is to optimize Hydro's hydraulic resources through the strategic use of its storage
- 5 capabilities, taking advantage of the variability of energy pricing in external markets over time.
- 6 Appendix A provides information regarding imported and exported energy transactions under the Pilot
- 7 Agreement during the month. No ponding exports or imports occurred over the ML during October
- 8 2025. Exports from Island sources have been placed on hold since July 2025.

2.2 **Spill Activity** 9

- 10 Appendix A provides information regarding spill avoidance export transactions undertaken. No releases
- 11 of water were required at any locations on the Island Interconnected System in October 2025, and no
- 12 spill avoidance exports were required during the month. A summary of the year-to-date ("YTD") total
- volumes spilled or bypassed in both MCM8 and GWh can be found in Table 3. 13

Table 3: Spill Activity

| | Granite Canal Bypass | | Upper Salmon Bypass | | Burnt Dam Spillway | |
|-----------------|-------------------------|-----|------------------------|-----|-----------------------|-----|
| | MCM | GWh | MCM | GWh | MCM | GWh |
| 31-October-2025 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| YTD Total | 22.8 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 |

⁸ Million cubic metres ("MCM").



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⁶ The Third Amended and Restated Pilot Agreement for the Optimization of Hydraulic Resources was approved as per Board Order No. P.U. 35(2022), and was extended as per Board Order No. P.U. 30(2023), and again in Board Order No. P.U. 29(2024).

⁷ Pursuant to the Pilot Agreement, exporting when system load is low allows for increased generation from Island hydraulic facilities and the utilization of water (energy) that would have otherwise been spilled, while not increasing the risk of spill elsewhere in the system.

3.0 Production and Purchases

- 2 Appendix B provides a breakdown of power purchases, including the import and export activity over the
- 3 LIL and ML and production by plant during October 2025. There was no energy repaid from CBPP to
- 4 Energy Marketing under the Temporary Energy Exchange Agreement in October 2025. There was 0.6
- 5 GWh of emergency energy, including losses, supplied to Nova Scotia over the Maritime Link during
- 6 October 2025.

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- 7 Hydro engaged Energy Marketing to seek imports over the ML to supplement reservoir storage during a
- 8 planned LIL outage on October 7 and 8, 2025. Further ML imports were secured on October 28, 2025
- 9 while the LIL was online in bipole mode, but was derated to facilitate a transmission outage. The
- 10 October 28, 2025 ML imports reduced the Nova Scotia Block export flow by an amount equal to the
- 11 scheduled imports and increased the net LIL delivery to the Island. Approximately 1.3 GWh of non-firm
- 12 energy was imported to the Island during October 2025. 10 Deliveries of energy to the Island
- 13 Interconnected System from Labrador via the LIL are also being maximized to the extent possible to
- 14 support Island reservoir storage. During the planned LIL monopole outages, Hydro utilized the monopole
- economic limits as conditions on the system enabled higher LIL deliveries to the Island to support
- reservoir storage. Operating in economic mode inherently introduces a risk of having a UFLS event if the
- 17 pole trips. However, scheduling is carried out to ensure that the duration of customer impact is
- 18 minimized.

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4.0 Thermal Production

- 20 Unit 2 at the Holyrood TGS was online on October 15, 2025, for system requirements and reservoir
- storage support, and remained online for the rest of the month. From October 15 to 20, 2025, the unit
- 22 was operated at a minimum of 70 MW. From October 21 to 31, 2025, the unit was operated at a
- 23 minimum of 100 MW to support reservoir storage. Unit 1 at the Holyrood TGS was online for all of
- 24 October for system requirements and reservoir storage support, except for a series of unit trips that
- 25 occurred between October 7-8. The unit was operated at a minimum of 100 MW from

¹⁰ The ML meter data in Hydro's monthly reporting is from 12:15 pm on the last day of the previous month to 12 pm on the last day of the current reporting month (i.e. 12:15 pm September 30th to 12 pm October 31st). Most of the Maritime Link imports reported for October 2025 occurred from 12:15 pm to 10:00 pm September 30 while a planned bipole outage on the LIL was still ongoing.



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⁹ On October 1, 2025, Hydro entered into a third six-month power purchase agreement with Corner Brook Pulp and Paper Limited ("CBPP") as directed by the Government of Newfoundland and Labrador. The power purchase agreement with CBPP provides Hydro with 80 GWh of non-firm energy from October 1, 2025 to March 31, 2026, inclusive.

- 1 October 1 to 15, 2025, a minimum of 70 MW from October 16 to 21, 2025, and a minimum 100 MW
- 2 from October 21 to 31, 2025 to support reservoir storage. The changes to the minimum generation on
- 3 unit 1 were because of low system load after unit 2 went online. Total energy production from the
- 4 Holyrood TGS was 94.2 GWh during the month. Standby generation was not used to support reservoir
- 5 storage.
- 6 The operating hours for the Holyrood TGS, Holyrood Combustion Turbine ("CT"), and the Hardwoods
- 7 and Stephenville Gas Turbines ("GT") are summarized in Table 4.

Table 4: Holyrood TGS and Combustion Turbines Operating Hours

| | | Sync | |
|----------------------------|-----------|----------|-----------|
| | Operating | Condense | Available |
| | Hours | Hours | Hours |
| Holyrood TGS | | | |
| Unit 1 | 711.8 | 0.0 | 711.8 |
| Unit 2 | 393.6 | 0.0 | 393.6 |
| Unit 3 | 0.0 | 0.0 | 0.0 |
| Combustion Turbines | | | |
| Hardwoods GT | 16.4 | 726.4 | 742.8 |
| Stephenville GT | 3.4 | 9.3 | 744.0 |
| Holyrood CT | 3.5 | 0.0 | 344.8 |

5.0 Unit Deratings

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- 9 Holyrood TGS Unit 1 was de-rated to 100 MW for the entire month of October 2025 due to an issue with
- 10 the main steam turbine control valves. An outage to correct this issue will occur by the end of November
- 11 2025, considering overall system requirements. On October 7, 2025, the unit tripped during
- 12 performance of a condenser backwash. It was returned to service later the same day. On
- 13 October 8, 2025, the unit tripped again, this time due to fluctuations in the main steam control valve
- 14 ram. The servo valve that supplies hydraulic fluid to this ram was replaced and the unit returned to
- 15 service later the same day, however a second trip occurred due to irregular main steam control valve
- 16 movement. A loose connection on the position feedback transmitter for the ram was discovered to be
- the root cause of both trips. This was corrected and the unit returned to service on October 9, 2025
- 18 without further issue.
- 19 Holyrood TGS Unit 2 completed its planned annual outage on September 28, 2025. During start-up of
- the unit following completion of the outage, Hydro attempted to commission new flame scanners,



- which are required safety devices that monitor each burner for the presence of flame. Technical issues
- 2 with the new scanners were encountered that prevented the unit from being returned to service. After
- 3 repeated attempts to resolve the issues with support from the scanner manufacturer, a decision was
- 4 made to revert to the previous flame scanner model on October 12, 2025. The unit was returned to
- 5 service on October 15, 2025 utilizing the old scanners, with a scheduled de-rating to 140 MW pending
- 6 completion of on-line safety valve testing. Safety valve testing was completed on October 23, 2025,
- 7 removing the scheduled de-rating. However, a load test completed that day achieved a maximum load
- 8 of 163 MW; limited because feedwater flow to the boiler had reached maximum output. Unit 2
- 9 remained de-rated to 163 MW for the remainder of October 2025. 11
- 10 Holyrood TGS Unit 3 was on a planned annual outage for the entire month of October 2025.
- 11 The Holyrood CT was available for the month of October 2025, apart from a planned annual outage from
- 12 October 16 to 27, 2025. The annual maintenance outage was completed; however, the unit remained
- 13 unavailable through the end of October due to experiencing a ground fault alarm upon energizing the
- 14 generator. 12
- 15 The Hardwoods and Stephenville GTs were available for the full month of October 2025.

¹² Note that this issue has since been resolved, and the unit has been available at full capacity since November 12, 2025.



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¹¹ Note that this issue has since been resolved, and Unit 2 has been available at full capacity since November 13, 2025.

Appendix A

Ponding and Spill Transactions



Table A-1: Ponding Transactions

| | | | Ponding Imports | Transfer of Pond Balance | Energy Losses | Cumulative |
|------------------------|----------------|----------------|--------------------|-----------------------------|------------------|------------|
| | Ponding | Ponding | Purchased | to Spill | to | Ponded |
| | Imports | Exports | by Hydro | Avoidance | Export | Energy |
| Date | (MWh) | (MWh) | (MWh) | (MWh) | (MWh) | (MWh) |
| Opening Balance | | | | | | (5,097) |
| Total ¹ | - | - | - | - | - | |

Table A-2: Avoided Spill Energy

| | | | Transfer of | |
|--------------------|---------|-----------|--------------|--------------|
| | Avoided | Energy | Pond Balance | YTD |
| | Spill | Losses | to Spill | Avoided |
| | Exports | to Export | Avoidance | Spill Energy |
| Date | (MWh) | (MWh) | (MWh) | (MWh) |
| Opening Balance | - | - | - | - |
| Total ² | | - | - | - |

² Total transactions for October 2025.



¹ Total transactions for October 2025.

Appendix B

Production and Purchases



Table B-1: Generation and Purchases (GWh)^{1,2}

| _ | Oct-25 | YTD Oct 2025 |
|---|--------------|----------------|
| Hydro Generation (Hydro) | | |
| Bay d'Espoir | | |
| Unit 1 Unit 2 | 0.0 0.0 | 121.6 110.0 |
| Unit 3 | 40.1 | 332.3 |
| Unit 4 | 19.5 | 192.9 |
| Unit 5 | 20.0 | 223.5 |
| Unit 6 | 21.8 | 286.6 |
| Unit 7 | 23.1 | 711.1 |
| Subtotal Bay d'Espoir | 124.6 | 1,978.0 |
| Upper Salmon | 41.2 | 441.5 |
| Granite Canal | 17.0 | 169.6 |
| Hinds Lake | 7.8 | 265.4 |
| Cat Arm | | |
| Unit 1 | 25.5 | 313.4 |
| Unit 2 Subtotal Cat Arm | 26.1 51.6 | 322.7 636.1 |
| | | |
| Paradise River | 1.3 | 18.5 |
| Star Lake | 0.0 | 95.8 |
| Rattle Brook Exploits | 0.7 13.9 | 9.0 434.3 |
| Mini Hydro | 0.0 | 0.0 |
| · _ | | |
| Total Hydro Generation (Hydro) | 258.2 | 4,048.2 |
| Thermal Generation (Hydro) | | |
| Holyrood TGS Unit 1 | 61.1 | 190.5 |
| Unit 2 | 33.1 | 231.4 |
| Unit 3 | 0.0 | 138.4 |
| Subtotal Holyrood TGS Units | 94.2 | 560.3 |
| Holyrood Combustion Turbine and Diesels | 0.2 | 4.5 |
| Hardwoods Gas Turbine | 0.2 | 1.3 |
| Stephenville Gas Turbine | 0.1 | 1.0 |
| Other Thermal | 0.0 | 0.3 |
| Total Thermal Generation (Hydro) | 94.7 | 567.4 |
| Purchases | | |
| Requested Newfoundland Power and Vale CBPP | 0.0 | 0.1 |
| Capacity Assistance | 0.0 | 0.0 |
| Power Purchase Agreement | 24.8 | 59.5 |
| Secondary | 0.0 | 0.6 |
| Co-Generation | 0.0 | 32.8 |
| Subtotal CBPP | 24.8 | 92.9 |
| Wind Purchases | 12.4 | 143.2 |
| Maritime Link Imports ³ | 1.3 | 21.7 |
| New World Dairy | 0.0 | 1.1 |
| Labrador Island Link Delivery to IIS ^{4,5} | 111.7 | 840.8 |
| Total Purchases | 150.1 | 1,099.8 |
| Total | 503.0 | 5,715.4 |
| _ | - | |

⁵ Net energy delivered to the Island Interconnected System is less than the total energy delivery to Hydro under the Muskrat Falls Power Purchase Agreement because of transmission losses on the LIL.



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 $^{^{\}rm 1}\,\text{Gross}$ generation.

² Actuals reflect rounded values to the nearest tenth of a GWh. Differences between total versus addition of individual components due to rounding.

³ Includes energy flows as a result of purchases and inadvertent energy.

⁴LIL deliveries to the Island Interconnected System are calculated as LIL imports of 233.1 GWh less ML exports of 121.5 GWh.