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October 16, 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 September 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

A handwritten signature in blue ink, appearing to read "Shirley A. Walsh", written over a horizontal line.

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

Encl.

ecc:

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

October 16, 2025

A report to the Board of Commissioners of Public Utilities



Contents

1.0	Introduction	1
2.0	System Hydrology	1
2.1	Ponding	5
2.2	Spill Activity	5
3.0	Production and Purchases	5
4.0	Thermal Production	6
5.0	Unit Deratings	7

List of Appendices

Appendix A: Ponding and Spill Transactions

Appendix B: Production and Purchases

1.0 Introduction

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:

- 1) System Hydrology Report;
- 2) The thermal plant operated in support of hydrology;
- 3) Production by plant/unit; and
- 4) Details of any current or anticipated long-term derating.

In July 2016, the Board indicated that a monthly report would thereafter be sufficient. This report provides data for September 2025.

Ownership of the Water Management function resides within Hydro in the Resource and Production Planning department and is at all times guided by Hydro’s operating instructions and environmental standards. This group works in consultation with Energy Marketing to optimize the use of Hydro’s 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 service in an environmentally responsible manner.

2.0 System Hydrology

Reservoir inflows in September 2025 were 86% below the month’s historical average.¹ Table 1 summarizes 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 (%)
30-September-2025	1,194	1,465	1,830	1,226	2,452	49

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

The aggregate reservoir storage level on September 30, 2025 was 1,194 GWh, which is 51% below the seasonal maximum operating level and 97% of the minimum storage limit.² Total system energy for the month decreased by 229 GWh overall, resulting in a total system energy storage 636 GWh below the 20-year average. Inflows to the reservoirs of the Bay d’Espoir Hydroelectric Generating Station (“Bay d’Espoir”) were 8% of average in September 2025. Inflows to the Hinds Lake Reservoir were 18% of average and inflows to the Cat Arm Reservoir were 30% of average during the month.

There were no significant rainfall events in September 2025. On September 12, 2025, a total of 31 mm of rainfall was recorded at Burnt Dam Spillway and on September 26, 2025 a total of 24 mm of rainfall was recorded. There was only a total of 36.5 mm of rain recorded at Long Pond for September 2025, with the highest daily amount being 15 mm on September 26, 2025. Otherwise conditions were extremely dry.

Table 2 summarizes the unit outages experienced during September 2025.

Table 2: September 2025 Unit Outage Summary

Unit Name	Date Offline	Return to Service	Outage type	Notes
Bay d’Espoir Unit 1	March 31	Ongoing	Planned outage	n/a
Bay d’Espoir Unit 2	March 31	Ongoing	Planned outage	n/a
Cat Arm Unit 1	July 24	September 5	Planned outage	n/a
Upper Salmon	August 27	September 13	Forced extension	On September 12 Upper Salmon went on a forced extension to a planned outage. The extension was due to an issue with the shutdown sequence.
Bay d’Espoir Unit 5	September 3	September 4	Planned daily outages	n/a
Bay d’Espoir Unit 6	September 3	September 5	Planned daily outages	n/a

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.

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

Unit Name	Date Offline	Return to Service	Outage type	Notes
Bay d’Espoir Unit 4	September 6	September 6	Forced outage	Outage was due to an oil/gas temperature alarm.
Paradise River Unit	September 9	September 11	Forced outage	Outage due to generator deluge system issues.
Granite Canal Unit	September 11	September 11	Forced outage	Unit tripped due to elevated bearing vibration.
Granite Canal Unit	September 17	September 17	Forced outage	Outage was due to an incomplete stop sequence during shutdown.
Granite Canal Unit	September 19	September 20	Forced outage	Unit tripped while being shut down for planned cycling.

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.

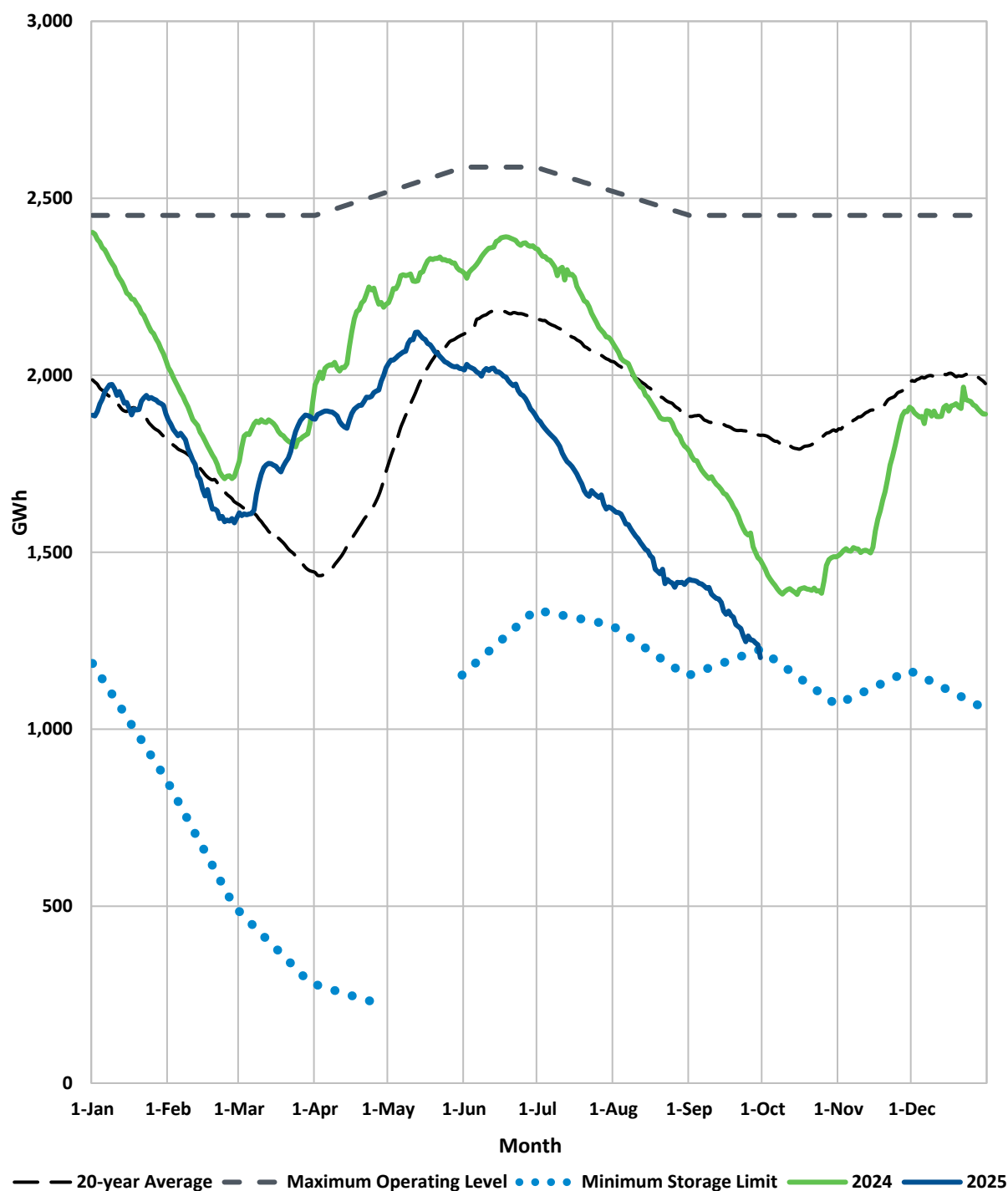


Figure 1: Total System Energy Storage⁴

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

In Board Order No. P.U. 49(2018), the Board approved Hydro's application for approval of a Pilot Agreement for the Optimization of Hydraulic Resources ("Pilot Agreement").⁵ The intent of the Pilot Agreement is to optimize Hydro's hydraulic resources through the strategic use of its storage capabilities, taking advantage of the variability of energy pricing in external markets over time.

Appendix A provides information regarding imported and exported energy transactions under the Pilot Agreement during the month. No ponding exports or imports occurred over the ML during September 2025. Exports from Island sources have been placed on hold since July 2025.

2.2 Spill Activity

Appendix A provides information regarding spill avoidance export transactions undertaken.⁶ No releases of water were required at any locations on the Island Interconnected System in September 2025, and no spill avoidance exports were required during the month. A summary of the year-to-date ("YTD") total volumes spilled or bypassed in both MCM⁷ and GWh can be found in Table 3.

Table 3: Spill Activity

	Granite Canal Bypass		Upper Salmon Bypass		Burnt Dam Spillway	
	MCM	GWh	MCM	GWh	MCM	GWh
30-September-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

3.0 Production and Purchases

Appendix B provides a breakdown of power purchases, including the import and export activity over the LIL and ML and production by plant during September 2025.⁸ There was no energy repaid from CBPP to Energy Marketing under the Temporary Energy Exchange Agreement in September 2025. There was no emergency energy supplied to Nova Scotia over the ML during September 2025.

⁵ 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).

⁶ 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.

⁷ Million cubic metres ("MCM").

⁸ 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.

On September 22, 2025, Hydro engaged Energy Marketing to seek imports over the ML to supplement reservoir storage while the LIL was on a planned bipole outage. Imports concluded on September 30, 2025 when the LIL returned to service in monopole mode. Approximately 20.4 GWh of non-firm energy was imported to the Island during this period. Deliveries of energy to the Island Interconnected System from Labrador via the LIL are also being maximized to the extent possible to 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 pole trips. However, scheduling is carried out to ensure that the duration of customer impact is minimized.

Hydro is also currently assessing the opportunity for additional ML imports, as the LIL returned to bipole operation on October 15, 2025.

4.0 Thermal Production

Holyrood TGS Unit 1 returned to service on September 18, 2025, with a scheduled derating to 140 MW pending completion of on-line safety valve testing. On September 22, 2025, an issue with the main steam turbine control valves was discovered, which caused the unit to be derated to 100 MW. The unit has been kept on-line at a maximum of 100 MW to support reservoir storage until the return to service of Unit 2. Total energy production from the Holyrood TGS was 22.1 GWh during the month. Standby generation was not used to support reservoir storage.

The operating hours for the Holyrood TGS, Holyrood Combustion Turbine ("CT"), and the Hardwoods and Stephenville Gas Turbines ("GT") are summarized in Table 4.

Table 4: Holyrood TGS and Combustion Turbines Operating Hours

	Operating Hours	Sync Condense Hours	Available Hours
Holyrood TGS			
Unit 1	280.8	0.0	280.8
Unit 2	0.0	0.0	0.0
Unit 3	0.0	0.0	0.0
Combustion Turbines			
Hardwoods GT	0.4	719.3	719.7
Stephenville GT	0.6	371.9	404.5
Holyrood CT	0.0	0.0	720.0

5.0 Unit Deratings

Holyrood TGS Unit 1 was on planned annual outage until September 14, 2025. The outage was extended to September 17, 2025, because the service pressure test of the boiler failed and had to be repeated after completion of necessary repairs. The unit was returned to service on September 18, 2025, with a scheduled derating to 140 MW pending completion of on-line safety valve testing. On September 22, 2025, an issue with the main steam turbine control valves was discovered, which caused the unit to be derated to 100 MW. This issue appears to be the same as encountered in April 2025, when commissioning Unit 1 after completion of the overhaul to replace last stage blades on the low-pressure turbine. An outage is required to confirm and correct this issue. The unit remained derated to 100 MW for the remainder of the month. On September 25, the unit tripped due to the quality of fuel oil in storage tank 3. The unit was returned to service later the same day. Further problems have been avoided through careful management of the fuel, including drawing from storage tank 3 and tank 1 in parallel when possible.

Holyrood TGS Unit 2 completed its planned annual outage on September 28, 2025, and Hydro is currently working to bring the unit back online.

Holyrood TGS Unit 3 was on a planned annual outage for the entire month of September 2025.

The Stephenville GT was available for the full month of September 2025 with the exception of a planned outage from September 2, 2025 to September 15, 2025, to complete corrective and preventative maintenance activities.

Appendix A

Ponding and Spill Transactions



Table A-1: Ponding Transactions

Date	Ponding Imports (MWh)	Ponding Exports (MWh)	Ponding Imports Purchased by Hydro (MWh)	Transfer of Pond Balance to Spill Avoidance (MWh)	Energy Losses to Export (MWh)	Cumulative Pondered Energy (MWh)
Opening Balance						(5,097)
Total¹	-	-	-	-	-	

Table A-2: Avoided Spill Energy

Date	Avoided Spill Exports (MWh)	Energy Losses to Export (MWh)	Transfer of Pond Balance to Spill Avoidance (MWh)	YTD Avoided Spill Energy (MWh)
Opening Balance	-	-	-	-
Total²	-	-	-	-

¹ Total transactions for September 2025.

² Total transactions for September 2025.

Appendix B

Production and Purchases



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

	Sep-25	YTD Sept 2025
Hydro Generation (Hydro)		
Bay d'Espoir		
Unit 1	0.0	121.6
Unit 2	0.0	110.0
Unit 3	42.8	292.1
Unit 4	19.9	173.4
Unit 5	26.4	203.4
Unit 6	15.9	264.8
Unit 7	28.9	688.0
Subtotal Bay d'Espoir	133.7	1,853.4
Upper Salmon	19.4	400.3
Granite Canal	16.3	152.5
Hinds Lake	16.9	257.6
Cat Arm		
Unit 1	23.5	287.9
Unit 2	28.1	296.6
Subtotal Cat Arm	51.6	584.4
Paradise River	0.2	17.2
Star Lake	3.3	95.8
Rattle Brook	0.0	8.4
Exploits	26.0	420.4
Mini Hydro	0.0	0.0
Total Hydro Generation (Hydro)	267.5	3,790.0
Thermal Generation (Hydro)		
Holyrood TGS		
Unit 1	22.1	129.5
Unit 2	0.1	198.3
Unit 3	0.0	138.4
Subtotal Holyrood TGS Units	22.1	466.2
Holyrood Combustion Turbine and Diesels	0.0	4.3
Hardwoods Gas Turbine	0.0	1.1
Stephenville Gas Turbine	0.0	0.9
Other Thermal	0.0	0.2
Total Thermal Generation (Hydro)	22.1	472.7
Purchases		
Requested Newfoundland Power and Vale	0.0	0.1
CBPP		
Capacity Assistance	0.0	0.0
Power Purchase Agreement	0.0	34.7
Secondary	0.0	0.6
Co-Generation	2.5	32.8
Subtotal CBPP	2.5	68.1
Wind Purchases	10.5	130.8
Maritime Link Imports ³	20.4	20.4
New World Dairy	0.0	1.1
Labrador Island Link Delivery to IIS ^{4,5}	90.9	729.1
Total Purchases	124.4	949.7
Total	414.1	5,212.4

¹ 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.

⁴ LIL deliveries to the Island Interconnected System are calculated as LIL imports of 192.9 GWh less ML exports of 102 GWh.

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.