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July 15, 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 June 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

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

July 15, 2025

A report to the Board of Commissioners of Public Utilities



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1 1.0 Introduction

- 2 On February 8, 2016, the Board of Commissioners of Public Utilities ("Board") requested Newfoundland
- 3 and Labrador Hydro ("Hydro") file a biweekly report containing, but not limited to, the following:
- 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 June 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
- 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
- 14 for Hydro's customers remains paramount in all decisions, ensuring the delivery of least-cost, reliable
- service in an environmentally responsible manner.

16 2.0 System Hydrology

- 17 Reservoir inflows in June 2025 were 65% below the month's historical average. 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-June-2025	1,877	2,359	2,158	1,442	2,588	73

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



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- 1 The aggregate reservoir storage level on June 30, 2025 was 1,877 GWh, which is 27% below the seasonal
- 2 maximum operating level and 30% above the minimum storage limit.² Total system energy for the
- 3 month decreased by 137 GWh overall, resulting in a total system energy storage 281 GWh below the 20-
- 4 year average. Inflows to the reservoirs of the Bay d'Espoir Hydroelectric Generating Station ("Bay
- 5 d'Espoir") were 32% of average in June 2025. Inflows to the Hinds Lake Reservoir were 36% of average
- 6 and inflows to the Cat Arm Reservoir were 41% of average during the month.
- 7 There were no significant weather events to note for the month of June 2025 that impacted reservoir
- 8 operations or hydrology. Overall inflow conditions were very dry compared with the historical average.
- 9 Generation at Cat Arm Hydroelectric Generating Station ("Cat Arm") was prioritized throughout most of
- 10 the month of June 2025 to reduce the risk of spilling at this location during an upcoming total plant
- outage planned for July and August 2025.
- 12 Table 2 summarizes the unit outages experienced during June 2025.

Table 2: June 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	n/a
Bay d'Espoir Unit 3	May 27	June 17	outage Planned	n/a
Dovidi Forcia Hait 4	N40.4.27	luna 17	outage	- In
Bay d'Espoir Unit 4	May 27	June 17	Planned outage	n/a
Cat Arm Unit 1	June 3	June 3	Planned outage	n/a
Granite Canal	June 4	June 4	Forced outage	Unit tripped on the governor emergency shutdown. Operations were at site; after resetting the trip, unit was restarted and released for service.

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 (39 months). 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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Unit Name	Date offline	Return to Service	Outage type	Notes
Granite Canal	June 5	June 5	Planned	n/a
			outage	
Paradise River	June 6	June 6	Planned	n/a
			outage	
Hinds Lake	June 8	June 13	Planned	n/a
			outage	
Granite Canal	June 15	Ongoing	Planned	n/a
			outage	
Upper Salmon	June 18	June 18	Forced outage	Outage due to brakes not applying during shut down. Brakes manually applied by Operations and crew sent to investigate. Protection & Controls Technician made adjustments to settings and unit was tested and released for service.

- 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. The 2025–
- 4 2026 limits were developed considering maximized delivery of power from the Muskrat Falls,
- 5 supplemented by available Recapture Energy from the Churchill Falls Generating Station over the LIL,
- 6 utilizing the transmission limits associated with the >58.0 Hz under-frequency load shedding scheme.³

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. Hydro plans to have all three units at the Holyrood TGS available at full capability, if needed. However, Hydro expects Island reservoirs to be supported with Muskrat Falls energy instead of thermal energy from the Holyrood TGS.



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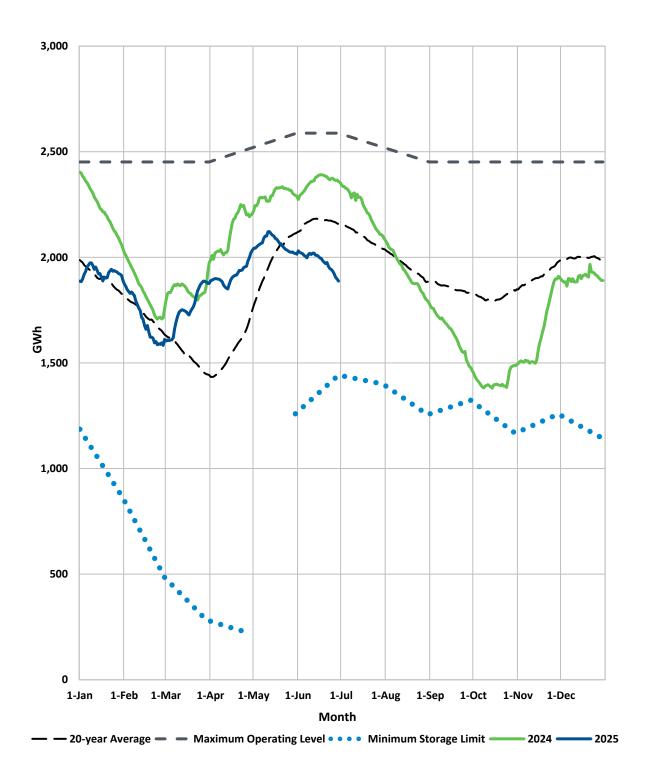


Figure 1: Total System Energy Storage⁴

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.



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2.1 **Ponding** 1

- In Board Order No. P.U. 49(2018), the Board approved Hydro's application for approval of a Pilot 2
- Agreement for the Optimization of Hydraulic Resources ("Pilot Agreement")⁵ The intent of the Pilot 3
- 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 Maritime Link during
- 8 June 2025.

2.2 **Spill Activity** 9

- 10 Appendix A provides information regarding spill avoidance export transactions undertaken.⁶ On May 6,
- 11 2025, a standing instruction was issued to Energy Marketing to seek spill avoidance exports for Bay
- 12 d'Espoir, due to the current reservoir storage position and projected short-term risk of spill, as well as at
- 13 Cat Arm due to the projected risk of spill during the upcoming total plant outage during summer 2025.
- 14 On May 13, 2025, this instruction was revised such that spill avoidance exports would only be sought for
- 15 Cat Arm as spill avoidance exports were no longer required for the other reservoirs. On June 24, 2025,
- 16 the standing instruction was removed as spill avoidance exports were no longer required for Cat Arm.
- 17 Spill avoidance exports in June 2025 were 0 GWh. No releases of water were required at any locations

Granite Canal

- on the Island Interconnected System in June 2025. A summary of the year-to-date ("YTD") total volumes 18
- spilled or bypassed in both MCM⁷ and GWh can be found in Table 3. 19

Table 3: Spill Activity

Upper Salmon

Burnt Dam

Bypass Bypass Spillway **MCM** GWh **MCM MCM** GWh GWh 0.0 0.0 0.0 0.0 0.0 0.0 22.8 2.2 0.0 0.0 0.0 0.0

30-June-2025 YTD Total

⁷ Million cubic metres ("MCM").



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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.

1 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 Maritime Link and production by plant during June 2025. There was no energy repaid from CBPP⁸
- 4 to Energy Marketing under the Temporary Energy Exchange Agreement in June 2025. There was no
- 5 emergency energy supplied to Nova Scotia over the Maritime Link during June 2025.

6 4.0 Thermal Production

- 7 No Holyrood TGS units were online for system requirements in June 2025. There was no energy
- 8 production from the Holyrood TGS during the month. Standby generation was not used to support
- 9 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

		Synch	
	Operating	Condense	Available
	Hours	Hours	Hours
Holyrood TGS			
Unit 1	0	0	0
Unit 2	0	0	176
Unit 3	0	0	0
Combustion Turbines			
Hardwoods GT	0	0	0
Stephenville GT	0.5	0	720
Holyrood CT	0	0	720

11 5.0 Unit Deratings

- 12 Holyrood TGS Unit 1 was on planned annual outage for the entire month of June 2025.
- 13 Holyrood TGS Unit 2 was on standby until June 8, 2025 as it was not required to support system
- 14 generation requirements. On June 8, 2025 the unit began its planned annual outage.
- 15 Holyrood TGS Unit 3 was on planned annual outage for the entire month of June 2025.

⁸ Corner Brook Pulp and Paper Limited ("CBPP").



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- 1 The Hardwoods GT was unavailable for the entire month of June 2025 on a planned outage to complete
- 2 a tank inspection and associated repairs, instrumentation upgrades as well as preventative maintenance
- 3 and corrective maintenance activities. The unit is expected to return to service on August 20, 2025.
- 4 The Holyrood CT and Stephenville GT were available for the full month of June 2025.



Appendix A

Ponding and Spill Transactions



Table A-1: Ponding Transactions

	Ponding	Ponding	Ponding Imports Purchased by Hydro	Transfer of Pond Balance to Spill Avoidance	Energy Losses to	Cumulative Ponded
Date	Imports (MWh)	Exports (MWh)	(MWh)	(MWh)	Export (MWh)	Energy (MWh)
Opening Balance						(4,903)
Total ¹	-	-	-	-	-	

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	-	-	-	-
Total ²		-	-	-

² Total transactions for June 2025.



 $^{^{}m 1}$ Total transactions for June 2025.

Appendix B

Production and Purchases



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

<u> </u>	Jun-25	YTD June 2025
Hydro Generation (Hydro)		
Bay d'Espoir		
Unit 1	0.0	121.6
Unit 2	0.0	110.0
Unit 3	15.7	179.8
Unit 4	4.7	110.8
Unit 5 Unit 6	26.9 46.7	137.8 185.2
Unit 7	69.2	496.8
Subtotal Bay d'Espoir	163.1	1,341.8
Upper Salmon	43.8	305.8
Granite Canal	8.3	113.3
Hinds Lake	19.4	198.9
Cat Arm		100
Unit 1	35.3	239.6
Unit 2	34.7	241.9
Subtotal Cat Arm	70.0	481.5
Paradise River	0.8	16.6
Star Lake	12.1	70.9
Rattle Brook	1.3	8.3
Exploits	44.6	306.6
Mini Hydro	0.0	0.0
Total Hydro Generation (Hydro)	363.3	2,843.0
Thermal Generation (Hydro) Holyrood TGS		
Unit 1	0.0	107.4
Unit 2	0.0	198.3
Unit 3	0.0	138.4
Subtotal Holyrood TGS Units	0.0	444.1
Holyrood Combustion Turbine and Diesels	0.0	4.2
Hardwoods Gas Turbine	0.0	1.:
Stephenville Gas Turbine	0.0	0.9
OtherThermal	0.0	0.2
Total Thermal Generation (Hydro)	0.0	450.6
20120000		
Purchases Requested Newfoundland Power and Vale CBPP	0.0	0.1
Capacity Assistance	0.0	0.0
Power Purchase Agreement	0.0	34.4
Secondary	0.1	0.4
Co-Generation	2.7	25.3
Subtotal CBPP	2.7	60.0
Wind Purchases	13.9	99.7
Maritime Link Imports ³	0.0	0.0
New World Dairy	0.0	0.9
Labrador Island Link Delivery to IIS ^{4,5}	35.1	512.2
Total Purchases	51.8	673.0
[otal	415.1	3,966.5
_	415.1	3,500.3

¹ Gross generation.

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.



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 236.2 GWh less Maritime Link exports of