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December 17, 2021

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

Attention: Ms. Cheryl Blundon Director Corporate Services & Board Secretary

Dear Ms. Blundon:

Re: Monthly Energy Supply Report for the Island Interconnected System for November 2021

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/kd

Encl.

ecc: Board of Commissioners of Public Utilities Jacqui H. Glynn PUB Official Email

> Newfoundland Power Dominic J. Foley Lindsay S.A. Hollett Regulatory Email

Consumer Advocate

Dennis M. Browne, QC, Browne Fitzgerald Morgan & Avis Stephen F. Fitzgerald, Browne Fitzgerald Morgan & Avis Sarah G. Fitzgerald, Browne Fitzgerald Morgan & Avis Bernice Bailey, Browne Fitzgerald Morgan & Avis Bernard M. Coffey, QC

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Praxair Canada Inc.

Sheryl E. Nisenbaum Peter Strong

Teck Resources Limited Shawn Kinsella



Monthly Energy Supply Report for the Island Interconnected System for November 2021

December 17, 2021



A report to the Board of Commissioners of Public Utilities

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Appendix A: Production and Purchases



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, as contained in Hydro's Quarterly 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 November 2021.

10 **2.0 System Hydrology**

- 11 Reservoir inflows in November 2021 were approximately 7% above the month's historical average.
- 12 Inflows in 2021 increased to 91% of the year-to-date historical average.
- 13 Table 1 summarizes the aggregate storage position of Hydro's reservoirs at the end of the reporting
- 14 period.

Table 1: System Hydrology Storage Levels

Date	2021 (GWb)	2020 (GW/b)	20-Year Average	Minimum Storage Limit	Maximum Operating Level (GWb)	Percentage of Maximum Operating Level (%)
Date	(Gvvn)	(Gwn)	(Gvvn)	(Gwn)	(Gwn)	(70)
30-Nov-2021	1,626	1,838	1,957	1,186	2,452	66

- 15 The aggregate reservoir storage level on November 30, 2021 was 1,626 GWh, which is 34% below the
- 16 seasonal maximum operating level and 37% above the minimum storage limit.¹ The current storage level

¹ 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, maximum generation at Holyrood Thermal Generating Station, and non-firm imports. Hydro's long-term critical dry sequence is defined as January 1959 to March 1962 (39 months). Other dry periods are also examined during the derivation to ensure that no other shorter term historic dry sequence could result in insufficient storage.



1 is shown in Figure 1 in relation to the 20-year average storage level for the end of November of

2 1,957 GWh. At the end of November 2020, the aggregate storage level was 1,838 GWh.

On November 5, 2021, the Upper Salmon Plant tripped offline due to damage on the flex leads on C
Phase of transformer T1. On November 10, 2021, after replacing the damaged flex leads, the unit
experienced a rotor ground fault when put online. As a result, it was determined that bypass of the
Upper Salmon Plant was required to support storage in the Long Pond Reservoir until all necessary
repairs could be completed. Bypass of the Upper Salmon plant commenced on November 12, 2021 and
ended on November 18, 2021 when the Upper Salmon Plant returned to service. A total of 10.0 GWh
was bypassed.

On November 3, 2021, Hydro began generating above minimum on the available unit at the Holyrood
Thermal Generating Station ("Holyrood TGS") and engaged Nalcor Energy Marketing ("Energy
Marketing") to import energy to offset thermal generation on its behalf. This action was required given
low major reservoir levels that were aggravated by sustained below average inflows, issues at both the
Upper Salmon Plant and the Holyrood TGS, and uncertainty in the scheduled Labrador-Island Link ("LIL")

15 flows. A combination of the efforts taken helped to slow the decline of total system energy. Beginning

16 November 19, 2021, a series of rainfall events occurred over all reservoir basins which significantly

17 increased the total system energy in storage by the end of the month.² The addition of a second

18 Holyrood TGS unit in early December has since allowed for a reduction in the production from the

19 Holyrood TGS units to minimum levels and Maritime Link imports to support reservoir levels were

- 20 stopped on December 4, 2021.
- 21 Standby units have not been used for water management purposes and Hydro does not currently
- 22 foresee using production from standby generation to support reservoir levels.
- 23 Figure 1 plots the 2020 and 2021 storage levels, minimum storage limits, maximum operating level
- 24 storage, and the 20-year average aggregate storage for comparison.

² Reservoir inflows received to November 23, 2021 were 66% of average. Following the rain events which began on November 19, 2021, monthly reservoir inflows increased to 107% of average by November 30, 2021.





Figure 1: Total System Energy Storage



3.0 Production and Purchases

- 2 Appendix A provides a breakdown of power purchases, including imports, and production by plant
- 3 during November 2021.

4 **4.0 Thermal Production and Imports**

5 Units 2 and 3 at the Holyrood TGS were required to generate during November 2021 for system
6 requirements. Holyrood TGS Unit 2 was operated for 272.5 hours, and Holyrood TGS Unit 3 was
7 operated for 268.4 hours. Unit 1 was not operated during November 2021. Total energy production

8 from Holyrood TGS during the month of November 2021 was 57.1 GWh.

- 9 Standby units were operated during the month to support system requirements and for testing
- 10 purposes. Standby units were operated for a total of 95.2 hours during the month. Total standby

11 production during the month was 3.5 GWh. Standby generation was not required to support reservoir

- 12 storage.
- 13 Testing activities continued on the LIL in November 2021, resulting in the delivery of 92.0 GWh of energy
- 14 at Soldiers Pond. Imports totalling 5.7 GWh over the Maritime Link were delivered to the Island
- 15 Interconnected System in November 2021. Energy Marketing made purchases totalling 21.9 GWh to
- 16 offset the use of thermal generation above minimum and support reservoir storage.³ Total exports over
- 17 the Maritime Link for the month of November 2021 were 21.8 GWh.^{4,5} Delivery of the Supplemental
- 18 Block commenced in November, with the first physical delivery taking place on November 1, 2021.^{6,7}
- 19 Energy Marketing exported 38.4 GWh associated with the delivery of the Nova Scotia Block and
- 20 Supplemental Energy. Ponding activities did not occur in November 2021. The ponded balance at month
- 21 end remained at -5.4 GWh. On November 17, 2021, approximately 0.1 GWh⁸ was generated to supply

⁸ Total energy supplied amounted to 123 MWh.



³ Total imports include the receipt of inadvertent energy from Nova Scotia Power Inc.

⁴ Total exports include the provision of emergency and inadvertent energy to Nova Scotia Power Inc., provision of the Nova Scotia Block, the Supplemental Block, and export activity conducted by Energy Marketing including the export of spilled energy on Hydro's behalf.

⁵ Physical delivery of the Nova Scotia Block will only occur when the LIL is online and able to transfer power.

⁶ Pursuant to the Energy and Capacity Agreement between between Nalcor Energy and Emera Inc.

⁷ Physical delivery of the Supplemental Block will only occur when the LIL is online and able to transfer power.

- 1 emergency energy to Nova Scotia Power, pursuant to the Interconnection Operators Agreement⁹
- 2 between Hydro and Nova Scotia Power.¹⁰

5.0 Unit Deratings

4 Holyrood TGS Unit 1 remained on a forced outage throughout November 2021 to complete the

- 5 investigation of, and remedial work resulting from, the cold reheat piping event that occurred on
- 6 October 25, 2021. The unit was returned to service on December 1, 2021.
- 7 Holyrood TGS Unit 2 tripped offline on November 12, 2021 as a result of a failure of the unit output
- 8 transformer. The unit remained offline for the remainder of the month. Transmission and Rural
- 9 Operations is in the process of replacing the transformer with the spare transformer stored on site.
- 10 Return to service is expected the week of December 20, 2021.¹¹
- 11 Holyrood TGS Unit 3 was returned to service on November 19, 2021 after completion of the
- 12 investigation and remedial work associated with the September 11, 2021 boiler tube failure. The unit
- 13 was returned to service with a scheduled derate to 135 MW pending completion of online safety valve
- 14 testing. Safety valve testing was completed on November 25, 2021, which removed the scheduled
- 15 derate.
- 16 The Hardwoods Gas Turbine was available at full capacity for the entire month of November 2021.¹²
- 17 The Stephenville Gas Turbine was available at full capacity for the entire month of November 2021, with
- 18 the exception of planned deratings on November 2, 2021 and November 3, 2021 to complete borescope
- 19 inspections of gas generators and a planned outage on November 25, 2021 to complete black start
- 20 testing.¹³

¹³ Due to limitations inherent in the design of combustion turbines, the output of combustion turbines may be reduced in the event that ambient temperatures exceed the threshold required for full rated output. This threshold is dependent on the design of each turbine.



⁹ Article 5, Schedules A3 and C9.

¹⁰ A copy of the agreement was provided in "The Board's Investigation and Hearing into Supply Issues and Power Outages on the Island Interconnected System – Availability of Requested Information from Hydro, July 5, 2017 Update," Appendix C. ¹¹ Following replacement of the main power transformer T2.

¹² Due to limitations inherent in the design of combustion turbines, the output of combustion turbines may be reduced in the event that ambient temperatures exceed the threshold required for full rated output. This threshold is dependent on the design of each turbine.

- 1 The Holyrood Gas Turbine was available at full capacity for the entire month of November 2021 with the
- 2 exception of a planned outage on November 25, 2021 to complete corrective maintenance on the
- 3 vibration monitoring system.¹⁴

¹⁴ Due to limitations inherent in the design of combustion turbines, the output of combustion turbines may be reduced in the event that ambient temperatures exceed the threshold required for full rated output. This threshold is dependent on the design of each turbine.





Production and Purchases



Table A-1: Generation and Purchases¹

Hydro Generation (Hydro) Letting Bay d'Espoir Plant 38.7 402.6 Unit 1 38.7 402.6 Unit 2 38.6 394.1 Unit 3 28.2 222.8 Unit 4 13.8 152.4 Unit 5 0.0 139.5 Unit 6 20.0 139.5 Subtotal Bay d'Espoir Plant 21.16 2.326.4 Upper Salmon Plant 32.9 395.8 Grante Canal Plant 26.2 217.3 Hinds Lake Plant 17.9 300.9 Cat Arm Plant 17.9 303.9 Unit 1 24.4 9.33.3 Subtotal Cat Arm Plant 16.6 112.9 Naior Exploits Plants 47.3 529.5 Mini Hydro 0.0 0.0 Total Hydro Generation (Hydro) 408.4 4.676.7 Thermal Generation (Hydro) 408.4 30.0 Unit 1 0.0 20.6 Unit 2 29.7 228.5 Unit 3 <td< th=""><th></th><th>November 1–30, 2021 (GWh)</th><th>YTD² November 30, 2021 (GWh)</th></td<>		November 1–30, 2021 (GWh)	YTD ² November 30, 2021 (GWh)
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Subtotal Bay d'Espri Plant 211.6 2,326.4 Upper Salmon Plant 32.9 395.8 Granite Canal Plant 26.2 217.3 Hinds Lake Plant 17.9 300.9 Cat Arm Plant 22.0 383.3 Subtotal Cat Arm Plant 26.4 744.4 Paradise River 3.7 20.7 Star Lake Plant 10.8 1198 Rattle Brook Plant 1.6 12.9 Nalcor Exploits Plants 47.3 528.5 Mini Hydro 0.0 0.0 Total Hydro Generation (Hydro) 408.4 4,676.7 Holyrood TGS 0.0 206.8 Unit 1 0.0 206.8 Holyrood TGS 27.4 140.2 Unit 3 27.4 140.2 Subtotal Holyrood TGS Units 57.1 632.8 Holyrood Gas Turbine 0.4 3.0 Stephenville Gas Turbine 0.0 0.1 Capacity Assistance 0 0.0 Firme Areagy Power Purchase Agreement	Unit 7	72.1	780.6
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Star Lake Plant 10.8 119.8 Rattle Brook Plant 1.6 12.9 Nalcor Exploits Plants 47.3 529.5 Mini Hydro 0.0 0.0 Total Hydro Generation (Hydro) 408.4 4,676.7 Holyrood TGS 0.0 206.8 Unit 1 0.0 206.8 Unit 2 29.7 285.8 Unit 3 27.4 140.2 Subtotal Holyrood TGS Units 57.1 632.8 Holyrood Gas Turbine and Diesels 3.1 18.6 Hardwoods Gas Turbine 0.4 3.0 Stephenville Gas Turbine 0.0 0.1 Total Thermal Generation (Hydro) 60.6 655.4 Purchases 0.0 0.1 Requested Newfoundland Power and Vale 0.0 0.0 Capacity Assistance 0.0 0.0 Subtotal CBPP 6.6 69.9 Wind Purchases 15.4 165.8 Subtotal CBPP 6.6 69.9 Wind Purchases 5.7	Paradise River	3.7	20.7
Rattle Brook Plant 1.6 12.9 Nalcor Exploits Plants 47.3 529.5 Mini Hydro 0.0 0.0 Total Hydro Generation (Hydro) 408.4 4.676.7 Thermal Generation (Hydro) 408.4 4.676.7 Holyrood TGS 0.0 206.8 Unit 1 0.0 206.8 Unit 2 29.7 285.8 Unit 3 27.4 140.2 Subtotal Holyrood TGS Units 57.1 632.8 Holyrood Gas Turbine and Diesels 3.1 18.6 Hardwoods Gas Turbine 0.0 0.1 Other Thermal 0.0 0.1 Total Thermal Generation (Hydro) 60.6 655.4 Purchases 0.0 0.0 Requested Newfoundland Power and Vale 0.0 0.0 Capacity Assistance 0.0 0.0 Subtotal CBPP 6.6 669.9 Wind Purchases 15.4 165.8 Martime Link Imports ⁴ 5.7 10.9 New Word Dairy	Star Lake Plant	10.8	119.8
Nalcor Exploits Plants 47.3 529.5 Mini Hydro 0.0 0.0 Total Hydro Generation (Hydro) 408.4 4,676.7 Thermal Generation (Hydro) 0.0 206.8 Unit 1 0.0 206.8 Unit 2 29.7 285.8 Unit 3 27.4 140.2 Subtotal Holyrood TGS Units 57.1 632.8 Holyrood Gas Turbine and Diesels 3.1 18.6 Hardwoods Gas Turbine 0.4 3.0 Stephenville Gas Turbine 0.0 0.1 Total Thermal Generation (Hydro) 60.6 655.4 Purchases 0.0 0.1 Requested Newfoundland Power and Vale 0.0 0.0 Capacity Assistance 0.0 0.0 Subtotal CBPP ³ 2.8 45.6 Subtotal CBPP 6.6 69.9 Wind Purchases 15.4 165.8 Subtotal CBPP 6.6 69.9 Wind Purchases 15.4 165.8 Maritime Link Imports ⁴	Rattle Brook Plant	1.6	12.9
Mini Hydro 0.0 0.0 Total Hydro Generation (Hydro) 408.4 4,676.7 Thermal Generation (Hydro) 00 206.8 Unit 1 0.0 206.8 Unit 2 29.7 285.8 Unit 3 27.4 140.2 Subtotal Holyrood TGS Units 57.1 632.8 Holyrood Gas Turbine and Diesels 3.1 18.6 Hardwoods Gas Turbine 0.4 3.0 Stephenville Gas Turbine 0.0 0.1 Other Thermal 0.0 0.1 Total Thermal Generation (Hydro) 60.6 655.4 Purchases Requested Newfoundland Power and Vale 0.0 0.1 CBPP ³ Capacity Assistance 0.0 0.0 Subtotal CBPP 6.6 69.9 9 Wind Purchases 15.4 165.8 69.9 Wind Purchases 15.4 165.9 10.9 10.9 New World Dairy 0.3 3.1 3.1 11.1 Unit 3 5.7 10	Nalcor Exploits Plants	47.3	529.5
Total Hydro Generation (Hydro) 408.4 4,676.7 Thermal Generation (Hydro) Holyrood TGS 0.0 206.8 Unit 1 0.0 206.8 Unit 2 29.7 285.8 Unit 3 27.4 140.2 Subtotal Holyrood TGS Units 57.1 632.8 Holyrood Gas Turbine and Diesels 3.1 18.6 Hardwoods Gas Turbine 0.0 0.0 Other Thermal 0.0 0.0 Other Thermal 0.0 0.1 Total Thermal Generation (Hydro) 60.6 655.4 Purchases Requested Newfoundland Power and Vale 0.0 0.1 CBPP ³ Capacity Assistance 0.0 0.0 Firm Energy Power Purchase Agreement 0.0 0.0 0.0 Subtotal CBPP 6.6 69.9 45.5 Wind Purchases 15.4 165.8 45.5 Maritime Link Imports ⁴ 5.7 10.9 3.1 11.9 New World Dairy 0.3 3.1 11.1 11.9	Mini Hydro	0.0	0.0
Thermal Generation (Hydro) Holyrood TGS Unit 1 0.0 206.8 Unit 2 29.7 285.8 Unit 3 27.4 140.2 Subtotal Holyrood TGS Units 57.1 632.8 Holyrood Gas Turbine and Diesels 3.1 18.6 Hardwoods Gas Turbine 0.4 3.0 Stephenville Gas Turbine 0.0 0.8 Other Thermal 0.0 0.1 Total Thermal Generation (Hydro) 60.6 655.4 Purchases Requested Newfoundland Power and Vale 0.0 0.1 CBPP ³ Capacity Assistance 0.0 0.0 Firm Energy Power Purchase Agreement 0.0 0.0 0.0 Subtotal CBPP 6.6 69.9 45.6 Subtotal CBPP 6.6 69.9 45.6 Subtotal CBPP 5.7 10.9 3.1 New World Dairy 0.3 3.1 11.1 11.65.8 Maritime Link Imports ⁴ 5.7 10.9 51.5 56.17	Total Hydro Generation (Hydro)	408.4	4,676.7
Holyrood TGS 0.0 206.8 Unit 1 0.0 206.8 Unit 2 29.7 285.8 Unit 3 27.4 140.2 Subtotal Holyrood TGS Units 57.1 632.8 Holyrood Gas Turbine and Diesels 3.1 18.6 Hardwoods Gas Turbine 0.4 3.0 Stephenville Gas Turbine 0.0 0.8 Other Thermal 0.0 0.1 Total Thermal Generation (Hydro) 60.6 655.4 Purchases 0.0 0.0 Requested Newfoundland Power and Vale 0.0 0.0 CBPP ³ Co-Generation 0.0 Co-Generation 2.8 45.6 Subtotal CBPP 6.6 69.9 Wind Purchases 15.4 165.8 Maritime Link Imports ⁴ 5.7 10.9 New World Dairy 0.3 3.1 ULI Imports ⁵ 92.0 501.7 Total ⁶ 588.9 6,083.5	Thermal Generation (Hydro)		
Unit 1 0.0 206.8 Unit 2 29.7 285.8 Unit 3 27.4 140.2 Subtotal Holyrood Gas Turbine and Diesels 3.1 632.8 Holyrood Gas Turbine 0.4 3.0 Stephenville Gas Turbine 0.4 3.0 Other Thermal 0.0 0.1 Total Thermal Generation (Hydro) 60.6 655.4 Purchases Requested Newfoundland Power and Vale 0.0 0.0 CBPP ³ Co-Generation 0.0 0.0 Subtotal CBPP 6.6 69.9 0.0 Wind Purchases 15.4 165.8 10.9 New World Dairy 0.3 3.1 3.1 Ult Imports ⁴ 5.7 10.9 501.7 New World Dairy 0.3 3.1 11.9 Ult Imports ⁵ 92.0 501.7 501.7 Total ⁶ 588.9 6,083.5 6,083.5	Holyrood TGS		
Unit 2 29.7 285.8 Unit 3 27.4 140.2 Subtotal Holyrood TGS Units 57.1 632.8 Holyrood Gas Turbine and Diesels 3.1 18.6 Hardwoods Gas Turbine 0.4 3.0 Stephenville Gas Turbine 0.0 0.8 Other Thermal 0.0 0.1 Total Thermal Generation (Hydro) 60.6 655.4 Purchases 0.0 0.1 Requested Newfoundland Power and Vale 0.0 0.1 CBPP ³ Capacity Assistance 0.0 0.0 Firm Energy Power Purchase Agreement 0.0 0.0 0.0 Subtotal CBPP 6.6 69.9 45.6 Subtotal CBPP 6.6 69.9 66.6 69.9 Wind Purchases 15.4 165.8 10.9 New World Dairy 0.3 3.1 11.1 ULI Imports ⁵ 92.0 501.7 501.7 Total Purchases 119.9 751.5 501.7 Total Purchases 119.9 6,083.5 508.9 6,083.5	Unit 1	0.0	206.8
Unit 3 1/14 140.2 Subtotal Holyrood TGS Units 57.1 632.8 Holyrood Gas Turbine and Diesels 3.1 18.6 Hardwoods Gas Turbine 0.4 3.0 Stephenville Gas Turbine 0.0 0.8 Other Thermal 0.0 0.1 Total Thermal Generation (Hydro) 60.6 655.4 Purchases 0.0 0.1 Requested Newfoundland Power and Vale 0.0 0.1 CBPP ³ 0.0 0.0 Capacity Assistance 0.0 0.0 Firm Energy Power Purchase Agreement 0.0 0.0 Subtotal CBPP 6.6 69.9 Wind Purchases 15.4 165.8 Maritime Link Imports ⁴ 5.7 10.9 New World Dairy 0.3 3.1 ULI Imports ⁵ 92.0 501.7 Total ⁶ 588.9 6,083.5	Unit 2	29.7	285.8
Burchain for yood residnedDriftDriftHolyrood Gas Turbine and Diesels3.118.6Hardwoods Gas Turbine0.43.0Stephenville Gas Turbine0.00.8Other Thermal0.00.1Total Thermal Generation (Hydro)60.6655.4Purchases0.00.1Requested Newfoundland Power and Vale0.00.1CBPP ³ 0.00.0Capacity Assistance0.00.0Firm Energy Power Purchase Agreement0.00.0Subtotal CBPP6.669.9Wind Purchases15.4165.8Maritime Link Imports ⁴ 5.710.9New World Dairy0.33.1ULI Imports ⁵ 92.0501.7Total ⁶ 588.96,608.5	UNIT 3 Subtotal Holyrood TGS Units		632.8
Holyrood Gas Turbine and Diesels 3.1 18.6 Hardwoods Gas Turbine 0.4 3.0 Stephenville Gas Turbine 0.0 0.8 Other Thermal 0.0 0.1 Total Thermal Generation (Hydro) 60.6 655.4 Purchases 0.0 0.1 Requested Newfoundland Power and Vale 0.0 0.1 CBPP ³ Capacity Assistance 0.0 0.0 Firm Energy Power Purchase Agreement 0.0 0.0 0.0 Secondary 2.8 45.6 Subtotal CBPP 6.6 69.9 Wind Purchases 15.4 165.8 Maritime Link Imports ⁴ 5.7 10.9 New World Dairy 0.3 3.1 ULI Imports ⁵ 92.0 501.7 Total ⁶ 588.9 6,083.5		57.1	032.0
Hardwoods Gas Lurbine 0.4 3.0 Stephenville Gas Turbine 0.0 0.8 Other Thermal 0.0 0.1 Total Thermal Generation (Hydro) 60.6 655.4 Purchases 0.0 0.1 Requested Newfoundland Power and Vale 0.0 0.1 CBPP ³ 0.0 0.0 Capacity Assistance 0.0 0.0 Firm Energy Power Purchase Agreement 0.0 0.0 Secondary 2.8 45.6 Subtotal CBPP 6.6 69.9 Wind Purchases 15.4 165.8 Maritime Link Imports ⁴ 5.7 10.9 New World Dairy 0.3 3.1 ULI Imports ⁵ 92.0 501.7 Total ⁶ 588.9 6,083.5	Holyrood Gas Turbine and Diesels	3.1	18.6
Stephenville Gas Turbine 0.0 0.8 Other Thermal 0.0 0.1 Total Thermal Generation (Hydro) 60.6 655.4 Purchases Requested Newfoundland Power and Vale 0.0 0.1 CBPP ³ 0.0 0.1 0.0 0.1 CBPP ³ 0.0 0.0 0.1 0.0 0.0 Firm Energy Power Purchase Agreement 0.0 0.0 0.0 0.0 Secondary 2.8 24.3 24.3 24.3 24.56 6.6 69.9 Wind Purchases 15.4 165.8 0.9 0.0 3.1 115.8 3.1 115.8 3.1 115.8 3.1 111	Hardwoods Gas Turbine	0.4	3.0
Other memory 0.0 0.1 Total Thermal Generation (Hydro) 60.6 655.4 Purchases Requested Newfoundland Power and Vale 0.0 0.1 CBPP ³ Capacity Assistance 0.0 0.0 Capacity Assistance 0.0 0.0 0.0 Firm Energy Power Purchase Agreement 0.0 0.0 0.0 Secondary 2.8 44.3 24.3 45.6 69.9 45.6 69.9 45.6 69.9 45.6 69.9 45.6 69.9 45.6 69.9 45.6 69.9 45.6 69.9 45.6 69.9 45.6 69.9 45.6 69.9 45.6 69.9 45.6 65.8 45.6 69.9 45.6 65.8 45.6 65.8 45.6 65.8 45.6 65.8 45.6 65.8 45.6 65.8 45.6 45.6 65.8 45.6 65.8 45.6 45.6 45.6 45.6 45.6 45.6 45.6 45.7 10.9 75.1	Stephenville Gas Turbine	0.0	0.8
Total Thermal Generation (Hydro) 60.6 655.4 Purchases Requested Newfoundland Power and Vale 0.0 0.1 CBPP ³ Capacity Assistance 0.0 0.0 Capacity Assistance 0.0 0.0 0.0 Firm Energy Power Purchase Agreement 0.0 0.0 0.0 Secondary 3.8 24.3 24.3 24.3 24.3 24.3 24.3 24.3 24.3 24.3 25.6 5.0 0.99 0.0 <td>Other merman</td> <td>0.0</td> <td>0.1</td>	Other merman	0.0	0.1
Purchases Requested Newfoundland Power and Vale 0.0 0.1 CBPP ³ 0.0 0.0 Capacity Assistance 0.0 0.0 Firm Energy Power Purchase Agreement 0.0 0.0 Secondary 3.8 24.3 Co-Generation 2.8 45.6 Subtotal CBPP 6.6 69.9 Wind Purchases 15.4 165.8 Maritime Link Imports ⁴ 5.7 10.9 New World Dairy 0.3 3.1 ULI Imports ⁵ 92.0 501.7 Total ⁶ 588.9 6,608.5	Total Thermal Generation (Hydro)	60.6	655.4
Requested Newfoundland Power and Vale 0.0 0.1 CBPP ³ Capacity Assistance 0.0 0.0 Firm Energy Power Purchase Agreement 0.0 0.0 0.0 Secondary 3.8 24.3 24.3 Co-Generation 2.8 45.6 69.9 Wind Purchases 15.4 165.8 165.8 Maritime Link Imports ⁴ 5.7 10.9 3.1 ULI Imports ⁵ 92.0 501.7 501.7 Total ⁶ 588.9 6,603.5 6,083.5	Purchases		
CBPP ³ 0.0 0.0 Firm Energy Power Purchase Agreement 0.0 0.0 Secondary 3.8 24.3 Co-Generation 2.8 45.6 Subtotal CBPP 6.6 69.9 Wind Purchases 15.4 165.8 Maritime Link Imports ⁴ 5.7 10.9 New World Dairy 0.3 3.1 ULI Imports ⁵ 92.0 501.7 Total ⁶ 588.9 6,608.5	Requested Newfoundland Power and Vale	0.0	0.1
Capacity Assistance 0.0 0.0 Firm Energy Power Purchase Agreement 0.0 0.0 Secondary 3.8 24.3 Co-Generation 2.8 45.6 Subtotal CBPP 6.6 69.9 Wind Purchases 15.4 165.8 Maritime Link Imports ⁴ 5.7 10.9 New World Dairy 0.3 3.1 ULI Imports ⁵ 92.0 501.7 Total ⁶ 588.9 6,083.5	CBPP ³		
Firm Energy Power Purchase Agreement 0.0 0.0 Secondary 3.8 24.3 Co-Generation 2.8 45.6 Subtotal CBPP 6.6 69.9 Wind Purchases 15.4 165.8 Maritime Link Imports ⁴ 5.7 10.9 New World Dairy 0.3 3.1 LIL Imports ⁵ 92.0 501.7 Total Purchases 119.9 751.5 Total ⁶ 588.9 6,083.5	Capacity Assistance	0.0	0.0
Secondary 3.8 24.3 Co-Generation 2.8 45.6 Subtotal CBPP 6.6 69.9 Wind Purchases 15.4 165.8 Maritime Link Imports ⁴ 5.7 10.9 New World Dairy 0.3 3.1 LlL Imports ⁵ 92.0 501.7 Total ⁶ 588.9 6,083.5	Firm Energy Power Purchase Agreement	0.0	0.0
Co-Generation 2.8 45.6 Subtotal CBPP 6.6 69.9 Wind Purchases 15.4 165.8 Maritime Link Imports ⁴ 5.7 10.9 New World Dairy 0.3 3.1 LIL Imports ⁵ 92.0 501.7 Total Purchases 119.9 751.5 Total ⁶ 588.9 6,083.5	Secondary	3.8	24.3
Subtotal CBPP 6.6 69.9 Wind Purchases 15.4 165.8 Maritime Link Imports ⁴ 5.7 10.9 New World Dairy 0.3 3.1 LIL Imports ⁵ 92.0 501.7 Total Purchases 119.9 751.5 Total ⁶ 588.9 6,083.5	Co-Generation	2.8	45.6
Wind Purchases 15.4 165.8 Maritime Link Imports ⁴ 5.7 10.9 New World Dairy 0.3 3.1 LIL Imports ⁵ 92.0 501.7 Total Purchases 119.9 751.5 Total ⁶ 588.9 6,083.5	Subtotal CBPP	6.6	69.9
Maritime Link Imports ⁴ 5.7 10.9 New World Dairy 0.3 3.1 LIL Imports ⁵ 92.0 501.7 Total Purchases 119.9 751.5 Total ⁶ 588.9 6,083.5	Wind Purchases	15.4	165.8
New World Dairy 0.3 3.1 LIL Imports ⁵ 92.0 501.7 Total Purchases 119.9 751.5 Total ⁶ 588.9 6,083.5	Maritime Link Imports ⁴	5.7	10.9
LlL Imports ² 92.0 501.7 Total Purchases 119.9 751.5 Total ⁶ 588.9 6,083.5	New World Dairy	0.3	3.1
Total Purchases 119.9 751.5 Total ⁶ 588.9 6,083.5	LIL Imports [°]	92.0	501.7
Total ⁶ 588.9 6,083.5	Total Purchases	119.9	751.5
	Total ⁶	588.9	6,083.5

¹ Gross generation.

² Year-to-date ("YTD").

³ Corner Brook Pulp and Paper Limited ("CBPP").

⁴ Includes energy flows as a result of purchases and inadvertent energy.

⁵ Includes purchases as result of testing activity as well as deliveries that are then exported over the Maritime Link.

⁶ Actuals reflect rounded values to the nearest tenth of a GWh. Differences between total vs. addition of individual components due to rounding.

