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May 30, 2024

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: Capacity Assistance Report – Winter 2023–2024

Please find enclosed Newfoundland and Labrador Hydro's Capacity Assistance Report for winter 2023–2024, which includes reporting for capacity assistance agreements with both Corner Brook Pulp and Paper Limited, and Vale Newfoundland and Labrador Limited.

We trust the foregoing is satisfactory. Should you have any questions, please contact the undersigned.

Yours truly,

NEWFOUNDLAND AND LABRADOR HYDRO

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

Encl.

ecc:

Board of Commissioners of Public Utilities
Jacqui H. Glynn
Board General

Consumer Advocate
Dennis M. Browne, KC, Browne Fitzgerald Morgan & Avis
Stephen F. Fitzgerald, KC, Browne Fitzgerald Morgan & Avis
Sarah G. Fitzgerald, Browne Fitzgerald Morgan & Avis
Bernice Bailey, Browne Fitzgerald Morgan & Avis

Linde Canada Inc.
Sheryl E. Nisenbaum
Peter Strong

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

Teck Resources Limited
Shawn Kinsella

Island Industrial Customer Group
Paul L. Coxworthy, Stewart McKelvey
Denis J. Fleming, Cox & Palmer
Dean A. Porter, Poole Althouse

Capacity Assistance Report

Winter 2023–2024

May 30, 2024

A report to the Board of Commissioners of Public Utilities

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1.0 Introduction

For the 2023–2024 winter season, Newfoundland and Labrador Hydro ("Hydro") had capacity assistance agreements in place with Corner Brook Pulp and Paper Limited ("CBPP") and Vale Newfoundland and Labrador Limited ("Vale").

Hydro previously had a capacity assistance agreement with CBPP, the Second Amended and Restated Capacity Assistance Agreement, that ended April 30, 2023. A summary of the terms and conditions of the Capacity Assistance Agreement are contained in Appendix A. While negotiating with CBPP for a further capacity assistance agreement, Hydro entered into a short-term agreement for up to 90 MW of capacity assistance for the period November 1–30, 2023, utilizing the same terms and conditions of the Second Amended and Restated Capacity Assistance Agreement. On November 17, 2023, Hydro filed an application with the Board of Commissioners of Public Utilities ("Board") for approval of the Long-term CBPP Capacity Assistance Agreement. For the period December 1–18, 2023, the parties entered into another short-term agreement utilizing the same terms and conditions as had been proposed in the application for approval of the Long-term Capacity Assistance Agreement. A summary of the terms and conditions of the Long-term Capacity Assistance Agreement are contained in Appendix B.

In Board Order No. P.U. 32(2023), approving the application for the Long-term CBPP Capacity Assistance Agreement, Hydro was directed to file a report no later than May 30 of each year during the term of the agreement, providing the following information:

- The capacity assistance requested and provided, including dates, times, and duration;
- The system conditions at the time of the capacity assistance request, including available generation and calculation of system reserve; and
- Payments made.

In addition, Hydro's agreement with Vale was a short-term agreement for the 2023–2024 winter period for up to 10.8 MW of capacity assistance, of which 6.8 MW was tested and confirmed to be available. Hydro did not utilize the capacity assistance agreement with Vale during the 2023–2024 winter period. For the period December 1, 2023–March 31, 2024, Hydro paid Vale the fixed fee of $190,400 for the

6.8 MW of available capacity.[1] A summary of the terms and conditions of the Capacity Assistance Agreement is contained in Appendix C.

The report for the 2023–2024 winter period is provided for both CBPP and Vale. Future reports will be provided for the period May 1–April 30, as the Long-term CBPP Capacity Assistance Agreement includes summer and winter capacity assistance.

2.0 Capacity Assistance Provided – Winter 2023–2024

During winter 2023–2024, Hydro made four requests for capacity assistance from CBPP, as detailed in Table 1.

Table 1: Summary of Winter 2023–2024 Capacity Assistance Requests

Date	Contract	Start Time	End Time	Duration (hh:mm)	Island Generation Available (MW)	Island Available Reserve (MW)	Island 10-Minute Reserve (MW)	Maximum Capacity Assistance Requested (MW)	Maximum Capacity Assistance Provided (MW)
15-Dec-2023	CBPP	1633	2227	6:00	1936	656	146	90	90
16-Dec-2023	CBPP	1836	0033 (+1)	6:00	2132	854	276	90	90
17-Dec-2023	CBPP	0647	0035 (+1)	18:00	1839	652	257	90	90
24-Jan-2024	CBPP	0725	1325	6:00	2231	353	165	90	90

The details of each of these capacity assistance requests are as follows:

2.1 December 15, 2023

On December 15, 2023, Pole 2 of the Labrador-Island Link ("LIL") tripped offline at 1523 hours. Following the loss of LIL Pole 2,[2] and the unavailability of Holyrood Thermal Generating Station ("Holyrood TGS") Units 1 and 2,[3] the Island 10-minute reserve started to drop during the evening peak load period. To assist in maintaining adequate 10-minute reserve, Hydro requested that Newfoundland Power Inc. ("Newfoundland Power") maximize its hydraulic generation. In addition, Hydro maximized Holyrood TGS Unit 3 thermal generation. Hardwoods and Holyrood Gas Turbines were also placed in service to support

[1] As per the agreement, the fixed fee was calculated as follows: 6,800 kW x $28/kW/winter = $190,400.
[2] The loss of LIL Pole 2 resulted in subsequent restrictions of the net LIL imports to the Island system to 15 MW during monopole operation to avoid under frequency load shedding in the event of loss of the remaining LIL pole.
[3] Holyrood TGS Units 1 and 2 were unavailable due to a forced outage and a forced extension to a planned outage, respectively.

the 10-minute reserve. The Stephenville Gas Turbine was unavailable due to a forced outage.[4] To further assist in maintaining adequate 10-minute reserve, CBPP provided 90 MW of capacity assistance at Hydro's request for six hours from 1633 hours to 2227 hours. LIL Pole 2 returned to service at 2158 hours, re-establishing LIL Bipole operation. The capacity assistance provided by CBPP during this period resulted in an equivalent value of 540,000 kWh.

2.2 December 16, 2023

On December 16, 2023, LIL Pole 1 tripped offline at 1812 hours. With the loss of LIL Pole 1,[5] the continued unavailability of Holyrood TGS Units 1 and 2, and the derating of Holyrood TGS Unit 3 to 70 MW due to a boiler leak, the Island 10-minute reserve started to drop during the evening peak load period. To assist in maintaining adequate 10-minute reserve, CBPP provided 90 MW of capacity assistance at Hydro's request for six hours from 1836 hours on December 16, 2023, to 0033 hours on December 17, 2023. To further assist in maintaining adequate Island 10-minute reserve, Hydro requested that Newfoundland Power maximize its hydraulic generation while preparing the Holyrood Gas Turbine for operation. Subsequent to the Pole 1 trip, LIL Pole 2 tripped offline at 2123 before Pole 1 was returned to service at 2319. The capacity assistance provided by CBPP during this period resulted in an equivalent value of 540,000 kWh.

2.3 December 17, 2023

On the morning of December 17, 2023, LIL Pole 2 was unavailable after it tripped offline the previous day. Due to the unavailability of LIL Pole 2,[6] the continued unavailability of Holyrood TGS Units 1 and 2, and the continued derating of Holyrood TGS Unit 3 to 70 MW, the Island 10-minute reserve started to drop during the morning peak load period. To assist in maintaining adequate 10-minute reserve, Hydro placed the Holyrood Gas Turbine in service. In addition, Hydro requested that Newfoundland Power maximize its hydraulic generation to support the 10-minute reserve. To further assist in maintaining adequate 10-minute reserve and cover the anticipated morning and evening peak loads for December 17, 2023, CBPP provided 90 MW of capacity assistance at Hydro's request for 18 hours from

[4] The Stephenville Gas Turbine was unavailable for the full winter period.
[5] The loss of LIL Pole 1 resulted in subsequent restrictions of the net LIL imports to the Island system to 15 MW during monopole operation to avoid under frequency load shedding in the event of loss of the remaining LIL pole.
[6] The loss of LIL Pole 2 resulted in subsequent restrictions of the net LIL imports to the Island system to 15 MW during monopole operation to avoid under frequency load shedding in the event of loss of the remaining LIL pole.

0647 hours on December 17, 2023 to 0035 hours on December 18, 2023. The capacity assistance provided by CBPP during this period resulted in an equivalent value of 1,620,000 kWh.

2.4 January 24, 2024

On January 24, 2024, the morning Island load was forecast to be high. The load forecast indicated loads of up to 1,990 MW including Maritime Link exports. Generation capacity on the Island Interconnected System was reduced due to the unavailability of Holyrood TGS Unit 2, and the derating of Holyrood TGS Unit 1. The Upper Salmon and Granite Canal units' outputs were proactively reduced to 50 MW and 22 MW respectively, due to the risk of frazil ice. The Upper Salmon uUnit was also proactively shut down overnight to mitigate this risk. In the early morning on January 24, 2024, the 10-minute reserve dropped to 165 MW as the Island load was increasing toward its peak. To assist in maintaining adequate 10-minute reserve, available Hydro standby generation was placed online. Hydro requested that Newfoundland Power maximize its hydraulic generation. To further assist in maintaining adequate 10-minute reserve, CBPP provided 90 MW of capacity assistance at Hydro's request for 6 hours from 0725 hours to 1325 hours. The capacity assistance provided by CBPP during this period resulted in an equivalent value of 540,000 kWh.

Details on system conditions, including actual peak demand values, are provided in Hydro's Supply and Demand Status Reports, included as Attachment 1 to this report.

3.0 Capacity Assistance Costs

The overall cost of capacity assistance for the 2023–2024 winter season is provided in Table 2.

Table 2: Summary of Capacity Assistance Costs Winter 2023–2024

Capacity Assistance Agreement	Capacity Fee ($)	Variable Charge ($)	Total ($)
CBPP Capacity Assistance November 1–30, 2023	368,909	-	368,909
CBPP Capacity Assistance December 1, 2023–April 30, 2024	3,000,000	108,000	3,108,000
Vale Winter 2023–2024	190,400	-	190,400
Total	**3,559,309**	**108,000**	**3,667,309**

Corner Brook Pulp and Paper Payments:

For the Period of November 1–30, 2023, Hydro paid the Capacity Fee for the available capacity from CBPP as follows:

25 days x 80 MW x $158.33/MW/day = $316,660

3 days x 70 MW x $158.33/MW/day = $33,249.30

2 days x 60 MW x $158.33/MW/day = $ 18,999.60

Total November 1–30, 2023 Fee = **$368,908.90**

For the period December 1, 2023–April 30, 2024, Hydro paid a fixed monthly fee of $600,000 per month for a total of $3,000,000, as well as a variable fee for the extended call on December 17, 2023. The variable charge is based on the following clause in the term sheet: "During summer or winter, if CBPP can provide more capacity than the maximum contracted amount or for longer than six hours and Hydro would like to purchase the capacity then there will be a variable payment for this extra capacity at $0.20 per kW per hour." Since Hydro called capacity assistance for 18 hours that day, and 12 of the hours were included in the fixed fee Hydro paid the variable charge on the additional 6 hours calculated as follows:

Energy associated with Capacity:	90,000 kW * 6 hrs = 540,000 kWh
Rate:	$0.20/kWh
Fee:	540,000 kWh * $0.20/kWh = **$108,000**

4.0 Conclusion

Hydro made four requests for capacity assistance during winter 2023–2024 to support the provision of reliable service to its customers. CBPP demonstrated its ability to provide capacity assistance when requested.

Appendix A

Summary of Short-Term CBPP Capacity Assistance Agreement November 1–30, 2023

Table A-1: Summary of Short-term CBPP Capacity Assistance Agreement November 1–30, 2023[1]

Capacity	Rate Structure	Conditions
Up to 105 MW in the following increments: • 20 MW • 40 MW • 60 MW • 90 MW • 105 MW	Fixed[2] $4.75/kW per month for each of November through April for a total of $2,992,500. Variable For capacity assistance up to and including 90 MW, a minimum of $0.20 per kW per hour to a maximum of $0.26 per kW per hour for the maximum assistance provided as determined on the following sliding scale: **1)** 0 to 7.5 GWh/Winter – 90% of GTVC;[3] **2)** Greater than 7.5 to 100 GWh/Winter Period – 80% of GTVC. For capacity assistance over 90 MW, the variable rate fee is based on the greater of (i) 80% of the previous month's GTVC plus $0.06/kWh, or (ii) a predetermined rate of $0.26/KWh, but which shall not exceed $0.32/KWh.	• Notification Period: 10 minutes • Interruption Period: 4 hours (minimum) to 6 hours (maximum) • Maximum number of curtailments: 2 per day, 60 per winter • Total Assistance Period: 250 hours per winter • Penalties: Three Strike Clause[4] • Test: Annually

[1]As per the Second Amended and Restated Capacity Assistance Agreement dated May 4, 2021.
[2] Due to the short term nature of the agreement the rate was converted to a daily rate as follows: $2,992,500/180 days/105 MW = $158.33/day/MW.
[3] GTVC = the previous month's Gas Turbine Variable Cost as provided on CBPP's monthly invoice and expressed as a cost per kWh.
[4] If CBPP fails to provide the requested capacity assistance, the fixed fee is reduced by 50% in the first instance. For the second failure to provide capacity assistance, the fixed fee is reduced by a further 25%. If CBPP fails to provide capacity assistance three times during the winter, 100% of the fee is forfeited.

Appendix B

Summary of Long-term CBPP Capacity Assistance Agreement December 1, 2023–April 30, 2024

Table B-2: Summary of Long-term CBPP Capacity Assistance December 1, 2023–April 30, 2024[11]

Contracted Capacity	Rate Structure	Conditions
Winter (Nov 1–Apr 30) Up to 90 MW (or another higher amount as tested and agreed by the parties) in the following increments: • 20 MW • 30 MW • 60 MW • 90 MW • Other if tested and agreed **Summer (May 1–Oct 31)** • 20 MW • 50 MW	**Fixed** $80 per kW per year for the maximum capacity contracted. 90 MW x $80 = $7,200,000 The fixed fee will be adjusted annually, starting January 1, 2025, according to the percentage change over 12 months in the "All-items" Consumer Price Index for Canada. The minimum adjustment will be 0% and the maximum adjustment will be 2.5%. **Variable** The variable fee will not apply to the first 180 hours/30 calls. An additional 90 hours/30 calls to be made available at $0.25 per kW per hour. The variable fee for extended duration or additional capacity assistance will be $0.20 per kW per hour	• Notification Period: 10 minutes • Interruption Period: 4 hours (minimum) to 6 hours (maximum) • Maximum Number of Curtailments: 2 per day, 30 per year • Total Assistance Period: 180 hours per year • Penalties: Reduced payment by $250,000 per failure occurrence; after three failures Hydro has the right to terminate the contract. • Expiry: 15 years • Test: Test to be completed in September or October of each year. CBPP and Hydro identify a one-day window for which the test can be completed. Hydro will make a call for capacity during this window for up to four hours. The amount of capacity provided will be the maximum contracted amount of capacity assistance for that winter (or lower amount as agreed to by both parties).

[11]As approved in Board Order No. P.U. 32(2023) on December 18, 2023. Hydro and CBPP operated under these terms during the review of the application from December 1-18, 2023.

Appendix C

Summary of Vale Capacity Assistance Agreement

December 1, 2023–March 31, 2024

Table C-3: Summary of Vale Capacity Assistance Agreement

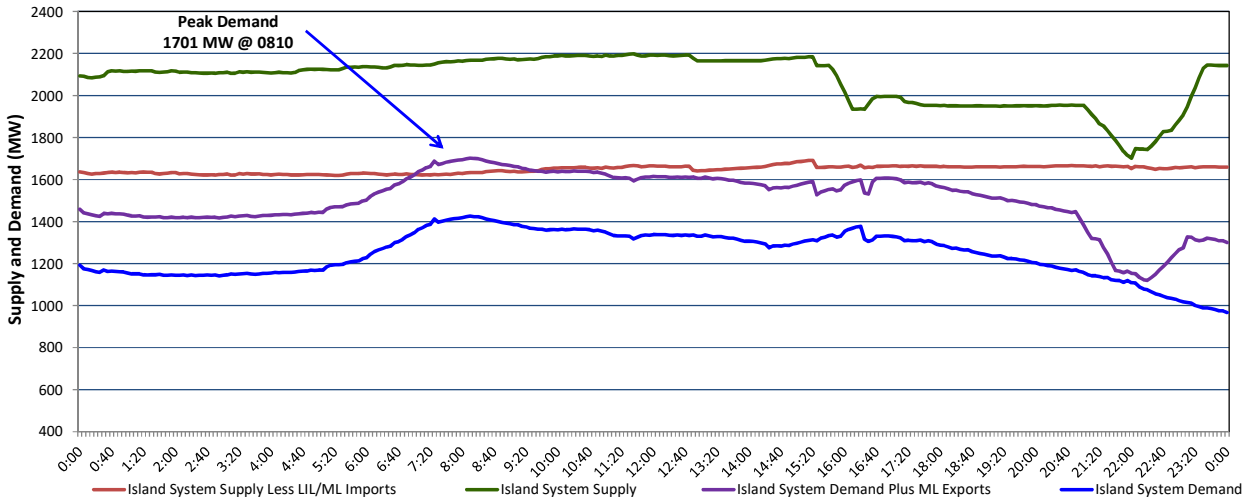
Capacity	Rate Structure	Conditions
Up to 10.8 MWs	**Fixed** $28 per kW per Winter	• Notification Period: 20 minutes • Capacity Assistance Request Period: Up to 6 hours (maximum) • Maximum Number of requests: 2 per day, 20 per winter • Total Assistance Period: 100 hours per winter • Expiry: March 31, 2024 • Test: Annually

Attachment 1

Supply and Demand Reports

Newfoundland Labrador Hydro (NLH)
Supply and Demand Status Report Filed Monday, December 18, 2023

Section 1
Island Interconnected System Supply, Demand & Exports
Actual 24 Hour System Performance For Friday, December 15, 2023



Supply Notes For December 15, 2023 [1,2]

A As of 0800 hours, May 21, 2023, Holyrood Unit 2 unavailable due to forced extension to planned outage (170 MW).
B As of 2059 hours, July 13, 2023, Stephenville Gas Turbine unavailable (50 MW).
C As of 2220 hours, December 11, 2023, Holyrood Unit 1 unavailable 140 MW (170 MW).

Section 2
Island Interconnected Supply and Demand

Sat, Dec 16, 2023	**Island System Outlook**[3]			**Seven-Day Forecast**	**Temperature (°C)**		**Island System Daily Peak Demand (MW)**	
					Morning	**Evening**	**Forecast**	**Adjusted**[7]
Available Island System Supply:[5]	**2,210**	**MW**		Saturday, December 16, 2023	1	-4	**1,650**	**1,551**
NLH Island Generation:[4,8]	1,305	MW		Sunday, December 17, 2023	-6	1	1,555	1,457
NLH Island Power Purchases:[6]	130	MW		Monday, December 18, 2023	4	7	1,420	1,324
Other Island Generation:	230	MW		Tuesday, December 19, 2023	8	7	1,175	1,081
ML/LIL Imports:	545	MW		Wednesday, December 20, 2023	8	7	1,180	1,086
Current St. John's Temperature & Windchill: 1 °C	N/A	°C		Thursday, December 21, 2023	1	-1	1,335	1,240
7-Day Island Peak Demand Forecast:	**1,650**	MW		Friday, December 22, 2023	-3	-2	1,430	1,333

Supply Notes For December 16, 2023 [3]

Notes:
1. Generation outages for running and corrective maintenance are included. These are not unusual for power system operations. They generally do not impact customer supply. The power system operators schedule outages to system equipment whenever possible to coincide with periods when customer demands are low and sufficient supply reserves are available. However, from time to time equipment outages are necessary and reserves may be impacted.
2. Due to the Island system having no synchronous connections to the larger North American grid, when there is a sudden loss of large generating units there may be a requirement for some customer's load to be interrupted for short periods to bring generation output equal to customer demand. This automatic action of power system protection, referred to as under frequency load shedding (UFLS), is necessary to ensure the integrity and reliability of system equipment. Under frequency events have typically occurred 5 to 8 times per year on the Island Interconnected System and the resultant customer load interruptions are generally less than 30 minutes. With the activation of the Maritime Link frequency controller during the winter of 2018, UFLS events have occurred less frequently.
3. As of 0800 Hours.
4. Gross output including station service at Holyrood (24.5 MW) and improved NLH hydraulic output due to water levels (35 MW).
5. Gross output from all Island sources (including Note 4).
6. NLH Island Power Purchases include: CBPP Co-Gen, Nalcor Exploits, Rattle Brook, Star Lake, Wind Generation and capacity assistance (when applicable).
7. Adjusted for curtailable load, market activities and the impact of voltage reduction when applicable.
8. 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

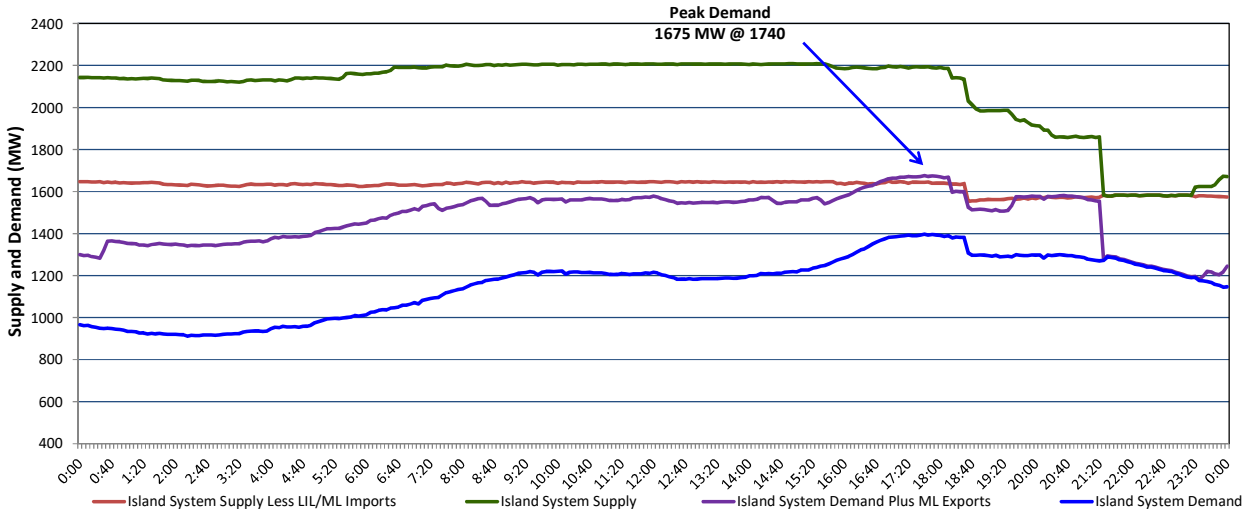
Section 3
Island Peak Demand Information
Previous Day Actual Peak and Current Day Forecast Peak

Fri, Dec 15, 2023	Actual Island Peak Demand[9]	8:10	1,701 MW
Sat, Dec 16, 2023	Forecast Island Peak Demand		1,650 MW

Notes: 9. Island Demand / LIL / ML Exports (where applicable) is supplied by NLH generation and purchases, plus generation owned and operated by Newfoundland Power and Corner Brook Pulp & Paper (Deer Lake Power, DLP).

Newfoundland Labrador Hydro (NLH)
Supply and Demand Status Report Filed Monday, December 18, 2023

Section 1
Island Interconnected System Supply, Demand & Exports
Actual 24 Hour System Performance For Saturday, December 16, 2023



Supply Notes For December 16, 2023 [1,2]

A	As of 0800 hours, May 21, 2023, Holyrood Unit 2 unavailable due to forced extension to planned outage (170 MW).
B	As of 2059 hours, July 13, 2023, Stephenville Gas Turbine unavailable (50 MW).
C	As of 2220 hours, December 11, 2023, Holyrood Unit 1 unavailable 140 MW (170 MW).
D	At 1833 hours, December 16, 2023, Holyrood Unit 3 available at 70 MW (150 MW).

Section 2
Island Interconnected Supply and Demand

Sun, Dec 17, 2023	Island System Outlook[3]		Seven-Day Forecast	Temperature (°C)		Island System Daily Peak Demand (MW)	
				Morning	Evening	Forecast	Adjusted[7]
Available Island System Supply:[5]	**1,780**	**MW**	Sunday, December 17, 2023	-7	0	**1,610**	**1,511**
NLH Island Generation:[4,8]	1,225	MW	Monday, December 18, 2023	2	4	1,445	1,348
NLH Island Power Purchases:[6]	95	MW	Tuesday, December 19, 2023	8	10	1,180	1,086
Other Island Generation:	215	MW	Wednesday, December 20, 2023	9	8	1,170	1,076
ML/LIL Imports:	245	MW	Thursday, December 21, 2023	5	-1	1,310	1,215
Current St. John's Temperature & Windchill: -8 °C	-16	°C	Friday, December 22, 2023	0	1	1,400	1,304
7-Day Island Peak Demand Forecast:	**1,610**	MW	Saturday, December 23, 2023	2	2	1,280	1,185

Supply Notes For December 17, 2023 [3]

Notes:
1. Generation outages for running and corrective maintenance are included. These are not unusual for power system operations. They generally do not impact customer supply. The power system operators schedule outages to system equipment whenever possible to coincide with periods when customer demands are low and sufficient supply reserves are available. However, from time to time equipment outages are necessary and reserves may be impacted.
2. Due to the Island system having no synchronous connections to the larger North American grid, when there is a sudden loss of large generating units there may be a requirement for some customer's load to be interrupted for short periods to bring generation output equal to customer demand. This automatic action of power system protection, referred to as under frequency load shedding (UFLS), is necessary to ensure the integrity and reliability of system equipment. Under frequency events have typically occurred 5 to 8 times per year on the Island Interconnected System and the resultant customer load interruptions are generally less than 30 minutes. With the activation of the Maritime Link frequency controller during the winter of 2018, UFLS events have occurred less frequently.
3. As of 0800 Hours.
4. Gross output including station service at Holyrood (24.5 MW) and improved NLH hydraulic output due to water levels (35 MW).
5. Gross output from all Island sources (including Note 4).
6. NLH Island Power Purchases include: CBPP Co-Gen, Nalcor Exploits, Rattle Brook, Star Lake, Wind Generation and capacity assistance (when applicable).
7. Adjusted for curtailable load, market activities and the impact of voltage reduction when applicable.
8. 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

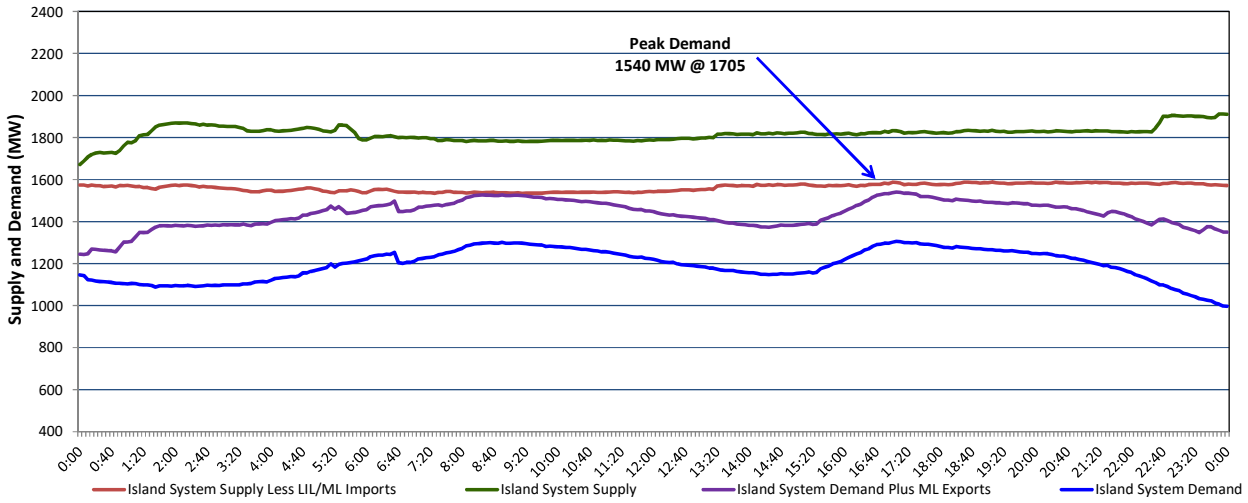
Section 3
Island Peak Demand Information
Previous Day Actual Peak and Current Day Forecast Peak

Sat, Dec 16, 2023	Actual Island Peak Demand[9]	17:40	1,675 MW
Sun, Dec 17, 2023	Forecast Island Peak Demand		1,610 MW

Notes: 9. Island Demand / LIL / ML Exports (where applicable) is supplied by NLH generation and purchases, plus generation owned and operated by Newfoundland Power and Corner Brook Pulp & Paper (Deer Lake Power, DLP).

Newfoundland Labrador Hydro (NLH)
Supply and Demand Status Report Filed Monday, December 18, 2023

Section 1
Island Interconnected System Supply, Demand & Exports
Actual 24 Hour System Performance For Sunday, December 17, 2023



Supply Notes For December 17, 2023 [1,2]

A As of 0800 hours, May 21, 2023, Holyrood Unit 2 unavailable due to forced extension to planned outage (170 MW).
B As of 2059 hours, July 13, 2023, Stephenville Gas Turbine unavailable (50 MW).
C As of 2220 hours, December 11, 2023, Holyrood Unit 1 unavailable 140 MW (170 MW).
D As of 1833 hours, December 16, 2023, Holyrood Unit 3 available at 70 MW (150 MW).

Section 2
Island Interconnected Supply and Demand

Mon, Dec 18, 2023	**Island System Outlook**[3]		**Seven-Day Forecast**	**Temperature (°C)**		**Island System Daily Peak Demand (MW)**	
				Morning	**Evening**	**Forecast**	**Adjusted**[7]
Available Island System Supply:[5]	**1,974**	**MW**	Monday, December 18, 2023	2	4	**1,470**	**1,373**
NLH Island Generation:[4,8]	1,225	MW	Tuesday, December 19, 2023	8	9	1,140	1,047
NLH Island Power Purchases:[6]	130	MW	Wednesday, December 20, 2023	9	9	1,165	1,072
Other Island Generation:	215	MW	Thursday, December 21, 2023	6	6	1,175	1,081
ML/LIL Imports:	404	MW	Friday, December 22, 2023	-1	0	1,425	1,329
Current St. John's Temperature & Windchill: 2 °C	N/A	°C	Saturday, December 23, 2023	-1	-3	1,335	1,240
7-Day Island Peak Demand Forecast:	**1,470**	MW	Sunday, December 24, 2023	-4	-4	1,395	1,299

Supply Notes For December 18, 2023 [3]

Notes:
1. Generation outages for running and corrective maintenance are included. These are not unusual for power system operations. They generally do not impact customer supply. The power system operators schedule outages to system equipment whenever possible to coincide with periods when customer demands are low and sufficient supply reserves are available. However, from time to time equipment outages are necessary and reserves may be impacted.
2. Due to the Island system having no synchronous connections to the larger North American grid, when there is a sudden loss of large generating units there may be a requirement for some customer's load to be interrupted for short periods to bring generation output equal to customer demand. This automatic action of power system protection, referred to as under frequency load shedding (UFLS), is necessary to ensure the integrity and reliability of system equipment. Under frequency events have typically occurred 5 to 8 times per year on the Island Interconnected System and the resultant customer load interruptions are generally less than 30 minutes. With the activation of the Maritime Link frequency controller during the winter of 2018, UFLS events have occurred less frequently.
3. As of 0800 Hours.
4. Gross output including station service at Holyrood (24.5 MW) and improved NLH hydraulic output due to water levels (35 MW).
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6. NLH Island Power Purchases include: CBPP Co-Gen, Nalcor Exploits, Rattle Brook, Star Lake, Wind Generation and capacity assistance (when applicable).
7. Adjusted for curtailable load, market activities and the impact of voltage reduction when applicable.
8. 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

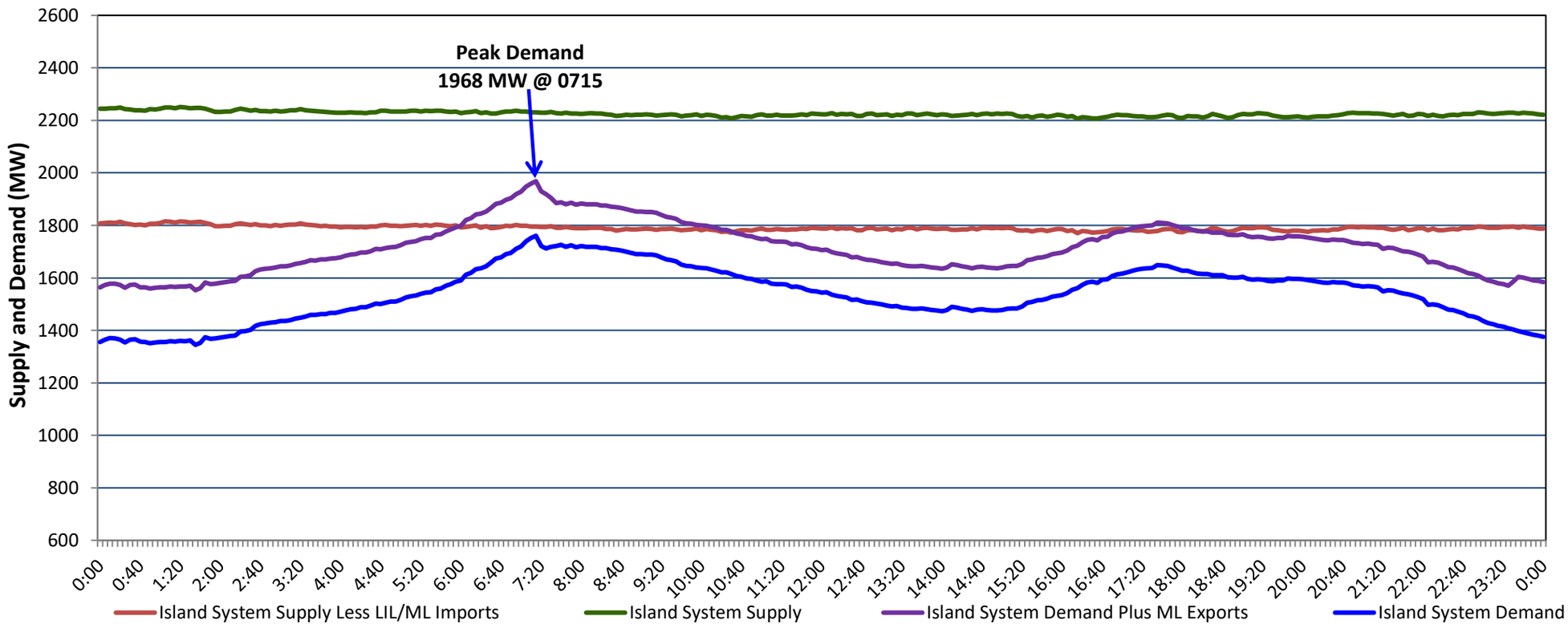
Section 3
Island Peak Demand Information
Previous Day Actual Peak and Current Day Forecast Peak

Sun, Dec 17, 2023	Actual Island Peak Demand[9]	17:05	1,540 MW
Mon, Dec 18, 2023	Forecast Island Peak Demand		1,470 MW

Notes: 9. Island Demand / LIL / ML Exports (where applicable) is supplied by NLH generation and purchases, plus generation owned and operated by Newfoundland Power and Corner Brook Pulp & Paper (Deer Lake Power, DLP).

Newfoundland Labrador Hydro (NLH)
Supply and Demand Status Report Filed Thursday, January 25, 2024

Section 1
Island Interconnected System Supply, Demand & Exports
Actual 24 Hour System Performance For Wednesday, January 24, 2024



Supply Notes For January 24, 2024 [1,2]

A As of 0800 hours, May 21, 2023, Holyrood Unit 2 unavailable due to forced extension to planned outage (170 MW).
B As of 2059 hours, July 13, 2023, Stephenville Gas Turbine unavailable (50 MW).
C As of 0714 hours, January 08, 2024, Holyrood Unit 1 available at 160 MW (170 MW).

Section 2
Island Interconnected Supply and Demand

Thu, Jan 25, 2024	**Island System Outlook**[3]		**Seven-Day Forecast**	**Temperature (°C)**		**Island System Daily Peak Demand (MW)**	
				Morning	**Evening**	**Forecast**	**Adjusted**[7]
Available Island System Supply:[5]	**2,272**	**MW**	Thursday, January 25, 2024	-2	-3	**1,710**	**1,610**
NLH Island Generation:[4,8]	1,465	MW	Friday, January 26, 2024	-7	-6	1,585	1,487
NLH Island Power Purchases:[6]	150	MW	Saturday, January 27, 2024	-6	-6	1,375	1,279
Other Island Generation:	230	MW	Sunday, January 28, 2024	-3	-1	1,370	1,274
ML/LIL Imports:	427	MW	Monday, January 29, 2024	-14	-14	1,660	1,561
Current St. John's Temperature & Windchill: -3 °C	-12	°C	Tuesday, January 30, 2024	-13	-10	1,670	1,571
7-Day Island Peak Demand Forecast:	**1,710**	MW	Wednesday, January 31, 2024	-7	-9	1,540	1,442

Supply Notes For January 25, 2024 [3]

Notes:
1. Generation outages for running and corrective maintenance are included. These are not unusual for power system operations. They generally do not impact customer supply. The power system operators schedule outages to system equipment whenever possible to coincide with periods when customer demands are low and sufficient supply reserves are available. However, from time to time equipment outages are necessary and reserves may be impacted.
2. Due to the Island system having no synchronous connections to the larger North American grid, when there is a sudden loss of large generating units there may be a requirement for some customer's load to be interrupted for short periods to bring generation output equal to customer demand. This automatic action of power system protection, referred to as under frequency load shedding (UFLS), is necessary to ensure the integrity and reliability of system equipment. Under frequency events have typically occurred 5 to 8 times per year on the Island Interconnected System and the resultant customer load interruptions are generally less than 30 minutes. With the activation of the Maritime Link frequency controller during the winter of 2018, UFLS events have occurred less frequently.
3. As of 0800 Hours.
4. Gross output including station service at Holyrood (24.5 MW) and improved NLH hydraulic output due to water levels (35 MW).
5. Gross output from all Island sources (including Note 4).
6. NLH Island Power Purchases include: CBPP Co-Gen, Nalcor Exploits, Rattle Brook, Star Lake, Wind Generation and capacity assistance (when applicable).
7. Adjusted for curtailable load, market activities and the impact of voltage reduction when applicable.
8. 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

Section 3
Island Peak Demand Information
Previous Day Actual Peak and Current Day Forecast Peak

Wed, Jan 24, 2024	Actual Island Peak Demand[9]	7:15	1,968 MW
Thu, Jan 25, 2024	Forecast Island Peak Demand		1,710 MW

Notes: 9. Island Demand / LIL / ML Exports (where applicable) is supplied by NLH generation and purchases, plus generation owned and operated by Newfoundland Power and Corner Brook Pulp & Paper (Deer Lake Power, DLP).