



Newfoundland and Labrador Hydro
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nlhydro.com

May 30, 2022

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 of Corporate Services and Board Secretary

Dear Ms. Blundon:

Re: Capacity Assistance Agreement with Corner Brook Pulp and Paper Limited – Report for Winter 2021–2022

Please find enclosed a copy of Newfoundland and Labrador Hydro's Capacity Assistance Report for winter 2021–2022 under which capacity assistance was requested from Corner Brook Pulp and Paper 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/kd

Encl.

ecc:

Board of Commissioners of Public Utilities
Jacqui H. Glynn
PUB Official 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

Praxair 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 Agreement with Corner Brook Pulp and Paper Limited – Report for Winter 2021–2022

May 30, 2022

A report to the Board of Commissioners of Public Utilities



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Appendix B: Summary of Second Amended and Restated Capacity Assistance Agreement

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List of Attachments

Attachment 1: Supply and Demand Report – November 26, 2021

1.0 Introduction

Capacity assistance arrangements are used as a means to either minimize disruptions to customers in the event of a contingency or maintain sufficient level of operating reserves for reliable operation of the electrical system. This support is typically requested during either (i) times of high or peak customer demand, or (ii) instances where there are issues with generation or regional transmission during the winter operating season.

Newfoundland and Labrador Hydro (“Hydro”) currently has one capacity assistance agreement in place.¹ The Second Amended and Restated Capacity Assistance Agreement (“Agreement”) with Corner Brook Pulp and Paper Limited (“CBPP”), approved in Board Order No. P.U. 4(2021),² provides for up to 105 MW of winter capacity assistance to Hydro. A summary of the terms and conditions of the Agreement is contained in Appendix B.

In accordance with Board Order No. P.U. 4(2021), which ordered the continuation of reporting requirements outlined in Board Order No. P.U. 40(2018),³ this report provides the following for winter 2021–2022 regarding the agreement with CBPP:

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

2.0 Capacity Assistance Provided – Winter 2021–2022

The Agreement with CBPP allows Hydro to make capacity assistance requests to CBPP during the winter period, defined as between November 1 to April 30. The Agreement also provides the ability for Hydro

¹ For the winter 2021–2022 period, Hydro also had a capacity assistance agreement with Vale Newfoundland and Labrador Limited (“Vale”). Hydro provided details on the use of the capacity assistance agreement between Hydro and Vale to the Board of Commissioners of Public Utilities (“Board”) in correspondence “Capacity Assistance Agreement with Vale Newfoundland & Labrador Limited,” Newfoundland and Labrador Hydro, April 12, 2022. Hydro’s capacity assistance agreement with Vale expired at the end of March 2022. Hydro continues to evaluate whether to continue an agreement with Vale through interconnection as part of its focus on customer reliability.

² “Public Utilities Act, RSNL 1990, c P-47, Board Order No. P.U. 4(2021), Board of Commissioners of Public Utilities, January 26, 2021, sch. C.

³ “Public Utilities Act, RSNL 1990, c P-47, Board Order No. P.U. 40(2018), Board of Commissioners of Public Utilities, November 22, 2018.

1 to make a request for capacity assistance outside the official winter period; CBPP may comply with this
2 request on a voluntary basis in accordance with clause 2.06 of the Agreement. In the fall of 2021, Hydro
3 initiated capacity assistance arrangements with CBPP earlier than the November 1 start of the winter
4 period. Hydro determined it was prudent to have arrangements in place in order to reliably meet
5 customer load and reserve requirements during this period due to forced outage extensions to a
6 number of larger generating units from late September to late October of 2021. Hydro formalized the
7 capacity assistance arrangements each week from September 25–October 31, 2021 through
8 correspondence with CBPP, attached to this report as Appendix C. However, Hydro did not make any
9 calls for capacity assistance during this early period.

10 Pursuant to the Agreement, CBPP is required to demonstrate the capability to reduce its load, pursuant
11 to a request of Hydro, such that it provides up to 105 MW of relief on the Island transmission system.
12 The test is generally required at a mutually agreed time between October 15 and October 31 before the
13 beginning of each winter period. Due to the need for early capacity assistance from CBPP, the test was
14 delayed until November 12, 2021. The results of the testing indicated capability up to 109,793 kW.
15 Hydro and CBPP agreed that 90 MW of capacity assistance would be made available from CBPP for
16 winter 2021–2022.

17 During the winter of 2021–2022, Hydro made one request for capacity assistance from CBPP. On
18 November 26, 2021, generating capacity on the Island Interconnected System was reduced due to an
19 extended planned outage of Holyrood Thermal Generating Stations (“Holyrood TGS”) Unit 1 and the
20 unavailability of Holyrood TGS Unit 2 due to the failure of its step-up transformer T2. There was a
21 sudden loss of the Labrador-Island Link imports when it tripped out of service at 19:02 hours (NST). This
22 event resulted in a further loss of 308 MW of capacity. As a result, the ten-minute and regulating
23 reserves became low and caused the Maritime Link frequency controller to activate, minimizing the
24 amount of load shed due to underfrequency load shedding. Once the Maritime Link frequency controller
25 is activated, it needs to be returned to pre-contingency level within 15 minutes. To assist in restoring
26 operating reserves and to return to Nova Scotia the Maritime Link power that had been transferred due
27 to the frequency response, Hydro’s standby hydraulic generation was placed in service and Hydro
28 requested that Newfoundland Power Inc. maximize its hydraulic generation. Holyrood TGS Unit 3
29 generation was also maximized. In addition, and at Hydro’s request, CBPP provided 40 MW of capacity
30 assistance from 19:22 to 23:08 hours (NST). The capacity assistance provided by CBPP during this period
31 resulted in an equivalent value of 160,778 kWh.

1 Further details regarding the capacity assistance requested and provided are included as Appendix A to
 2 this report. Details on system conditions, including actual peak demand values, are provided in Hydro’s
 3 Supply and Demand Status Report for November 26, 2021,⁴ included as Attachment 1 to this report.

4 **3.0 Capacity Assistance Costs**

5 The overall cost of capacity assistance for the 2021–2022 winter season is provided in Table 1.

Table 1: Summary of Capacity Assistance Costs – CBPP

CBPP Capacity Assistance Agreement	Capacity Fee (\$)	Variable Charge (\$)	Total (\$)
Early Capacity Assistance	424,324.40	-	424,324.40
Winter 2021–2022	2,565,000.00	36,472.17	2,601,472.17
Total	2,989,324.40	36,472.17	3,025,796.57

6 Hydro paid a reduced Capacity Fee for the agreed upon level of 90 MW of capacity assistance available
 7 from November 1, 2021 to April 30, 2022.⁵ The variable charge relates to the November 26, 2021
 8 request for assistance calculated in accordance with clause 3.02 of the Agreement.

9 The Early Capacity Assistance Capacity Fees were calculated as a prorated portion of the winter period
 10 Capacity Fee stipulated in the Agreement and calculated as \$2,992,500/180 days/105 MW =
 11 \$158.33/day/MW. The detailed calculation is contained in Table 2 below.

Table 2: Calculation of Early Capacity Assistance Capacity Fees

Date	Capacity (MW)	Number of Days	Daily Capacity Fee (\$)	Total (\$)
September 25–October 1	60	7	158.33	66,498.60
October 2–October 15	60	14	158.33	132,997.20
October 9–October 15	20	7	158.33	22,166.20
October 16–October 31	80	16	158.33	202,662.40
Total				424,324.40

⁴ “Daily Supply and Demand Status Report – November 26, 2021,” Newfoundland and Labrador Hydro, November 29, 2021.

⁵ Pursuant to clause 2.07 of the Agreement, a reduction in the Capacity Fee is made to reflect the prorated amount of Capacity Assistance.

1 **4.0 Conclusion**

2 Hydro made one capacity assistance request from CBPP in winter 2021–2022 to support the provision of
3 reliable service to its customers. As has been the case in previous winters, CBPP demonstrated its ability
4 to provide capacity assistance when requested.

Appendix A

Summary of Winter 2021–2022 Capacity Assistance Requests – Corner Brook Pulp and Paper Limited

Table A-1: Summary of Winter 2021–2022 Capacity Assistance Requests – CBPP¹

Date	Start Time	End Time	Duration (hh:mm)	System Generation Available (MW)	System Available Reserve (MW)	System 10-Minute Reserve (MW)	Maximum Capacity Assistance Requested (MW)	Maximum Capacity Assistance Provided (MW)
November 26, 2021	19:22	23:08	3:46	1,514	750	62	40.0	40.0

¹ Corner Brook Pulp and Paper Limited (“CBPP”).

Appendix B

Summary of Second Amended and Restated Capacity Assistance Agreement

Table B-1: Summary of Second Amended and Restated Capacity Assistance Agreement – CBPP¹

Capacity	Rate Structure	Conditions
Up to 105 MW in the following increments: <ul style="list-style-type: none"> • 20 MW • 40 MW • 60 MW • 90 MW • 105 MW 	<p><u>Fixed</u> \$4.75/kW per month for each of November through April for a total of \$2,992,500.</p> <p><u>Variable</u> 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:</p> <ol style="list-style-type: none"> 1) 0 to 7.5 GWh/Winter – 90% of GTVC;² 2) Greater than 7.5 to 100 GWh/Winter Period – 80% of GTVC. <p>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.</p>	<ul style="list-style-type: none"> • 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 Clause³ • Expiry: April 30, 2023 • Test: Annually

¹ Corner Brook Pulp and Paper Limited (“CBPP”).

² GTVC = the previous month’s Gas Turbine Variable Cost as provided on CBPP’s monthly invoice and expressed as a cost per kWh.

³ 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 C

Weekly Capacity Assistance Arrangements – Corner Brook Pulp and Paper Limited



Newfoundland and Labrador Hydro
Hydro Place, 500 Columbus Drive
P.O. Box 12400, St. John's, NL
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t. 709.737.1400 | f. 709.737.1800
nlhydro.com

September 24, 2021

Via Email: Darren Pelley - darren.pelley@kruger.com

Corner Brook Pulp and Paper Limited
3285 Bedford Road
Montreal, Quebec, H3S 1G5

Attention: Darren Pelley

Re: Capacity Assistance Outside a Winter Period – September 25 – October 1, 2021

Newfoundland and Labrador Hydro ("Hydro") and Corner Brook Pulp and Paper Limited ("CBPPL") are parties to a Capacity Assistance Agreement recently amended and restated for the second time and dated May 4, 2021 ("CAA"). Clause 2.06 of the CAA allows Hydro to make a Capacity Assistance Request outside of a Winter Period and CBPPL may comply with this request on a voluntary basis. The parties wish to set out the terms of any Capacity Assistance Requests that may be made during the period September 25 through to October 1, 2021 pursuant to Clause 2.06 of the CAA.

CBPPL agrees to provide 60 MW of Capacity Assistance to Hydro for the period September 25 through to October 1, 2021. During this period, all provisions in the CAA will apply unless expressly stated in this letter.

Clause 2.01 of the CAA states:

Hydro may make Capacity Assistance Requests to the Customer in amounts of 20, 40, 60, 90 or 105 MW, or other amount as confirmed in a test pursuant to Clause 2.07 hereof, no more than twice in a calendar day, no more than sixty times in a Winter Period, each of a duration of not less than 4 hours and not more than six (6) hours, and such that the total duration of such Capacity Assistance Periods does not exceed 250 hours in a Winter Period.

During the period September 25 through to October 1, 2021, Hydro may make Capacity Assistance Requests to the Customer in 20 MW increments up to 60 MW, no more than twice in a calendar day, each of a duration of not less than four (4) hours and not more than six (6) hours and such that the total duration of such Capacity Assistance does not exceed twenty (20) hours during the period September 25 through to October 1, 2021. Any Capacity Assistance Requests

made after the total duration of twenty (20) hours has been reached will be voluntary at CBPPL's discretion.

For clarity, the payments to be made by Hydro to CBPPL for this Capacity Assistance outside a Winter Period will be as per Clause 3.03 in the CAA and more specifically:

The variable rate fee for the maximum Capacity Assistance requested and provided during each Capacity Assistance Period will be 80% of \$0.28617¹.

The Capacity Fee referenced in Clause 3.01 and 3.03 will be a prorated portion of the Winter Period Capacity Fee² calculated as:

$$\$158.33/\text{day}/\text{MW} \times 60 \text{ MW} \times 7 \text{ days} = \$66,498.60$$

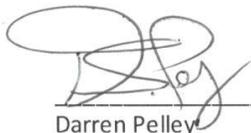
Please indicate your agreement with the foregoing by signing below and returning a copy to the undersigned.

Sincerely,



Robert Collett, Vice President, Engineering and Technology
Newfoundland and Labrador Hydro

Acknowledged and Agreed this 24 th day of September, 2021



Darren Pelley
Corner Brook Pulp and Paper Limited

¹ GTVC for August

² \$2,992,500/180 days/105 MW = \$158.33/day/MW





Newfoundland and Labrador Hydro
Hydro Place, 500 Columbus Drive
P.O. Box 12400, St. John's, NL
Canada A1B 4K7
t. 709.737.1400 | f. 709.737.1800
nlhydro.com

September 30, 2021

Via Email: Darren Pelley - darren.pelley@kruger.com

Corner Brook Pulp and Paper Limited
3285 Bedford Road
Montreal, Quebec, H3S 1G5

Attention: Darren Pelley

Re: Capacity Assistance Outside a Winter Period – October 2 – October 15, 2021

Newfoundland and Labrador Hydro ("Hydro") and Corner Brook Pulp and Paper Limited ("CBPPL") are parties to a Capacity Assistance Agreement recently amended and restated for the second time and dated May 4, 2021 ("CAA"). Clause 2.06 of the CAA allows Hydro to make a Capacity Assistance Request outside of a Winter Period and CBPPL may comply with this request on a voluntary basis. The parties wish to set out the terms of any Capacity Assistance Requests that may be made during the period October 2 through to October 15, 2021 pursuant to Clause 2.06 of the CAA.

CBPPL agrees to provide 60 MW of Capacity Assistance to Hydro for the period October 2 through to October 15, 2021. During this period, all provisions in the CAA will apply unless expressly stated in this letter.

Clause 2.01 of the CAA states:

Hydro may make Capacity Assistance Requests to the Customer in amounts of 20, 40, 60, 90 or 105 MW, or other amount as confirmed in a test pursuant to Clause 2.07 hereof, no more than twice in a calendar day, no more than sixty times in a Winter Period, each of a duration of not less than 4 hours and not more than six (6) hours, and such that the total duration of such Capacity Assistance Periods does not exceed 250 hours in a Winter Period.

During the period October 2 through to October 15, 2021, Hydro may make Capacity Assistance Requests to the Customer in 20 MW increments up to 60 MW, no more than twice in a calendar day, each of a duration of not less than four (4) hours and not more than six (6) hours and such that the total duration of such Capacity Assistance does not exceed forty (40) hours during the period October 2 through to October 15, 2021. Any Capacity Assistance Requests made after the total duration of forty (40) hours has been reached will be voluntary at CBPPL's discretion.

For clarity, the payments to be made by Hydro to CBPPL for this Capacity Assistance outside a Winter Period will be as per Clause 3.03 in the CAA and more specifically:

The variable rate fee for the maximum Capacity Assistance requested and provided during each Capacity Assistance Period will be 80% of \$0.28617¹.

The Capacity Fee referenced in Clause 3.01 and 3.03 will be a prorated portion of the Winter Period Capacity Fee² calculated as:

$$\$158.33/\text{day}/\text{MW} \times 60 \text{ MW} \times 14 \text{ days} = \$132,998.20$$

Please indicate your agreement with the foregoing by signing below and returning a copy to the undersigned.

Sincerely,



Robert Collett, Vice President, Engineering and Technology
Newfoundland and Labrador Hydro

Acknowledged and Agreed this 30th day of SEPTEMBER, 2021



Darren Pelley
Corner Brook Pulp and Paper Limited

¹ GTVC for August

² \$2,992,500/180 days/105 MW = \$158.33/day/MW





Newfoundland and Labrador Hydro
Hydro Place, 500 Columbus Drive
P.O. Box 12400, St. John's, NL
Canada A1B 4K7
t. 709.737.1400 | f. 709.737.1800
nlhydro.com

October 8, 2021

Via Email: Darren Pelley - darren.pelley@kruger.com

Corner Brook Pulp and Paper Limited
3285 Bedford Road
Montreal, Quebec, H3S 1G5

Attention: Darren Pelley

Re: Additional 20 MW Capacity Assistance Outside a Winter Period – October 9 – 15, 2021

Further to the letter dated September 30, 2021 wherein Newfoundland and Labrador Hydro ("Hydro") and Corner Brook Pulp and Paper Limited ("CBPPL") agreed to the terms whereby CBPPL agrees to provide 60 MW of Capacity Assistance to Hydro for the period October 2 through to October 15, 2021, CBPPL now agrees to provide an additional 20 MW of Capacity Assistance to Hydro for the period October 9 – October 15.

All other provisions in the CAA and the letter dated September 30, 2021 will apply unless expressly stated here.

The additional payments to be made by Hydro to CBPPL, in addition to the amounts set out in the September 30, 2021 letter are:

The Capacity Fee for the additional Capacity Assistance will be calculated as:
 $\$158.33/\text{day}/\text{MW} \times 20 \text{ MW} \times 7 \text{ days} = \$22,166.20$

Please indicate your agreement with the foregoing by signing below and returning a copy to the undersigned.

Sincerely,

A handwritten signature in blue ink that reads "R. Collett".

Robert Collett, Vice President, Engineering and Technology
Newfoundland and Labrador Hydro

Acknowledged and Agreed this 8 th day of October, 2021



Darren Pelley
Corner Brook Pulp and Paper Limited





Newfoundland and Labrador Hydro
Hydro Place, 500 Columbus Drive
P.O. Box 12400, St. John's, NL
Canada A1B 4K7
t. 709.737.1400 | f. 709.737.1800
nlhydro.com

October 8, 2021

Via Email: Darren Pelley - darren.pelley@kruger.com

Corner Brook Pulp and Paper Limited
3285 Bedford Road
Montreal, Quebec, H3S 1G5

Attention: Darren Pelley

Re: Capacity Assistance Outside a Winter Period – October 16 – October 31, 2021

Newfoundland and Labrador Hydro ("Hydro") and Corner Brook Pulp and Paper Limited ("CBPPL") are parties to a Capacity Assistance Agreement recently amended and restated for the second time and dated May 4, 2021 ("CAA"). Clause 2.06 of the CAA allows Hydro to make a Capacity Assistance Request outside of a Winter Period and CBPPL may comply with this request on a voluntary basis. The parties wish to set out the terms of any Capacity Assistance Requests that may be made during the period October 16 through to October 31, 2021 pursuant to Clause 2.06 of the CAA.

CBPPL agrees to provide 80 MW of Capacity Assistance to Hydro for the period October 16 through to October 31, 2021. During this period, all provisions in the CAA will apply unless expressly stated in this letter.

Clause 2.01 of the CAA states:

Hydro may make Capacity Assistance Requests to the Customer in amounts of 20, 40, 60, 90 or 105 MW, or other amount as confirmed in a test pursuant to Clause 2.07 hereof, no more than twice in a calendar day, no more than sixty times in a Winter Period, each of a duration of not less than 4 hours and not more than six (6) hours, and such that the total duration of such Capacity Assistance Periods does not exceed 250 hours in a Winter Period.

During the period October 16 through to October 31, 2021, Hydro may make Capacity Assistance Requests to the Customer in 20 MW increments up to 80 MW, no more than twice in a calendar day, each of a duration of not less than four (4) hours and not more than six (6) hours and such that the total duration of such Capacity Assistance does not exceed forty (40) hours during the period October 16 through to October 31, 2021. Any Capacity Assistance Requests

made after the total duration of forty (40) hours has been reached will be voluntary at CBPPL's discretion.

For clarity, the payments to be made by Hydro to CBPPL for this Capacity Assistance outside a Winter Period will be as per Clause 3.03 in the CAA and more specifically:

The variable rate fee for the maximum Capacity Assistance requested and provided during each Capacity Assistance Period will be 80% of \$0.28617¹.

The Capacity Fee referenced in Clause 3.01 and 3.03 will be a prorated portion of the Winter Period Capacity Fee² calculated as:

$$\$158.33/\text{day}/\text{MW} \times 80 \text{ MW} \times 16 \text{ days} = \$202,662.40$$

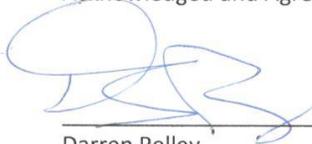
Please indicate your agreement with the foregoing by signing below and returning a copy to the undersigned.

Sincerely,



Robert Collett, Vice President, Engineering and Technology
Newfoundland and Labrador Hydro

Acknowledged and Agreed this 8 th day of OCTOBER, 2021



Darren Pelley
Corner Brook Pulp and Paper Limited

¹ GTVC for August

² \$2,992,500/180 days/105 MW = \$158.33/day/MW



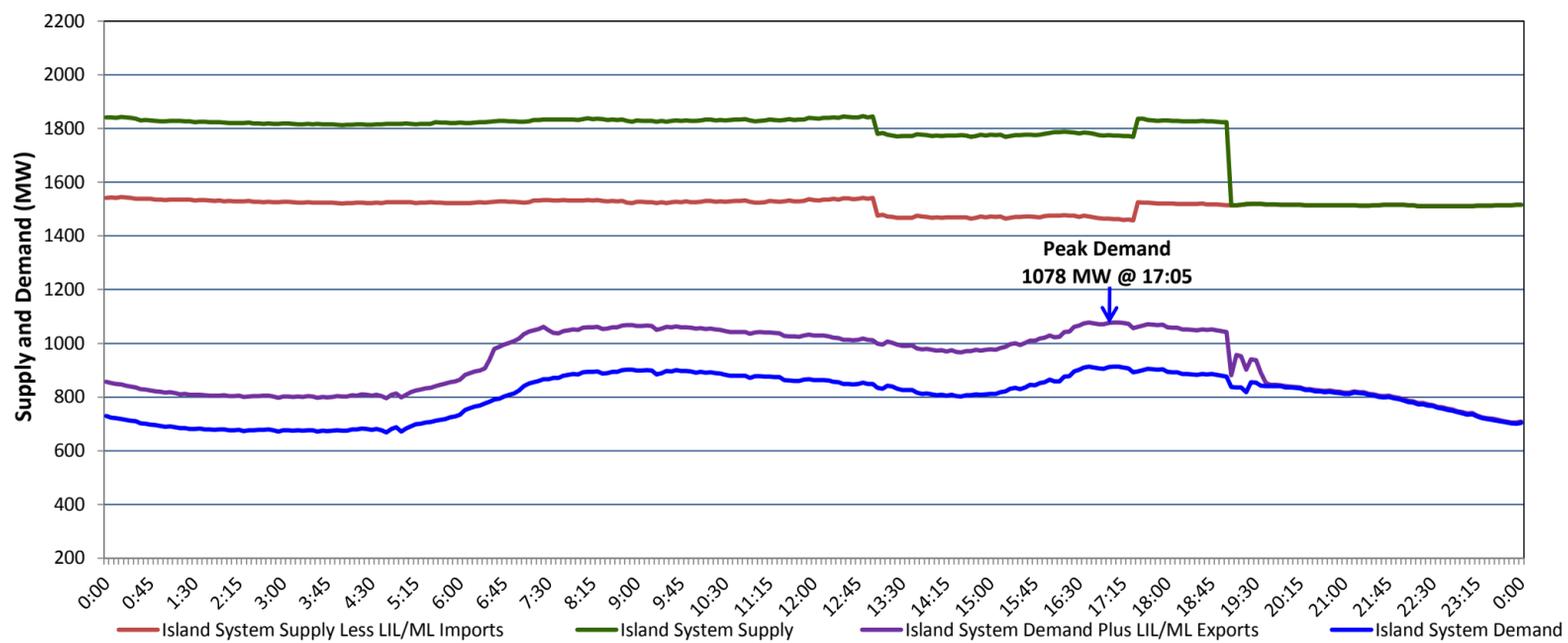


Attachment 1

Supply and Demand Report – November 26, 2021

**Newfoundland Labrador Hydro (NLH)
Supply and Demand Status Report Filed Monday, November 29, 2021**

**Section 1
Island Interconnected System Supply, Demand & Exports
Actual 24 Hour System Performance For Friday, November 26, 2021**



Supply Notes For November 26, 2021

- A As of 0804 hours, May 26, 2021, Holyrood Unit 1 unavailable due to planned outage (170 MW).
- B As of 0850 hours, July 25, 2021, Bay d'Espoir Unit 5 unavailable due to planned outage (76.5 MW).
- C As of 0830 hours, November 12, 2021, Holyrood Unit 2 unavailable (170 MW).
- D As of 0820 hours, November 24, 2021, Cat Arm Unit 2 unavailable due to planned outage (67 MW).
- E **At 1304 hours, November 26, 2021, Cat Arm Unit 1 unavailable due to planned outage (67 MW).**
- F **At 1728 hours, November 26, 2021, Cat Arm Unit 1 available (67 MW).**

**Section 2
Island Interconnected Supply and Demand**

Sat, Nov 27, 2021	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	1,539	MW		Saturday, November 27, 2021	7	9	1,040	948
NLH Island Generation: ^{4,8}	1,210	MW		Sunday, November 28, 2021	8	5	1,160	1,067
NLH Island Power Purchases: ⁶	110	MW		Monday, November 29, 2021	5	2	1,175	1,081
Other Island Generation:	190	MW		Tuesday, November 30, 2021	7	8	1,100	1,007
ML/LIL Imports:	29	MW		Wednesday, December 01, 2021	4	2	1,250	1,156
Current St. John's Temperature & Windchill:	6 °C	N/A	°C	Thursday, December 02, 2021	3	3	1,165	1,072
7-Day Island Peak Demand Forecast:	1,250	MW		Friday, December 03, 2021	3	8	1,165	1,072

Supply Notes For November 27, 2021

- Notes:
- 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.
 - 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.
 - As of 0800 Hours.
 - Gross output including station service at Holyrood (24.5 MW) and improved NLH hydraulic output due to water levels (35 MW).
 - Gross output from all Island sources (including Note 4).
 - NLH Island Power Purchases include: CBPP Co-Gen, Nalcor Exploits, Rattle Brook, Star Lake, Wind Generation and capacity assistance (when applicable).
 - Adjusted for curtailable load, market activities and the impact of voltage reduction when applicable.
 - 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.

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

Fri, Nov 26, 2021	Actual Island Peak Demand ⁹	17:05	1,078 MW
Sat, Nov 27, 2021	Forecast Island Peak Demand		1,040 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).