WHENEVER. WHEREVER.
We'll be there.

NEWFOUNDLAND POWER
A FORTIS COMPANY

April 29, 2022

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

Attention: G. Cheryl Blundon
Director of Corporate Services
and Board Secretary

Re: 2022 Curtailable Service Option Report

Dear Ms. Blundon:

Please find enclosed Newfoundland Power's *2022 Curtailable Service Option Report*.

If you have any questions, please contact the undersigned at the direct number noted below.

Yours very truly,

Dominic Foley
Legal Counsel

Enclosures

ec. Shirley Walsh
Newfoundland and Labrador Hydro

Dennis Browne, QC
Browne Fitzgerald Morgan Avis & Wadden

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2022 Curtailable Service Option Report

April 29, 2022

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1.0 Purpose of Report

This report summarizes the annual costs of maintaining Newfoundland Power Inc.'s ("Newfoundland Power" or the "Company") Curtailable Service Option (the "Option") and the Option statistics for the 2021-2022 winter season, including the impact of curtailment on the demand of customers availing of the Option ("Option participants").

This report is submitted in accordance with Order No. P.U. 7 (1996-97), which states:

> "The Applicant shall follow the directions given in Items (4) and (5) of Order No. P.U. 4 (1994-95) and provide the updated statistics, thirty days after each 'winter season' for the Board's information and evaluation."

Items (4) and (5) of Order No. P.U. 4 (1994-95) are as follows:

> (4) "Accounts will be established to accumulate all costs associated with the curtailable service option for purpose of evaluation at the next rate hearing.
>
> (5) Statistics are to be compiled for the purpose of determining the impact on peak load conditions during the period in which curtailment occurred."

In Order No. P.U. 47 (2014), the Board of Commissioners of Public Utilities of Newfoundland and Labrador (the "Board") approved interim revisions to Newfoundland and Labrador Hydro's ("Hydro") Utility rate to reflect a curtailable load credit (the "Curtailable Credit") in the computation of billing demand for Newfoundland Power for the period December 1, 2014 to March 31, 2015.

In Order No. P.U. 9 (2016), the Board ordered continued use of the Curtailable Credit, on an interim basis, effective December 1, 2015.

On December 1, 2016, the Board issued Order No. P.U. 49 (2016). In the Order, the Board approved use of the Curtailable Credit on a final basis.

The Curtailable Credit ensures that curtailments are requested from Newfoundland Power customers only to meet system load requirements. Previously, curtailments pursuant to the Option were also requested to reduce the demand requirements of the Company during peak load conditions.

2.0 Costs of the Curtailable Service Option

The operating costs incurred by Newfoundland Power in offering the Option include labour costs, telephone line and modem rental costs and the cost of curtailment credits paid to Option participants.

Table 1 compares the costs for the current period (April 2021 to March 2022) with the costs for the previous 12 months.

Table 1:
Curtailable Service Option
Operating Costs

	April 2021 to March 2022	April 2020 to March 2021
Labour	$8,496	$8,103
Telephone Line and Modem Rentals	$3,120	$3,480
Curtailment Credits	$396,478	$391,149
Total Operating Costs	$408,094	$402,732
Customers	24	24

The total curtailment credits of $396,478 for the current period compare to a total of $391,149 for the same period during the previous year. The credit total for the 2021-2022 winter season is higher than the previous seasons total. This is attributable to variations in Option participants' demand and consumption as well as the mix of Option participants achieving full, partial, or no credit.

3.0 Curtailable Service Option Statistics

3.1 Impact of Curtailment Request

There were no curtailment requests during the 2021-2022 winter season, apart from the Curtailment Test, which was completed on the morning of December 10, 2021 from 9:00 a.m. to 11:00 a.m.[1]

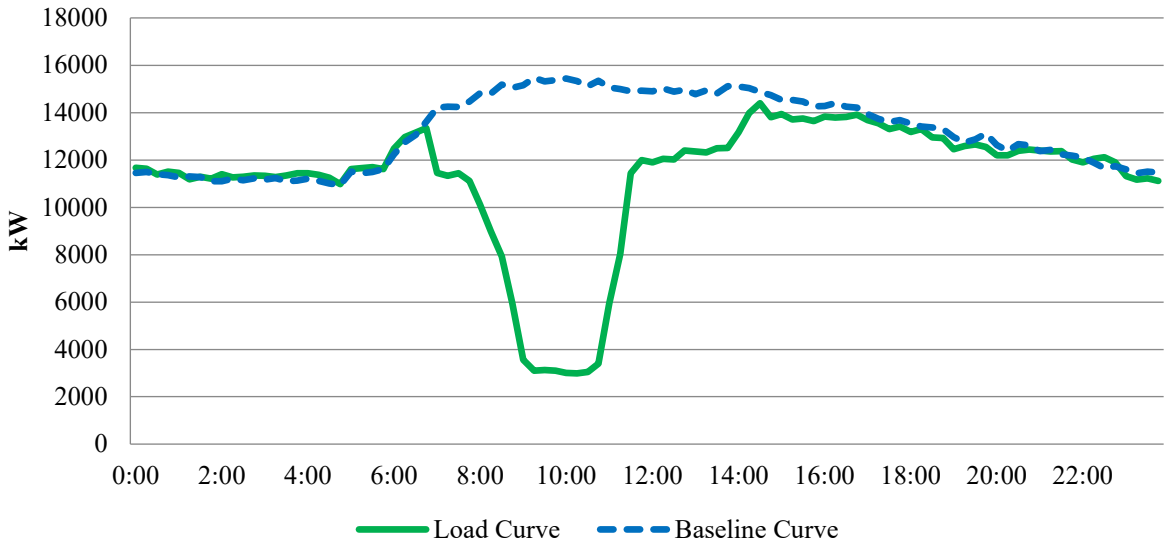
During the request, the average load curtailed was 12.2 MW, and 23 of the 24 Option participants were successful in their curtailment.[2]

[1] In accordance with Hydro's Utility rate, the Curtailable Credit is required to be verified annually. The verification test involves curtailing Option participants' load, at a minimum of the load on which the Curtailable Credit is based, for a period of one hour (the "Curtailment Test").

[2] Curtailment is measured based on a comparison of the aggregate customer load curve for the curtailment event day to a *baseline curve*. A baseline curve is an estimate of what the customer aggregate load would have been had there been no curtailment. The difference between the baseline curve and the aggregate curve for the event day determines the impact of the curtailment. A baseline curve is the average of the aggregate load curves for the most recent three days of the same day type (i.e. weekday vs. weekend). Prior to averaging, the load data for each of the most recent three days are weather-adjusted (for temperature and wind) to match the weather on the day of curtailment event. The weather adjustment is based on a statistical regression analysis of the aggregate load data for the related winter season. When necessary, one or more of the three most recent days may be excluded if the load shape is considered abnormal, or if one of more of the following three days is considered more comparable.

Figure 1 illustrates the impact of the curtailment request on the demand of customers availing of the Option on December 10, 2021.

Figure 1:
Aggregate Load Curve for the Curtailment Request
December 10, 2021



3.2 2021-2022 Winter Season Curtailment Service Option Statistics

Table 2 provides the Option participant statistics for the 2021-2022 winter season on a total basis.

Table 2:
Curtailable Service Option
Participant Statistics

Number of Curtailment Requests	1
Number of Curtailment Days	1
Number of Customers Available to Curtail	24
Number of Customer Curtailment Failures	1
Number of Successful Customer Curtailments	23
% of Successful Curtailments	96%
Requested Hours of Curtailment	2
Avoided Load due to Curtailment	12.2 MW

4.0 Summary

The cost of offering the Option for the period April 2021 to March 2022 was $408,094, of which $396,478 was paid to Option participants in curtailment credits. The balance consists of internal labour and other costs associated with administration of the Option.

During the 2021-2022 winter season, a total of 24 customers participated in the Option. There was one curtailment request (the Curtailment Test), resulting in approximately 2 hours of curtailment.

The average load curtailed under the Option during the 2021-2022 winter season was 12.2 MW.