

WHENEVER. WHEREVER.
We'll be there.



April 28, 2020

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: 2020 Curtailable Service Option Report

Ladies and Gentlemen:

In accordance with the Board's March 17, 2020 notice regarding the activation of its Business Continuity Plan to address the COVID-19 pandemic, Newfoundland Power is providing its 2020 Curtailable Service Option Report in electronic format only.

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

Yours very truly,

A handwritten signature in blue ink, appearing to read "Gerard M. Hayes".

Gerard M. Hayes
Senior Counsel

Enclosures

cc. Shirley Walsh
Newfoundland and Labrador Hydro

Dennis Browne, QC
Browne Fitzgerald Morgan & Avis

Newfoundland Power Inc.

55 Kenmount Road • P.O. Box 8910 • St. John's, NL A1B 3P6
PHONE (709) 737-5609 • FAX (709) 737-2974 • ghayes@newfoundlandpower.com

2020 Curtailable Service Option Report

April 28, 2020

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Table of Contents

	Page
1.0 Purpose of Report	1
2.0 Costs of the Curtailable Service Option	1
3.0 Curtailable Service Option Statistics	2
3.1 Impact of Curtailment Request	2
3.2 2019-2020 Winter Season Curtailment Service Option Statistics	4
4.0 Summary	4

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 2019-2020 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 1st, 2014 to March 31st, 2015.

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

On December 1st, 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 2019 to March 2020) with the costs for the previous 12 months.

Table 1
Curtable Service Option
Operating Costs

	April 2019 to March 2020	April 2018 to March 2019
Labour	\$9,388 ¹	\$7,079
Telephone Line and Modem Rentals	\$3,432	\$3,192
Curtable Credits	\$384,831	\$365,056
Total Operating Costs	\$397,651	\$375,327
Customers	24	23

The total curtable credits of \$384,831 for the current period compare to a total of \$365,056 for the same period during the previous year. The credit total for the 2019-2020 winter season is higher than the previous season's total primarily due to higher customer participation and a lower number of customer curtable failures.²

3.0 Curtable Service Option Statistics

3.1 Impact of Curtable Request

There were no curtable requests during the 2019-2020 winter season, apart from the Curtable Test, which was completed on the morning of December 13, 2019, from 9:00 a.m. to 11:00 a.m.³

¹ The 2019-2020 labour costs are higher than the previous season's labour costs primarily due to the additional work required to onboard a new large customer to the Option.

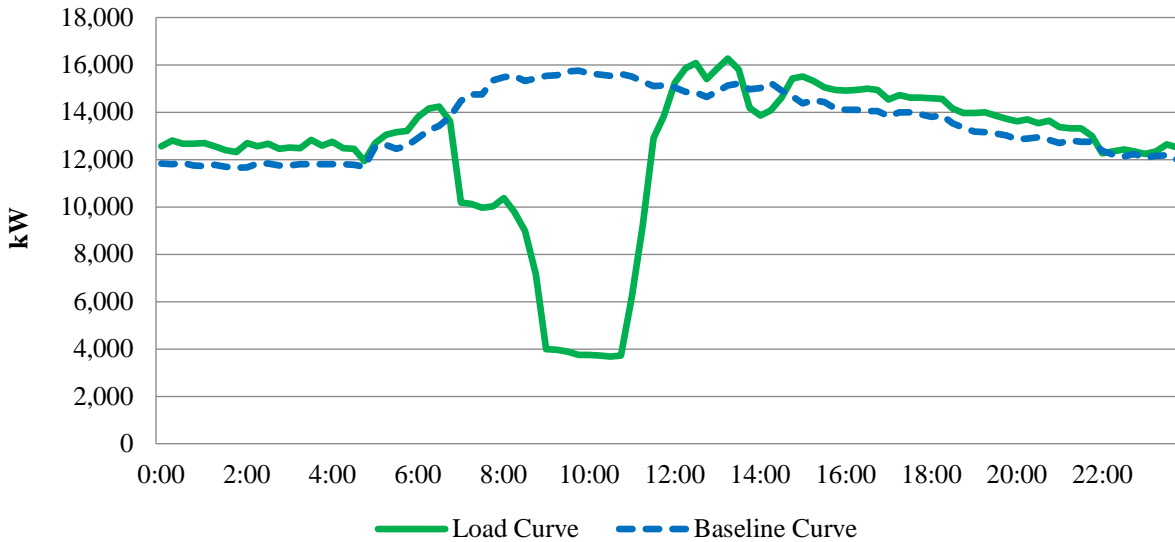
² Changes to Curtable Credits year over year are attributable to variation in demand and consumption, and the mix of Option participants achieving full, partial, or no credit. In the 2019-2020 winter season, there were two customer curtable failures compared to three failures in the 2018-2019 winter season.

³ In accordance with Hydro's Utility rate, the Curtable Credit is required to be verified annually. The verification test involves curtailing Option participants' load, at a minimum of the load on which the Curtable Credit is based, for a period of one hour (the "Curtable Test").

During the request, the average load curtailed was 11.8 MW, and 22 of the 24 Option participants were successful in their curtailment.⁴

Figure 1 illustrates the impact of the curtailment request on the demand of customers availing of the Option on December 13th, 2019.

Figure 1
Aggregate Load Curve for the Curtailment Request
December 13, 2019



⁴ 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 3 days of the same day type (i.e. weekday vs. weekend). Prior to averaging, the load data for each of the most recent 3 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 of the three most recent days may be excluded if the load shape is considered abnormal, or if a following day is considered more comparable.

3.2 2019-2020 Winter Season Curtailment Service Option Statistics

Table 2 provides the Option participant statistics for the 2019-2020 winter season on a total basis.

**Table 2
Curtable 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	2
Number of Successful Customer Curtailments	22
% of Successful Curtailments	92%
Requested Hours of Curtailment	2
Avoided Load due to Curtailment	11.8 MW

4.0 Summary

The cost of offering the Option for the period April 2019 to March 2020 was \$397,651, of which \$384,831 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 2019-2020 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 2019-2020 winter season was 11.8 MW.