WHENEVER. WHEREVER. We'll be there.



HAND DELIVERED

March 28, 2019

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: Newfoundland Power's 2018 Net Metering Service Option Annual Report

Ladies & Gentlemen:

Please find enclosed the original and 9 copies of Newfoundland Power's 2018 Net Metering Service Option Annual Report.

In Order No. P.U. 17 (2017), the Board ordered that Newfoundland Power file annual progress reports on its Net Metering Service Option. The Board specified that the annual report include application and take-up rates, total customer generation installed, associated costs, and any other relevant information. This report is filed in compliance with Order No. P.U. 17 (2017).

I trust the enclosed is found to be in order; however, should you have any questions, please contact the undersigned at the direct number noted below.

Yours very truly,

Gerard M. Hayes Senior Counsel

Enclosures

c. Geoffrey Young Newfoundland and Labrador Hydro

2018 Net Metering Service Option Annual Report March 28, 2019



Table of Contents

]	Page
1.0	Introduction	1
2.0	Net Metering Service Option	1
3.0	2018 Net Metering Service Option Results	2
3.1	2018 Applications and Take-up Rates	2
3.2	2018 Costs	3
3.3	2018 Net Metering Energy Deliveries, Credits, and Payments	3
4.0	Total Net Metering Service Option Results	3
4.1	Total Applications and Take-up Rates	3
4.2	Total Program Administration Costs	5
5.0	Summary	5

1.0 Introduction

In Order No. P.U. 17 (2017), the Board approved Newfoundland Power's ("Newfoundland Power" or "the Company") Net Metering Service Option effective July 1, 2017. The Net Metering Service Option provides customers with the option to generate electricity from smallscale renewable sources to offset their own use. Customers maintain a secure connection to the electricity system for times when they need to purchase electricity.

The Company's Net Metering Service Option is based on the principles outlined in the Provincial Government's Net Metering Policy Framework ("the Framework").² The Framework established a provincial subscription limit of 5.0 MW. Government, in consultation with Newfoundland Power, Newfoundland and Labrador Hydro ("Hydro"), and the Board, will monitor the response to net metering in the province and may adjust the overall capacity limit in the future.³

In Order No. P.U. 17 (2017), the Board ordered the Company to file annual progress reports on application and take-up rates, total customer generation installed, associated costs, and any additional relevant information.⁴ This report is Newfoundland Power's 2018 progress report on its Net Metering Service Option.

2.0 **Net Metering Service Option**

Newfoundland Power's Net Metering Service Option facilitates the safe interconnection of customer-owned generating resources to the Company's electrical system. To qualify for the Net Metering Service Option, a customer's generation must (i) be designed not to exceed the customer's annual energy requirements, (ii) be 100 kW or less, and (iii) produce electricity from a renewable resource.

On a monthly basis, Net Metering Service Option customers will continue to pay the applicable basic customer charge. General Service customers will also pay demand charges, if applicable. If more energy (kWh) is used than generated in a given month, the customer will be charged for the net amount of energy used. If more energy is generated than used, the customer will avoid paying an energy charge. The surplus energy generated in that month will be banked and applied to future bills.

Net Metering Service Option customers receive a credit for any surplus energy remaining on the customer's bill for the Annual Review Billing Month.⁵ Compensation for these credits is based on the 2nd block energy charge of Hydro's Utility Rate applicable to wholesale supply for Newfoundland Power.

Newfoundland and Labrador Hydro's Net Metering program was also approved in Order No. P.U. 17(2017).

The Newfoundland and Labrador Net Metering Policy Framework was released in July 2015.

See the Newfoundland and Labrador Net Metering Policy Framework, July 2015, Section 3.5, Page 5.

See Order No. P.U. 17(2017), Page 6, lines 10-13.

In accordance with the Company's March 1st, 2019 Schedule of Rates, Rules and Regulations, the balance of the customer's Banked Energy Credits carried forward will be settled annually by means of a credit on the customer's bill for the Annual Review Billing Month. The Annual Review Billing Month is determined by the customer, in consultation with the Company, during the process of implementing Net Metering Service.

Customers interested in participating in Newfoundland Power's Net Metering Service Option are required to submit a Net Metering Interconnection Application and sign a Net Metering Interconnection Agreement. The Company's net metering interconnection requirements, interconnection application form, and a sample interconnection agreement are available on the Newfoundland Power website.⁶

3.0 2018 Net Metering Service Option Results

Newfoundland Power received a total of 14 Net Metering Service Option applications between January 1st, 2018 and December 31st, 2018. Of the 14 applications that were received, 13 were approved and 1 was rejected.⁷ Of the 13 applicants that were approved, 3 had generation systems in service by the end of 2018.

3.1 2018 Applications and Take-up Rates

Table 1 shows the number of Net Metering Service Option applications received in each of the Company's 3 operating regions in 2018. It also provides a breakdown of the generation system type, and proposed generation capacity, in kW, that has been submitted, approved, and placed in service.

Table 1 Net Metering Service Option 2018 Customer Applications and Capacity (kW)

	Generation	Submitted		Approved		In Service	
Location	System Type	Projects	kW	Projects	kW	Projects	kW
St. John's Region	Solar (0-25kW)	3	39.0	3	39.0	1	14.4
	Wind (0-25kW)	1	20.0	1	20.0	0	-
Eastern Region	Solar (0-25kW)	38	34.2	3	34.2	1	12.8
S	Wind (0-25kW)	2	15.0	2	15.0	1	10
Western Region	Solar (0-25kW)	2	21.4	1	11.4	0	_
C	Wind (0-25kW)	2	25.5	2	25.5	0	-
	Wind (>25 kW)	1	90.0	1	90.0	0	-
Total		14	245.1	13	235.1	3	37.2

⁶ Information relating to Newfoundland Power's Net Metering Service Option is available to customers at: https://www.newfoundlandpower.com/My-Account/Usage/Electricity-Rates/Net-Metering.

⁷ The application was rejected for not meeting the Company's *Net Metering Interconnection Requirements*. This was due to the customer's generation system being sized in excess of the customer's annual energy requirements.

⁸ One of the projects submitted to Newfoundland Power in 2018 included both a 10kW solar generation system and 2.8kW wind generation system.

The 14 applications received in 2018 proposed a total generation capacity of 245.1 kW. The 13 applications approved included 235.1 kW of generation capacity. The total generation capacity of actual installations in 2018 was 37.2 kW.

3.2 2018 Costs

The total cost of administering Newfoundland Power's Net Metering Service Option in 2018 was \$16,575. This includes costs associated with responding to customer inquiries, reviewing and assessing applications, site visits for commissioning, initial setup costs, and incremental and recurring metering and billing costs.

3.3 2018 Net Metering Energy Deliveries, Credits, and Payments

In 2018, the total amount of energy delivered to Newfoundland Power by Net Metering Service Option customers was 14,760 kWh. By December 31st, 2018, none of the customers had reached their Annual Review Billing Month. As a result, no customer was eligible to receive an annual settlement of Banked Energy Credits for energy delivered to the Company's electrical system.

4.0 Total Net Metering Service Option Results

Newfoundland Power's Net Metering Service Option was made available to customers on July 1st, 2017. Out of the 22 applications received by December 31, 2018, the Company had a total of 3 customers with generation systems installed with approximately 37.2 kW of aggregate capacity. This represents less than 1% of the 5.0 MW aggregate capacity limit for net metering generation within the province.⁹

4.1 Total Applications and Take-up Rates

Table 2 provides a summary of the customers that applied for the Net Metering Service Option, projects that were approved, and projects that came into service in 2017 through 2018. This table also provides a regional breakdown of each project and the generation system type.

3

 $^{^{9}}$ (0.0372 MW / 5.0 MW) × 100% = 0.7%.

Table 2
Total Net Metering Activities from July 1, 2017 to December 31, 2018

	Generation	Submi	tted	Appro	ved	In Serv	vice
Location	System Type	Projects	\mathbf{kW}	Projects	kW	Projects	\mathbf{kW}
St. John's Region	Solar (0-25kW)	8	85.0	8	85.0	1	14.4
	Wind (0-25kW)	1	20.0	1	20.0	0	-
Eastern Region	Solar (0-25kW)	4	44.2	4	44.2	1	12.8
	Wind (0-25kW)	2	15.0	2	15.0	1	10.0
Western Region	Solar (0-25kW)	3	31.4	2	21.4	0	_
J	Wind (0-25kW)	2	25.5	2	25.5	0	-
	Wind (>25kW)	2	180.0	1	90.0	0	-
TD 4.1		22	401.1	20	201.1		25.2
Total		22	401.1	20	301.1	3	37.2

Table 3 shows the Net Metering Service Option capacities, in kW, for all applications approved and projects placed in service, as a percentage of the 5.0 MW provincial aggregate generating capacity as of December 31st, 2018.

Table 3
Net Metering Service Option
Percentage of 5.0 MW Provincial Limit

Year	Appro kW	oved %	In Service kW %		
2017	66.0	1.3	0.0	0.0	
2018	235.1	4.7	37.2	0.7	
Total	301.1	6.0	37.2	0.7	

4.2 Total Program Administration Costs

Table 4 below reflects the costs incurred to administer Newfoundland Power's Net Metering Service Option since implementation in 2017.

Table 4
Net Metering Service Option
Program Administration Costs

Year	Costs
2017	\$11,700
2018	\$16,575

The year over year cost increase indicated in Table 4 is attributed to increased customer applications and costs associated with connecting 3 customers to the Company's electrical system.

5.0 Summary

Newfoundland Power's Net Metering Service Option became available on July 1st, 2017. Throughout 2018, the Company received 14 applications from customers planning to install solar and wind generation systems of less than 100kW each. Of these, 13 applications were approved for construction.

By December 31st, 2018, 3 customers had completed their generation systems and began availing of the Company's Net Metering Service Option. The total amount of energy generated and delivered to the Company's electrical system was 14,760 kWh. The cost of administering the Net Metering Service Option to these customers was \$16,575. To date, none of the Net Metering Service Option customers have reached the Annual Review Billing Month required to settle any Banked Energy Credits for energy delivered to the Company's electrical system. The first annual review is scheduled for April 2019.