

March 28, 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: Newfoundland Power's 2021 Net Metering Service Option Annual Report

Dear Ms. Blundon:

Please find enclosed Newfoundland Power's 2021 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. If you have any questions on the enclosed, please contact the undersigned at your convenience.

Yours truly,

Dominic Foley Legal Counsel

Enclosures

ec. Shirley Walsh Newfoundland and Labrador Hydro Dennis Browne, Q.C. Browne Fitzgerald Morgan Avis & Wadden 2021 Net Metering Service Option Annual Report

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#### 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.<sup>1</sup> The Net Metering Service Option provides customers with the option to generate electricity from small-scale 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").<sup>2</sup> 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.<sup>3</sup>

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.<sup>4</sup> This report is Newfoundland Power's 2021 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.<sup>5</sup> Compensation for these credits is based on the 2<sup>nd</sup> block energy charge of Hydro's Utility Rate applicable to wholesale supply for Newfoundland Power.

<sup>&</sup>lt;sup>1</sup> Newfoundland and Labrador Hydro's Net Metering program was also approved in Order No. P.U. 17(2017).

<sup>&</sup>lt;sup>2</sup> The Newfoundland and Labrador Net Metering Policy Framework was released in July 2015.

<sup>&</sup>lt;sup>3</sup> See the Newfoundland and Labrador Net Metering Policy Framework, July 2015, Section 3.5, Page 5.

<sup>&</sup>lt;sup>4</sup> See Order No. P.U. 17(2017), Page 6, lines 10-13.

<sup>&</sup>lt;sup>5</sup> In accordance with the latest version of the Company's 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.<sup>6</sup>

#### 3.0 2021 Net Metering Service Option Results

Newfoundland Power received a total of ten Net Metering Service Option applications between January 1<sup>st</sup>, 2021 and December 31<sup>st</sup>, 2021, eight of which were approved.<sup>7</sup> Seven of the applicants had generation systems in service by the end of 2021.

#### 3.1 2021 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 2021. 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.

Generation		Submitted		Approved		In Service <sup>8</sup>	
Location	System Type	Projects	kW	Projects	kW	Projects	kW
St. John's Region	Solar (0-25 kW)	5	48.0	5	48.0	7	78.8
	Solar (>25 kW)	1	28.9	1	28.9	-	-
Eastern Region	Solar (0-25 kW)	1	12.0	1	12.0	1	12.0
Western Region	Solar (0-25 kW)	3	21.9	1	7.9	3	23.8
Total		10	110.8	8	96.8	11	114.6

## Table 1Net Metering Service Option2021 Customer Applications and Capacity (kW)

The applications received and approved in 2021 proposed a total generation capacity of 96.8 kW. The total generation capacity of actual installations in 2021 was 114.6 kW.

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

<sup>&</sup>lt;sup>7</sup> One application was an increase in capacity from an existing participant.

<sup>&</sup>lt;sup>8</sup> These quantities include generation that was approved in preceding years.

### 3.2 2021 Costs

The total cost of administering Newfoundland Power's Net Metering Service Option in 2021 was \$31,416. This includes costs associated with responding to customer inquiries, reviewing and assessing applications, site visits for commissioning, and incremental and recurring metering and billing costs.

#### 3.3 2021 Net Metering Energy Deliveries, Credits, and Payments

In 2021, the total amount of energy delivered to Newfoundland Power by Net Metering Service Option customers was 47,270 kWh. By December 31<sup>st</sup>, 2021, 11 customers had reached their Annual Review Billing Month. Three of the customers were eligible to receive an annual settlement of Banked Energy Credits for energy delivered to the Company's electrical system. The total amount of Energy Credits for which a billing credit was applied in 2021 was 5,157 kWh.

### 4.0 Total Net Metering Service Option Results

Newfoundland Power's Net Metering Service Option was made available to customers on July 1<sup>st</sup>, 2017. Out of the 44 applications received by December 31, 2021, the Company had a total of 21 customers with generation systems installed with approximately 210.1 kW of aggregate capacity. This represents approximately 4.2% of the 5.0 MW aggregate capacity limit for net metering generation within the province.<sup>9</sup>

### 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 2021. This table also provides a regional breakdown of each project and the generation system type.

<sup>&</sup>lt;sup>9</sup>  $(0.2101 \text{ MW} / 5.0 \text{ MW}) \times 100\% = 4.2\%.$ 

July 1, 2017 to December 31, 2021							
	Generation	Submitted		Approved		In Service <sup>10</sup>	
Location	System Type	Projects	kW	Projects	kW	Projects	kW
St. John's	Solar (0-25 kW)	17	172.3	17	172.3	10	103.9
Region	Wind (0-25 kW)	1	20.0	1	20.0	-	-
	Solar (>25 kW)	2	73.1	2	73.1	-	-
Eastern Region	Solar (0-25 kW)	6	62.5	6	62.5	5	52.5
	Wind (0-25 kW)	2	15.0	2	15.0	2	15.0
Western Region	Solar (0-25 kW)	12	97.5	8	65.9	5	38.7
	Wind (0-25 kW)	2	25.5	2	25.5	0	-
	Wind (>25 kW)	2	180.0	1	90.0	0	-
Total		44	645.9	39	524.3	22	210.1

# Table 2Total Net Metering Activities fromJuly 1, 2017 to December 31, 2021

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 31<sup>st</sup>, 2021.

# Table 3Net Metering Service OptionPercentage of 5.0 MW Provincial Limit

	Appr	oved	In Ser	vice
Year	kŴ	%	kW	%
2017	66.0	1.3	0.0	0.0
2018	235.1	4.7	37.2	0.7
2019	17.2	0.3	40.8	0.8
2020	109.2	2.2	17.5	0.4
2021	96.8	1.9	114.6	2.3
Total	524.3	10.5	210.1	4.2

#### 4.2 Total Program Administration Costs

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

<sup>&</sup>lt;sup>10</sup> One Net Metering Service Option customer expanded their initial net metering project. As a result, the 22 projects in service represent 21 separate customers.

# Table 4Net Metering Service OptionProgram Administration Costs

Year	Costs
2017	\$11,700
2018	\$16,575
2019	\$8,105
2020	\$9,908
2021	\$31,416

The year over year cost fluctuation indicated in Table 4 is attributed to the changes in customer participation in the program. The increase in costs between 2020 and 2021 is due to: (i) the number of new net metering systems that were commissioned<sup>11</sup>; (ii) an increase in customer net metering enquiries<sup>12</sup>; and (iii) an overall increase in the number of net metering customer accounts that require manual billing each month.<sup>13</sup>

#### 5.0 Summary

Newfoundland Power's Net Metering Service Option became available on July 1<sup>st</sup>, 2017. In 2021, the Company received ten applications from customers planning to install solar generation systems. Nine of the applications were for solar systems less than 25 kW and one application was for a solar system greater than 25 kW. Eight applications were approved for construction.

By December 31<sup>st</sup>, 2021, 11 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 47,270 kWh. The cost of administering the Net Metering Service Option to these customers was \$31,416. To date, 11 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 total amount of Energy Credits for which a billing credit was applied in 2021 was 5,157 kWh.

<sup>&</sup>lt;sup>11</sup> In 2021, Newfoundland Power added a total of 11 new Net Metering Service Option customers. This compares to 3 Net Metering Service Option customers added in 2020.

<sup>&</sup>lt;sup>12</sup> Net Metering enquiries increased from 28 to 41 from 2020 to 2021 and correspondence with potential and existing Net Metering Service Option customers increased from 42 to 124 in the same period.

<sup>&</sup>lt;sup>13</sup> In 2020, Newfoundland Power manually administered monthly billing associated with 11 Net Metering Service Option customers. In 2021, the number of Net Metering Service Option Customers requiring monthly billing increased to 21.