

1 **Q. At page 10 of Newfoundland Power's pre-filed evidence, lines 6 to 9, the Net**
2 **Metering Exemption Order restricting a customer's generating facility to 100 kW is**
3 **referenced. In practical terms:**

4
5 (a) (i) **If a Newfoundland Power customer's annual energy consumption**
6 **amounts to 10,000 kWh, what would be that customer's maximum**
7 **permitted generating facility pursuant to the Net Metering Energy**
8 **Order expressed in kWhs at a hypothetical domestic rate of**
9 **\$0.10/kWh?**

10
11 **and**

12
13 (ii) **Please calculate the annual offset/credit that such a Newfoundland**
14 **Power customer would receive on an annual basis if their maximum**
15 **generating facility was installed, as expressed in dollars.**

16
17 (b) (i) **If a Newfoundland Power customer's annual energy consumption**
18 **amounts to 20,000 kWh, what would be their maximum permitted**
19 **generating facility pursuant to the Net Metering Energy Order**
20 **expressed in kWhs at a hypothetical domestic rate of \$0.10/kWh?**

21
22 **and**

23
24 (ii) **Can Newfoundland Power calculate the annual savings that a**
25 **Newfoundland Power customer may experience on an annual basis if**
26 **their maximum generating facility was installed.**

27
28 (c) (i) **If a Newfoundland Power customer's annual energy consumption**
29 **amounts to 30,000 kWh, what would be their maximum permitted**
30 **generating facility pursuant to the Net Metering Energy Order**
31 **expressed in kWhs at a hypothetical domestic rate of \$0.10/kWh?**

32
33 **and**

34
35 (ii) **Can Newfoundland Power calculate the annual savings that a**
36 **Newfoundland Power customer may experience on an annual basis if**
37 **their maximum generating facility was installed.**

38
39 (d) (i) **If a Newfoundland Power customer's annual energy consumption**
40 **amounts to 40,000 kWh, what would be their maximum permitted**
41 **generating facility pursuant to the Net Metering Energy Order**
42 **expressed in k Whs at a hypothetical domestic rate of \$0.10/kWh?**

43
44 **and**

1 (ii) **Can Newfoundland Power calculate the annual savings that a**
 2 **Newfoundland Power customer may experience on an annual basis if**
 3 **their maximum generating facility was installed.**

4
 5 (e) (i) **If a Newfoundland Power customer's annual energy consumption**
 6 **amounts to 50,000 kWh, what would be their maximum permitted**
 7 **generating facility pursuant to the Net Metering Energy Order**
 8 **expressed in kWhs at a hypothetical domestic rate of \$0.10/kWh?**

9
 10 **and**

11
 12 (ii) **Can Newfoundland Power calculate the annual savings that a**
 13 **Newfoundland Power customer may experience on an annual basis if**
 14 **their maximum generating facility was installed.**

15
 16 A. Under the Net Metering Service Option, a customer's generating facilities must produce
 17 electricity from renewable energy sources and be designed not to exceed (i) the
 18 customer's annual energy requirements in kWh, or (ii) 100 kW of capacity.

19
 20 This means that the largest permitted generating facility is one that is designed to produce
 21 sufficient energy to meet, but not exceed, the customer's annual energy requirements.
 22 However, the capacity of the generating facility cannot be greater than 100 kW.

23
 24 This request for information seeks the maximum permitted generating facility "expressed
 25 in kWhs" for annual energy consumption amounts between 10,000 kWh and 50,000 kWh.
 26 For these consumption levels it is unlikely that the 100 kW limit will factor into the size
 27 of the generator. For example, a 100 kW Photovoltaic ("PV") system is estimated to be
 28 capable of producing 110,000 kWh in this province.¹ Similarly, a 100 kW wind
 29 generator system can be expected to produce between 175,000 kWh and 307,000 kWh.²
 30 As a result, for each of the annual consumption levels requested, the 100 kW limit will
 31 not limit the customer's ability to select a Photovoltaic installation that would meet their
 32 annual energy requirements.

¹ The production of 110,000 kWh was determined using the software PVWatts® Calculator. This software is available at <http://pvwatts.nrel.gov/index.php>.

² Energy production from wind generators depends on several factors including wind speed, geographic location, and tower height. This range of annual energy production assumes a capacity factor of between 20% and 35%. This range is consistent with current industry experience for distributed wind generation facilities.

1 Table 1 provides the expected customer savings, at a domestic energy rate of 0.10 \$/kWh,
 2 if a customer's generator produces sufficient energy to offset the annual energy
 3 requirements in the examples set out in the question.
 4
 5

Table 1
Estimated Annual Customer Savings

Customer's Annual Energy Consumption (kWh)	Customer's Maximum Designed Production Capability (kWh)	Hypothetical Domestic Rate (\$/kWh)	Annual Customer Savings (\$)
10,000	10,000	0.10	1,000
20,000	20,000	0.10	2,000
30,000	30,000	0.10	3,000
40,000	40,000	0.10	4,000
50,000	50,000	0.10	5,000