

1 **Q. What is the magnitude of excess energy that could be expected from an individual**  
2 **participant given the limits placed on the size of the installation?**  
3

4 A. The requirements in Newfoundland Power's Net Metering Service Option that limit the  
5 magnitude of excess energy that could be expected from an individual participant are (i)  
6 for customer generating facilities to be sized to not exceed the annual energy  
7 requirements of the customer's load, and (ii) for the customer's generating system not to  
8 exceed 100 kW of capacity. The Company's application process will include a review of  
9 the customer's load and proposed generating system to ensure these requirements are met  
10 and the generating system is properly sized.<sup>1</sup>  
11

12 Given these limitations associated with Newfoundland Power's Net Metering Service  
13 Option, the magnitude of excess energy that could be expected from an individual  
14 participant can be expected to be quite small. Experience in other jurisdictions may  
15 provide some rough guide as to quantities, however, Newfoundland Power acknowledges  
16 such guidance will have limited reliability.  
17

18 British Columbia has had a net metering program since 2004. This program does not  
19 include a limitation that capacity of a customer's generating system not exceed annual  
20 energy requirements. In 2013, after 10 years of program availability, just over 5% of BC  
21 Hydro's net metering customers received compensation for excess energy.<sup>2</sup>  
22

23 The average load for a Newfoundland Power domestic customer is approximately  
24 16,000 kWh. If an average net metering customer within this group produced, say, 5%  
25 more energy than what was required to serve the customer's load, it would, under current  
26 Newfoundland Power customer rates, result in an annual excess energy credit of  
27 800 kWh or \$76.07.<sup>3</sup>  
28

29 Approximately 95% of Newfoundland Power's general service customers are served  
30 under Rate #2.1.<sup>4</sup> The average load for this customer class is approximately 36,000 kWh.  
31 If an average net metering customer within this group produced, say, 5% more energy  
32 than what was required to serve the customer's load, it would, under current  
33 Newfoundland Power customer rates, result in an annual excess energy credit of  
34 1,800 kWh or \$171.16.<sup>5</sup>

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<sup>1</sup> See Newfoundland Power's *Net Metering Interconnection Requirements*, filed as Attachment A to the response to Request for Information CA-NP-003.

<sup>2</sup> See BC Hydro's Net Metering Evaluation Report No. 3, April 30, 2013, Pages 10-12. A total of 13 out of 228 net metering customers were paid for 529 MWh of excess energy produced through net metering systems. Of this, one customer project was responsible for 423 MWh (80%) of the excess energy while the remaining 12 customers contributed 106 MWh (20%).

<sup>3</sup>  $16,000 \text{ kWh} \times .05 = 800 \text{ kWh}$ .  $800 \text{ kWh} \times 9.509\text{¢/kWh} = \$76.07$ .

<sup>4</sup> The remaining 5% of general service customers are billed in accordance with Rate #2.3 and Rate #2.4. These customers would generally have large loads and the potential of excess energy that may be produced through the Net Metering Service Option would be limited by the 100 kW capacity restriction on customer generation.

<sup>5</sup>  $36,000 \text{ kWh} \times .05 = 1,800 \text{ kWh}$ .  $1,800 \text{ kWh} \times 9.509\text{¢/kWh} = \$171.16$ .

1           Given the terms of the Net Metering Service Option, the magnitude of excess energy  
2           credits for an individual participant should be small. This expected outcome is supported  
3           by (i) the low excess energy credits arising in other jurisdictions such as British  
4           Columbia, after a decade of program implementation and (ii) *pro forma* calculations  
5           under current Newfoundland Power customer rates.

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7           Newfoundland Power intends to monitor and assess all energy transfers under the Net  
8           Metering Service Option on an ongoing basis. This will include excess energy credits.