

1 **Q. (Reference CA-NP-046) It is stated "the Company does not currently consider**  
 2 **customer generation to be a factor that exposes its assets to a risk of becoming**  
 3 **stranded."**

4 **a) Has NP determined that customer generation will never be a factor that**  
 5 **exposes its assets to a risk of becoming stranded? Has rooftop solar become**  
 6 **cost competitive in some areas of North America? Is there no possibility**  
 7 **that rooftop solar, rooftop wind, customer battery storage options,**  
 8 **hydrogen fuel cells, etc. could result in distribution assets becoming**  
 9 **stranded?**

10 **b) If electricity rates increased to 24 cents/kWh, might this accelerate**  
 11 **adoption of customer-owned generation?**

12 **c) If there were an electricity supply deficiency in the province, might this**  
 13 **accelerate adoption of customer-owned generation?**

14  
 15 **A. a)** At this time, Newfoundland Power does not consider future customer generation to  
 16 be a factor that exposes its assets, including its distribution assets, to a risk of  
 17 becoming stranded. Newfoundland Power cannot predict whether customer owned  
 18 generation would never be a factor that could cause any of its distribution assets to  
 19 become stranded in the future. Newfoundland Power anticipates that a safe and  
 20 reliable distribution system will still be required as the penetration of customer  
 21 generation and other distributed energy resources increases.

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 23 Through the Company's Net Metering Service Option, customers can generate up to  
 24 100 kW of renewable electricity for their own use.<sup>1</sup> Customers who enrolled in the  
 25 Net Metering Service Option as of December 31, 2022 installed an average capacity  
 26 of 10.8 kW.<sup>2</sup> As of December 31, 2022, Newfoundland Power had 28 Net Metering  
 27 Service Option customers, totaling 303.3 kW of generation capacity producing  
 28 90,508 kWh of energy. At the end of 2022, participation in the Net Metering Service  
 29 Option represented approximately 0.02% of Newfoundland Power's peak demand for  
 30 the 2022-2023 winter season and approximately 0.002% of the Company's annual  
 31 energy sales.<sup>3</sup>

32  
 33 Any increases in customer generation could potentially help offset growth expected  
 34 from customer electrification. For example, light-duty electric vehicle adoption is  
 35 forecast to have a significant impact on electricity consumption and demand in the  
 36 province. By 2040, the adoption of light-duty electric vehicles could account for  
 37 480 GWh to 1,000 GWh of annual energy sales and, if left unmanaged, 170 MW to  
 38 340 MW of peak demand.<sup>4</sup>

1 Newfoundland Power's Net Metering Service Option is based on the principles outlined in the Provincial Government's *Net Metering Policy Framework*, July 2015.

2 303.3 kW of installed generation capacity / 28 Net Metering Service Option customers = 10.8 kW of generation capacity installed on average per customer.

3 See Newfoundland Power's *2022 Net Metering Service Option Annual Report*, which was filed with the Board on March 24, 2023.

4 See Newfoundland and Labrador Hydro's October 3, 2022 *Reliability and Resource Adequacy Study – 2022 Update – Volume III: Long-Term Resource Plan, Attachment 2: EV Adoption and Impacts Study – Final Results*, pages 28 and 29.

- 1                   Rooftop solar is cost competitive in some parts of North America.<sup>5</sup>
- 2
- 3                   b) Interest in customer-owned generation would likely increase if electricity rates
- 4                   increased to 24 cents/kWh. The amount of customer-owned generation capacity in
- 5                   the province is currently limited to 5.0 MW in accordance with the provincial
- 6                   government's *Net Metering Policy Framework*.<sup>6</sup>
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- 8                   c) If there were an electricity supply deficiency in the province, interest in customer-
- 9                   owned generation would likely increase.

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<sup>5</sup> See Canada Energy Regulator Article: *Market Snapshot: Residential solar is financially viable in some provinces and territories, but not in others*, Release date 2018-12-06.

<sup>6</sup> See Government of Newfoundland and Labrador *Net Metering Policy Framework*, July 2015, page 5.