

- 1 **Q.** (Application Volume 1, page 2-12) It is stated “*Electrification programs will provide*  
2 *a rate mitigating benefit for Newfoundland Power’s customers over the long term. For*  
3 *example, increased net revenue through electrification will provide a rate mitigating*  
4 *benefit for the Company’s customers of approximately 0.5¢/kWh by 2034.”*
- 5 a) What customer rates were assumed in this analysis? Are these the same  
6 rates assumed in the GRA?
- 7 b) Are the costs of electric vehicles expected to be on par with gasoline vehicles  
8 by 2025?
- 9 c) Is the proposed treatment of charging station costs consistent with treatment  
10 of CDM costs?
- 11 i) Are any of NP’s costs for CDM programs included in rate base?
- 12 ii) Does NP recover the costs of incentives for CDM programs such as  
13 low interest loans, rebates, etc. in a deferral account?
- 14 iii) Has NP ever built, owned and operated any CDM facilities?
- 15 d) How much is the estimated rate mitigating benefit by the end of 2030?
- 16 e) Is there any risk that the projected benefit could be less than 0.5¢/kWh or  
17 even negative? Please identify any such risks.
- 18 f) If residential or commercial customers install EV chargers then would they  
19 have to upgrade their electrical panels or connections? Is the cost of such  
20 upgrades and the cost, net of incentives, of the chargers included in the  
21 calculation of the rate mitigating benefit to customers?
- 22 g) Would CDM programs that lead to reduced electricity consumption more  
23 than offset the 0.5¢/kWh rate mitigating benefit?
- 24
- 25 **A.** a) The analysis referenced in this Request for Information was filed prior to  
26 Newfoundland Power’s 2022/2023 *General Rate Application* and prior to the  
27 annual July 1<sup>st</sup> rate adjustment for 2021. Accordingly, the customer rates  
28 assumed in the analysis do not reflect those assumed in the GRA.  
29
- 30 For the customer rates assumed in the analysis, see response to Request for  
31 Information CA-NP-035.
- 32
- 33 b) Yes, electric vehicles (“EVs”) are forecast to reach cost parity with gasoline-  
34 powered vehicles in 2025.
- 35
- 36 c) Yes, the proposed treatment of charging station costs is consistent with the  
37 treatment of CDM costs.
- 38
- 39 i) Yes, Newfoundland Power’s costs for CDM programs are included in rate  
40 base. CDM program costs are included in rate base from 2 perspectives.  
41 First, CDM program costs are included in the CDM Cost Deferral  
42 Account. The inclusion of deferred charges in the calculation of regulated

1 rate base is consistent with the Asset Rate Base Method.<sup>1</sup> Second, while  
2 Newfoundland Power does not construct, own or operate infrastructure as  
3 part of its CDM programs, its customer energy conservation website is a  
4 capital asset.<sup>2</sup> This capital asset is included in the Company's rate base.

5  
6 ii) Yes, Newfoundland Power recovers the costs of incentives for CDM  
7 programs in a deferral account. See part (c)(i).

8  
9 iii) See part (c)(i).

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11 d) The estimated rate mitigating benefit by 2030 is 0.2¢ per kWh.

12  
13 e) In Newfoundland Power's view, it is likely that the projected benefit could be  
14 greater than 0.5¢/kWh.

15  
16 On July 28, 2021, the Provincial Government and the Federal Government  
17 announced an agreement-in-principle to mitigate rate impacts associated with the  
18 Muskrat Falls Project. The mitigated customer rate target was updated to  
19 14.7 ¢/kWh, or approximately 9% higher than the previously indicated target of  
20 13.5 ¢/kWh.<sup>3</sup>

21  
22 If actual electricity rates were higher than the level assumed in the net present  
23 value ("NPV") analysis, incremental revenues, and thus, customer rate mitigation  
24 benefits would be higher. For example, if the NPV analysis assumed customer  
25 electricity rates increased by 9% in 2022, it would result in additional net  
26 revenues of approximately \$35 million to \$40 million over the 2021 to 2034  
27 period, or approximately \$20 million on an NPV basis. The higher net revenues  
28 would increase the estimated customer rate mitigation benefit to approximately  
29 0.65 ¢/kWh by 2034, or about 0.15 ¢/kWh higher than the current estimate of  
30 0.5 ¢/kWh by 2034.<sup>4</sup>

31  
32 Newfoundland Power conducted a sensitivity analysis of the rate mitigating  
33 benefit of electrification programs based on potential changes in major  
34 assumptions. The analysis confirmed that electrification programs will provide a  
35 rate mitigating benefit to customers, even with changes in major assumptions.<sup>5</sup>

36  
37 Furthermore, a study by Dunsky Energy Consulting showed that, without utility  
38 intervention, there is a risk that costs to customers will increase materially. The

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<sup>1</sup> In Order No. P.U. 32 (2007), the Board approved Newfoundland Power's calculation of regulated rate base in accordance with the Asset Rate Base Method.

<sup>2</sup> See Newfoundland Power's 2021 Capital Budget Application, Volume 1, Schedule B, page 80 of 98.

<sup>3</sup>  $14.7 \div 13.5 - 1 = 0.089$ , or approximately 9%.

<sup>4</sup> For an illustration of the impact, see response to Request for Information PUB-NP-065 filed as part of Newfoundland Power's 2021 Electrification, Conservation and Demand Management Application.

<sup>5</sup> Ibid.

1 analysis showed that, under the baseline scenario (i.e. without utility  
2 intervention), the unmanaged charging of EVs would increase costs to customers  
3 by approximately \$22 million by 2034.<sup>6</sup>  
4

- 5 f) Residential or commercial customers installing EV chargers may be required to  
6 upgrade their electrical panels or connections, depending on the customer's  
7 premises and the size of the charging infrastructure being installed. This will be  
8 highly variable from customer to customer.  
9

10 Incremental customer costs associated with installing charging infrastructure are  
11 accounted for in the calculation of the modified Total Resource Cost test, which is  
12 the test proposed to be used to determine the cost-effectiveness of electrification  
13 programs for customers. These costs are not included in the NPV analysis, which  
14 focuses on incremental utility system benefits and costs.  
15

- 16 g) No. Customer CDM and electrification programs are complementary. As  
17 customers' energy usage increases through electrification, it becomes increasingly  
18 important to manage impacts on system peak and related system costs through  
19 CDM. Both CDM and electrification programs result in lower overall costs for  
20 customers.<sup>7</sup>

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<sup>6</sup> See response to Request for Information PUB-NP-037 filed as part of the *2021 Electrification, Conservation and Demand Management Application*.

<sup>7</sup> For example, a customer who upgrades their insulation and thermostats through a CDM program would experience overall net savings of approximately \$8,800 over the life of those technologies. Similarly, a customer who purchases an electric vehicle would experience overall net savings of approximately \$5,200 through reduced maintenance and fuel costs over the life of that vehicle. See the *2022/2023 General Rate Application, Volume 1, Application, Company Evidence and Exhibits, Section 2: Customer Operations*, pages 2-10 to 2-11.