

1 **Q. (Reference slide 36)**

2 **(a) When household rates have a flat energy charge as they do now, does the potential**
 3 **exist for significant cross-subsidization; i.e., under the current rate design, are oil**
 4 **heating customers subsidizing electric baseboard heating customers, and will**
 5 **customers with no EV chargers be subsidizing customers with EV chargers?**

6 **(b) If it has been determined that no such cross-subsidization is taking place, please**
 7 **provide the analyses.**

8
 9 A. *This Request for Information relates to the Electrification, Conservation and Demand*
 10 *Management Plan: 2021-2025 (the “2021 Plan”) developed in partnership by*
 11 *Newfoundland Power Inc. (“Newfoundland Power”) and Newfoundland and Labrador*
 12 *Hydro (“Hydro”) (collectively, the “Utilities”) and the related Technical Conference*
 13 *presented by the Utilities on February 1, 2022. Accordingly, the response reflects*
 14 *collaboration between the Utilities.*

15
 16 (a) Newfoundland Power assesses cross-subsidization on a regular basis through its cost
 17 of service study.¹ The level of cross-subsidization is measured in terms of a revenue
 18 to cost ratio.² The cost of service study includes each customer class of service.³

19
 20 Newfoundland Power also maintains accounts within its cost of service study to
 21 assess revenue to cost ratios for regular and all-electric domestic customer
 22 subclasses.⁴

23
 24 Table 1 shows the revenue to cost ratios for domestic regular and all-electric
 25 customers from the Company’s latest cost of service study filed with the Board.

**Table 1:
 Domestic Service Subclasses
 Revenue to Cost Ratios**

Domestic Subclass	Revenue to Cost Ratio ⁵
Regular	96.5%
All-electric	96.6%

¹ For a copy of the Company’s cost of service study filed with the Board, see Volume 2 of its *2022/2023 General Rate Application*.

² Maintaining revenue to cost ratios for each class within a range of 90% to 110% has been an accepted approach to achieving fairness in rate design by avoiding undue cross-subsidization among the various classes. This is consistent with the views of the Board as expressed in Order No. P.U. 7 (1996-97), which states: *“The Board agrees with the philosophy that it is not necessary to achieve a 100% revenue to cost ratio for all classes and takes no exception to a variance of up to 10%.”*

³ Newfoundland Power’s customer classes are: (i) Domestic Service; (ii) General Service, 0-100 kW (110 kVA); (iii) General Service, 110 kVA (100 kW) - 1000 kVA; (iv) General Service, 1000 kVA and Over; and (v) Street and Area Lighting Service.

⁴ Regular domestic customers have a primary heating source other than electric heat such as oil or wood sources.

⁵ For an analysis of the revenues and costs of regular and all-electric heating domestic customers, see *Schedule 1.3 Total Allocation of the Cost of Service* and *Schedule 1.4 Revenue by Class of Service* in the Company’s cost of service study filed in Volume 2 of its *2022/2023 General Rate Application*.

1 The revenue to cost ratios shown in Table 1 indicate there is no cross-subsidization
2 between regular and all-electric heating customers.

3
4 Customer revenue to cost ratios change over time due to changes in customer usage
5 patterns and supply cost characteristics. These changes are incorporated into the cost
6 of service study as they occur. If cross-subsidization were to develop in the future
7 between groups of customers due to changes related to EV charging, Newfoundland
8 Power would address the cross-subsidization issue at that time.

9
10 While cross-subsidization issues between customers with no EV chargers and
11 customers with EV chargers has not been determined at this time, it has been
12 determined that the electrification initiatives outlined in the 2021 Plan will provide
13 rate mitigation benefits to all customers over the long term.

14 See part (b) for further information.

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16
17 (b) Newfoundland Power assessed the rate mitigating benefit of customer electrification
18 programs for all customers through a net present value (“NPV”) analysis.⁶ The NPV
19 analysis shows that electrification initiatives will provide additional net revenue of
20 approximately \$123 million over the period 2021 to 2034. On an NPV basis, this
21 equates to approximately \$62 million in additional net revenue over this period.

22
23 The net revenue impact was then divided by projected Company energy sales,
24 including energy sales from electrification, to determine an indicative customer rate
25 impact. By 2034, increased net revenue through electrification will provide a rate
26 mitigating benefit for customers of approximately 0.5¢/kWh.⁷

⁶ For a copy of the NPV Analysis, see Newfoundland Power’s Application, Volume 1, Exhibit 2, Appendix A.

⁷ The customer rate impact of 0.5 cents/kWh was determined by dividing the net revenue impact of \$33.9 million in 2034 by the projected Company energy sales, including energy sales from electrification, of 6,527 GWh.