

1 **Q. (Reference PUB-NP-010) If Newfoundland Power determines that a charger**
 2 **site requires expansion owing to high usage rates, why does it believe that the**
 3 **business case remains too weak for the private sector to undertake the charger**
 4 **expansion?**
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6 A. Newfoundland Power is coordinating with Newfoundland and Labrador Hydro ("Hydro")
 7 (collectively, the "Utilities") to establish the minimum infrastructure necessary to permit
 8 travel across the Island of Newfoundland in an electric vehicle ("EV"). Establishing this
 9 minimum infrastructure is necessary to address customers' range anxiety related to
 10 owning an EV.¹
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12 Newfoundland Power installed 10 charging stations as part of its *EV Charging Network*
 13 following Board approval in 2021. A proposal to install 10 additional charging stations in
 14 2022 is currently under review by the Board. These 20 charging stations are designed
 15 to provide minimum geographic coverage to permit travel across the Island of
 16 Newfoundland in an EV. Three additional charging stations are proposed for installation
 17 in 2023 to provide adequate access to charging services in the highest usage areas.²
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19 Newfoundland Power's proposal to install three charging stations in the highest usage
 20 areas of its *EV Charging Network* is intended to provide additional charging availability
 21 during busy periods. This is expected to be required at a small number of sites where
 22 customers will experience long wait times for charging services.³ The installation of a
 23 small number of charging stations in high usage areas does not imply that the business
 24 case for private sector investment has improved.
 25

26 The weak business case for private sector investment reflects the upfront costs of
 27 installing EV charging infrastructure and the limited number of EVs in the province.⁴
 28 This dynamic was recognized by the Board when issuing its Reasons for Decision for
 29 Order No. P.U. 30 (2021) approving Newfoundland Power's installation of 10 EV
 30 charging stations in 2021. The Board stated:
 31

32 *"The evidence is clear that access to fast charging infrastructure in the province*
 33 *is limited and lags behind the other provinces. Newfoundland and Labrador, in*
 34 *fact, ranks last in terms of the number of EV charging stations in the country. It*
 35 *is clear that EV charging station infrastructure is not being deployed by the*
 36 *private sector in this province. The evidence shows that private sector*
 37 *investment in EV charging stations is constrained by a weak business case in this*
 38 *province as a result of the high upfront cost and the low number of EVs."*⁵

1 See Newfoundland Power's *2021 Electrification, Conservation and Demand Management Application, Volume 1*, Exhibit 2, page 4.

2 Variables that will be used to determine high usage areas include: (i) number of charging sessions; (ii) energy use at the charger; (iii) average charging session length; and (iv) number of unique drivers using the charger. The most popular stations will be selected to avoid future queuing and decrease potential wait times at these sites. See the response to Request for Information PUB-NP-010.

3 For example, approximately 35% of charging sessions to date have lasted longer than one hour. Longer charging sessions can contribute to significant wait times for customers in the highest usage areas.

4 As of June 30, 2022, there were 439 all-electric vehicles registered in Newfoundland and Labrador.

5 See Reasons for Decision for issuing Order No. P.U. 30 (2021), page 11, line 31, to page 12, line 1.

1 The weak business case for private sector investment in EV charging infrastructure in
2 Newfoundland and Labrador has persisted since the Board issued its order in 2021.
3 Despite investment in EV charging infrastructure in other provinces by private network
4 operators such as Tesla, Petro Canada and Electrify Canada, no private sector
5 investment in EV fast charging infrastructure has occurred in Newfoundland and
6 Labrador. EV adoption continues to lag behind in Newfoundland and Labrador in
7 comparison to other provinces.⁶

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9 Customer adoption of EVs will continue to be limited without investment in adequate
10 charging infrastructure. The Potential Study completed by Dunskey Energy Consulting
11 (“Dunskey”) found that the single largest factor influencing the adoption of EVs in
12 Newfoundland and Labrador is access to fast charging infrastructure.⁷ Dunskey found
13 that upwards of 200 Direct Current Fast Charging ports and up to 2,000 Level 2
14 charging ports may be helpful to promote EV adoption.⁸

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16 By establishing EV charging infrastructure in the province, including reasonable
17 geographic coverage and adequate access in high usage areas, the Utilities will
18 accelerate EV adoption in the province, thereby improving the business case for private
19 sector investment in EV charging infrastructure over time.

⁶ See the response to Request for Information PUB-NP-011, page 3, Table 1.

⁷ See Newfoundland Power’s *2021 Electrification, Conservation and Demand Management Application, Volume 2, Schedule C*, page 146 of 325.

⁸ See the response to Request for Information CA-NP-046.