

1 **Q. What research has Newfoundland Power undertaken to determine how electric**
2 **chargers and the uptake in electric vehicles are dealt with by the various utilities**
3 **boards in these jurisdictions:**

4 **(a) Nova Scotia**

5 **(b) Prince Edward Island**

6 **(c) New Brunswick**

7 **(d) Quebec**

8 **(e) Ontario**

9 **(f) Manitoba**

10 **(g) Saskatchewan**

11 **(h) Alberta**

12 **(i) British Columbia**

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

20
21 **A. Introduction**

22
23 Electric vehicles (“EVs”) are a rapidly emerging technology globally.¹ In the Utilities’
24 view, given the emerging nature of the technology, it is appropriate for the Board to
25 consider not only the experience in Canadian jurisdictions, but North American
26 jurisdictions more broadly.

27
28 A February 2021 report from the Edison Electric Institute found that *“Electric companies*
29 *increasingly are engaged in many different facets of electric transportation”*.² A more
30 recent report found that the number of utilities having regulatory approval for filings
31 related to transportation electrification increased from 52 utilities as of February 2021, to
32 60 utilities as of November 2021.³ The value of approved regulatory filings increased
33 from approximately \$2.97 billion to approximately \$3.4 billion over this timeframe.⁴

34
35 As utilities become increasingly engaged in transportation electrification, the primary
36 issues being considered by regulators are the regulation of EV charging services and the
37 recovery of costs associated with utility electrification initiatives.

¹ For example, see response to Request for Information CA-NP-060 for a history of EV charger development.

² See Edison Electric Institute, *Electric Transportation Biannual State Regulatory Update*, February 2021, page 1.

³ See Edison Electric Institute, *Electric Transportation Biannual State Regulatory Update*, November 2021, page 1 and *Electric Transportation Biannual State Regulatory Update*, February 2021, page 1.

⁴ See Edison Electric Institute, *Electric Transportation Biannual State Regulatory Update*, November 2021, page 1 and *Electric Transportation Biannual State Regulatory Update*, February 2021, page 24.

B. Regulation of EV Charging Services

As discussed in the response to Request for Information PUB-NP-002, there is currently no prevailing practice in Canada with respect to the regulation of EV charging services. Rather, approaches to regulating EV charging services vary in response to the unique circumstances in each province. This was observed by the Board, in Order No. P.U. 27 (2020).⁵

Regulators in certain provinces have determined that the regulation of EV charging services is not required. The Nova Scotia Utility and Review Board found that EV chargers are not a regulated service. The Ontario Energy Board determined that EV charging services are not subject to its jurisdiction. Under Maritime Electric's current pilot project, the rates for EV charging services will be established by the municipalities.⁶

Other provinces permit the regulation of EV charging services. The British Columbia Utilities Commission found that the regulation of EV charging services is required to protect the public interest when the service is provided by a public utility. This determination was made on the basis of mitigating ratepayer risk and ensuring fairness in the EV charging market.⁷ Legislation in Quebec allows the government to set rates for EV charging services.⁸

Whether or not the service is regulated, the rates for EV charging services throughout North America are generally based on market rates.⁹ Response to Request for Information CA-NP-014 includes a survey of hourly charging rates in Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, Alberta and British Columbia. The survey shows that fast charging rates across Canada generally range from \$15 to \$20 per hour of use.¹⁰

Hydro filed an application with the Board in June 2020 regarding the provision of EV charging services in Newfoundland and Labrador. Hydro submitted that EV charging services are akin to post-meter activities, do not attract concerns regarding monopolistic utility behaviour, and are not a regulated service as contemplated by provincial legislation.¹¹

In Order No. P.U. 27 (2020), the Board determined that: (i) the *Public Utilities Act* and *Electrical Power Control Act, 1994* do not require that the Board approve rates, tolls or charges for the provision of EV charging services; and (ii) the regulation of EV charging

⁵ The Board stated, "While these approaches respond to unique circumstances in each province, it seems that the provision of EV charging services has generally been viewed a service which is different than a traditional or core utility service." See Order No. P.U. 27 (2020), page 5, lines 15-17.

⁶ See response to Request for Information PUB-NP-002, page 3.

⁷ Ibid.

⁸ Ibid., pages 2 to 3.

⁹ See response to Request for Information PUB-NP-026, Table 1.

¹⁰ The one exception is Quebec, which charges approximately \$12 per hour of use.

¹¹ See Hydro's *Application Regarding the Provision of Electric Vehicle Charging Services*, Schedule 2, pages 7 to 8.

1 services in the province was not required at that time to protect the public interest or to be
2 consistent with sound public utility practice. The Board did not, however, make a finding
3 as to whether EV charging services are subject to the legislative authority of the
4 province.¹²

6 C. Recovery of Electrification Costs

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8 Utilities throughout North America have pursued various initiatives related to
9 transportation electrification. A 2020 survey conducted by the Utilities showed that
10 North American utilities have invested in: (i) EV incentive programs for vehicles and
11 chargers; (ii) EV charging infrastructure; and (iii) load management initiatives.¹³ These
12 initiatives are being pursued by utilities throughout North America to achieve various
13 policy goals, including greenhouse gas reductions.¹⁴

14
15 In some cases, utility initiatives are fully funded by government and ratepayer recovery is
16 not required. In other cases, utility initiatives are partly funded by government with
17 ratepayer recovery of the remaining costs. A 2019 utility survey conducted by E Source
18 showed that, of 28 utilities pursuing transportation electrification, approximately 60%
19 funded their initiatives solely from ratepayers or from a combination of ratepayer
20 recovery and government funding.¹⁵

21
22 Ratepayer recovery of electrification initiatives has included both EV incentive programs
23 and charging infrastructure investments.

24
25 Utility-offered EV incentive programs include vehicle and charger incentives. A sample
26 of North American jurisdictions highlighted 9 regulators that have approved recovery of
27 incentive program costs from ratepayers. For example, the Michigan Public Service
28 Commission approved \$13 million in EV investments by DTE Energy, including
29 residential and commercial charging incentives.¹⁶ In Canadian jurisdictions, such as

¹² See response to Request for Information PUB-NP-002, page 4.

¹³ The Utilities researched 43 jurisdictions where utilities offer customer electrification programs. Of these 43 jurisdictions: (i) 32 jurisdictions provide incentives for vehicles or chargers; (ii) 31 jurisdictions invest in charging infrastructure; (iii) 27 jurisdictions provide custom solutions for commercial customers; and (iv) 25 jurisdictions undertake managed charging. For the results of the survey, see Newfoundland Power's Application, Volume 2, Schedule B.

¹⁴ For example, in Washington's 2021 State Energy Strategy, electrifying vehicles is a priority with goals to set ambitious statewide targets, improve planning and oversight of battery electric vehicle ("BEV") charging infrastructure, and accelerate the market for BEVs. Puget Sound Energy's 2021 Transportation Electrification Plan provides a pathway toward significantly reducing carbon emissions from vehicles and will help Washington achieve its climate goals. The state of New York's *Climate Leadership and Community Protection Act*, sets goals for decarbonization of the electric grid. In response, utilities have worked with the New York Public Service Commission to develop transportation programs that are aligned with the objectives of the legislation.

¹⁵ See response to Request for Information PUB-NP-027.

¹⁶ See response to Request for Information PUB-NP-027, Table 1.

1 British Columbia, utility incentive programs have been fully funded by governments and
2 ratepayer recovery has not been required.¹⁷
3

4 Utility investments in EV charging infrastructure have been substantial throughout North
5 America. For example, in June 2021, the Florida Public Service Commission approved
6 Duke Energy Florida's application for EV programs, including 100 utility-owned
7 charging stations. All costs associated with the charging stations are captured in the
8 utility's cost of service.¹⁸ In Canada, ratepayer recovery of charging infrastructure costs
9 has occurred in Prince Edward Island, British Columbia and Quebec.¹⁹
10

11 **D. Conclusion**

12

13 EVs are a rapidly emerging technology globally. North American utilities are
14 increasingly engaged in various aspects of transportation electrification. This, in turn,
15 has required regulators to consider the regulation of EV charging services and whether
16 ratepayer recovery of utility costs related to transportation electrification is reasonable.
17

18 Approaches taken throughout North America vary and generally depend on the specific
19 policy goals to be achieved in each jurisdiction.
20

21 While there is no prevailing practice regarding the regulation of EV charging services,
22 market-based rates are typically applied.
23

24 In Newfoundland and Labrador, the Utilities apply market-based rates for EV charging
25 services. The Board previously determined that the approval of rates for EV charging
26 services was not required under provincial legislation or to protect the public interest at
27 the time. In the Utilities' view, the Board's determination continues to be appropriate.
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29 With respect to cost recovery, North American regulators have approved ratepayer
30 recovery of both EV incentive programs and charging infrastructure investments.
31

32 In Newfoundland and Labrador, the Utilities have proposed electrification initiatives to
33 support the provincial policy goal of customer rate mitigation. The rate mitigating
34 benefit of electrification reflects the unique circumstances in the province. Following
35 commissioning of the Muskrat Falls Project, the province will have over 3 TWh of
36 surplus energy and domestic rates for electricity service will substantially exceed the
37 value of export sales. The dynamic was recognized by the Board as part of the reference
38 on Muskrat Falls Project rate mitigation. In its final report as part of the reference, the
39 Board found that:

¹⁷ For example, EV incentive programs provided by utilities in British Columbia are funded under its Provincial Government's CleanBC plan.

¹⁸ See response to Request for Information PUB-NP-045.

¹⁹ Ibid.

1 *“[M]aximizing domestic load through electrification, improving energy efficiency*
2 *and using demand response to reduce peak and allow for increased export sales*
3 *leads to the best outcomes for customers.”²⁰*
4

5 The electrification initiatives included in the 2021 Plan are essential to maximizing
6 domestic load in the province and achieving the best outcomes for customers. The
7 initiatives included in the 2021 Plan also align with initiatives being pursued by utilities
8 throughout North America. The rate mitigating benefit of the Utilities’ initiatives is
9 consistent with the least-cost delivery of reliable service to customers. Recovery of costs
10 associated with the Utilities’ electrification initiatives from ratepayers is therefore
11 reasonable.

²⁰ See response to Request for Information PUB-NP-067.