

- 1 Q. Order No. P.U. 30(2021) Reasons for Decision stated the following with respect to the
2 installation and promotion of EV charging infrastructure on the interconnected system:

3 “These stations are a critical first step toward the electrification of the province so as to
4 maximize the benefits of the forecast surplus energy upon the commissioning of the Muskrat
5 Falls Project. The geographic coverage provided by the proposed EV charging stations will
6 address a primary barrier to EV adoption and the resulting increase in EV uptake should improve
7 the business case for future private investment. The Board is satisfied that investment by the
8 utilities in EV charging infrastructure is the best currently available tool to contribute to
9 increased EV uptake in the province which will ultimately contribute to increased sales of
10 electricity, increased revenues and, with appropriate load management measures, reduced
11 costs for customers.”

12 a. Please describe the expected distribution and generation system impacts of EV usage to
13 customers on isolated systems given that most EV charging typically occurs at customers'
14 homes.

15 b. Please describe how Hydro is proposing to limit the costs associated with serving the
16 additional capacity and energy requirements on isolated systems to ensure “minimal impact
17 on the diesel electrical system or the rural deficit”, as stated in Schedule 1, page 7.

18 c. Is Hydro aware of approaches being employed in other jurisdictions in Canada to
19 manage the system impacts of promoting EV usage on isolated systems? Please
20 discuss.

21 d. Is Hydro aware of any EV purchase or charger rebates available to customers on
22 isolated systems? Please explain.

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- 25 A. a. Newfoundland and Labrador Hydro (“Hydro”) does not expect any material impact to its
26 distribution and generation systems in its isolated systems due to electric vehicle (“EV”)
27 growth in the near-term forecast period (e.g., 5–10 years). Hydro will continue to monitor

1 and consider the impact of EV growth in its isolated systems as part of its annual load
2 forecasting process. Please refer to Hydro's response to PUB-NLH-002 of this proceeding for
3 additional details on the equipment specification to aid in achieving this outcome.

4 b. Please refer to Hydro's response to part c) of PUB-NLH-001 of this proceeding.

5 c. Hydro issued an email survey to other utilities who are members of the Off-Grid Utility
6 Association ("OGUA").¹ Feedback from other Canadian utilities² is as follows:

7 i. Northwest Territories Power Corporation indicated that their EV chargers are non-
8 regulated.³

9 ii. ATCO Yukon has public/highway chargers installed in four of the five ATCO Yukon
10 remote systems. They were installed by the Yukon Government. ATCO Yukon
11 developed limits that were issued for sizing the chargers to limit grid impacts.

12 No other OGUA members provided relevant responses, however, Hydro is aware that
13 Hydro Québec's charging network, Circuit Electrique, uses a similar configuration as
14 proposed by Hydro in this Application in some of its isolated systems (i.e. lower
15 powered Direct Current Fast Chargers paired with solar generation, battery storage,
16 and limited grid connections).⁴

17 d. No, Hydro is not aware of any current EV purchase rebates available to customers in isolated
18 systems.⁵

¹ Respondents include: Hydro One Remotes, Manitoba Hydro, Hydro Quebec, Qulliq Energy, Cordova Electric, Atco Alberta, Alaska Village Electric Cooperative, BC Hydro, and Northwest Territories Power Corporation ("NTPC").

² Qulliq Energy also responded indicating that they have no EV chargers in Nunavut.

³ NTPC also indicated that their EV chargers are managed by NT Energy, and fully funded by the Government of North-West Territories.

⁴ Please refer to Hydro's response to PUB-NLH-001 of this proceeding.

⁵ The Government of Newfoundland and Labrador's EV rebate program, administered by Hydro, is only available to customers in interconnected systems.