

1 Q. **Reference: Application for Approval of the Construction and Installation of 14 Level 3 Direct**
2 **Current Fast Chargers and 14 Level 2 Chargers, Schedule 1, Page 2, Lines 1-3.**

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4 *“The completion of the proposed charging network will bring the first DCFC*
5 *network to the province, promote EV based tourism, and allow for increased*
6 *domestic ownership of EVs which will reduce greenhouse gas emissions and*
7 *promote electrification in the province.”*

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9 Please explain whether and how the installation of an EV fast charging network will contribute
10 to rate mitigation efforts.

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13 A. Currently, there are approximately 185 battery powered electric vehicles (“EV”) in the province.
14 As noted in the “Conservation Potential Study, Final Report,” (“Dunsky Report”), “. . . a \$20M
15 investment in DCFC infrastructure would result in 132,000 EVs on the road . . . and 647 GWh of
16 EV load by 2034. . .”¹ As a result, Newfoundland and Labrador Hydro (“Hydro”) expects that the
17 proposed project will contribute to increasing consumer confidence regarding ability to move
18 about the province in EV and will therefore provide the opportunity to materially increase the
19 number of EV in the province.

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21 Assuming average annual driving of 20,000 km per year, each new domestically owned EV will
22 result in 5,000 kWh of new energy sales contributing approximately \$500 per vehicle per year
23 towards rate mitigation.² While Hydro expects that the majority of these new energy sales will
24 occur at Level 2 chargers at EV owners’ homes, Hydro expects that the proposed fast charging
25 network will be a material contributor towards domestic purchases of EV in the province and
26 thus contribute to rate mitigation efforts.

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28 In order to maximize potential rate mitigation benefits, EV charging during peak periods will
29 need to be managed effectively. As a result, Hydro believes that a Conservation and Demand

¹ “Conservation Potential Study, Final Report,” Dunsky Energy Consulting, vol. 1, p. xviii.

² 5,000 kWh x 10 cents/kWh increased rate versus forecast average export prices = \$500 (assuming a target domestic rate of 13.5 cents/kWh post Muskrat Falls).

- 1 Management program for smart Level 2 home chargers will be necessary to assist in the
- 2 management of consumer charging behaviours. Please refer to Hydro's response to NP-NLH-005
- 3 for additional information.