Q. Please explain if the cost of system upgrades/extensions for the charging stations on the isolated systems are reflected in the proposed capital cost. If not, please provide a cost estimate for the system upgrades/extensions for each charging station and advise whether or not Hydro will be recovering these costs from rate payers.

A. Newfoundland and Labrador Hydro's ("Hydro") Application proposes Direct Current Fast Chargers ("DCFC") located in Labrador South include solar generation for energy and battery storage for capacity to avoid any system upgrade or annual fuel costs. Specifically, Hydro's proposal for isolated DCFCs include:

- Solar generation to provide energy that would otherwise have to come from increased diesel fuel consumption at Hydro's diesel plant. This generation is sized to allow for sufficient energy on an annual basis to charge approximately 100 electric vehicles ("EV"). This mitigates concerns associated increased operating costs for energy.

- A battery energy storage system to allow full 120 kW EV charger output but with a reduced grid peak load impact of 20 to 40 kW. This mitigates concerns associated with increasing the peak load and associated capacity requirements on the distribution and isolated generation systems.[1]

- A small grid connection to ensure some level of charging is always available, increasing the reliability of the EV charger compared to an alternative where the charger is solely supplied by solar generation and a battery energy storage system. On an annual basis, the proposed solar generation is forecast to provide sufficient energy to supply the needs of the proposed charging locations.

This proposed site design is deliberate in its intent to limit the impact on Hydro's isolated systems and avoid impacts to the rural deficit. Due to the proposed design, no capacity

[1] Hydro proposes that the backup charger will be grid connected for reliability purposes and that this charger will be included in the 40 kW or less total site capacity requirements.

upgrades are necessary or advanced on either the distribution system, or isolated generation systems to facilitate the proposed isolated EV charger installation. As such, the only expected[2] system costs will be those associated with connecting the chargers as a standard new customer connection. Hydro has included in the proposed capital cost a forecast contribution in aid of construction to be paid by the project, which will ultimately vary based on the final site selection within the community.

[2] Depending on the number of EV charges per year (estimated at beyond 100), auxiliary EV charger loads, and exact solar output, there is a possibility of increased fuel consumption at Hydro's isolated diesel plant throughout the project life. Hydro will monitor usage and solar production once in-service and consider further mitigations (i.e., additional solar generation), if required.