Q. Is a primary objective of the proposed electrification program to increase consumption of electricity in the Province, particularly the Island Interconnected System (IIS)? If so, by how many years is the proposed electrification program expected to advance electrification in the Province?

A.

This Request for Information relates to the Electrification, Conservation and Demand Management Plan: 2021-2025 (the "2021 Plan") developed in partnership by Newfoundland Power Inc. ("Newfoundland Power") and Newfoundland and Labrador Hydro ("Hydro") (collectively, the "Utilities") and the related Technical Conference presented by the Utilities on February 1, 2022. Accordingly, the response reflects collaboration between the Utilities.

The primary objective of the proposed electrification programs is to increase domestic consumption of electricity on the Island Interconnected System in a manner that provides a rate mitigating benefit for customers. This is consistent with the Board's findings as part of the Reference on Rate Mitigation Options and Impacts, including the finding that:

"[M] aximizing domestic load through electrification, improving energy efficiency and using demand response to reduce peak and allow for increased export sales leads to the best outcomes for customers." 1

Electrification programs in the 2021 Plan seek to realize the customer benefits of electrification primarily through increasing the adoption of electric vehicles ("EVs") in the province.² Under the baseline scenario (i.e. without utility intervention), the market potential study completed by Dunsky Energy Consulting (the "Study") projects approximately 41,000 EVs in the province by 2034. By comparison, implementation of the 2021 Plan is projected to: (i) result in 41,000 EVs in the province by 2029, or 5 years ahead of the baseline scenario; and (ii) more than triple the number of EVs to approximately 137,000 on provincial roads by 2034.

Additionally, the Study shows that system costs will increase without utility intervention. This is largely due to an increase in capacity-related system costs resulting from the unmanaged charging of EVs. Increased system costs would put upward pressure on customer rates and would be inconsistent with provincial rate mitigation objectives. Implementation of the 2021 Plan will lay the foundation for effective load management to avoid exposing customers to higher rates due to increased system costs. See the response to Request for Information PUB-NP-037 for further information.

See Reference to the Board: Rate Mitigation Options and Impacts, Muskrat Falls Project – Final Report, February 7, 2020, page iii.

The customer benefits of electrification programs are assessed through the modified Total Resource Cost test and a net present value analysis. For more information, see response to Request for Information TC-CA-NP-002.