Q. (Reference CA-NP-004) With respect to customer trade-offs between cost and reliability:

a) Is Newfoundland Power best described as a distribution company responsible for the operation and planning of the low voltage network of power lines, underground cables, substations etc. that deliver power to homes and businesses in its franchise area? If not, how is Newfoundland Power best described?

b) Please provide a list and brief explanation of all documentation that Newfoundland Power uses to plan and operate its distribution system such as the Distribution Planning Guidelines, Schedule of Rates, Rules and Regulations, CIAC policies, etc.

c) Please demonstrate the linkage between customer satisfaction and reliability used to assist in determining the appropriate balance between improved service and cost control.

d) How can Newfoundland Power gain useful information concerning customer trade-offs between cost and reliability?

e) Does Newfoundland Power believe that customer satisfaction levels would be improved noticeably if it could cut the average number and duration of interruptions in half?

f) Does Newfoundland Power believe that customer satisfaction levels would deteriorate noticeably if its average number and duration of interruptions doubled?

g) Does Newfoundland Power believe that its customers place a premium on an average SAIFI of 2 rather than 3 outages per year and/or an average SAIDI of 3 hours per year rather than 4 hours per year?

h) Would there be an incremental savings if Newfoundland Power were to allow SAIDI to match to the Canadian average?

A. a) Newfoundland Power operates an integrated electricity generation, transmission and distribution system throughout the island portion of Newfoundland and Labrador. The Company is the primary distributor of electricity on the island portion of the province of Newfoundland and Labrador, serving 87% of all customers in the province. The Company maintains a distribution system operating at voltages of 12,500 volts to 25,000 volts. In addition, the Company maintains a transmission system operating at voltages of 66,000 volts to 138,000 volts which transmits electricity to substations, and converts it to distribution voltages.[1] The Company also operates 143 MW of electricity generation, producing 421.1 GWh of electricity in 2022 with over 99% of electricity generated from Hydroelectric plants.[2]

[1] Newfoundland and Labrador Hydro is responsible for bulk transmission of electricity in the province, operating at voltages of 138,000 volts, 230,000 volts, 315,000 volts and 735,000 volts, as well as directly serving 38,000 customers mainly on the northern peninsula and in Labrador.

[2] 420.4 GWh / 421.1 GWh = 99.8%. See page 29 of Newfoundland Power's *2022 Sustainability Report* found at https://newfoundlandpower.com/-/media/PDFs/About-Us/Sustainable-Electricity/2022-SUSTAINABILITY-REPORT-FINAL.pdf.

b) The primary documentation Newfoundland Power employs in the operation of its distribution system are:

- *Distribution Planning Guidelines* – this document is intended to be a general listing of all the criteria that are to be observed when planning a distribution system as well as the guidelines that are useful in planning the most economical expansion of the distribution system.

- *Schedule of Rates, Rules and Regulations* – this document outlines classes of service and rates for those classes along with other rules and regulations.

- *Contribution in Aid of Construction ("CIAC") Policy* – this document outlines calculations of CIAC for the cost to construct and maintain a line extension.

c) As outlined in the response to Request for Information CA-NP-004, customer opinions on the value they place on reliable service can be difficult to ascertain. Newfoundland Power referenced two jurisdictions in which parties determined that customer "willingness-to-pay" studies did not provide substantial guidance in analyzing tradeoffs between cost and reliability.

Newfoundland Power has a statutory obligation to provide safe, adequate and reliable electrical service to customers at the lowest possible cost in an environmentally responsible manner. The Board has recognized that fully justified capital expenditures contribute to the delivery of least cost service to customers.[3] The Company has had consistent customer satisfaction and reliability performance over the last decade.

d) See part c) of this response.

e) Newfoundland Power does not have the information necessary to draw conclusions on the hypothetical scenario in this request.

Newfoundland Power observes that its reliability performance has been reasonably consistent under normal operating conditions since 2013.[4] Similarly, customers' overall satisfaction with Newfoundland Power's service delivery has been reasonably consistent over the last decade.[5] Newfoundland Power is focused on maintaining current levels of service reliability for customers.

Additionally, the Company observes that the lowest level of customer satisfaction recorded was during the first quarter of 2014. This survey followed widespread

[3] See Order No. P.U. 7 (2002-2003), in which the Board stated: "*From a regulatory perspective, efficient operations, fully justified capital expenditures and a low cost capital structure all combine to minimize revenue requirement, and hence provide least cost electricity to ratepayers*."

[4] See Newfoundland Power's *2025/2026 General Rate Application, Volume 1, Application, Company Evidence and Exhibits, Section 2: Customer Operations*, pages 2-17 and 2-18.

[5] Ibid, page 2-7.

customer outages known as "#darkNL." Customer satisfaction was 82% in that quarter.

f) See part e) of this response.

g) Newfoundland Power does not have the specific information necessary to conclude if customers place a "premium" on various levels of SAIFI and SAIDI in its operations.[6]

As shown in the response to Request for Information PUB-NP-046, Newfoundland Power's capital investment increased by 47% over the 2013 to 2022 period. The average growth rate experienced by the remaining two utilities in the Atlantic Canadian comparison was 56%. On a per customer basis, the Company's investment was 7% lower than the average of the two remaining utilities in 2013, and 11% lower in 2022. NB Power changed its accounting standards in 2016. Subsequent to that change, Newfoundland Power observes that NB Power's property, plant and equipment relating to Transmission and Distribution ("T&D") assets increased by approximately 40% from 2016 to 2022. By comparison, Newfoundland Power's T&D assets increased by approximately 25% over the same period.

In the same response, Newfoundland Power demonstrated that over the 2012 to 2021 period, the Company's customers have experienced 31% fewer outage hours in comparison to customers of other Atlantic Canadian utilities. The Company's average outage duration was among the lowest of any Atlantic Canadian utility over this period.

h) See the responses to Requests for Information PUB-NP-148 and CA-NP-293.

[6] See response to part c) of this Request for Information.