Q. **Reference: PUB-NLH-015.**

It is stated *"The Technical Report – Asset Management Needs and Readiness Assessment ("Report") was informative and validated Newfoundland and Labrador Hydro's ("Hydro") current approach. Hydro's practical approach is very much in line with the Report's high-level findings and is aimed at making foundational improvements that will have a lasting impact on the way Hydro manages its assets and determines the priority of future capital investment."*

New Brunswick Power filed evidence with the New Brunswick Energy and Utilities Board on August 1, 2019 entitled "Advanced Metering Infrastructure Capital Project (https://www.nbpower.com/media/1489724/nbp0103.pdf) which states (page 5) "*The pace of technological change has been increasing and will continue to increase. NB Power believes that continuing to plan on the basis of making investments in traditional utility assets in the face of such change may not be prudent and reasonable.*"

Nova Scotia Power states on its website (https://www.nspower.ca/clean and green/innovation/smart-grid-nova-scotia) "*Globally, the electrical grids that have served us over the past century are evolving through new technology into "smart grids." Smart grids offer a future in which individual pieces of the electrical system — including "smart devices" in customers' homes and businesses — can communicate with one another, so that the entire electrical system works together to use energy more efficiently. This means lower overall costs for customers and a cleaner environmen*t."

a) Does Hydro agree or disagree with the statements made by New Brunswick Power and Nova Scotia Power? If not, why not?

b) Please file documentation produced by, or on behalf of, Hydro that supports or refutes these statements.

c) What is Hydro doing to make its grid smarter so that the entire electrical system works together to use energy more efficiently?

d) How is Hydro's asset management approach taking into consideration technological change and investing in traditional utility assets in the face of such change that may not be prudent and reasonable?

A. Newfoundland and Labrador Hydro ("Hydro") agrees that technological advancements, including those categorized as "smart grid" technologies, provide alternatives to investment in traditional utility infrastructure. Hydro's perspective is that such investments should be pursued based on cost-benefit analyses or through pilot programs to aid in the collection of cost and operational data before a broad deployment.

To that end, Hydro has implemented smart grid technologies where such technologies have been demonstrated to be cost effective. For example, in 2024 Hydro began a pilot program to assess the use of Dynamic Line Rating ("DLR"), which provides real-time transmission line capacity data to maximize the transfer capacity of a transmission line. DLR offers an alternative to traditional methods such as re-conductoring or installation of additional structures to improve transmission line capacity.

Through the *Reliability and Resource Adequacy Study Review* proceeding, Hydro has evaluated, and continues to evaluate, technological advancements to enable enhanced demand management; however, to date, these technologies have not been determined to be more cost effective than other traditional supply options within Hydro's supply stack.

As Hydro looks toward options to address further load growth, demand management enabled by smart meters will likely present a viable option, alongside other smart grid technologies such as battery energy storage systems, and traditional supply options such as combustion turbines and hydroelectricity. Hydro will evaluate such technologies with holistic consideration of the costs and benefits of each technology. Hydro's response to CA-NLH-078 of this proceeding provides further detail on the use of non-wire alternatives in Hydro's resource and capital investment planning.

Hydro will continue to evaluate technologies on a case-by-case basis. Hydro has not produced, nor has had produced on its behalf, any documentation that would support or refute the provided statements by Nova Scotia Power or New Brunswick Power. Hydro and Newfoundland Power undertake Conservation and Demand Management Potential Studies which evaluate the potential of Electrification, Conservation and Demand Management ("ECDM") within the

province, which the utilities use to inform their ECDM Plans.[1] Hydro also commissioned a report, prepared by Util-Assist Inc., which evaluated various metering technologies; this report was provided in Hydro's response to CA-NLH-012 of this proceeding.

As part of Hydro's asset management and capital planning, Hydro will continue to evaluate any viable alternatives when planning capital investment, including smart grid technologies. Hydro believes smart grid solutions are part of our future system, and when the implementation of such technologies are determined to be least cost, Hydro will plan to propose the implementation of such technologies. Recognizing that these technologies are rapidly advancing, Hydro will continue to assess the data and research to make informed decisions with the best information available at the time, which is ultimately in line with its legislated mandate to deliver safe, reliable electricity service, consistent with lowest possible cost, in an environmentally responsible manner.

[1] "Application for Approvals Required to Execute Programming Identified in the Electrification, Conservation and Demand Management Plan 2021–2025," Newfoundland and Labrador Hydro, rev. July 8, 2021 (originally filed June 16, 2021).