Q. (Reference CA-NP-021) Table 1 indicates that NP has 96 "Load Research/MV90 Meters".

a) Please provide a detailed description of these meters. Are these meters considered new technology?

b) Does MV90 refer to a type of meter, or does it refer to Itron's software platform used by electrical utilities to collect, process, and manage interval data from electric meters?

c) Is MV90 new technology? When was it first introduced to the power sector?

d) Please describe NP's consideration of AMI technology for its load research project, including whether AMI was assessed as technically or economically feasible at the time, and whether NP anticipates AMI playing a role in future load research.

e) Undertaking U-08 pertaining to NP's 2025-26 GRA indicated that NP ordered the load research meters on September 14, 2023, 8.5 months after Newfoundland Power filed its Load Research and Rate Design Framework with the Board (December 30, 2022). Undertaking U-11 (pertaining to NP's 2025-26 GRA) indicated that NP was anticipating delivery of the meters commencing in September 2024, a full year after ordering. Please explain the delayed timing of the order and delivery schedule for the load research meters, and describe how this project was prioritized relative to NP's other meter procurement projects and programs over the same period.

a) MV-90 is not a type of meter. It is a data collection and management system that utilities use to retrieve and process customer load data. It supports collection of interval data from different meter types. MV-90 has been used in the power sector for over 30 years.[1]

Newfoundland Power utilizes MV-90 for metering some of its larger and more complex customers including customers participating in Newfoundland Power's Curtailable Service Option. In such cases, Newfoundland Power metering technicians are required to install communications equipment at the customer's premises to enable the transfer of customer load data.

b) See the response to part a) above.

c) See the response to part a) above.

d) The load research meters procured for the Load Research Study were selected because they are capable of recording customer interval load data while remaining compatible with Newfoundland Power's existing meter reading infrastructure and meter reading processes. This approach was consistent with

[1] Itron acquired UTS, including its MV-90 product, in 1996. See https:/na.itron.com/company/history, retrieved September 10, 2026.

the *Load Research and Rate Design Framework*.[2] It enabled the Company to collect interval load data without the need to establish a separate Advanced Metering Infrastructure ("AMI") communications network and incur the costs of integrating a new AMI system into the Company's existing metering and billing processes.[3]

The Load Research Study required the installation of meters throughout Newfoundland Power's service territory. This includes urban as well as rural locations. Establishing a dedicated AMI communications network throughout the Company's service territory and integrating that network into the Company's existing metering, billing and operational systems for the purposes of the Load Research Study would have required significant additional investment and was considered cost prohibitive for the study. Newfoundland Power therefore utilized load research meters that could be integrated with its existing infrastructure and processes to minimize overall study costs.

Establishing an AMI system in the future would offset some of the costs associated with conducting future load research studies, including the cost of installing additional load research meters.[4] Using Newfoundland Power's existing metering infrastructure and meter reading processes enabled the Company to conduct its load research study in a manner that minimizes costs for customers and is not subject to a future implementation of AMI. The Company continues to explore funding opportunities that could enable a transition to AMI.[5]

e) The timing of the procurement and deployment of the load research meters was primarily driven by the design requirements of the Load Research Study and by global supply chain constraints affecting the availability of specialized metering equipment.

Following the filing of the *Load Research and Rate Design Framework* on December 30, 2022, Newfoundland Power initiated a competitive procurement process for an experienced load research consultant in February 2023. DNV was engaged in April 2023 and subsequently developed the detailed Load Research Study Plan, including the statistical sampling methodology, customer segmentation, metering requirements, communications requirements, and data

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[2] See Newfoundland Power's *Load Research and Rate Design Framework*, December 2022, page 4, footnote 10.

[3] Aside from the upfront cost of individual AMI meters, establishing an AMI metering system would require significant additional investments, including the deployment of an AMI communications network throughout Newfoundland Power's service territory to enable the transmission of meter data to the Company's metering and billing systems. Additional costs would also be incurred to integrate AMI functionality and associated meter data management capabilities with Newfoundland Power's Customer Information System. See the *2027 Capital Budget Application, 2027-2031 Capital Plan, Appendix B 2027 CBA AMI Update,* Section *4.2 Preliminary Cost Estimates*, page 4.

[4] The cost of completing load research studies includes costs associated with meters as well as internal labour costs and external labour costs associated with consultants with expertise in analyzing customer load data.

[5] See the *2027 Capital Budget Application, 2027-2031 Capital Plan, Appendix B 2027 CBA AMI Update*, Section *1.2 The 2027 Update*, pages 1-2.

collection approach. As part of this process, comments from Board Staff, Hydro and the Consumer Advocate (the "Parties") were incorporated into the final study design. Accordingly, the specific metering requirements could not be finalized until completion of the study design and incorporation of feedback from the Parties.

The load research meters required for the study were not standard replacement meters. The meters were required to be capable of recording interval load data and to be compatible with Newfoundland Power's existing meter reading infrastructure, billing systems and meter reading processes. Consistent with the study plan, Newfoundland Power selected a metering solution that leveraged existing infrastructure to minimize overall study costs. After finalizing the technical specifications, Newfoundland Power placed the order for the required meters in September 2023.

While the order was placed in 2023, meter delivery was impacted by industry-wide supply chain constraints affecting electrical equipment and technology products. Newfoundland Power advised in its March 2024 update that these constraints prevented the Company from obtaining and installing the meters in time for the 2023-2024 winter season. The Company received only a limited quantity of meters during early 2024 and was required to complete testing and integration of the devices with its meter reading and billing systems prior to large-scale deployment. Greater quantities of meters were subsequently delivered during 2024, enabling installation prior to the commencement of the 2024-2025 winter season.

With respect to prioritization relative to other metering activities, the load research meter procurement represented a specialized, one-time procurement associated with the Load Research Study. Newfoundland Power continued to maintain its normal metering programs, including the replacement of failed meters and installation of meters required for new customer connections. These programs are ongoing obligations required to provide customer service and maintain the integrity of the metering system. The Load Research Study meters were procured separately because they required specialized interval data recording capabilities and compatibility with the study objectives. Procurement of the load research meters did not defer or replace Newfoundland Power's regular customer metering programs. The timing of the project was therefore determined principally by completion of the study design, the availability of the specialized meters, and the subsequent testing and systems integration required before deployment.