

1 **Q. (Reference Application, 2023 – 2027 Capital Plan, page 3) It is stated**
 2 **"Newfoundland Power and Newfoundland and Labrador Hydro ("Hydro") have**
 3 **designed an EV Demand Response Pilot Project to study options for managing**
 4 **the impact of EVs on peak demand." On the same page it is stated "Over the**
 5 **longer term, increased peak demand due to EV adoption is expected to result**
 6 **in dynamic rate structures becoming cost-effective for customers."**

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 8 **a) Why is NP not proposing in this capital budget application to add new**
 9 **meters and replace faulty meters with AMI (advanced metering**
 10 **infrastructure) when it might be needed in 2027?**

11 **b) How is this pilot project being coordinated with NP's retail rate design**
 12 **study, load research study and programs related to AMI? Would it be**
 13 **more efficient to undertake the retail rate design review and load**
 14 **research study first before determining the need for AMI and an EV**
 15 **demand response pilot?**

16 **c) What is the expected cost of transitioning to AMI?**

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 18 **A. a)** For an explanation of why Newfoundland Power is not proposing to add new
 19 meters or replace faulty meters with AMI in 2023 see the response to Request
 20 for Information PUB-NP-016.

21
 22 **b)** Newfoundland Power plans to undertake the *EV Demand Response Pilot*
 23 *Program*, retail rate design review and load research study before completing the
 24 business case supporting the need for AMI.¹

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 26 In its *2022/2023 General Rate Application* Newfoundland Power sought approval
 27 of a deferral account to complete both load research and rate design prior to its
 28 next general rate application.²

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 30 The pilot project is planned to be completed over three years following the
 31 approval of the *2021 Electrification, Conservation and Demand Management*
 32 *Application*.³ Similar to the retail rate design review and the load research study,
 33 the execution of the *EV Demand Response Pilot Program* will provide valuable
 34 information for evaluating dynamic rates and the implementation of AMI
 35 technology.

¹ The *EV Demand Response Pilot Program* targets customers who are existing or potential EV owners and will be charging at home with a Level 2 charger. The objective of this pilot program is to assess demand response measures to determine their ability to shift peak loads, customer acceptance and cost effectiveness. The pilot program will collect EV charging information showing the load profile of charging operation and the impact on the distribution system.

² See the *2022/2023 General Rate Application, Load Research and Rate Design Cost Deferral Account Definition, Exhibit 15*.

³ For additional information see the *2021 Electrification and Conservation and Demand Management Application, Schedule K*, pages 1 to 2.

- 1 c) Newfoundland Power has not completed a detailed assessment of the expected
2 cost of transitioning to AMI. The specifications for the AMI technology will
3 depend upon, among other things, the dynamic rate structure chosen.⁴
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5 Newfoundland Power observes that AMI and smart meter projects are ongoing in
6 Nova Scotia and New Brunswick. The Nova Scotia Power project is approaching
7 conclusion with approximately 495,000 smart meters at an initial project budget
8 of \$133 million.⁵ The New Brunswick Power project will commence in 2022 with
9 approximately 360,000 smart meters at a project budget of approximately
10 \$110 million.⁶

⁴ The dynamic rate structure will inform the number and frequency of meter reads. This, in turn, will help specify the amount of storage in the meter, bandwidth requirements of the communications channel, back office data storage requirements and whether or not direct control of customer owned equipment is required. This information will need to be known before meaningful cost estimates can be prepared.

⁵ See *Decision M08349* dated June 11, 2018 before the Nova Scotia Utility and Review Board.

⁶ See *Matter No. 452* dated September 4, 2020 before the New Brunswick Energy and Utilities Board.