

1 **Q.** (Reference 2026-2030 Capital Plan, Appendix B, AMI Update) It is stated
2 (page 4) "*The annual costs associated with operating AMI technology is*
3 *estimated to be approximately \$2.0 million in 2025 dollars. This compares to*
4 *the annual cost for operating AMR technology of approximately \$1.4 million*
5 *in 2025.*"

6 a) Please provide a breakdown of the annual operating costs of AMI and AMR
7 technologies.

8 b) Has NP assessed AMI on the basis of costs alone, or are savings and
9 benefits also included in its analyses?

10 c) Please provide a similar NPV analysis as that in 4.1 - Customer
11 Correspondence Modernization, Appendix A for smart meters (AMI
12 technology) relative to AMR technology. Please quantify savings associated
13 with smart meters relative to AMR for the following:

14 i) Reduced Manual Meter Reading and Meter Service Orders;

15 ii) Avoided Meter Replacement Costs;

16 iii) Conservation Voltage Reduction;

17 iv) High Bill Alert Service;

18 v) Distribution Network Losses;

19 vi) Meter Accuracy Losses;

20 vii) Avoided Cost of Load Research Program;

21 viii) Avoided Cost of Net Metering Program;

22 ix) Avoided Cost of Meter Services Staff Salaries;

23 x) Avoided Cost of Meter Reading Vehicles;

24 xi) Outage Restoration (Crew management);

25 xii) Reduced Customer Inquiries;

26 xiii) Avoided Cost Of Handheld Systems;

27 xiv) Unbilled/Uncollectable Accounts; and

28 xv) Reduced Overtime for Meter Service Orders.

29 In addition, please quantify, and if not possible, qualify additional customer
30 and societal benefits of AMI such as time-varying rates, which can provide
31 significant benefits to customers and NP, and geographically-targeted
32 demand-side management (DSM) programs, which can avoid or defer costly
33 transmission & distribution ("T&D") investments.

34 d) On page 4 it is stated "*Newfoundland Power will continue with the use of*
35 *AMR technology to fulfill its obligation to provide service to customers at*
36 *least-cost and to comply with government regulations until a fulsome*
37 *business case supports a full scale AMI deployment.*" Please file NP' s latest
38 "fulsome" study quantifying the benefits of AMI technology relative to AMR
39 technology.

- 1 **A.** a) Tables 1 and 2 provide the requested information.

Table 1 Estimated Annual AMI Operating Costs in 2025 Dollars (\$millions)	
Description	Amount
Head-end system and communications	1.1
Meter data management	0.4
Integration systems	0.5
Total	2.0

Table 2 Annual AMR Operating Costs – 2025 Forecast (\$millions)	
Description	Amount
Meter reading	0.6
Meter maintenance	0.4
Vehicle and support system related costs ¹	0.4
Total	1.4

- 2 b) Parts b), c) and d) of this Request for Information do not consider pertinent
3 information provided in the AMI Update. While this information is summarized
4 below, it should be considered in conjunction with the AMI Update, in full.
5
6 • Newfoundland Power has not completed a fulsome business case assessment
7 to implement AMI technology in its service territory as part of the AMI Update.²
8 The AMI Update has been provided in accordance with Order No. P.U. 3
9 (2025). In Order No. P.U. 3 (2025), the Board noted that the Company is
10 advancing studies that will help quantify the potential benefits of an AMI
11 implementation and found that Newfoundland Power should not be directed to

¹ Includes estimates of capital related items to ensure all costs necessary to operate AMR technology (such as mobile collectors and vehicles) are included in the analysis.

² As provided in the AMI Update, fulsome business cases for larger projects are lengthy and costly processes that typically occur near the end of life of the current assets. Newfoundland Power estimates the cost of a fulsome business case for AMI to be approximately \$2.5 million and would take roughly 16 months to complete. As such, an NPV analysis similar to that provided for the Customer Correspondence Modernization project cannot be provided.

1 provide a cost benefit analysis with respect to an AMI implementation at this
2 time.³

- 3
- 4 • The Company's AMR technology will require mass replacement in the
5 mid-2030s. Based on current Canadian utility practice, Newfoundland Power
6 anticipates that transitioning to AMI at that time will be a reasonable
7 alternative to re-investing in AMR technology. A transition to AMI at that time
8 would require a fulsome business case, including detailed engineering
9 assessments and assessment of alternatives, to support approval of an AMI
10 capital project by the Board.
- 11
- 12 • In the interim, Newfoundland Power has been developing its business case for
13 AMI on a preliminary basis. The primary purpose for this exercise is to be in a
14 position to apply for government funding that could enable the adoption of AMI
15 in the shorter term.
- 16
- 17 • Currently, the estimated capital cost of implementing AMI technology is
18 \$118 million. Beyond the upfront network and project costs associated with an
19 AMI implementation, the average cost of an AMI meter is estimated to be
20 \$220 per meter or roughly double the average cost of an AMR meter of
21 \$110 per meter. In addition, the annual costs associated with operating AMI
22 technology is estimated to be more than 40% higher than the annual costs to
23 operate AMR technology.
- 24
- 25 • In addition to continuing to refine its preliminary cost estimates, the Company
26 is also currently assessing potential use cases associated with AMI technology
27 that could provide benefits to customers, net of the associated costs. Of note,
28 the potential benefit of time-varying rate structures is currently being assessed
29 as part of the next five-year electrification, conservation and demand
30 management plan. Newfoundland Power and Newfoundland and Labrador
31 Hydro are currently developing the plan, which is anticipated to be completed
32 by the end of 2025.⁴
- 33
- 34 • Newfoundland Power will continue to explore funding opportunities, along with
35 continuing to assess potential benefits of AMI, which could enable the
36 Company's transition to AMI ahead of the potential mid-2030s timeframe.
- 37

38 See the response to part a) of Request for Information CA-NP-093 for context
39 regarding the transition to AMI technology for other Atlantic Canadian utilities
40 compared to Newfoundland Power.

³ See Order No. P.U. 3 (2025), page 64.

⁴ See the response to Request for Information CA-NP-051 for an update on the plan and the *EV Load Management Pilot Project*.

- 1 c) See part b).
- 2
- 3 d) See part b).