

IN THE MATTER OF the *Public Utilities Act* (the “Act”);

AND

IN THE MATTER OF an application by Newfoundland Power Inc. for an Order pursuant to sections 41 and 78 of the Act:
(a) approving its 2027 Capital Budget; and
(b) fixing and determining its 2025 rate base.

**MOTION OF THE CONSUMER ADVOCATE
FOR AN ORDER DIRECTING AN INDEPENDENT ASSESSMENT OF
ADVANCED METERING INFRASTRUCTURE**

PART I — NATURE OF THE MOTION

1. The Consumer Advocate moves for an order of the Board directing that an independent assessment of Advanced Metering Infrastructure (“AMI”) be undertaken by a qualified consultant retained by and reporting to the Board, in accordance with terms of reference settled by the Board, and that the resulting report be filed on the public record and made available to ratepayers.
2. In Order No. P.U. 38 (2025), issued December 16, 2025 in respect of Newfoundland Power’s 2026 Capital Budget Application, the Board found that smart metering through AMI implementation could provide additional benefits to customers beyond those currently provided by Automatic Meter Reading (“AMR”) technology, but that the evidence did not support a change at that time. The Board directed that Newfoundland Power provide a further update on its review of AMI implementation as part of its 2027 Capital Budget Application.
3. As set out in Part II below, the material bearing on AMI accumulated across successive proceedings consists principally of the Company’s own assessment, together with two third-party studies, each directed to a different question in a different proceeding and one of them prepared for a different utility. Newfoundland Power has assessed AMI on what it describes as a preliminary and high-level basis, using broad assumptions that it states will change following detailed engineering assessments, and it acknowledges that a transition to AMI would require a fulsome business case, which has not been prepared. No independent assessment of AMI in the circumstances of Newfoundland Power’s distribution system has been undertaken, and none of the Company’s cost or benefit figures has been independently tested.

PART II — THE RECORD ON AMI AND SMART METERING

A. Newfoundland Power’s AMI material

4. Newfoundland Power filed an AMI Update as Appendix B to the 2026–2030 Capital Plan in its 2026 Capital Budget Application, comprising a description of its current metering technology and a jurisdictional scan of AMI adoption elsewhere. That update estimated the cost of AMI implementation for Newfoundland Power at approximately \$118 million. The Company has since responded to requests for information on AMI in successive proceedings, and in this proceeding has filed a further AMI Update and addressed AMI and time-varying rates in its response to CA-NP-022. Its stated position is that it anticipates

transitioning to AMI when its AMR technology requires mass replacement in the mid-2030s.

5. At section 4.4.3 of Order No. P.U. 38 (2025), the Board concluded that while smart metering through AMI implementation could provide additional benefits to customers beyond those currently provided by AMR, the evidence did not support a change at that time. The Board directed a further update in this proceeding.
6. In compliance with Order No. P.U. 38 (2025), Newfoundland Power filed a further AMI Update as an appendix to its 2027 Capital Budget Application. The 2027 Update comprises an updated jurisdictional scan, an update on government funding opportunities, and a preliminary cost benefit analysis of an AMI implementation. Newfoundland Power concluded that transitioning to AMI at this time would not be consistent with the provision of least-cost service.
7. The 2027 Update reproduced the preliminary capital estimate of approximately \$118.0 million provided in the 2026 Update, expressed in nominal dollars and comprising \$82 million for AMI meters and installation, \$19 million for network, systems and integrations, and \$17 million for project engineering, resourcing and training. The estimates were prepared in 2025 and are based on broad assumptions, primarily associated with the AMI network type, which the Company states will change following detailed engineering assessments. Annual operating costs for AMI are estimated at approximately \$2.0 million in 2025 dollars, more than 40% higher than the estimated \$1.4 million cost of operating AMR, and the average cost of an AMI meter is estimated at \$220 against \$110 for an AMR meter. The Company's analysis assumes a 20-year useful life and that an AMI project would be completed over a five-year period, following an estimated 2-year period for detailed engineering assessments, a fulsome business case, and regulatory approval.
8. On those inputs, the 2027 Update presents a preliminary net present value analysis in 2025 dollars comprising capital implementation costs of \$91 million, AMI operating and sustaining capital costs of \$39 million, avoided AMR costs of \$47 million, and three quantified use-case benefit streams: load management of \$23 million, customer service of \$10 million, and field operations of \$13 million. The result is a net cost of approximately \$37 million, on the basis of which the Company concludes that an AMI implementation is not least-cost for customers at this time. The Company further states that if capital implementation costs were partially offset by government funding equal to that provided to Maritime Electric, being almost 50%, the business case would instead be positive, with a projected net present value of approximately \$8 million.
9. The Company reports that it has identified no provincial or federal funding opportunity for which it would be an eligible applicant and AMI deployment an eligible project, and that it will apply for any such opportunity that arises. It notes that Natural Resources Canada's

Smart Renewables and Electrification Pathways Program, a \$4.5 billion program that includes support for transmission and distribution infrastructure, is currently expected to run until March 31, 2036, although the Program is not presently accepting proposals. Newfoundland Power characterises its own analysis as preliminary and high-level, based on broad assumptions as to costs, benefits and implementation parameters, and states that the results are indicative in nature and will change following detailed engineering assessments and the more detailed analyses that would be expected to accompany an AMI capital project filed with the Board for approval. The Company also states that, in accordance with the provisional CBA Guidelines, a transition to AMI would require a fulsome business case including detailed engineering assessments, an assessment of alternatives, and estimates. The Company states that such a business case would cost approximately \$2.5 million and take roughly 16 months to complete.

B. The 2025 Energy Solutions Potential Study

10. On November 5, 2025, Newfoundland and Labrador Hydro filed the 2025 Energy Solutions Potential Study prepared by Posterity Group in the proceeding reviewing Hydro's 2025 Build Application. The Study was jointly commissioned by Newfoundland Power and Hydro and was prepared to inform the Utilities' next five-year Conservation, Demand Management and Electrification Plan. The Study states that it is not intended to serve as a program design document, and Hydro's covering letter states that it should not be considered independent of that Plan.
11. Among the demand response measures assessed, the Study examined time-of-use ("TOU") and critical peak pricing ("CPP") rate design measures, and concluded that they are "not cost-effective" due to the program costs associated with installing and operating the AMI infrastructure required to administer them.
12. This Study is a partial answer only. It does not, and does not purport to, assess the full costs and benefits of AMI for Newfoundland Power. The Company's 2027 Update does address a wider range of costs and benefits, and ascribes net present values to several of them, but expressly on a preliminary and high-level basis and on assumptions the Company states will change following detailed engineering assessments. Neither the Study nor the 2027 Update has been independently tested.
13. The Study estimates approximately \$80 million over four years to implement time-varying rates and AMI for the customers of both utilities (page xxiv), while Newfoundland Power's updates estimate approximately \$118 million for its own customers alone. Given the discrepancy, these estimates should also be independently tested.

C. The 2020 Util-Assist business case prepared for Newfoundland and Labrador Hydro

14. In its 2025 Capital Budget Application, Hydro filed, in response to CA-NLH-012, a Business Case Report for Next Generation Metering prepared by Util-Assist Inc., dated June 15, 2020. The report assessed four metering options for Hydro over a system lifecycle of approximately 21 years: full deployment of Hydro’s existing power line carrier AMR platform; a full-scale AMI mesh deployment with the meter data management software and system integration required to support the full range of AMI use cases; a drive-by AMR “lite” option using Newfoundland Power’s Itron drive-by system; and an AMI “lite” option consisting of AMI meters and network collection infrastructure without the meter data management software and integration.
15. The net present values reported were approximately \$10.2 million for full-scale power line carrier AMR, negative \$1.2 million for full-scale AMI, \$17.6 million for drive-by AMR “lite”, and \$13.4 million for AMI “lite”. Util-Assist recommended the AMI “lite” option. It expressly declined to recommend drive-by AMR notwithstanding that option’s higher net present value, on the basis that the technological limitations of a drive-by solution are too great, that the industry trend is toward AMI, and that drive-by metering delivers “little to nothing” to the customer. The consultant also identified the absence of meaningful synergies with Newfoundland Power as a reason for discounting the drive-by option.
16. Hydro’s response to CA-NLH-012 describes the Util-Assist results as consistent with its position that drive-by AMR was the least-cost alternative for its metering requirements, and footnotes the \$17.6 million net present value of the drive-by option as the highest of the alternatives studied. That characterisation does not disclose that the consultant recommended against the drive-by option and in favour of deploying AMI meters and network collection infrastructure. The Consumer Advocate raises the point to illustrate the difficulty of determining AMI infrastructure questions on a utility’s characterisation of the underlying analysis.
17. The Util-Assist report is not an assessment of AMI for Newfoundland Power; it was prepared for Hydro in 2020 and addresses a rural customer base of approximately 32,000 to 40,000 meters rather than Newfoundland Power’s distribution system. It quantifies only three benefit streams: avoided meter replacement (\$13.7 million), reduced manual meter reading (\$8.4 million), and avoided meter reading vehicles (\$1.0 million). Benefits such as outage detection and restoration, distribution automation, load control, and time-varying rates were left unquantified, and the consultant estimated that the meter data management software and integration required to capture them would cost a further \$7 million to \$8 million on a net present value basis.
18. The report is instructive in two respects. First, it demonstrates that a third-party business case resulted in a recommendation for AMI meter deployment and network collection

infrastructure. Second, no comparable exercise has been undertaken for Newfoundland Power, notwithstanding that Newfoundland Power serves the majority of retail customers on the Island Interconnected System (“IIS”) and that the cost of AMI implementation for its customers alone is estimated at approximately \$118 million.

PART III — THE CONSUMER ADVOCATE’S POSITION

19. As acknowledged by the Board previously, AMI could deliver benefits to customers beyond those available from AMR. The Office of the Consumer Advocate has in previous proceedings recommended that the Board direct Newfoundland Power to move to AMI. The position advanced in this motion is narrower; the Consumer Advocate submits that the current record is insufficient to determine whether AMI deployment would be in the interests of ratepayers. Tested evidence and analysis through an independent study is required.
20. Specifically, the Consumer Advocate submits that a full assessment and business case is required, and that the following matters in particular warrant independent examination:
 - a. the \$47 million net present value ascribed to avoided AMR costs in the 2027 Update, including the assumed timing and cost of AMR mass replacement against which that credit is measured;
 - b. the remaining useful life of the existing AMR meter population and associated systems, vendor support and obsolescence risk in the Company’s AMR platform, and whether continued capital additions to AMR assets are prudent given a potential transition to AMI in the mid-2030s;
 - c. the \$23 million ascribed to load management in the 2027 Update, and its relationship to the findings of the Posterity Study on time-varying rates and on utility-driven equipment demand response;
 - d. the \$10 million ascribed to customer service benefits in the 2027 Update, including reduced bill estimation, remote connection and disconnection, and the resolution of billing-related inquiries;
 - e. the \$13 million ascribed to field operations benefits in the 2027 Update, including avoided manual meter reading, outage detection and restoration, voltage optimisation, and revenue protection;

- f. the \$118.0 million preliminary capital estimate and the \$2.0 million annual operating estimate in the 2027 Update, including the AMI network type assumptions on which they depend, the confidence level and contingency attaching to them, and their comparability to the estimates prepared for other utilities;
 - g. the assumption that an AMI project would follow a two-year assessment and approval period and a five-year build, and the effect of that timing on the analysis;
 - h. the availability of provincial and federal funding, given the Company's statement that funding equal to that received by Maritime Electric would render the business case positive, and the steps required to position the Company to apply before any such opportunity closes; and
 - i. the deployment experience in comparable jurisdictions, including cost performance against approvals and the results of any post-implementation benefit realization review (particularly cases where there have been documented difficulties in North American deployments including capital cost overruns against approved estimates, schedule slippage, difficulties integrating metering data management with customer information and billing systems, meter failure and accuracy issues, disputes over remote disconnection practices, privacy and data governance concerns, the cost of accommodating customers who decline the technology, and benefit realization falling short of the projections relied upon at the approval stage).
- 21. Respectfully, utility-prepared updates are limited in their usefulness and are unlikely to properly inform an infrastructure question of this scale. This is not necessarily a question of good faith on the part of the utility, but rather a structural limitation. Newfoundland Power would bear the execution risk of this large technology deployment, would be answerable for any cost overruns and service disruption, and would see its existing AMR investment and systems significantly affected by a transition to AMI. A party in that position is not a neutral source of the analysis.
- 22. Further, on the Company's own evidence, a transition may happen in the mid-2030s when AMR technology requires replacement. Yet, interim capital continues to be committed to AMR metering assets. Whether it is prudent to continue incremental investment in a technology the Company will replace is a question the Board will be able to better answer with evidence.
- 23. IIS customers, through their rates, and provincial taxpayers, through rate-mitigation funding, are already bearing the enormous costs of the Muskrat Falls Project. Yet, Hydro's

2024 Resource Adequacy Plan and its 2025 Build Application, which itself seeks approximately \$2 billion, recommended billions of dollars in additional capital costs for the IIS over the next five to ten years, especially if load growth follows Hydro's Reference Case. Better rate design may offer significant potential to avoid or defer some of those capital costs, which would otherwise largely fall on Newfoundland Power customers as Hydro's costs are recovered through the Utility rate. It is therefore very important to ascertain how the availability of AMI could broaden the scope for changes in rate design.

24. The Company has indicated that a fulsome business case would cost approximately \$2.5 million and take roughly 16 months to complete. The Consumer Advocate respectfully submits that the basis for that estimate warrants confirmation. If confirmed, it remains open to the Board to contain the overall cost and timeline by looking at alternative approaches or adjusting the scope of the independent study.
25. The Consumer Advocate continues to strongly support every reasonable avenue for delivering cost savings to ratepayers. At the same time, any infrastructure investment of this scale must be supported by independently verified evidence that demonstrates that its benefits to ratepayers exceed its ultimate cost. The assessment sought in this motion is the means by which the Board can satisfy itself that a transition to AMI is, or is not, in the interests of ratepayers.

PART IV — RELIEF SOUGHT

26. The Consumer Advocate respectfully requests that the Board, in its order disposing of the 2027 Capital Budget Application or in a separate order on the motion, direct as follows:
 - (a) that an independent assessment of AMI in the circumstances of Newfoundland and Labrador be undertaken by a consultant with demonstrated expertise in metering technology and associated programming, utility business case evaluation, and post-implementation benefit realization, retained by and reporting to the Board;
 - (b) that the consultant be retained on terms of reference settled by the Board following an opportunity for Newfoundland Power, the Consumer Advocate, and other intervenors to make written submissions on the draft terms of reference;
 - (c) that Newfoundland Power be directed to provide the consultant with full and timely access to such data, systems documentation, cost records, meter population and asset condition information, vendor correspondence, and internal analyses as the consultant reasonably requires, subject to such confidentiality protections as the Board considers appropriate;

- (d) that the consultant's report be filed with the Board no later than a date that permits it to inform Newfoundland Power's 2028 Capital Budget Application, and placed on the public record by a date certain, with the parties afforded an opportunity to file written submissions in response.

PART V — PROCESS AND TIMING

- 27. The Consumer Advocate proposes that the Board retain the consultant directly, rather than directing Newfoundland Power to commission the work. Retention by the Board secures the independence and places the settling of terms of reference and the scope of inquiry in the Board's hands.
- 28. As to timing, the Consumer Advocate recognises that a study of the scope proposed is unlikely to be completed within the schedule of the present 2027 CBA proceeding. The Consumer Advocate proposes that the Board's order disposing of the 2027 CBA direct the assessment, that terms of reference be settled in the first quarter of 2027 following submissions from the parties, and that the consultant's report be filed no later than a date that permits it to inform Newfoundland Power's 2028 Capital Budget Application. The Consumer Advocate notes that Newfoundland and Labrador Hydro is expected to file its next Resource Adequacy Plan in 2027, and submits that there would be advantage in the two exercises being informed by one another.
- 29. The Consumer Advocate is prepared to make further written or oral submissions on this motion as the Board may direct, and to respond to any submissions filed by Newfoundland Power or other intervenors.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

DATED at St. John's, in the Province of Newfoundland and Labrador, this 10th day of September, 2026.



Adrienne Ding
Interim Consumer Advocate
Office of the Consumer Advocate
consumeradvocate@odeaearle.ca
ading@odeaearle.ca

TO: The Board of Commissioners of Public Utilities
Jacqui H. Glynn
Ryan Oake
Board General

AND TO: Newfoundland Power Inc.
Dominic J. Foley
Douglas W. Wright
Regulatory Email

AND TO: Newfoundland and Labrador Hydro
Shirley A. Walsh
Regulatory Email

APPENDIX A

MATTERS PROPOSED FOR INCLUSION IN THE TERMS OF REFERENCE

The Consumer Advocate submits that the terms of reference should direct the consultant to address the following, and should frame the central question neutrally: whether, when, and on what terms a transition to AMI would be in the interests of IIS ratepayers.

Framing

- (a) that the assessment evaluate AMI against the full range of costs and benefits attributable to the infrastructure, and not against any single benefit stream in isolation, and that where infrastructure cost is allocated across benefit streams the basis of allocation be stated expressly;
- (b) that the consultant consider the findings of the 2025 Energy Solutions Potential Study and the 2020 Util-Assist business case and to what extent those findings bear on the overall business case for AMI;

Existing assets

- (c) the composition, age, condition, and remaining useful life of Newfoundland Power's existing meter assets and systems, and the expected replacement profile absent an AMI transition;
- (d) vendor support, firmware, software, and parts availability for the Company's existing AMR platform, and an assessment of obsolescence risk and its likely timing;

Options and costs

- (e) a range of options, including full deployment, phased or geographically targeted deployment, hybrid AMR/AMI configurations, deferral to natural asset end-of-life, and options incorporating customer opt-out;
- (f) for each option, a full lifecycle cost estimate including meters, communications network, metering data management and information technology integration, billing and customer information system modification, installation labour, project management, cybersecurity, licensing and ongoing operating costs, TOU program costs, together with the treatment of any AMR assets rendered surplus before the end of their service lives;

- (g) the confidence level and contingency associated with the cost estimates, and a comparison of original approved estimates against actual outcomes in comparable deployments elsewhere;

Benefits

- (h) quantified benefits, separately identified as (i) utility operating cost savings, (ii) avoided or deferred capital expenditure, and (iii) customer-facing benefits, with an explicit statement of which benefits are automatic upon deployment and which are contingent upon enabling rate design, program expenditure, or customer participation, and the incremental cost of those enablers;
- (i) the evidentiary basis for each material benefit assumption, distinguishing benefits demonstrated in post-implementation reviews elsewhere from benefits that have been projected but not verified;
- (j) the extent to which demand response enabled by AMI could realistically defer or avoid generation, transmission, or distribution investment on the IIS, having regard to the load and capacity forecasts of Newfoundland Power and Hydro and to the forthcoming Hydro Resource Adequacy Plan, and the reliability that should be attributed to any such deferral;
- (k) whether demand response measures found cost-effective without time-varying rates, including thermal storage, are affected by the presence or absence of AMI;

Jurisdictional review

- (l) an independent review of comparable deployments, addressing cost and schedule performance against approvals, technical and integration difficulties encountered, meter accuracy and failure experience, customer response and opt-out uptake, and the results of any post-implementation benefit realization audit or prudence review;
- (m) lessons applicable to Newfoundland and Labrador, including deployment practices that mitigated the difficulties identified;

Newfoundland and Labrador specific circumstances

- (n) the implications of the Company's service territory and operating environment, including customer density and geographic dispersion, telecommunications and cellular coverage limitations, climatic conditions, and the size of the customer base over which fixed information technology and program costs must be recovered;
- (o) the interaction between AMI and existing and prospective rate structures, and the rate design work that would be required for the contingent benefits to be realized;

Ratepayer impact and consumer protection

- (p) rate and bill impact under each option, by customer class, including the profile of impacts over time and considerations of intergenerational equity;
- (q) the distributional consequences for low-income domestic customers and customers whose consumption patterns are least able to respond to time-varying rates;
- (r) the privacy, data governance, data retention, and cybersecurity framework that should attend any deployment;
- (s) the consumer protection framework that should attend any deployment, including remote disconnection policy, opt-out availability and cost allocation, high-bill alerting, estimation practices, and dispute resolution;

Recommendation

- (t) a recommended decision framework, identifying the conditions or trigger points that would prompt a decision to deploy, the analysis that should be completed in advance of that decision, and the steps that should be taken in the interim, including whether continued capital additions to AMR assets remain prudent; and
- (u) such further matters as the consultant considers material, or as the Board may direct.