

Office of the Consumer Advocate

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November 14, 2024

Via Email

The Board of Commissioners of Public Utilities
Prince Charles Building
120 Torbay Road, P.O. Box 21040
St. John's, NL A1A 5B2

Attention: Jo Galarneau
Executive Director and Board Secretary

Dear Ms. Galarneau:

Re: Newfoundland Power Inc. - 2025 Capital Budget Application
- Submission of the Consumer Advocate

On June 28, 2024, Newfoundland Power ("NP") submitted to the Public Utilities Board (the "Board") its 2025 Capital Budget Application ("NP 2025 CBA" or "Application"). The Application seeks Board approval for the following (Application, para. 2):

- a) proposed single-year 2025 capital expenditures in the amount of \$79,468,000 comprising projects and programs costing in excess of \$750,000;
- b) proposed single-year 2025 capital expenditures of \$10,850,000 comprising projects and programs costing \$750,000 and under;
- c) proposed multi-year projects commencing in 2025 with capital expenditures of \$18,219,000 in 2025, \$46,145,000 in 2026 and \$9,816,000 in 2027; and
- d) ongoing multi-year projects previously approved in Order No. P.U. 36 (2021) and Order No. P.U. 2 (2024) with capital expenditures of \$19,414,000 in 2025 and \$297,000 in 2026 (the "Previously Approved Multi-Year Projects").

Thus, the Application entails capital expenditures of \$184,209,000 consisting of \$164,498,000 in new expenditures in 2025, 2026 and 2027, and \$19,711,000 for projects that were previously approved by the Board. The Application is also requesting the Board to fix its average rate base for 2023 in the amount of \$1,290,079,000 (Application, para. 9(c)).

The Application has included two rounds of Requests for Information (RFIs).

The Board directed intervenors to file submissions on the Application by November 14, 2024. This document is the Consumer Advocate's submission. What follows consists of five sections: Context; Documentation Governing Utility Capital Budgets; Issues Relevant to the Application; Expenditure-Specific Recommendations; and Conclusions.

1. CONTEXT

- a) In light of large recent and forecast rate increases, there is an extremely high sensitivity on the part of electricity consumers in the province to ensure that expenditures by a utility be subject to transparent, effective oversight. In the period from July 1, 2024 to July 1, 2025 alone, if NP has its way, rates could increase by almost 23% as witnessed in the June 14, 2024 Transcript (page 53) pertaining to NP's 2025-2026 GRA, when Ms. Greene asks Mr. Murray *"And if we added all of those up, we would get over 20 percent increase, and if we add on the 2.25 to come from Hydro next year on July 1, 2025 arising from rate mitigation, we 're almost up to a 23 percent increase in rates for customers between where we are now and July 1, 2025. Is that correct?"* Mr. Murray responded, *"Those numbers sound correct, yes."*
- b) In Order No. P.U. 36(2021) the Board, *"acknowledges the rate pressures which are expected in association with the commissioning of the Muskrat Falls Project. The Board believes that, given the circumstances, both Newfoundland Power and Hydro should renew their efforts to provide evidence which demonstrates that every effort is being made to reduce costs for customers while ensuring the continued provision of reliable service."*
- c) In spite of these rate pressures and the Board's direction to reduce costs, the Application seeks Board approval for capital expenditures of \$184,209,000, representing a \$49.2 million and 36.5% increase over the 2024 CBA (CA-NP-193).
- d) The large capital budgets are expected to continue in future years, averaging \$163 million annually from 2025 through 2029 (Application, 2025 – 2029 Capital Plan, page 1). According to CA-NP-082a, average annual capital expenditures are forecast to increase in the 2025 to 2029 period relative to the 2020 to 2024 period as follows:
 - i. For distribution, by 17.9%.
 - ii. For substations, by 39.4%.
 - iii. For transmission, by 62.9%.
 - iv. For generation, by 286.6%.
 - v. For transportation, by 47.3%.
 - vi. For general property, by 62.4%.

These increases compare to the forecast average annual inflation rate from 2025 to 2029 of 1.7%.

- e) Capital expenditure adds to rate base, which adds to costs for customers and those costs are further increased with any increase in NP's approved rate of return on rate base. Reduced capital expenditure, strategically done so as not to impair safety or bring reliability down to or below the average of Electricity Canada Region 2 utilities, can ease the cost burden on ratepayers. NL Hydro has apparently made a commitment to do so, stating in its 2024 Capital Budget Application (Capital Budget Overview page 36) that "*Hydro recognizes other capital investment proposals before the Board and continues to take deliberate actions to reduce requested capital investment as compared to prior years.*" NP likewise should be focusing on limiting its capital expenditures to what is absolutely necessary and fully justified.
- f) CA-NP-005, Attachment A indicates that depreciation cost will have increased dramatically from 1994 to 2026F, rising from approximately 55% of operating expenses in 1994 to exceeding it now. Increases in depreciation are driven primarily by capital spending (CA-NP-194). Further, CA-NP-055 states "*The forecast increase in average rate base from 2024 to 2025 forecast is \$47.7 million. The estimated impact on Newfoundland Power's return on equity for 2025 is \$1.8 million.*" More specifically, NP's shareholder gains another \$1.8 million while in return customers get a rate increase owing to the \$47.7 million increase in rate base. This trend will continue. As shown in CA-NP-207, NP forecasts that its average rate base will increase by \$50.3 million in 2026, and further increases of \$61.1 million in 2027, \$85.1 million in 2028 and \$108.2 million in 2029, and the resulting impact on its return on equity will be an increase of \$1.9 million in 2026, and further increases of \$2.3 million in 2027, \$3.3 million in 2028 and \$4.1 million in 2029. The driving force underlying this is persistent increases in capital expenditures. According to the 2025-2029 Capital Plan, Table A-1, NP plans capital expenditures of \$127,951,000 in 2025 with increases in each year thereafter to \$199,138,000 in 2029, a 55.6% increase over the 4-year period. The implied burden on the ratepayers for this massive increase is alarming.
- g) Having regard for the sheer scale of the Application for \$184.2 million for 2025 and later years, and the relentless trajectory of significant capital budget costs year over year, the ratepayers are entitled to complete justification from Newfoundland Power for its expenditures to ensure that the Electrical Power Control Act, 1994 is complied with and that Newfoundland Power is delivering power to consumers in the province consistent with the requirements set out in the Act which requires that power be delivered to customers at the lowest possible cost, in an environmentally responsible manner, consistent with reliable service. In this regard, on October 25, 2024 the Consumer Advocate requested that the Board order an oral hearing open to the public on the Capital Budget on the basis that a number of issues have not been fully explained or justified by Newfoundland Power, despite the RFI process. The Board denied the Consumer Advocate's request for an oral hearing on the Application in its November

1, 2024 determination. There has not been an oral hearing on a capital budget in over 20 years.

In sum, ratepayers are now being required to pay for the Muskrat Falls Project and new generation projects. The Board has called on the utilities to reduce costs, and NL Hydro is making efforts to reduce capital investment while Newfoundland Power has added to rate base by much more than inflation. In these circumstances, it is not unreasonable to believe that, for 2025, NP can reduce its proposed capital budget without a detrimental impact on reliability. As the Board assesses NP's Application, it should take this context into account.

2. DOCUMENTATION GOVERNING UTILITY CAPITAL BUDGETS

As noted in the Application (2025 Capital Budget Overview, page 2):

Newfoundland Power's operations, including its capital investments, are regulated by the Newfoundland and Labrador Board of Commissioners of Public Utilities (the "Board") pursuant to the Public Utilities Act and the Electrical Power Control Act, 1994. The Public Utilities Act requires a public utility to provide services and facilities that are reasonably safe and adequate and just and reasonable. The Electrical Power Control Act, 1994 contains the provincial power policy, which requires that power be delivered to customers at the lowest possible cost, in an environmentally responsible manner, consistent with reliable service."

With respect to utility capital budgets, the Board issued Provisional Capital Budget Application Guidelines ("Provisional Guidelines") on December 20, 2021 (effective January 2022). The Provisional Guidelines state (pages 1 and 2):

"The Board considers the interests of both customers and utilities in determining whether proposed capital expenditures should be approved. Appropriate capital spending is in the interest of both customers and utilities as customers benefit from a utility which is well positioned to provide safe, reliable and adequate service and utilities benefit when the rates to be paid by customers are reasonable and just. Cost, performance and risk are among the factors considered by the Board in determining whether capital expenditures are appropriate and necessary to ensure the delivery of power to customers at the lowest possible cost consistent with reliable service."

In issuing the Provisional Guidelines, the Board noted that: *"While strict adherence to all aspects of the provisional guidelines may not be possible, the Board asks that the stakeholders make best efforts to respect the spirit and intent of the guidelines."* In fact, Newfoundland Power currently does not meet the requirements sets out in the Provisional Guidelines, and after three years, has made no progress in meeting the requirements. According to CA-NP-018, NP did not undertake analyses to determine *"unit costs of reliability and risk improvements of proposed projects, considered alternatives, or ratepayer valuations thereof"*. Application Schedule B,

page iii, states "*Newfoundland Power does not currently have the data or software necessary to provide calculations of risk mitigation or reliability improvement.*" And in CA-NP-012 (pertaining to NP's 2024 CBA) it is stated "*There have been no substantial changes to Newfoundland Power's approach to asset management since June 2022.*" And according to CA-NP-011, NP has made no fundamental changes to its overall approach to asset management since filing its 2024 Capital Budget Application.

In sum, Newfoundland Power admits that it is not meeting the requirements set out in the Provisional Guidelines, and by extension, is not meeting the requirements set out in legislation.

3. ISSUES RELEVANT TO THE APPLICATION

The most important aspect of a capital budget is that the burden of proof is on the utility to prove that a capital project or program is needed. NP agrees (NP 2021 CBA: CA-NP-128) "*It is Newfoundland Power's position that the onus is on the utility to fully support with evidence the expenditures proposed in its capital budgets*". NP bears the burden of establishing that each proposed project meets the Board's prudence test.

This section identifies matters that illustrate how NP does not meet the burden of proof requirement in its 2025 CBA.

- a) **Limited control by NP senior management over capital spending.** According to CA-NP-010, NP senior management provided no documentation to line managers with respect to budget control, prioritization and cost efficiencies in the 2025 CBA in light of rate pressures brought on by the Muskrat Falls Project. Also, it is stated (Application, 2025 - 2029 Capital Plan, page 6) "*The effect of age on the condition of Newfoundland Power's electrical system can be observed through its recent experience with equipment failures. An average of approximately 1,100 equipment failures per year were experienced on the distribution system from 2019 to 2023, which represents a 6% increase compared to the previous five-year period.*" CA-NP-224, Attachment A shows that in 12 of 23 cases, SAIDI actually worsened following Substation Refurbishment and Modernization projects. In spite of NP's large capital budgets in recent years, equipment failures are increasing, and in many cases, reliability has actually worsened following major project upgrades. This suggests that the capital budgets are improperly prioritized and have not met the burden of proof requirement. NP senior management is not exercising control over capital spending in order to optimize rate impacts on customers.
- b) **Asset Management Update Report.** According to CA-NP-081c, "*The refurbishment and replacement of existing assets is forecast to account for an average of approximately \$98 million of annual capital expenditures from 2025 to 2029, or 60% of total annual expenditures.*" A key component of asset management review should be to optimize capital expenditures, particularly the refurbishment and replacement of

existing assets given the very high forecast cost. Yet the Asset Management Update Report (page 4) states "*The pilot project indicated that Newfoundland Power is currently not in the position to implement quantitative risk modelling. AHIs factor into risk modelling as they are a key determiner in probability of failure of an asset. It would be prudent to determine which assets require risk modelling based on the assets that are being selected for AHIs. As well, large amount of financial inputs, such as the reactive cost of asset replacement, would need refinement to provide a more accurate representation of risk for the assets. Given the requirements of quantifiable risk modeling, further exploration should be completed as asset management is matured.*"

Regardless of the data requirements, quantifying the risk of failure warrants the highest priority. NP is forecasting expenditures on such programs of \$98 million annually (on average) from 2025 to 2029. The Board cannot approve such high levels of capital expenditure when NP has not met the burden of proof requirement. Further, it is not at all clear that NP's asset management review is consistent with changes going on in the industry and best practice emerging elsewhere (as discussed below).

- c) ***Inadequate planning.*** According to CA-NP-028, NP has not produced a 5-year Distribution Expansion Plan. The Board states in its November 1, 2024 Response to the Consumer Advocate Request for an Oral Hearing (Page 4) "*The Board acknowledges that while Newfoundland Power has not produced a five-year Distribution Expansion Plan, its plans related to the distribution network over the next five years are contained within the Application, including the 2025-2029 Capital Plan.*" However, in the absence of a Five-Year Distribution Plan, it is not possible to determine if the capital budget application adequately addresses and assesses the needs of NP's customers, particularly as they relate to government net-zero emissions and electrification efforts. In response to CA-NP-027 (pertaining to NP's 2024 CBA) NP indicates that it does not plan its distribution system in an integrated manner. It states, "*Information related to integrated resource planning, reductions in harmful environmental emissions and government zero-carbon efforts, is not included in these guidelines.*" In the response to CA-NP-165 (pertaining to NP's 2024 CBA) NP reconfirms "*that its current practices do not fully incorporate integrated distribution system planning.*" Integrated distribution system planning is in the best interests of customers and necessary if the Board is to determine if proposed capital projects and programs provide least cost supply in an environmentally responsible manner. In the absence of a coordinated 5-year distribution expansion plan, NP fails to meet the burden of proof requirement.
- d) ***Inadequate assessment of alternatives.*** According to CA-NP-017, NP does not assess benefit to cost ratios for its projects and programs and does not use benefit to cost ratios for ranking projects and programs. According to CA-NP-018, NP did not undertake analyses to determine "*unit costs of reliability and risk improvements of proposed projects, considered alternatives, or ratepayer valuations thereof*". How can the Board

approve any capital project or program (save for those that are mandatory) in the absence of such information? How can NP meet the burden of proof requirement in the absence of such information?

According to NL Hydro and NP 2022 Net Metering reports, as of December 31, 2022, Hydro and NP had a total of 3 and 28 net metering customers, respectively. In a November 1, 2022 News Release by the Nova Scotia government (<https://news.novascotia.ca/en/2022/11/01/new-program-commercial-net-metering>) it is stated “*In the spring, our legislation cleared the way for homeowners to go green and lower their energy bills without any extra charges,*” said Tory Rushton, Minister of Natural Resources and Renewables. “*Now, regulations are in place to create a new commercial net-metering program that will help businesses pay less for power, support our green economy and take us another step closer to achieving our climate change goals.*” It is understood that as of January 2022, there were around 4,100 net metering customers in Nova Scotia most of which are residential customers with solar panels. This is 132 times the number of net metering customers in NL. In New Brunswick, more than 765 customers have installed their own renewable energy projects under its net metering program¹ which is 25 times the number of net metering customers in NL. NP is not adequately promoting or assessing environmentally friendly alternatives to its traditional wires undertakings, perhaps because customer-owned generation (net metering) is not in its shareholder’s interest.

- e) ***Limited customer input on the value placed on reliability.*** According to CA-NP-014, NP does not solicit customer input on willingness to pay for reliability improvements, instead relying solely on customer’s overall satisfaction with service delivery. Such information has limited value as most every survey conducted by an electric utility would show that the two most important issues for electricity customers is reliability and price (according to CA-NP-203, NP is not aware of this). What is not known is how much customers are willing to spend on reliability. In CA-NP-065d Newfoundland Power states “*in the Company’s view, maintaining current levels of service reliability is least cost for customers when compared to (i) degrading reliability, or (ii) increasing reliability. As such, customers would incur incremental costs if Newfoundland Power were to seek to improve or degrade system reliability.*” This is a circular argument whose premise is unsupported. NP is targeting current levels of reliability that in the case of SAIDI is 40% better than the EC Region 2 average, and in the case of SAIFI, is equal to, if not slightly better than the average. In CA-NP-197 NP was asked if it had “*undertaken an analysis with figures showing that current levels of reliability are optimum and least cost for consumers relative to levels that are, for example, 20%*

¹ See New Brunswick Power Corporation 2023/24 Annual Report (page 16) at https://www.nbpower.com/media/1493290/nbp_annual-report_2024_english-1.pdf.

better or 20% worse than current levels of reliability?” No such analysis was filed or referenced in its response.

There is no evidence on the record supporting NP’s claim, but plenty of evidence indicating that current levels of reliability are *not* optimum or least cost, as witnessed by the following.

- (Application, 5.1 Port Union Building Replacement, page 1) Footnote 1 states *"To decrease the duration of customer outages, more remote areas are provided with power line technician crew(s) and commonly required materials (distribution transformers, cross-arms, conductor, streetlights and hardware)."*
- (Application, 2025 - 2029 Capital Plan, page 3) NP states *"Providing customers with reliable service requires capital investments to maintain the condition of the electrical system and the Company's operational response capabilities when outages occur."*
- (Application, 6.2 Asset Management Technology Replacement, page 2) It is stated *"Maintaining reliable service for customers is expected to require increased investments in the planned refurbishment and replacement of assets going forward. Optimizing the future replacement of these assets in order to balance performance, cost and risk is a key consideration for Newfoundland Power's asset management journey."*

Clearly, there is an incremental cost associated with maintaining current levels of reliability. In spite of the importance that customers place on reliability, Newfoundland Power does not even track customer complaints relating to reliability (CA-NP-064a). The Board cannot approve a capital project or program in the absence of such information as once again, NP has not met the burden of proof requirement.

f) *Inadequate assessment of alternatives for Replacement Meters and New Meters programs.* According to CA-NP-083, the annual costs for the new meters and replacement meters programs are forecast to increase from \$457,000 and \$648,000 in 2025 to \$774,000 and \$1,150,000 in 2029, increases of 69.4% and 77.5%, respectively. NP is currently using AMR (Automatic Meter Reading) meters rather than AMI (Advanced Metering Infrastructure, or smart meters) for these programs. AMR metering is not compatible with time-varying rates, and has numerous deficiencies compared to smart meters. In NP’s October 29, 2024 Response to the Consumer Advocate’s Request for an Oral Hearing it is stated (page 9 of 12) *"The Company submits that, given the extensive evidence currently on record with respect to AMI and the fact that there are no capital expenditures associated with AMI included in the 2025 Capital Budget, an oral hearing on these matters is not required."* While it is true that

there are no capital expenditures for AMI included in the Application, NP is proposing to spend \$1.1 million in 2025 on AMR meters that have been, or are currently being, replaced with AMI in eight of the nine other Canadian provinces. NP has failed to provide evidence that AMR is the least cost alternative for the New and Replacement Meters programs.

New Brunswick Power filed evidence with the New Brunswick Energy and Utilities Board more than 5 years ago, on August 1, 2019 entitled “Advanced Metering Infrastructure Capital Project <https://www.nbpower.com/media/1489724/nbp0103.pdf>”. The New Brunswick Power study quantified the following benefits of smart meters relative to AMR: i) Reduced Manual Meter Reading and Meter Service Orders; ii) Avoided Meter Replacement Costs; iii) Conservation Voltage Reduction; iv) High Bill Alert Service; v) Distribution Network Losses; vi) Meter Accuracy Losses; vii) Avoided Cost of Load Research Program; viii) Avoided Cost of Net Metering Program; ix) Avoided Cost of Meter Services Manager Salary; x) Avoided Cost of Meter Reading Vehicles; xi) Outage Restoration (Crew management); xii) Reduced Customer Inquiries; xiii) Avoided Cost Of Handheld System; xiv) Unbilled/Uncollectable Accounts; xv) Avoided Cost of Meter Reading Supervisor; and xvi) Reduced Overtime for Meter Service Orders. It also identified 12 additional customer and societal benefits of AMI that were not quantified such as *“time-varying rates, which can provide significant benefits to customers and NB Power by providing more efficient price signals, and geographically-targeted demand-side management (DSM) programs, which can avoid or defer costly transmission & distribution (“T&D”) investments based on AMI-derived visibility into grid needs and patterns.”*

Dunsky identified the 12 additional benefits that were not quantified in the New Brunswick Power study; Dunsky also reviewed the list of quantified benefits. However, in Dunsky’s 2019 study of smart meters in NL, it assessed (CA-NP-070b) *load shifting potential of dynamic rate structures, including an estimate of the cost of AMI implementation. The consultant did not complete an overall assessment of smart meters.”* NP states that smart meters are not least cost based on an analysis that quantified a single benefit while ignoring the 27 other benefits identified in the New Brunswick Power study that was undertaken more than 5 years ago. New Brunswick Power justified smart meters even without quantifying the benefits from load shifting, the lone benefit quantified by Dunsky in its study conducted on NP’s behalf (CA-NP-248e).

Why is NP replacing meters and installing new meters with AMR technology when these meters are likely to soon become stranded assets? The Board states in its November 1, 2024 response to the Consumer Advocate’s request for an oral hearing (page 5) *“The Board notes that there is comprehensive information on the written*

record concerning AMI technology.” However, NP has not filed a study including a fulsome review of AMI. The Board goes on to say, “*The Board is aware of the ongoing studies currently being conducted by Newfoundland Power that will help inform the business case for AMI technology, particularly rate design, load research, and the study by the Posterity Group.*” However, none of these studies is needed to undertake a fulsome review of smart meters. New Brunswick Power did not quantify the benefits of load shifting (the lone aspect of the Posterity study relevant to smart meters, see CA-NP-247), did not undertake a load research study, and did not undertake a retail rate design review before filing its study on smart meters. Eight of the nine other provinces in Canada have, or are implementing, smart meters (CA-NP-248f). New Brunswick Power justified its smart meter program over 5 years ago. How much farther will NL fall behind other jurisdictions before NP finally embarks on a smart metering program?

Application Schedule B, page iv states "*Newfoundland Power also considered risks of assets becoming stranded for each proposed project and program*". However, NP has not incorporated the risk of an asset becoming stranded owing to new technology (smart meters), new environmental regulations such as net-zero emissions and electrification policies, distributed generation, rate design, etc., or owing to a significant rate increase such as that forecast from July 1, 2024 to July 1, 2025. NP has not met the burden of proof requirement for its New and Replacement Meters programs.

- g) *Historical averages for budget estimation.*** (Application, Use of Historical Averages for Budget Estimation, Table 2) The table lists only Nova Scotia Power, Maritime Electric, and NL Hydro as using historical averages for budget estimation. CA-NP-099b indicates that NP considers its jurisdictional scan to be reasonable in that it included all Canadian utilities subject to the filing of annual capital budgets. According to PUB-NP-023, NP has 22 capital programs encompassing 48% (\$61.7 million) of its total 2025 capital budget amount, for which the historical average method is used. NP is unable to determine a comparable proportion for NS Power, Maritime Electric or NL Hydro. Nevertheless, NP’s proportion is quite high. According to NL Hydro (CA-NLH-074 regarding Hydro’s 2025 Capital Budget Application), only four of its capital programs’ estimates are based on historical averages and the approximate expenditure associated with them totals just \$14.8 million for 2025F. In short, NP uses historical averages for an excessive proportion of its budget estimates and risks perpetuating spending levels by avoiding careful scrutiny of capital spending while providing no incentive for cost-cutting.
- h) *Use of Internal Labour Inflation Rate.*** NP’s capital budget estimated costs include allowances for inflation. NP uses its own in-house labour inflation rate for its internal labour while it uses the general inflation rate (GDP deflator) for other cost categories. Data provided in CA-NP-218 (Attachment A) show that for each year from 2010-2023 inclusive, except for two years, NP’s internal labour inflation rate exceeded the general

rate of inflation (given in the “Non-Labour” column in the Attachment). More significantly, looking forward, that attachment also shows that for 2024F to 2029F, NP’s labour inflation rate exceeds the general inflation rate in every year. Additionally, CA-NP-098 indicates that internal labour inflation is not adjusted for productivity improvements in NP’s labour employed in capital projects and programs. The result will be that for all NP’s capital programs and projects involving internal labour, the inflation adjustment will be higher than the general rate of inflation. This effectively adds a cushion to NP’s budget requests. It also raises the question of why NP does not either substitute contract labour for internal labour or raise its internal labour’s productivity through innovation; perhaps the answer is that there that it has no incentive to do so.

- i) ***Falling behind other provinces.*** New Brunswick Power filed evidence with the New Brunswick Energy and Utilities Board on August 1, 2019 entitled Advanced Metering Infrastructure Capital Project 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.*" (emphasis added)

Nova Scotia Power states on its website "*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 environment.*" Yet NP continues “business-as-usual”, pouring considerable amounts of capital into its “traditional utility assets” and using a planning approach that does not result in lower overall costs for consumers and a cleaner environment. NP cannot evolve its distribution system into a “smart grid” without smart meters. Owing to NP’s outdated planning approach, NL is falling behind other jurisdictions.

- j) ***Capital budget envelope.*** The proposed increase in capital expenditure in 2025 and, especially, the subsequent increases envisaged in NP’s 2025-2029 Plan, is so alarming that the Board should consider new approaches. One appealing possibility is the envelope approach. In the Capital Budget Application Guidelines Review, the October 2020 Midgard Consulting report, prepared for the Board, stated on page 22:

"The PUA specifies the frequency of Capital Budget Applications and sets materiality thresholds requiring approval, however, it does not specify that the NLPUB must review and approve expenditures on a line by line basis. Midgard is of the opinion that existing legislation enables the NLPUB either to continue with the existing itemized explicit project approvals, or alternatively, to approve capital budget envelopes that

represent all or some portion of the total proposed utility budgets. Using the latter approach, utility management may need to reprioritize, modify or defer some projects to meet the approved capital budget envelope.”

As pointed out in 2023 in the Utility Management Responsibility Report prepared for the Consumer Advocate by Midgard Consulting Incorporated, the ways that regulators review capital budgets and utilities approach capital budget applications are changing. *“Three (3) of the four (4) regulatory approaches used across Canada explicitly have some form of capital budget envelope...”*. As stated in Midgard Consulting’s Utility Management Responsibility Report, various forms of budget envelopes are used by regulatory boards elsewhere in Canada. Midgard (page 23) points out: *“Three (3) of the four (4) regulatory approaches used across Canada explicitly have some form of capital budget envelope (COS, PBR, Rate Setting), with the difference being the degree of management authority to adapt its capital plans within the financial constraints applied by the board (i.e., either through a revenue requirement or rates). For line-by-line capital approvals, there is nothing inherent in that approach that precludes considering a capital budget envelope.”*

In some jurisdictions, the envelope approach is employed without having an explicit statute or regulation to authorize it. In NP-CA-006 pertaining to NP’s 2024 CBA, Midgard was asked *“For the three identified regulatory approaches across Canada that explicitly have some form of capital budget envelope, please provide the statute, regulation, or regulatory guideline that explicitly establishes a capital budget envelope.”* Midgard responded *“The three identified regulatory approaches across Canada do not have specific statutes, regulations, or regulatory guidelines that explicitly establish or prohibit capital budget envelopes. Instead, these regulatory approaches implicitly incorporate capital budget envelopes.”*

In its response to the Consumer Advocate’s request for an oral hearing, the Board states (page 7) *“The Board notes that the use of capital budget envelopes is being considered as part of its Capital Budget Guidelines Review. The Board does not believe that it is appropriate to address potential changes to the Guidelines in the Application as the issue should continue to be addressed in the established process.”* First, the Provisional Guidelines do not disallow use of budget envelopes. Second, it is not clear what *“established process”* the Board is referring to. The Board has done nothing with respect to the Capital Budget Application Guidelines in three years since the Provisional Guidelines were issued; neither has the Board issued a schedule for further study of the Guidelines. What is clear is that NP will not comply with the Provisional Guidelines until the requirements are made mandatory.

In the past 5 years (2020 to 2024) NP’s requested capital expenditures totaled \$557.8 million. The Board approved \$554.7 million, or 99.44% of the total expenditure

requested. In the past 10 years (2015 to 2024), the Board approved 99.7% of the total capital expenditure requested by NP. As noted, the Provisional Guidelines state “*The Board considers the interests of both customers and utilities in determining whether proposed capital expenditures should be approved.*” A 99.7% approval rate does not lend confidence that the interests of consumers are being adequately taken into account.

Considering 1) the challenges facing the electricity sector in this province, and especially the adverse impact on ratepayers, 2) the inadequacies of NP’s planning process that has fallen well-behind other Canadian jurisdictions, 3) NP’s inability to meet the burden of proof requirement, and 4) the high proportion of NP’s budget driven by historical averages, a budget envelope on NP’s total capital expenditures must be imposed on NP. Newfoundland Power annual capital budgets should be capped at 2024 levels with a modest adjustment for inflation, and the Board should order Newfoundland Power to refile and reprioritize its proposed expenditures consistent with this direction. For 2025, NP is proposing new capital expenditures of \$164.5 million in 2025, 2026 and 2027 (excludes \$19,711,000 for projects that were previously approved by the Board). This compares to \$120.0 million proposed in the 2024 CBA, and \$119.0 million that was approved by the Board in the 2024 CBA.

Establishing a budget envelope based on 2024 levels represents a sizeable budget and allows NP to retain discretion as to when to spend it, thus accommodating multi-year projects. This would lend ratepayers confidence that the Board is balancing the interests of ratepayers and the utility, and signal Newfoundland Power that the Board finds its capital spending is out of control and inconsistent with current industry practice. To continue a “business-as-usual” approach is unacceptable. A budget envelope established in this manner would place management responsibility on Newfoundland Power where it belongs.

RECOMMENDATION 1: The Board should confirm its authority to use an envelope approach in regard to all or a selected portion of Newfoundland Power’s capital budgets and finalize the Capital Budget Application Guidelines.

RECOMMENDATION 2: The Board should employ a capital budget envelope based on the 2024 CBA approved capital budget of \$119.0 million plus a modest 2% increase for inflation (a total of \$121.4 million). This would apply only to new single and multi-year expenditures, and would exclude previously approved amounts. The Board should order Newfoundland Power to refile and reprioritize its proposed expenditures consistent with this direction.

- k) *Newfoundland Power Distribution Planning Process and Asset Management Study.*** The Distribution Planning Process and Asset Management Study are inadequate. In particular, the environmental implications of projects are for the most part ignored. NP

has failed to show that its 2025 CBA is consistent with government policy and legislation, industry best practice and experience elsewhere, the promotion of alternative forms of generation that do not burn carbon fuels, and the advent and repercussions on the planning process of the “prosumer”.² If NL is to avoid falling even further behind other jurisdictions, the Board must order NP to embark on a smart metering program and employ a planning regime that recognizes that investments in traditional utility assets in the face of technological change may no longer be prudent and reasonable. In the next few years NP will greatly increase spending on meters. According to the 2025-2029 Capital Plan (Table A-2), expenditure on new and replacement meters will increase from \$457,000 and \$648,000, respectively in 2025 to \$904,000 and \$1,223,000 in 2027 with spending in 2028 and 2029 similar to those 2027 levels. This heightened spending should not be for the limited and outdated technology of AMR meters.

RECOMMENDATION 3: The Board should order Newfoundland Power to purchase and install only smart meters as its current inventory of AMR meters is drawn down.

4. EXPENDITURE-SPECIFIC RECOMMENDATIONS

For an intervenor and the Board, it is challenging to determine which, if any, of NP’s proposed capital projects are premature, unnecessary or inadequately justified. Within the regulatory process, there is an information asymmetry that favours the applicant. The Board’s consultant, Midgard, alludes to the information asymmetry as follows:³

To function effectively and ensure the necessary tension between interests, a capital budget approval process requires the applicant to provide complete and accurate supporting information for the planned investments. It is important to recognize that even if the application is full, complete and accurate, a significant informational asymmetry always exists between the applicant (i.e., utility) and the intervenors and regulatory Board.

Further highlighting the information asymmetry problem is that Newfoundland Power does not calculate a quantifiable risk mitigation value associated with its asset management program and does not have the data or software necessary to provide calculations of risk mitigation or reliability improvement. It has not identified the risk associated with project deferral, or the

² A “prosumer” is defined as (see the chapter from The Palgrave Handbook of International Energy Economics titled *Integration of Non-Dispatchable Renewables*, first online May 28, 2022, by Marco Baroni). “These producers are often connected to mid- or low-voltage levels grids (distribution grids), generally closer to demand centres, and are often consumers of electricity themselves.” Baroni goes on to say “The main change introduced by prosumers is their number, scale and diffusion. This is already having an important impact on transmission and distribution grids, and is expected to change the way that transmission system operators (TSO) and distribution system operators (DSO) function and interact, including the possibility for DSOs to provide flexibility services to the system through the aggregation of small active actors (TSO–DSO 2019).”

³ See October 29, 2020 report by Midgard Consulting Inc. titled “Capital Budget Application Guideline Review”, page 18.

reliability and productivity improvement brought on by a project. It is not possible for the intervenors and the Board to know if a project is justified when the applicant is unable to provide such information. Compounding the information asymmetry issue, the Board declined to proceed with an oral hearing on this Application as requested by the Consumer Advocate, meaning intervenors have not had the opportunity to cross-examine NP witnesses to gain a complete understanding of the merits of the projects included in the Application.

Nevertheless, there are some specific expenditures of particular concern. They follow.

- a) **Extensions.** The Application requests \$13,402,000 for this program. That amount, which includes approximately \$4 million for internal labour, is based on the five-year historical average cost per new customer, scaled up for 2025 inflation, and a forecast number of new customers for 2025. The 2025 cost per customer is set at \$6,057. That is a 6.5% increase compared to 2024, which is much higher than expected inflation as well as higher than NP's own internal labour inflation rate. One factor in determining the historical average was high expenditure in 2023. According to CA-NP-150, spending in 2023 was unusually high due to higher material and contractor labour cost and an increase in the number of large-scale customers. In CA-NP-234 it is acknowledged that the expenditure for extensions for the large-scale customers were included in the 2023 expenditure figure but there was an associated CIAC which was not purged from the historical expenditure. According to P.U. 27 (2023), the CIAC was more than \$1.1 million. The combination of weaving the unusual 2023 year, the use of historical averages, and the use of an in-house determined internal inflation rate makes the 2025 request less than credible. Moreover, there is no evidence that NP has taken any action to control the cost components of this large spending program. In these circumstances, a reasonable approach is to allow for 2% inflation over the 2024 cost per customer of \$5,670. That gives \$5,784 (= \$5,670 multiplied by 1.02). Accepting NP's 2025 forecast number of customers of 2,220, the implied total is approximately \$12,840,000 (= \$5,784 multiplied by 2220). That level of spending would save approximately \$562,000 for customers.

RECOMMENDATION 4: The Board should approve \$12,840,000 for the Extensions program for 2025.

- b) **Rebuild Distribution Lines.** The Application requests \$5,115,000 for this program. That amount, which includes approximately \$2.6 million for internal labour, is based on the five-year historical average cost of the program, which is scaled up by NP's labour inflation rate (applied for internal labour) and the general inflation rate for other components of cost, including contract labour. Given the SAIDI and SAIFI values for NP's system, and considering that the budget request is based on historical averages rather than specific identified needs, a modest reduction in this request would not be a threat to reliability. It might even encourage NP to seek cost-cutting measures. In light

of current reliability levels, a \$4.9 million budget would not be unreasonable and would save customers \$215,000.

RECOMMENDATION 5: The Board should approve \$4,900,000 for the Rebuild Distribution Lines program for 2025.

- c) ***Transmission Line Maintenance.*** The Application requests \$2,884,000 for this program. That amount, which includes approximately \$0.5 million for internal labour, is based on the five-year historical average cost of the program, which is scaled up by NP's labour inflation rate (applied for internal labour) and the general inflation rate for other components of cost, including contract labour. The historical average including what appears to be an outlier year (2023 expenditure was \$3.54 million whereas the other four years used for the average were very similar at about \$2.64 million each). In addition, the strong reliability performance of NP's system suggests that a modest reduction in the request would not be detrimental to service. In light of these considerations, a budget of \$2.7 million would not be reasonable and would save customers \$184,000.

RECOMMENDATION 6: The Board should approve \$2,700,000 for the Transmission Line Maintenance program for 2025.

- d) ***New Transformers/Replacement Transformers.*** The Application requests \$5,623,000 and \$6,340,000 respectively for these two programs, each of which is dedicated to purchasing distribution transformers. The only cost component for each program is the material cost. Of those amounts, approximately \$1.2 million (CA-NP-160, Table 2) and \$1.3 million (CA-NP-156, Table 2), respectively, are for additions to inventory rather than immediate use. Additional observations are:
- There is upward pressure on the price of transformers with an increase of 11% or more expected for 2025 (PUB-NP-008).
 - Budget estimates for these programs are based on the historical average of expenditures even though the only cost is material and, presumably, the most accurate price information is the current price and outlook rather than past prices embedded in historical expenditures.
 - Inventories of transformers, which are held in aggregate, have been declining from 2005 to 2023 (CA-NP-161, Table 1) but as of August 2024 were higher, at 1,710 (CA-NP-238) compared to the 2023 annual average of 1,588.
 - The number of replacement transformers has been declining quite steadily. Over 2004 to 2008, 1,503 were replaced per year on average but over 2019 to 2023, the annual average was 638 (CA-NP-158, Table 1).
 - Repairs and refurbishment of transformers help prolong the life of transformers (CA-NP-094) as does improved protection (CA-NP-157c, including footnote 3).

- Holding inventories comes at a cost to electricity customers because inventories are included in NP's rate base (CA-NP-161c). With increasing prices for transformers, even maintaining a constant number of transformers in inventory means a higher cost for customers.
- There is no evidence of an impending risk of inventories being exhausted. Moreover, NP has taken some measures to cover the risk of a supply shortage (CA-NP-161d).
- Most of NP's distribution transformers have been in service for less than 20 years while the average service life is 42 years (CA-NP-158), which suggests there is no urgency to add inventories for replacement purposes.

Given these circumstances, it would be worthwhile for NP to assess (i) the appropriate level on transformer inventories taking into account the increasing cost of holding larger inventories as well as the possibilities for repair, refurbishment and protection and (ii) the use of historical average expenditures for budget estimates in comparison to using the historical quantities along with the most up-to-date and forward-looking price information. In the interim, modest reductions in expenditures for additions to inventories for 2025 would provide some savings for customers without any undue risk. This is entirely appropriate since no case has been made for an immediate need to add to inventories, nor has there been a determination of the appropriate level of inventories.

RECOMMENDATION 7: The Board should order Newfoundland Power to study and report on (i) the determination of an appropriate level of inventories that reflects the repair, refurbishment, and protection possibilities as well as the cost of holding inventories, and (ii) the use of historical average expenditure for budget estimation rather than using quantities with the latest price information, or other possible approaches.

RECOMMENDATION 8: For 2025, the Board should reduce the Budget requests for New and Replacement Transformers by decreasing the amounts for additions to inventories in each by \$200,000; making the budget for New Transformers \$5,432,000 and for Replacement Transformers \$6,140,000.

The effect of Recommendation 8 would save customers \$400,000. Recommendation 7 would help NP and the Board determine appropriate levels of expenditures in NP's 2026 and subsequent capital budget applications.

- e) ***Port Union Building Replacement.*** The cost to replace the Port Union building is estimated at about \$1.3 million. A typical house price in Port Union is under \$200,000. In CA-NP-141, NP indicates it does not know how much it would cost to build a single family home of comparable size in Port Union. In its response to the Consumer Advocate's request for an oral hearing, NP states "the Port Union building (the "Facility") is not comparable to the construction of a residential single-family home of

a similar building size in Port Union.” However, NP does not indicate how it is different, instead choosing to re-state the purpose of the project. Clearly, NP has failed to meet the burden of proof requirement. The Board should reject this expenditure until such proof is provided.

RECOMMENDATION 9: The Board should reject the Port Union building replacement project until NP provides evidence that the \$1.3 million expenditure is justified.

5. CONCLUSION

Collectively, Recommendations 4, 5, 6, 8 and 9 involve a \$2,661,000 saving for electricity customers. Considering the information asymmetry, Newfoundland Power’s use of a high labour inflation rate for its internal labour, its use of the historical average approach for so much of its spending, and its substantial budget request, this amount is very modest and most unlikely to affect NP’s ability to provide reliable service to its customers in 2025. The \$2.66 million in savings would be independent of our recommended budget envelope and not meant as a reduction in it.

Recommendations 3 and 7 do not require any reduction in NP’s budget but are important. The former empowers consumers with AMI, which has been shown to generate net benefits in other jurisdictions and is largely displacing AMR technology. Recommendation 7 would help improve budgeting for transformers and offers the prospects of future savings.

More broadly, Recommendations 1 and 2 are important because they would clarify the Board’s jurisdiction with respect to the use of budget envelope approaches. Given the extremely large expenditure increases in Newfoundland Power’s 2025-2029 Capital Plan, it is crucial to have finalized capital budget guidelines that clearly define the Board’s scope to act with respect to utilities’ capital budget application. Until such time the capital budget application guidelines are finalized, a capital budget envelope should be employed based on the capital budget approved by the Board at the 2024 CBA with a modest 2% increase for inflation (a budget envelope of \$121.4 million applicable to all new single and multi-year expenditures). This would provide Newfoundland Power incentive to improve its planning and prioritization processes to make them consistent with changes in the industry brought on by technology, and to bring them up to Canadian standards consistent with the expectations of ratepayers.

Importantly, the Board cannot ignore the very expensive rate mitigation plan put in place by the government. It cannot allow Newfoundland Power to dramatically increase spending and undermine the rate mitigation objective of reasonable and affordable rates. The rate mitigation plan was not put in place to allow Newfoundland Power to opportunistically continue with aggressive profiteering in isolation from the reality of the electricity cost crisis faced by

consumers brought on by Muskrat Falls, or to insulate Newfoundland Power from the effects of this crisis.

Please contact the undersigned if you have any questions on this submission.

Yours truly,



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Encl.

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