

Office of the Consumer Advocate

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July 6, 2026

Via Email

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

Attention: Mike McNiven (Board Secretary)

Re: Newfoundland Power Inc.'s 2027 Capital Budget Application – CA Requests for Information

Please find enclosed the Consumer Advocate's requests for information CA-NP-001 to CA-NP-049 in relation to Newfoundland Power Inc.'s 2027 Capital Budget Application.

Should you have any questions, please contact the undersigned.

Yours truly,

CONSUMER ADVOCATE



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Newfoundland Power Inc.

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Shirley A. Walsh
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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.

**CONSUMER ADVOCATE
REQUESTS FOR INFORMATION
CA-NP-001 to CA-NP-049**

Issued: July 6, 2026

General and Data Requests

CA-NP-001

(Reference Application, para. 2)

- a) Please confirm that in the 2027 CBA, Newfoundland Power (NP) is requesting Board approval of capital expenditures totaling:
 - \$149,349,000 in 2027 (includes \$89,134,000 in proposed new single-year expenditures, \$9,551,000 in 2027 for multi-year expenditures and \$50,664,000 in 2027 for previously approved multi-year expenditures);
 - \$31,344,000 in 2028 (includes \$23,304,000 for new expenditures in 2028 and \$8,040,000 in 2028 for expenditures previously approved by the Board); and
 - \$12,867,000 in 2029 (for multi-year projects);
 for a total of \$193,560,000.
- b) Please provide a comparison of the expenditures in part (a) relating to the 2027 CBA to comparable figures for the 2025 and 2026 CBAs and show the increase/decrease in both dollars and percent.
- c) Are there any other capital expenditures anticipated or under consideration for 2027 that may require supplemental capital budget applications? If so, please identify them.

CA-NP-002

(Reference Application)

- a) Please provide a table of annual values from 2000 to 2027F (inclusive) for the following items: NP's net plant investment, NP's rate base, number of customers, the GDP deflator, net plant investment expressed in real terms using the GDP deflator, rate base expressed in real terms using the GDP deflator, net plant in real terms per customer, and real rate base per customer.
- b) For the years 2000 to 2030F, please provide a table giving annual values for the following: NP's total internal labour cost; the percentage change in NP's total internal labour cost over prior year; the percentage change in the GDP deflator; the provincial inflation (NL CPI based); and NP's internal labour inflation rate.
- c) Please provide a table and graph showing for the years 2000 through 2027F NP's annual gross operating cost, operating expenses, depreciation cost and capital expenditures.
- d) Please provide the tables from Appendix A in a usable data format, such as csv or xlsx.

CA-NP-003

(Reference Application) It is stated that the capital projects proposed in the Application are estimated to increase the Company's annual revenue requirement by approximately \$10 million on a pro forma basis.

- a) Please provide the complete calculation supporting this estimate in working Microsoft Excel format with all formulas intact, broken down by project and program, and separately showing depreciation, return on rate base, income taxes, allowance for funds used during construction, contributions in aid of construction, and any offsetting operating cost or purchased power savings.
- b) Please provide the estimated impact of the proposed 2027 Capital Budget on customer rates and on the monthly bill of an average Domestic customer.

- 1
2
3
- 4 CA-NP-004 (Reference Application) For each year from 2000 to 2027F, please provide the
5 following:
6 a) A table showing the total number of NP customers by customer class, with the
7 domestic customers decomposed by regular and all electric.
8 b) A table showing the annual total sales, in MWh, to each group of customers as
9 requested in (a).
10 c) For January 2023 to June 2026, please provide a table showing monthly
11 electricity sales (kWhs) per customer for domestic regular customers, domestic
12 all-electric customers, each class of GS customers, and street-lighting customers.
13
- 14 CA-NP-005 (Reference Application) On December 20, 2021, the Board issued its Provisional
15 Capital Budget Application Guidelines, stating in its cover letter that “*The Board will*
16 *establish the process for the conclusion of the capital budget guidelines review next*
17 *year when there is more clarity as to the scope of the Government’s review and the*
18 *impact of the renewable energy plan.*” What direction, if any, has NP received with
19 respect to guidelines that are to be used in NP’s 2027 capital budget? Please provide
20 any relevant direction that NP has received.
21
- 22 CA-NP-006 (Reference Application) For each project and program over \$750,000, please identify
23 the expected cost savings, provide an estimate of the impact on rates and provide an
24 explanation of how these cost savings will be tracked and recorded in NP’s next
25 GRA.
26
- 27 CA-NP-007 (Reference Application) Please identify all analyses undertaken as part of the 2027
28 CBA that were completed by independent third parties.
29
- 30 CA-NP-008 (Reference Application) Please provide a table showing the average all-in rate and
31 percentage year-over-year increase for NP’s Domestic customer class on July 1 of
32 2000 through 2026, and forecast for July 1, 2027 (based in Hydro’s 2026 GRA and
33 amounts owed by customers to NP).
34
- 35 CA-NP-009 (Reference Application) Regarding NP’s hydro plants:
36 a) What is the value of those plants based on the cost of purchases from Hydro and
37 the NP hydro generation credit included in Hydro’s cost of service study?
38 b) Please provide a table listing all those plants giving their capacities and showing
39 each one’s monthly generation for the months January 2025 to June 2026.
40 c) Do any of NP’s hydro plants have significant reservoirs or are they all run-of-
41 the-river? Please provide quantitative information for any with significant
42 reservoirs.
43
- 44 CA-NP-010 (Reference Schedule D, Computation of Average Rate Base) Additions to rate base
45 increased by approximately \$17.1 million in 2025, primarily due to a Cost Recovery
46 Deferral or the 2025 revenue shortfall approved in Order P.U. 23 (2025).
47 a) Please provide the calculation of the \$17.156 million Cost Recovery Deferral –

- 2025 Revenue Shortfall included in the 2025 rate base in an Excel worksheet
- b) Please identify the Board authority for its inclusion in rate base and the approved amortization period.
 - c) Please describe its revenue requirement treatment and quantify its effect on customer rates, on the requested 2025 average rate base of \$1,419,718,000, and on forecast rate base for 2026 and 2027.
 - d) Please extend the Schedule D table (Computation of Average Rate Base), to include 2022 and 2023.

Capital Budget Overview

CA-NP-011

(Reference 2027 Capital Budget Overview)

- a) Given the direction in P.U. 3(2025), has NP developed a strategic plan (or a scope of work for the development of a strategic plan) to address the significant issues currently facing its system and the associated costs? If not, what is the status of the work?
- b) How has this work been incorporated in the 2027 CBA?
- c) Is strategic planning a core component of NP's business? Please provide an organization chart of NP's planning department.
- d) In the development of its strategic plan, does NP plan to leverage work undertaken by Hydro in its digital engagement initiative and/or consult NP customers directly?

CA-NP-012

(Reference 2027 Capital Budget Overview) It is stated (page 5) "*The Company is currently focused on implementing the Asset Management Technology Replacement project, as approved in the 2025 Capital Budget Application.*"

- a) What is the status of this project?
- b) What are the expected benefits from this project?
- c) When can customers expect to start seeing benefits from this project?

CA-NP-013

(Reference Schedule A and Capital Budget Overview, Appendix E) NP states there has been no change in the scope, nature or magnitude of previously approved multi-year projects, which account for \$50,664,000 of the 2027 request. For each previously approved multi-year project with expenditures in 2027 or 2028, please provide in table form (and in Excel format):

- a) the original Board-approved budget and the Order in which it was approved;
- b) actual expenditures to date;
- c) the current forecast of final cost;
- d) the current schedule compared to the original schedule, including the expected in-service date;
- e) the procurement status of major equipment and contracts; and
- f) a description of any change in scope, timing, cost drivers or risk since Board approval.

CA-NP-014

(Reference 2027 Capital Budget Overview, Appendix C) It is stated that NP does not currently have the software or data to calculate risk mitigation per dollar or reliability improvement per dollar as contemplated by the provisional guidelines, and instead relies on a risk matrix informed by engineering judgment.

- a) For each project and program over \$750,000, please provide the workpaper or analysis supporting the assigned probability and consequence scores, identifying the consequence category (reliability, safety, environment, economic) that drove the score and all quantitative evidence relied upon. Where a score rests on engineering judgment without quantitative support, please state so explicitly.
- b) The four proposed power transformer replacements (LAU-T1, LBK-T1, HAR-T1 and RRD-T3) are each scored 16, while NP's evidence emphasizes extended transformer procurement lead times, an aging transformer fleet, and increasing pressure on the portable substation fleet. Please reconcile the score of 16 with this evidence and explain what circumstances would cause these projects to score 20 or 25.

2027-2031 Capital Plan

CA-NP-015

(Reference 2027-2031 Capital Plan) It is stated (page 1) "*The Company is anticipating filing a supplemental application in the third quarter of 2026 for the refurbishment of thermal generation facilities at Greenhill and Wesleyville over the next five years.*" It is further stated (page 1) "*The refurbishment of these facilities is currently forecast to account for a total of approximately \$231 million from 2027 to 2031.*"

- a) Please provide the derivation of the approximately \$231 million estimate, including the implied cost per kilowatt of capacity.
- b) Please identify the class of estimate and its basis, including the status of the detailed condition assessments and the planning study referenced in the Capital Plan.
- c) Is fuel supply on the IIS adequate for these uprates? Could they be operated to cover a LIL shortfall event which is a LIL bipole outage for 6 weeks in winter?
- d) Have NP and Hydro been in discussion regarding the fate of the two gas turbines in question? What is the status of such discussions?
- e) Is NP allowed to uprate its gas turbines under current legislation?
- f) Does NP need to either retire or replace these CTs before 2031, i.e., is continued operation not an option?
- g) How much would the refurbishment of these gas turbines reduce costs compared to Hydro's reference plan?
- h) Are there other opportunities for refurbishment/uprating NP gas turbines to meet capacity needs on the IIS?

CA-NP-016

(Reference 2027-2031 Capital Plan) It is stated (page 1) "*The Company's current capital plan forecasts average annual investments of approximately \$207 million from 2027 to 2031.*"

- a) Please confirm whether this represents an increase of more than 20% relative to the five-year plan submitted last year for the 2026 to 2030 period. Please explain the factors arising since last year that account for this increase.
- b) How does this increase compare to average annual expenditures (nominal) over the past 5 years?
- c) Has the Asset Management Technology Replacement Project impacted capital costs going forward? Does the project enable NP to better manage costs?

CA-NP-017

(Reference 2027-2031 Capital Plan) It is stated (page 3) “*Newfoundland Power’s EV Load Management Pilot Project was completed in 2025. The results showed that while both active and passive load management strategies showed evidence of being able to successfully move EV load from peak periods to overnight, significant technical and operational challenges still exist that may be a barrier to scaling the program.*” Is this consistent with findings in other jurisdictions?

CA-NP-018

(Reference 2027-2031 Capital Plan) It is stated (page 6) “*The Company’s asset management practices have been found to conform with good utility practice*”, referencing the Liberty Consulting Group 2014 Report on Island Interconnection System to Interconnection with Muskrat Falls addressing Newfoundland Power Inc.

- a) Is this the most recent review of NP’s asset management practices?
- b) Please identify any references in this report that examined the trade-off between cost and reliability.

CA-NP-019

(Reference 2027-2031 Capital Plan and PUB-NP-001 pertaining to NP’s 2026 CBA)

- a) It is stated (page 5) “*The Company is undertaking a climate risk vulnerability study to ensure its strategies and forecast of capital investments continue to reflect shifting priorities and risks related to climate change.*” Given that the last climate risk vulnerability study was completed in December 2021, what significant changes in priorities or risks have occurred since then that prompt the need for a new study?
- b) NP outlines actions it has taken in response to recommendations of the Climate Change Adaptation Plan. The actions primarily relate to grid design changes and grid resiliency. Are there any projects or programs in the 2027 CBA that reduce customer reliance on the grid and does the Climate Change Adaptation Plan include any behind-the-meter or smart grid applications?

AMI Requests

CA-NP-020

(Reference 2027-2031 Capital Plan, Appendix B, 2027 CBA AMI Update) Table 1 indicates that AMI would cost \$118 million. Assuming no offsetting savings, and taking into account costs of New Meters and Meter Replacement requirements, what would be the impact on rates and customer’s monthly bills relative to the rates proposed for July 1, 2027 in Hydro’s 2026 GRA?

CA-NP-021

(Reference 2026-2030 Capital Plan, Appendix B, 2027 CBA AMI Update) It is stated (page 4) “*the annual costs associated with operating AMI technology of \$2.0 million*

in 2025 dollars is estimated to be more than 40% higher than the annual costs to operate AMR technology of an estimated \$1.4 million in 2025.”

- a) Please provide a table identifying the number of customers, or meters, that NP currently has in place for the following technologies: AMR technology, AMI technology (i.e., load research), mechanical metering technology, and unmetered customers?
- b) Please review the rate design and metering technology in Ontario.
 - i. What consideration has NP given to the adoption rates of time-varying rates (TVR) in Ontario?
 - ii. Please compare the system load factors of the Ontario and IIS systems and how AMI could be applied to each.
- c) How much capital is NP proposing in the 2027 CBA on projects and programs that improve customer service? Please provide the economic analysis that quantifies the cost savings associated with these programs and demonstrates that they are least cost.
- d) How much capital is NP proposing in the 2027 CBA on projects and programs that improve field operations? Please provide the economic analysis that quantifies the cost savings associated with these programs and demonstrates that they are least cost.
- e) Has any comprehensive study been undertaken quantifying the benefits of AMI technology relative to AMR technology in Newfoundland and Labrador?
- f) Please identify any issues that NP encountered in the installation of AMI meters for the load research study.
- g) Does NP have the expertise in-house to undertake a comprehensive review of AMI technology?
- h) Does NP have the expertise in-house to implement, maintain and operate AMI technology?

CA-NP-022

(Reference Schedule B, System Upgrades) In reference to MC3 Equipment Upgrade, it is stated (page 132) *“This item involves the replacement of the MC3 drive-by collection devices used in operating Newfoundland Power’s Automated Meter Reading (“AMR”) Collection System.”*

- a) What is the expected life of the MC4 equipment upgrade?
- b) When does NP believe that AMI will be the least cost metering technology on its system?
- c) When was the first large scale deployment of AMI metering technology implemented in Canada?
- d) In the November 15, 2018 Marginal Cost Study Update prepared by Christensen Associates Energy Consulting states (page ES-4): *“Electricity demands on Hydro’s Island Interconnected System are characterized by substantial seasonal differences, with approximately 2-to-1 differences between winter and non-winter levels of energy consumption and peak demands. Hydro’s marginal costs to serve those loads show yet further variation, well beyond 7-to-1. These system conditions afford substantial opportunities for cost savings. To this end, Hydro is strongly encouraged to explore time-of-use (TOU) tariff options.”*
 - i. Does NP agree that time-of-use rates reflecting all-in marginal-cost would improve consumption efficiency and provide substantial

- opportunities for reducing peak demand and the cost of supply?
- ii. Would time-of-use rates better reflect cost causation and improve the fairness of the rate regime?
 - iii. Could effective use of seasonal and/or TOU retail rates on the IIS, if implemented in the near future, potentially reduce load enough to defer, or avoid the need for both, or one of, the Avalon CT and Bay d’Espoir Unit 8?
 - iv. Does NP benefit financially from the implementation of time-varying and load-control rates?

Capital Expenditure Report

- CA-NP-023 (Reference 2025 Capital Expenditure Report, Page 8) Please provide detailed explanations for the following notable variances for the following Distribution Projects and Programs:
- a) Extensions;
 - b) Reconstruction; and
 - c) New Services.
- CA-NP-024 (Reference 2025 Capital Expenditure Report, Page 14) With regard to the Microsoft Enterprise Agreement:
- a) How many consecutive years has the Agreement appeared in capital budget applications?
 - b) Does NP anticipate this item to recur beyond the 2026 Forecast?
 - c) Given that this \$297,000 expenditure appears to recur annually, please explain why it is capitalized as a discrete asset acquisition rather than treated as an ongoing operating expense.
- CA-NP-025 (Reference 2025 Capital Expenditure Report, Appendix A) It is stated (page 4 of 7) *“The New Street Lighting program budget estimate is determined based on the five-year historical average cost. This decrease is primarily attributable to a 26% decrease in requests for new street light installations as compared to the previous five-year average.”*
- a) Does NP consider this a trend or an anomaly?
 - b) Has this decrease influenced NP’s capital budget estimation process for New Street Lighting?
- CA-NP-026 (Reference 2025 Capital Expenditure Report, Appendix A) It is stated (page 4 of 7) *“The New Meters program budget estimate is determined based on the forecast number of new customer connections and the five-year historical average cost. The 2025 budget estimate was based on a forecast of 2,220 customer connections. Actual customer connections were 3,122 representing a 41% increase.”*
- a) How many new AMR meters were installed in 2025, 2026 and proposed for 2027?
 - b) What is the estimated service life of these meters?

- c) What is NP's estimate of the probability that these meters become stranded assets?

Distribution Reliability Initiative

CA-NP-027

(Reference Schedule B, Distribution Reliability Initiative)

- a) Please provide a summary of all complaints related to reliability filed by customers served by GLV-02 in the past 10 years.
- b) Please decompose the cost estimate in Table 1 to show the costs for the 5 kilometre and 12 kilometre sections of the feeder line separately.
- c) Please provide the annual repair, preventive maintenance and all other related costs for each of the two sections of the feeder line over the past 10 years.

CA-NP-028

(Reference Report 1.1 Distribution Reliability Initiative)

- a) Please provide references and/or support for the statement that "*The monitoring of reliability metrics and the targeting of capital expenditures on the worst performing feeders is considered good utility practice and is increasingly required by regulatory bodies.*" (page 1)
- b) Does the outage management system track customer complaints about reliability? If not, what means, if any, does NP have to track customer complaints related to reliability?
- c) It is stated (page 4) "*The feeder is predominately within the boundary of the Terra Nova National Park and currently serves approximately 1,560 customers.*" What special arrangements is NP undertaking to preserve the environment within the park?
- d) What percentage of NP's feeders are worse than the company average in at least 3 of the 4 reliability metrics shown in Table 1?
- e) What work has NP done with respect to environmental assessment and permitting requirements that might be expected from Parks Canada, Parks NL, the Department of Transportation and Infrastructure, or other governing body?
- f) Page 8 indicates that there are 180 customers along and downstream of the 12 kilometre section of the feeder. Please provide a profile of these customers. How many are year-round versus seasonal, and residential versus general service and cabins or other? Are all of these customers located in Charlottetown?
- g) Page 8 indicates that there are 1100 customers along and downstream of the 5 kilometre sector of the feeder. Please provide a profile of these customers. How many are year-round versus seasonal, and residential versus general service and cabins or other?
- h) Would changes in reliability in either one of the two sections have any effect on reliability for customers along or downstream from the other section?

CA-NP-029

(Reference Report 1.1 Distribution Reliability Initiative)

- a) Please provide a table showing annual expenditures on the Distribution Reliability Initiative since its inception in 1998 as well as the annual

- expenditures on the Reconstruction program and the Rebuild Distribution Lines program for the same years.
- b) How has the Distribution Reliability Initiative affected corrective and preventative maintenance expenditure on feeders?

Distribution Feeders

- CA-NP-030 (Reference Schedule B, Distribution Feeder GBY-01 Refurbishment)
- Leaning poles is one of the reasons given for project need. How much pole lean is acceptable before deciding the line must be replaced?
 - Is the 14 kilometres of the line to be refurbished a continuous section and how long is the line?
 - Please provide the annual repair costs, preventive maintenance costs, and all other related costs for GBY-01 feeder line over the past 10 years.
- CA-NP-031 (Reference Schedule B, Rebuild Distribution Lines) Why is GBY-01 included in the set of distribution feeders to be inspected in 2026 with planned preventative maintenance in 2027, given that NP plans to spend \$1,360,000 on refurbishment of GBY-01 in 2027 and 2028? Was not GBY-01 fully inspected in order to determine the scope of the proposed refurbishment?
- CA-NP-032 (Reference Schedule B, Distribution Feeder GDL-02 Loop 10 and 20)
- Please provide a table showing the number of primary conductor failures and customer outage minutes per year for Loop 10 and Loop 20 from 2010 to 2026 (to date).
 - When a primary conductor failure occurs, what is the typical time required to complete repairs?
 - How are customers on either of these Loops affected by a primary conductor failure?
 - Please provide a table for the years 2015 to 2026 (to date) showing the annual cost of restoring service on Loop 10 and 20.
- CA-NP-033 (Reference 1.2 Feeder Additions for Load Growth) Page 5 states “*A preliminary cost estimate for the procurement of a battery storage solution for this application is approximately \$557,000 and would have an expected lifetime of 15 years. This corresponds to \$1,029,000 on a net-present value basis.*”
- What value does this option have in terms of the avoided cost of capacity on the IIS? Was this included in NP’s economic assessment?
 - What value does this option have in terms of avoided power purchase costs from Hydro and the generation credit given NP in Hydro’s cost of service study? Was this value included in NP’s economic assessment?

Distribution Equipment

- CA-NP-034 (Reference Schedule B, Reconstruction)

- a) Page 41 states “*Over the period 2021 to 2025, equipment-related failures on the distribution system accounted for an average of over 29,000,000 customer minutes of interruption annually.*” Please provide the corresponding data for the periods 2016 to 2020 and 2011 to 2015 for the part of the system that has and has not been reconstructed.
- b) The proposed budget of \$8,319,000 is 8.4% higher than the 2026F figure of \$7,674,000. What is the basis for this increase?
- c) Table 3 (page 42) indicates that not proceeding with the program would pose a risk of High (25). If the program were funded at 60% of the amount requested, then how would the risk assessment be impacted?

CA-NP-035

(Reference Schedule B, Replacement Transformers)

- a) How many replacement transformers were purchased in each of 2024, 2025 and 2026 and what is the number for 2027?
- b) What is NP’s current inventory of distribution transformers?
- c) The proposed budget for 2027 of \$5,573,000 is 12.5% higher than the 2026F figure of \$4,954,000. What is the basis for the large percentage increase?

CA-NP-036

(Reference Schedule B, New Transformers) How many new transformers were purchased in each of 2024, 2025 and 2026 and what is the number for 2027?

CA-NP-037

(Reference Schedule B, Relocate/Replace Distribution Lines for Third Parties)

- a) Is it NP’s policy to request contributions in aid of construction for all such requests from third parties?
- b) Will 100% of these costs be recovered from third parties?

Street Lighting

CA-NP-038

(Reference Schedule B, New Street Lighting)

- a) Table 1 (page 61) shows expenditure of \$1,856,000 in 2025 and Page 63 indicates that a low of 696 new street lights were installed in 2025. Is there any particular reason for such a low figure in 2025 relative to the other years in the table?
- b) Please provide a table showing the number of new street lights installed per year from 2022 to 2025.
- c) How much has been spent to date under this program?
- d) How many new street lights have been installed so far in 2026?

CA-NP-039

(Reference Schedule B, Replacement Street Lighting program) This program (page 64) “*involves the replacement of failed street lighting components...*” Page 66 notes that the LED Street Lighting Replacement project will be completed in 2026. In NP’s 2021 CBA, the document entitled “LED Street Lighting Replacement Plan” (page 3) states “*... in comparison to HPS fixtures, LED fixtures require ½ the number of maintenance visits and each maintenance visit is less than ½ the cost.*” And in response to CA-NP-023 (NP CBA 2026), it was stated “*opportunities to address other deficiencies are evaluated during the replacement of an HPS street light fixture*”

with an LED street light fixture. If feasible, the responding crew will make the repairs during the same site visit as the street light replacement.”

- a) With the completion of the LED Street Lighting Program in 2026, why has the 2027 cost of the Replacement Street Lighting program not declined?
- b) At half the number of maintenance visits with each visit being half the cost, why are costs not reduced by 75%?
- c) Please provide a table showing the number of street light replacements for the first six months of 2025 and for the first six months of 2026.

Portable Substation

CA-NP-040

(Reference Schedule B, Portable Substation) Page 69 states “*Increasing usage of the Company’s portable substation inventory is forecast as a result of an aging power transformer fleet, extended deployment durations following in-service failures, and growing demands associated with planned maintenance and capital programs.*”

- a) Please provide a comparison of the average age of the transformer fleet in 2010, 2015, 2020 and 2025.
- b) What are the reasons for the “extended deployment durations” following in-service failures?
- c) Why are the demands associated with planned maintenance and capital programs increasing?
- d) Given that delivery, installation, testing and commissioning is to be completed in 2029 (page 68), will it be 2030 before the portable substation will be available for deployment?
- e) How many power transformers are expected to be replaced/repared between now and when the new portable substation is expected to be available for deployment?
- f) Has Hydro’s P2 unit been deployed for NP’s purposes? If so, please provide details.
- g) Has there been any occasions when all portable substations, including Hydro’s P2 portable substation, have been deployed simultaneously?

CA-NP-041

(Reference 2.3 – Portable Substation) Page 5 states “*Each power transformer replacement is expected to require a portable substation to remain in service for approximately four to ten weeks depending on the scope of work and offload capability. In addition to transformer replacement activities, the project scopes may include new spill containment systems and upgrades to the existing protection and control systems.*”

- a) Could NP reduce the number of annual transformer replacements (i.e., from 3 per year to 2 per year), and the number of capital projects?
- b) Please quantify the probability of insufficient emergency response capability.
- c) Please identify the number of service interruptions greater than 24 hours, and alternatively 36 hours, following a transformer failure in each of the past 10 years.
- d) How many portable substations do small/medium distribution companies typically carry?
- e) Why is the procurement of one portable substation adequate versus two/three?

Transmission Lines and Substations

CA-NP-042

(Reference Schedule B, Transmission Line Maintenance)

- a) In footnote 38 (page 110), it is stated that in 2023 labour costs previously included in GEC were allocated to this program. Please clarify the effect of that allocation on the figures in Table 1. In particular, was the approximate \$1 million increase in the 2023 figure compared to 2022 the result of that allocation? And was that allocation on a one-time basis or does it continue annually?
- b) Please explain why the 2026F figure of \$3,306,000 is approximately 13.6% higher than the 2025 inflation-adjusted figure of \$2,909,000.
- c) The requested amount of \$3,465,000 is approximately 10% higher than the average annual adjusted cost of \$3.1 million over 2022 to 2026F (page 110). Please explain this increase.
- d) Please provide the annual expenditure on the Transmission Line Maintenance program and on the Transmission Line Rebuild Strategy since 2006.
- e) How has the completion of work since 2006 through NP's Transmission Line Rebuild Strategy affected the cost of the Transmission Line Maintenance program?

CA-NP-043

(Reference 2.1 – 2027 Substation Refurbishment and Modernization) Page 21 states *“For 2027, Newfoundland Power is proposing to refurbish and modernize BLK, RBK, and MOP Substations.”*

- a) For each of these substations, please provide a table showing all capital and maintenance expenditures for each of the past 10 years.
- b) For each of these substations provide a table showing each outage event at these substations over the past 10 years including the number of customers with service interruptions and the time interrupted.
- c) Please quantify the risk of delaying the Blaketown and Rattling Brook projects by three years and identify the savings if the projects were to be delayed three years.
- d) Please quantify the risk of delaying by three years the Substation Refurbishment and Modernization Plan, which includes the refurbishment and modernization of 14 substations over the next five years.
- e) Please provide data for the Substation Refurbishment and Modernization Plan showing that the plan has provided reliability improvements and cost savings.
- f) Why was NP not aware that the new transformer had a larger footprint than the existing Mobile Plant transformer MOP-T1?

CA-NP-044

(Reference 2.2 – Substation Power Transformer Strategy) It is stated (page 11) *“For 2027, Newfoundland Power is proposing capital projects to replace LAU-T1, LBK-T1, HAR-T1 and RRD-T3.”*

- a) For each of these transformers provide a table showing all capital and maintenance expenditures for each of the past 10 years.
- b) For each of these transformers provide a table showing each outage event over the past 10 years including the number of customers with service interruptions and the time interrupted.
- c) For each of these transformers please quantify the risk associated with a 3-year

project delay.

- d) Is the Remove and Repair alternative still relevant? How many transformers in the past 10 years has NP pursued the Remove and Repair alternative?
- e) Does the extended lead time for transformer replacement improve the economics of the Remove and Repair alternative?
- f) Does purchasing an increasing number of spares and mobile substations enable extended lives of transformers; e.g., run to failure?
- g) What is the scrap value of a transformer?
- h) Appendix C-4 states “*Newfoundland Power has three portable substations and two spare power transformer that can be used for emergency response to an in-service failure of HAR-T1.*” Does this level of backup suggest the transformer can remain in service beyond 2029?

CA-NP-045

(Reference 2.2 – Substation Power Transformer Strategy-Appendix B). Regarding the proposed LBK-T1 Power Transformer Replacement:

- a) Page B-8 indicates that this substation work is being advanced from 2032 to 2027 due to the condition of the power transformer. Where the transformer has only required minimal maintenance in 1996 and in 2009 (Attachment B), please explain how its condition has deteriorated so much since the 2024 Capital Budget Application that advancement by 5 years is required.
- b) The Normal Degradation Index for LBK-T1 is 0.29 (page B-2), which is only slightly greater than the 0.25 level that suggests further scrutiny and substantially below the crucial threshold of 0.60 and below the values for the other proposed power transformer replacements at 0.58, 0.65 and 0.57 for LAU-T1, HAR-T1, and RRD-T3, respectively. According to this metric, are not the other three more urgent?
- c) Page B-8 indicates that an updated lifecycle cost analysis of the Lookout Brook hydro plant has been completed and justifies this project. Please provide a copy of that analysis.
- d) Please provide a table showing the annual capital, operation and maintenance, and other expenditures on the Lookout Brook hydro plant, including the LBK substation and related infrastructure for 2015 to 2025 with forecasts for 2026 to 2030.
- e) It is indicated that if LBK-T1 failed then the Lookout Brook plant would not be able to supply its 5.889 MVA during system peak.
 - i. For each of the past five years, how much capacity has the plant supplied at system peaks?
 - ii. For how long can the plant operate at its maximum capacity?
- f) How many customers are served by the LBK substation and where are they located?
- g) Is the sole purpose of the LBK substation to serve the Lookout Brook hydro plant?
- h) Is the Flat Bay Brook Road to the Lookout Brook hydro plant a public access road or a Hydro owned road?
- i) Is the bridge owned by NP and is it used by any other parties or is it solely for NP’s use?
- j) Page 117 indicates that the bridge replacement is needed because the current one is not sufficient for the load associated with delivery of the proposed replacement

power transformer for the plant's substation. If the LBK-T1 Power Transformer Replacement project were not approved then would there be any need for this bridge replacement?

- k) Why was not this bridge replacement included with the LBK-T1 power transformer as a single project?

CA-NP-046

(Reference 2027 Capital Budget Overview and Schedule B) Several programs in the 2027 Capital Budget, including Rebuild Distribution Lines, Reconstruction, Replacement Transformers, and Replacements Due to In-Service Failures, are justified in whole or in part by the age and deterioration of NP's assets.

- a) For each major asset class (wood poles, distribution transformers, power transformers, overhead conductor, underground cable, breakers and reclosers, and street lighting fixtures), please provide in working Microsoft Excel format the number of units currently in service by age band (0–5, 6–10, 11–15, 16–20, 21–30, 31–40, 41–50, 51+ years).
- b) For each of the past ten years, please provide the number of in-service failures by asset class and by the same age bands, including the age of each failed unit at the time of failure, in a format permitting the calculation of a failure rate (failures per unit in service) by age band.
- c) For each asset class, please provide the age at replacement of units replaced in each of the past ten years, distinguishing between (i) replacements due to in-service failure and (ii) planned or condition-based replacements.
- d) Please provide any hazard-rate, survivor-curve, or other analysis NP has performed correlating asset age or condition with failure probability. Where no such analysis exists for an asset class, please state so explicitly.

Hydro Generation

CA-NP-047

(Reference 3.1 – Rose Blanche Hydro Plant Refurbishment)

- a) Why is a plant that was commissioned in 1998 in such poor condition?
- b) Please provide reliability and cost data supporting the need for this project.
- c) What is the value of the plant based on avoided power purchase costs from Hydro and the NP hydro generation credit included in Hydro's cost of service study?
- d) Please quantify the risk of failure over the next 3 years.
- e) It is stated (page 10) "*the governor oil cooler and auxiliary power unit do not effectively function as required.*" Have they ever functioned as required?

Information Systems

CA-NP-048

(Reference Schedule B, Information Systems) With respect to Artificial Intelligence (AI):

- a) What consideration has NP given to using AI chatbots and virtual agents to reduce call centre staffing requirements, and how, if at all, is that reflected in the 2027 CBA?

- 1 b) What consideration has NP given to AI reducing costs of cybersecurity and how,
 2 if at all, is that reflected in the 2027 CBA?
 3 c) What consideration has NP given to AI efficiency gains in grid operations and
 4 field services through predictive maintenance (eg. predicting equipment failures)
 5 and cutting down on emergency response mechanisms; and how, if at all, is this
 6 reflected in the 2027 CBA?
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8 CA-NP-049

(Reference Schedule B, Application Enhancements) Page 142 states “*The application enhancements identified for 2027 will advance operational efficiency and provide cost savings for customers.*” Please quantify the cost savings.
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DATED at St. John’s, Newfoundland and Labrador, this 6th day of July, 2026.

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Per:

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