Office of the Consumer Advocate

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August 9, 2023

Board of Commissions of Public Utilities 120 Torbay Road P.O. Box 2140 St. John's, NL A1A 5B2

Attention: G. Cheryl Blundon, Director of <u>Corporate Services / Board Secretary</u>

Dear Ms. Blundon:

Re: Newfoundland Power Inc. - 2024 Capital Budget Application – Requests for Information <u>CA-NP-001 to CA-NP-147</u>

Further to the above-captioned, enclosed are the Consumer Advocate's Requests for Information numbered CA-NP-001 to CA-NP-147.

If you have any questions regarding the enclosed, please contact the undersigned at your convenience.

Yours truly,

PANOINO

Dennis Browne, KC Consumer Advocate

Encl. /jm

cc <u>Newfoundland Power Inc.</u> Dominic J. Foley (<u>dfoley@newfoundlandpower.com</u>) Liam O'Brien, (<u>lobrien@curtisdawe.com</u>) NP Regulatory (<u>regulatory@newfoundlandpower.com</u>) <u>Newfoundland & Labrador Hvdro</u> Shirley Walsh (<u>ShirleyWalsh@nlh.nl.ca</u>) NLH Regulatory (<u>nlhregulatory@nlh.nl.ca</u>) Board of Commissioners of Public Utilities PUB Official Email (ito@pub.nl.ca) Colleen Jones (cjones@pub.nl.ca) Jacqui Glynn (jglynn@pub.nl.ca) Maureen Greene (mgreene@pub.nl.ca) **IN THE MATTER OF** the *Public Utilities Act* (the "*Act*");

AND

IN THE MATTER OF capital expenditures and rate base of Newfoundland Power Inc.;

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 2024 Capital Budget; and (b) fixing and determining its 2022 rate base.

CONSUMER ADVOCATE REQUESTS FOR INFORMATION CA-NP-001 to CA-NP-147

Issued: August 9, 2023

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	CA-NP-001	 (Reference Cover Letter to Application) It is stated "Amendments to the Public Utilities Act (the "Act") became effective in May 2023. Regarding section 41 of the Act, the amendments provide that a utility shall not proceed with any improvement or addition to its property where the cost exceeds \$750,000 without prior approval of the Board." a) Please provide Newfoundland Power's (NP's) interpretation of this change in legislation. Specifically, can Newfoundland Power proceed with any project that costs less than \$750,000 without first gaining Board approval, and is pass-through of the cost of such projects to customers guaranteed whether or not the project is shown to be prudent? How will the prudence of such projects be audited? Will Board approval be required for such spending to be included in rate base? b) How will the \$750,000 threshold be applied; e.g., to individual projects, projects that are a component of a larger program, projects that might be a component of a larger project; e.g., replacement of a faulty breaker at a substation that is undergoing refurbishment?
17 18 19 20 21 22 23 24 25 26 27 28 29 30	CA-NP-002	 (Reference Application) Please confirm that NP is requesting Board approval of capital expenditures totaling \$120,042,000 in the 2024 Capital Budget Application which includes \$19,711,000 that would be expended in 2025 and 2026. Please confirm that NP proposes a capital spend of \$115,252,000 in 2024 (includes previously approved projects). a) Please identify any other capital expenditures that are not included in these figures such as the proposed MUN-T2 transformer replacement. b) NP indicates (Application, para. 3) that in 2024 it intends to demand \$2.5 million in contributions in aid of construction from its customers. Does this mean that of the \$115,252,000, the amount of \$112,752,000 (i.e., \$115,252,000 - \$2,500,000) will affect rate base and that the \$2.5 million will not affect rate base?
31 32 33 34 35 36 37	CA-NP-003	(Reference Application) Please provide a table of annual values from 1993 to 2022 for the following items: NP's net plant investment, NP's rate base, number of NP's 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.
38 39 40 41 42 43 44	CA-NP-004	(Reference Application) Please provide a table of the annual values from the years 1993 to 2024 for the following items: NP's total capital expenditure, the GDP deflator, NP's total capital expenditure expressed in real terms using the GDP deflator, the number of NP customers, NP real capital expenditures per customer. (For 2023 and 2024 use the Conference Board of Canada's forecast for GDP deflator; for 2023 use NP's estimate of total spending and for 2024 use NP's 2024 CBA figures.)

1 2 3 4 5 6 7 8 9	CP-NP-005	 (Reference Application For the years 1993 to 2024 (with estimates for 2023 and 2024), please provide the following: a) A table showing the total number of NP customers by customer class, with the Domestic customers decomposed by regular and all electric. b) A table showing the annual total sales, in MWh, to each group of customers as requested in a). c) A table showing the annual total sales, in MWh, per customer for each group of customers as requested in a).
10 11 12	CA-NP-006	(Reference Application) Please confirm that the 2024 capital budget application does not include any costs for electrification programs.
12 13 14 15 16 17 18	CA-NP-007	(Reference Application) Please provide a table showing for each of the past 25 years the capital budget amounts proposed by NP in its capital budget applications, the corresponding amounts approved by the Board, and identifying the specific projects and budget amounts that were not approved along with the reasons given by the Board for rejecting the capital expenditure(s).
20 21 22 23	CA-NP-008	(Reference Application) Please provide a list of the dates for all oral/public hearings that the Board has held on NP's capital budget applications in the past 25 years.
24 25 26 27 28 29 30 31 32	CA-NP-009	 (Reference Application) If the Board were to authorize a fixed amount of capital expenditure(s) by NP in 2024 that is less than the amount requested and if the Board were to do so without rejecting any particular proposed capital expenditure(s), then: a) Would NP have the judgement, expertise and tools to determine what of its proposed 2024 capital expenditures can be accommodated within that fixed amount considering both work priority and execution capability? b) Would NP proceed with projects according to its prioritization plan?
33 34 35 36	CA-NP-010	(Reference Application) Please provide all documented communication between NP's senior management and line managers with respect to the 2024 CBA relating to prioritization and cost efficiencies.
 37 38 39 40 41 42 43 	CA-NP-011	Board Order No. P.U. 36(2021)) The Board, in Order No. P.U. 36 (2021) "acknowledged 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."

1 2 3 4 5 6		 a) Please confirm and explain NP efforts to reduce costs for customers in light of rate pressures brought on by Muskrat Falls. b) Please provide any documentation from NP senior management to line managers with respect to the 2024 CBA relating to budget control in light of rate pressures brought on by the Muskrat Falls Project.
7 8 9	CA-NP-012	(Reference Application) What changes has NP made to its asset management plan and practices since filing its 2023 Capital Budget Application?
10 11 12 13 14 15	CA-NP-013	(Reference Application) Please provide a summary of all benchmarking exercises performed by NP relating to costs and performance that have been incorporated in the 2024 Capital Budget Application. Specifically, please show how Newfoundland Power spending and performance compare to a peer group and provide relevant information on each peer included in the group.
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41	CA-NP-014	 (Reference Application) In the 2024-2028 Capital Plan it is stated (page 2) "Newfoundland Power's investment priorities and five-year capital plan reflect the capital expenditures necessary to meet its statutory obligations under the Public Utilities Act and Electrical Power Control Act, 1994." The 2024 Capital Budget Overview (page 2) states "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." a) If the Board were to order any amount less than the amounts requested in the 2024 CBA, would NP be able to meet its statutory obligations under the provincial legislation? b) Specifically, what is NP's mandate? c) Please provide NP's definition of "reliable service" and all reliability criteria used to define "reliable service". d) Please provide NP's definition of "environmentally responsible manner". e) Did NP incorporate the requirement that projects be undertaken in an environmentally responsible manner? Please cite such references. For example, with respect to the Substation Refurbishment and Modernization Plan it is stated (page 21) "Implementing this plan allows the Company to maintain the overall condition of its substation assets in a manner that provides efficiency and service benefits for customers." Does NP propose to do so in an environmentally responsible manner? f) Is it a requirement under current provincial legislation and the Provisional Capital Budget Application Guidelines that NP provide service commensurate with the value its customers place on service, or does NP decide what constitutes reliable service on its own without consulting outcomers?

1 CA-NP-015 (Reference Application) The Midgard report titled Capital Budget Application 2 Guideline Review filed with the Board on October 29, 2020 states (page 61): 3 "declaring that a project went to competitive tender as evidentiary justification for meeting least cost reliable services does not address key 4 5 Board questions such as "At what unit cost are system reliability and risk profile improved by the project", "Does the ratepayer value the improvement 6 7 in system reliability and risk reduction more than the project cost?, and "How 8 cost effective are the proposed improvements in system reliability and risk reduction compared to other budget items being proposed and other 9 alternatives that are available?" 10

Has NP provided answers to these questions in the 2024 CBA? If so, please provide all references.

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- 15 CA-NP-016 (Reference Application) How has NP ensured that its 2024 Capital Budget provides an appropriate balance between reliability, environment, rate 16 impacts, and the value customers place on service? Has NP conducted a 17 customer engagement process and incorporated the results in its 2024 Capital 18 19 Budget Application, or any other Capital Budget Application in recent years? If so, please provide customer surveys and documentation relating to customer 20 feedback that NP has relied upon to determine the appropriate balance between 21 reliability, environment, rate impacts, and the value customers place on 22 service, and please provide specific references to customer input and feedback 23 used in the development of the 2024 Capital Budget Application. 24
- 26CA-NP-017(Reference Application) Please confirm that NP has not determined the risk27mitigation value provided by its asset management program (i.e., the28difference between baseline risk and residual risk) used in the development of29the 2024 CBA.
- CA-NP-018 (Reference Application) Please confirm that NP has not quantified the
 reliability improvement resulting from its asset management program used in
 the development of the 2024 CBA.
- 35 CA-NP-019 (Reference Application) Please provide a summary of all laboratory testing
 36 conducted by NP in the 2024 Capital Budget Application to verify the need
 37 for asset replacement.
- 39 CA-NP-020 (Reference Application) What is the overall improvement in productivity
 40 stemming from the projects included in the 2024 Capital Budget Application?
 41 Please identify the expected cost savings and provide an estimate of the impact
 42 on rates.

1 2 3 4	CA-NP-021	(Reference Application) Please provide a detailed calculation of the cost to own and operate NP's hydro facilities, and the amount of money recovered annually from customers attributable to NP's hydro generation facilities.
5 6 7	CA-NP-022	(Reference Application) Please provide a copy of all studies relating to the retirement of NP's hydro generation facilities.
8 9 10 11 12	CA-NP-023	(Reference Application) What is the current status of the new customer service system? When can customers expect to start realizing the benefits, and what level of cost savings can customers expect from the new customer service system?
12 13 14 15	CA-NP-024	(Reference Application) Please provide an update on studies relating to NP's capital structure and the appropriate split between debt and equity.
16 17 18	CA-NP-025	(Reference Application) Please provide an update on the load research study relating to the impact of conversions from electric baseboard heating to heat pumps.
20 21 22 23	CA-NP-026	(Reference Application) Please confirm that the Board has the authority to take into consideration the current economic climate in the province in its decisions and orders. Has the Board ever done so?
23 24 25 26 27 28 29 30	CA-NP-027	(Reference Application) Please provide for the record a copy of NP's distribution planning guide explaining its planning approach, how integrated resource planning is incorporated including distributed generation and renewable forms of generation, how reductions in harmful environmental emissions are accounted for, and how planning is influenced by government zero-carbon efforts.
31 32 33 34	CA-NP-028	(Reference Application) Please provide for the record a copy of NP's connection policy, for both new and existing customers, and for each customer class.
35 36 37 38 39 40 41 42 43	CA-NP-029	 (Reference Application) With respect to the General Service Rate 2.4 customer class: a) Currently, how many customers does Newfoundland Power serve in the General Service Rate 2.4 class, what is the total annual capacity and energy used by the class, and what is the average annual capacity and energy use per customer in that class? b) Currently, excepting Memorial University from the Rate 2.4 customer class, what is the total annual capacity and energy used by the class and what is the average capacity and energy use per customer in the class?

1 2 3 4 5 6 7		 c) In this class, how much of the total annual capacity and energy use is attributed to Memorial University? d) Is Memorial University considered to be an average user in the Rate 2.4 customer class? If not, why not? e) What criteria are used to classify a customer as a General Service Rate 2.4 customer and explain how Memorial University fits those criteria?
8 9 10 11 12 13 14 15 16 17 18 19 20	CA-NP-030	 (Reference Application) For each General Service Rate 2.4 customer, please identify the following with respect to its point of supply: a) The transmission/distribution lines serving the customer's substation, including designation (e.g., Line 5L), voltage level, and transfer capacity. b) The substation serving the customer including designation and number of customers served by the substation (in addition to the Rate 2.4 customer). c) The transformers at the substation serving the customer and any other customers including designation, voltage level, maximum loading, and number of customers served by the transformer (in addition to the Rate 2.4 customer). d) A single line diagram showing the customer's connection facilities.
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35	CA-NP-031	 (Reference Application) For each General Service Rate 2.4 customer, please provide: a) The connection agreement with the customer. b) The operating and maintenance costs incurred in each of the last five years on the connection facilities that benefit only that customer. c) The amount of capital spent in each of the past five years on the connection facilities that benefit only that customer. d) The amount of capital included in the 2024 Capital Budget Application in 2024 and through to 2028 that is proposed to be spent on the connection facilities that benefit only that customer. e) The amount of capital and operating and maintenance cost that has been recovered in each of the past 5 years, and the amount that is proposed to be recovered through 2028, directly from Rate 2.4 customers that are benefitting from the dedicated supply facilities.
 36 37 38 39 40 41 42 43 44 	CA-NP-032	 (Reference Application and Board Order P.U. 14(2023)) In Order No. P.U. 14(2023) (page 4), it is stated "<i>The Board notes that General Service customers are supplied through a single supply point which is included in Newfoundland Power's cost of service and funded by all ratepayers.</i>" a) Does NP agree with this statement? Please elaborate. b) Are the supply points of all General Service customers the same? Specifically, are all supply points to General Service customers expected to provide comparable levels of reliability? Are any of these supply points shared with other customers?

1 2 3		c) Please provide reliability statistics for the supply points of each General Service Rate 2.4 customer.
4 5 6 7 8 9	CA-NP-033	(Reference Application and Board Order P.U. 14(2023)) In Order No. P.U. 14(2023) (Page 3), the Board states "Newfoundland Power has a limited fleet of portable substations and cannot install one at the Memorial Substation until 2024 without compromising the availability of portable units to maintain service to customers during substation maintenance, capital projects, and equipment failures."
10 11 12 13		a) What is the purpose of the portable substations?b) Has NP ever deployed a portable substation even though by doing so it would compromise the ability to maintain service to customers during substation maintenance?
14 15 16		 c) Please provide a table identifying each occasion over the past five years that a portable substation has been deployed, the start and end dates of the deployment, and the reason for the deployment.
17 18 19		d) Please provide a table illustrating the number of portable substations NP has purchased over the previous ten years, and the cost of each.
20 21 22 23 24 25 26	CA-NP-034	(Reference Application and Board Order P.U. 14(2023)) In Order No. P.U. 14(2023) (Page 5), it is stated "the Board accepts the evidence that the Substation Replacements Due to In-Service Failures program would not accommodate work of the magnitude required to replace MUN-T2 as diverting funds from this project would impact the expenditures for substation equipment failures that require immediate attention to maintain reliable supply to customers."
27 28 29 30		 a) Is this statement correct? Was it not possible for NP to accommodate this work under the Substation Replacements Due to In-Service Failures program? Is it more accurate to say that NP preferred not to divert funds to this project? Please explain.
31 32 33		b) Would not any project under this program regardless of the cost "impact the expenditures for substation equipment failures that require immediate attention to maintain reliable supply to customers"?
34		c) What is the purpose of the "Substation Replacements Due to In-Service
35		<i>Failures</i> " program?
30 27		a) Can cost overages for this program be recovered under a project variance?
38		much money has been expended on the project to date? Could the project
39		have been deferred until the 2024 Capital Budget? What impact did the
40		filing of a supplemental capital budget application for the MUN-T2
41		replacement have on regulatory costs and efficiency?
42		f) By submitting a supplemental capital budget application for the MUN-T2
43		transformer replacement rather than incorporating it under the Substation

Replacements Due to In-Service Failures program, will NP increase its rate base and profits?

- g) The Board states "the Substation Replacements Due to In-Service Failures program would not accommodate work of the magnitude required to replace MUN-T2." What magnitude of work can be accommodated under the Substation Replacements Due to In-Service Failures program? At what cost level, or percentage of approved cost level, does NP decide that an inservice failure will not be included under the Substation Replacements Due to In-Service Failures Due to In-Service Failures and 2024 CBAs relating to the cost of projects that can be incorporated under the program.
- h) Please identify each occasion in the past ten years when an in-service
 failure at a substation was not covered under the *Substation Replacements Due to In-Service Failures*" program owing to cost.
 - i) Please provide a table identifying each project over the past five years that has been covered under the *Substation Replacements Due to In-Service Failures*" program, the timing, the cost, and the percentage of the cost relative to the cost approved for the program in that year.
- 20CA-NP-035(Reference Application and Board Order P.U. 14(2023)) In Order No. P.U.2114(2023) (Page 6), the Board states "The 25 MVA power transformer which22will be purchased provides the maximum coverage and risk mitigation for in-23service power transformers."
 - a) Does NP agree with this statement? Please elaborate.
 - b) Please provide the evidence and source that supports the Board's statement that a 25 MVA transformer spare "*provides maximum coverage and risk mitigation for in-service power transformers*".
 - c) Has NP taken delivery of the 25 MVA transformer? And if not, when does NP expect delivery to take place? Please provide the final cost of same and how that cost compares to budget.
- 32 CA-NP-036 (Reference Application and Board Order P.U. 14(2023)) In Order No. P.U.
 33 14(2023) (Page 5), it is stated "Newfoundland Power's approved cost of 34 service and customer rates do not currently provide for specifically-assigned 35 charges for general service customers. Such a significant change would 36 require a full review of Newfoundland Power's cost of service and customer 37 rates with the input of stakeholders, likely in a general rate application."
 38 Did NP submit evidence that it would be necessary to wait until there is a
 - a) Did NP submit evidence that it would be necessary to wait until there is a general rate application (GRA) before the cost of the MUN-T2 transformer replacement could be charged to the university? If so, please provide the source.
 - b) Will NP request a full review of specifically-assigned charges at its next GRA, at least for General Service Rate 2.4 customers, to ensure consistency between the treatment of its customers and those of NL Hydro?

1 2		c) When does NP expect to file its next GRA?
3 4 5 6 7 8	CA-NP-037	(Reference Application and Board Order P.U. 14(2023)) In Order No. P.U. 14(2023) (Page 5), it is stated " <i>The Board notes that maintaining the Memorial Substation as a primary point of supply and the Long Pond Substation as a special facility is consistent with the cost of service methodology accepted by the parties in Newfoundland Power's most recent General Rate Application and approved by the Board in Order No. P.U. 3(2022).</i> "
9 10		a) Does NP agree with this statement? Please identify evidence filed by NP that supports the statement as reason for charging the cost of the MUN T-
11		2 transformer replacement to all customers rather than only Memorial
12		University, the sole customer that benefits from the transformer.
13		of current retail rates? Are the unit costs derived in the cost of service study
15		reflected in current rates? Please elaborate.
16		c) Specifically, what is the purpose of the cost of service study? Were all costs
17		included in the cost of service study agreed to by all parties participating in the GRA2
19		
20 21	CA-NP-038	(Reference Application Schedule B, page i) It is stated "Newfoundland Power has met the information requirements of the Provisional Guidelines when the
22		required information is available."
23 24		a) Please confirm that this same statement was made in the 2023 CBA (Schedule B page i)
24 25 26		b) Please provide a table identifying the information that is not available and include an explanation of why it is not available.
27 28		c) Is NP requesting the Board to provide a provisional approval of the projects in the 2024 CBA until it can provide the information?
29 30 31		d) Does NP expect the Board to approve a project when the conditions set out in the Provisional Capital Budget Application Guidelines have not been met?
32 33 34		e) Is the Board in a position to approve a project when the information requirements set out in its Provisional Guidelines are not met?
35 36 37 38	CA-NP-039	(Reference Application Schedule B, page ii) It is stated "The Company is currently undertaking a review of its asset management practices that, among other matters, will evaluate options to meet the information requirements contained in the Provisional Guidelines."
 39 40 41 42 43 		 a) Please confirm that a similar statement was made in NP's 2023 CBA. b) Please identify each step that NP has taken since filing the 2023 CBA toward meeting the requirements of the Provisional Guidelines. c) Please provide details of this asset management practices review including schedule for completion and when it is expected to be implemented.

1 2 3 4 5 6 7 8 9 10 11	CA-NP-040	 (Reference Application Schedule B, page iii) It is stated "Newfoundland Power does not currently have the data or software necessary to provide calculations of risk mitigation or reliability improvement." a) Why not? Are risk mitigation and reliability valued by customers? How do they rank relative to other customer priorities? Have they always been ranked high by customers? b) Please confirm that the risk matrix shown in Figure 1 does not meet the requirements set out in the Provisional Guidelines relating to the calculation of risk mitigation and reliability improvement. c) Please identify all changes that have been made to the risk matrix since the 2023 CBA.
13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	CA-NP-041	 (Reference Application Schedule B, page ii) It is stated "While Newfoundland Power does not use estimate classifications, as referenced in the Provisional Guidelines, budget estimates for projects and programs are expected to be accurate within a range of plus or minus 10%." a) Please confirm that this same statement was made in NP's 2023 CBA (Schedule B, page ii). b) Please confirm that NP has made no changes to its budget estimating process since filing the 2023 CBA. c) Specifically, what estimate classifications referenced in the Provisional Guidelines are not being met in the Application? d) How can the Board be expected to decide that all projects are "accurate within a range of plus or minus 10%" when NP has not provided the estimate classifications required in the Provisional Guidelines? e) Should the Board order that any cost overruns exceeding 10% are not prudently incurred and pass-through to consumers will not be allowed? f) Does Newfoundland Power's estimation approach encourage development of project cost estimates that are on the high side?
31 32 33 34 35 36 37 38 39 40 41 42 43 44	CA-NP-042	 (Reference Application Schedule B, page ii) It is stated "In Newfoundland Power's view, trends for individual programs can be reasonably observed in total program costs over time. The Program Trend sections therefore provide graphs of five-year historical, current budget year, and five-year forecast expenditures for each program." a) Please confirm that this statement was also made in NP's 2023 CBA (Schedule B, page ii) b) Please confirm that NP's method of "trending" is to use the five-year average. c) Does trending in the manner proposed by Newfoundland Power take account of the impacts of new technology and efficiency improvements on productivity and costs? d) If program A had annual inflation-adjusted costs of \$2 million, \$4 million, \$6 million, \$8 million and \$10 million in years 1 to 5 respectively, and if

1 2 3 4 5 6 7		 program B had annual inflation-adjusted costs of \$10, \$8 million, \$6 million, \$4 million and \$2 million in years 1 to 5 respectively, and program C had annual inflation-adjusted costs of \$6 million in each of the 5 years then, according to NP's methodology, do all three programs have the same trend? e) In the Program Trends sections, how can the forecast components, which are based on the average of five historical years, represent part of a trend?
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	CA-NP-043	 (Reference Application Schedule B, page ii) It is stated "Where quantitative information is not available, qualitative assessments based on engineering judgment have been provided. For projects over \$5 million, more detailed information is provided in reports prepared by Professional Engineers or other qualified experts." a) Please confirm that this same statement was made in NP's 2023 CBA. b) Excluding NP staff, what other qualified experts have prepared reports associated with the 2024 Capital Budget Application? c) Please confirm that this approach is essentially unchanged from that used by NP in its recent capital budget applications. d) Are the "professional engineers or other qualified experts" referenced by NP able to quantify risk? If not, why has NP hired "professional engineers and other qualified experts" who do not have the expertise to quantify risk when it is a requirement under the Provisional Guidelines?
24 25 26 27 28 29 30 31 32 33 34 35 36	CA-NP-044	 (Reference Application Schedule B, page iii) It is stated "The Assessment of Alternatives sections discuss only those alternatives the Company has identified as relevant, and are provided for projects and programs in excess of \$1 million, with the exception of expenditures classified as Access". a) Please confirm that this same statement was made in NP's 2023 CBA and that there has been no change in approach in the 2024 CBA. b) What criteria has Newfoundland Power used to determine if an alternative is "relevant"? Are environmental impacts one such criterion? c) How has NP incorporated future trends in its assessment? Specifically, has NP considered sensitivity studies relating to shorter asset lifespans in the event that new environmentally sensitive options become available in, for example, the next 5 years?
 37 38 39 40 41 42 	CA-NP-045	 (Reference Application Schedule B, page iii) It is stated "To comply with the spirit and intent of the Provisional Guidelines, the Company developed a methodology to provide consistency in its assessment of risks across projects and programs. The methodology uses a risk matrix where priority is determined based on assessments of probability and consequence." a) Please confirm that this same statement was made in NP's 2023 CBA.

b) Does the consequence of a failure change materially over time? For 1 2 example, is the consequence of the failure of MUN-T2 the same whether 3 the project is carried out now, 5 years from now, or 5 years ago? 4 c) Does the probability of failure change materially over time given NP's 5 inability to quantify the difference in risk of equipment failure between 6 now, 3 years from now, or 3 years ago? 7 d) Is this practice consistent with that used by distribution companies 8 elsewhere in Canada? Is it consistent with the approach used by Hydro? 9 e) What other prioritization methodologies are used by distribution 10 companies in Canada? f) Are there other means for prioritizing projects that do not require a 11 significant amount of subjectivity as that used in the proposed 12 13 methodology? 14 g) Specifically, who at NP determines the priority of a project and how does NP ensure that it is applied consistently across the broad range of projects 15 included in the Application? 16 17 (Reference Application Schedule B, page iv) It is stated "Newfoundland 18 CA-NP-046 Power also considered risks of assets becoming stranded for each proposed 19 project and program". How did NP incorporate the risk of an asset becoming 20 stranded owing to new technology, new environmental regulations such as 21 zero-carbon policies, distributed generation, rate design, etc., or owing to a 22 significant rate increase resulting from Muskrat Falls? Have the potential 23 24 results of the retail rate design review been incorporated, and if so, how? 25 (Reference Application Schedule B, page iv) It is stated "Newfoundland 26 CA-NP-047 Power submits that overall the Application includes comprehensive 27 information that clearly describes the Application's proposals and 28 demonstrates that all proposed capital expenditures are necessary to provide 29 customers with access to safe and reliable service at the lowest possible cost." 30 31 a) Please confirm that this same statement was made in NP's 2023 CBA. b) Please confirm that the projects included in the application have not been 32 discussed with customers in terms of service improvement versus cost, and 33 impact on the environment. 34 35 36 CA-NP-048 (Reference Application, 2024 Capital Budget Overview, page 2) It is stated "The capital expenditures proposed as part of Newfoundland Power's 2024 37 Capital Budget Application (the "Application") are necessary to meet its 38

39statutory obligations under the Public Utilities Act and the Electrical Power40Control Act, 1994." Are the Board's Provisional Capital Budget Application41Guidelines consistent with legislation and the need to ensure projects are42carried out in an environmentally responsible manner?

1 2 3 4 5	CA-NP-049	(Reference Application, 2024 Capital Budget Overview, page 5) It is stated "Newfoundland Power owns and operates approximately 9,500 kilometres of distribution line, approximately 2,100 kilometres of transmission line, 131 substations, 23 hydro generating plants and six thermal generating plants to serve its customers."
6 7		a) How many transmission lines are dedicated to serving a single customer? Please identify the benefiting customer
8		b) How many distribution lines are dedicated to serving a single customer?
9		Please identify the benefiting customer.
10 11		c) How many of the 131 substations serve a single customer? Please identify the benefiting customer.
12 13		d) In the above cases, how are operating and maintenance costs allocated to the single benefiting customers?
14 15 16		e) In the above cases, how are capital costs allocated to the single benefitting customers?
10 17 18 19 20	CA-NP-050	(Reference Application, 2024 Capital Budget Overview, page 5) It is stated "National construction standards are applied to ensure the Company's electrical system is constructed and maintained to withstand local climatic conditions"
20 21 22 23 24 25		a) Have the standards been revised, or is there a plan to revise the standards to take into consideration global warming impacts?b) Has NP made changes to its operation, maintenance and design practices and standards to incorporate global warming impacts?
25 26 27 28 29	CA-NP-051	(Reference Application, 2024 Capital Budget Overview, Figure 1, page 6) Please reproduce Figure 1 based on rolling 5-year averages of SAIDI and SAIFI.
29 30 31 32 33 34 35 36 37 38 39 40 41	CA-NP-052	 (Reference Application, 2024 Capital Budget Overview, pages 7 and 8) It is stated (page 8) "<i>The average duration of customer outages has been approximately half the Canadian average since 2013.</i>" a) Please provide an estimate of what it is costing customers to have reliability (SAIDI) that is about twice as good as the Canadian average and provide documentation indicating customer willingness to pay for this increased reliability. b) Are the results shown in Figure 2 impacted by weather in the province relative to weather in other provinces? c) Are the results shown in Figure 2 impacted by staff levels dedicated to outage response? d) Please reproduce Figures 2 and 3 based on rolling 5-year averages.
42		e) What SAIDI/SAIFI targets are set by the Board?

1 2 3 4 5 6 7 8	CA-NP-053	(Reference Application, 2024 Capital Budget Overview, page 8) It is stated "Newfoundland Power is focused on maintaining current levels of overall service reliability for its customers under normal operating conditions. The Company's annual targets for service reliability are based on the most recent five-year average." Does Hydro have information on customer trade-offs between cost and reliability, and does the information include NP customers? If so, was it incorporated in NP's 2024 Capital Budget process?
9 10 11 12 13 14 15 16	CA-NP-054	 (Reference Application, 2024 Capital Budget Overview, page 8) It is stated "While overall levels of service reliability are viewed as acceptable, customers in certain areas experience service reliability that is considerably below Newfoundland Power's corporate average." a) Is it inevitable that some customers have reliability that is below "average"? b) Do some customers have reliability that is average or below average to below average to below average to below average to below the provide that is average or below average to below the provide that the provide that is average or below average to below the provide that the provide the provide that the provide that the provide the provide that the provide the provide that the provide that the provide the provide that the provide the provide
17 18 19 20		subsidize customers who are receiving reliability that is above average?c) How many customers experienced no distribution-related service outages in 2022?
21 22 23 24 25 26 27 28 29 30 31	CA-NP-055	 (Reference Application, 2024 Capital Budget Overview, page 8) It is stated "Newfoundland Power's annual capital expenditures reflect the capital additions, replacements and refurbishments necessary each year to provide safe and reliable service to customers at the lowest possible cost." a) Please explain how the 2024 CBA reflects the value customers place on service improvements and environmental responsibility. b) How does NP define "lowest possible cost" when NP does not know the value customers place on service improvements? c) Does Newfoundland Power plan to carry out its capital program in an environmentally responsible manner? Please explain.
32 33 34 35 36 37 38 39 40 41 42	CA-NP-056	 (Reference Application, 2024 Capital Budget Overview, page 9, Figure 4) a) Please provide a table of the annual values of the nominal and real capital expenditures given in Figure 4. b) Please explain how the nominal values of capital expenditures were converted to real (2023\$) terms; supplement the explanation with a numerical calculation for the year 2019. c) In P.U.36(1998-1999) the Board ordered "the adoption of the GDP deflator for Canada as an appropriate inflation index to forecast non-labour operating expenses." Please confirm that (i) in relation to Figure 4, the inflation adjustment is for historical data, not forecasts, and (ii) the data in Figure 4 relates to capital expenditures, not operating expenses.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	CA-NP-057	 (Reference Application, 2024 Capital Budget Overview, page 9) It is stated "The capital projects proposed in the Application are estimated to increase the Company's annual revenue requirement by approximately \$4 million on a pro forma basis. The estimate includes increases in depreciation, return on rate base and income taxes." a) What is the expected percentage increase in rates resulting from the proposed capital budget? b) How much will the 2024 CBA increase NP's rate base and profits? c) How much would service be improved and how much gain in efficiency would result if the capital expended were increased to a level that would increase the annual revenue requirement by \$8 million? d) How much would service be diminished and how much reduction in efficiency would result if the capital expended were decreased to a level that would result in no change in the annual revenue requirement?
15 16 17 18 19 20 21 22 23 24 25 26 27 28	CA-NP-058	 (Reference Application, 2024 Capital Budget Overview, page 12) It is stated "In Newfoundland Power's view, the Company's approach to capital planning tends to minimize overall costs to customers over the longer term." Further, it is stated "Newfoundland Power's contribution to average customer rates increased by approximately 16% from 2015 to 2024." a) If NP's contribution has increased customer rates by 16% from 2015 to 2024, how has the capital planning approach "minimized overall costs to customers"? b) How does a 16% increase over this time frame compare to a peer group of comparable utilities? c) If the distribution reliability target was the Atlantic Canadian average, would NP's contribution to rates be less?
28 29 30 31 32 33 34 35	CA-NP-059	 (Reference Application, 2024 Capital Budget Overview, Table 3, page 12) a) Please reproduce Table 3 showing each Atlantic utility separately. b) Please reframe Table 3 by showing capital expenditures for the given years on a per-customer basis. (If customer numbers are not available then use provincial populations for the Maritimes and population in NP's service area for NP as proxies.)
36 37 38 39 40	CA-NP-060	 (Reference Application, 2024 Capital Budget Overview, Table 3, page 12) a) Why is a comparison to the Atlantic Canada utilities appropriate? b) Please reproduce Table 3 showing a broad range of distribution companies across Canada, e.g., Electricity Canada Region 2 utilities as listed in footnote 11 on page 7.
42 43 44	CA-NP-061	(Reference Application, 2024 Capital Budget Overview, Appendix B, Table B-1) The table indicates that Transmission Line 146L Rebuild and Gambo Substation Refurbishment and Modernization projects were planned for 2023

1 2 3 4		but were deferred to allow for engineering assessment. Is it more accurate to say that NP was not ready to proceed with these projects in 2023 rather than to say that the projects were deferred?
5 6 7 8	CA-NP-062	 (Reference Application, 2024 – 2028 Capital Plan, page 1) It is stated "the Company is targeting stability in its reliability performance." Please provide: a) Customer complaints relating to reliability over time. b) Documentation informing customers of the cost of maintaining current
9 10 11 12 13 14 15 16		 levels of reliability. c) Customer survey responses identifying: i) the value customers place on maintaining current levels of reliability, ii) customer willingness to pay more for increased levels of reliability, iii) customer willingness to accept lower levels of reliability in exchange for lower rates. d) Current reliability criteria used by NP that balance the level of reliability with the cost to provide that level of reliability.
17 18 19 20 21 22 23 24	CA-NP-063	(Reference Application, 2024 – 2028 Capital Plan, page 1) In reference to a forecast decline in the number of customer connections, it is stated "system load growth driven by residential development in urban areas, electrification of heating systems, and electric vehicle adoption is forecast to offset this decline." How, and to what extent, will these increases be offset by conversions from baseboard heating to heat pumps, rate design and behind-the-meter generation?
25 26 27 28 29 30 31 32 33 34	CA-NP-064	 (Reference Application, 2024 – 2028 Capital Plan, page 2) It is stated "Newfoundland Power has an obligation to provide customers with equitable access to an adequate supply of power." a) How does NP determine if levels of reliability better or worse than the system average are fair and equitable? b) Does provincial legislation apply equally to NL Hydro and Newfoundland Power? c) Is there a statutory obligation in the province to provide reliability that is equal to or better than the Canadian average?
35 36 37	CA-NP-065	(Reference Application, 2024 – 2028 Capital Plan, Footnote 5) Please provide for the record a copy of the March 13, 2023 news release.
38 39 40	CA-NP-066	(Reference Application, 2024 – 2028 Capital Plan, Figure 1) Has customer feedback concerning reliability changed materially since 2003?
41 42 43	CA-NP-067	(Reference Application, 2024 – 2028 Capital Plan, page 6) It is stated "Inflationary pressures on materials also increased following the COVID-19 pandemic."

1 2		a) In the post-COVID-19 period of 2024-2028 does inflation continue to be material?
3 4		b) How has inflation impacted the costs included in NP's 2024 capital budget application?
5 6 7 8 9		 c) Does NP (or its sources) believe that inflation is a continuing problem? d) Please provide NP's forecast of inflation used in the Application. e) Please provide the Conference Board of Canada's latest forecasts of the annual percentage increase in (i) the Canada GDP deflator for 2024 to 2028 and (ii) the Business Non-residential Structures Machinery and
10		Equipment component of the GDP deflator for 2024 to 2028.
12 13 14	CA-NP-068	(Reference Application, 2024 – 2028 Capital Plan, page 14, Figure 8) Please add to Figure 8 by including earlier years back to and including 2000.
15 16 17 18	CA-NP-069	(Reference Application, 2023 Capital Budget Expenditure Status Report, page 1 of 6) How is it that budget and forecast are exactly the same for all 11 categories in the table?
19 20 21 22 23 24	CA-NP-070	(Reference Application) In light of existing and proposed 'green energy' initiatives by the governments of Canada and Newfoundland and Labrador, has Newfoundland Power analyzed the possibility that capital expenditures on thermal capacity and thermal energy may become stranded? If so, please provide copies of all such analyses.
25 26 27 28 29 30 31	CA-NP-071	(Reference Application) Please provide a discussion of the consideration being given to non-wires alternatives (NWAs) in each Canadian jurisdiction addressing the current practices of Canadian integrated utilities, transmission companies and major distributors. Further, please provide a discussion of the consideration being given to NWAs in each Canadian jurisdiction addressing the current practices of Canadian regulators.
32 33 34 35 36 37 38 39 40	CA-NP-072	(Reference Application Schedule A, page 2 of 6, and Schedule B, LED Street Lighting Replacement, page 2) On Schedule A, there are 3 street lighting projects and programs including: LED Street Lighting Replacement, New Street Lighting and Replacement Street Lighting. Schedule B states with respect to the LED Street Lighting Replacement Program (page 2) " <i>Street light</i> <i>fixtures will be replaced on an ongoing basis throughout the year in response</i> <i>to street light trouble calls.</i> " Why is the Replacement Street Lighting program not incorporated under the LED Street Lighting Replacement project?
41 42 43	CA-NP-073	(Reference Application Schedule B, Feeder Additions for Load Growth, pages 7 and 9)a) Are rooftop solar or wind viable alternatives for off-loading feeders?

1 2 3		 b) In Table 1, the total budget is stated at \$2,811,000. Of this amount \$516,000 is referenced as "Other" in the Cost Categories. Please provide the specifics of these "Other Costs".
4 5 6 7 8 9 10 11 12 13 14	CA-NP-074	 (Reference Application, 1.2 Feeder Additions for Load Growth) a) For these projects, were dynamic rates such as time-of-day rates considered as an alternative? b) Footnote 7 indicates that the cost for a battery storage solution is \$2.1 million based on a June 2021 report prepared for the National Renewable Energy Laboratory by Cole et al. Please provide the calculation and all assumptions. c) Are utility-scale battery systems in use elsewhere? d) What are the expected operating and maintenance costs for utility-scale battery systems?
15 16 17 18		e) Do the significant cost reductions in utility-scale battery systems going forward suggest that portions of the feeder additions for load growth project may become stranded?
19 20 21 22 23 24 25 26 27 28 29 30	CA-NP-075	 (Reference Application Schedule B, Distribution Reliability Initiative, page 12) It is stated "<i>The reliability performance experienced by the 658 customers served by this section of WAV-01 feeder has been considerably worse than Newfoundland Power's corporate average over the last three years.</i>" a) For how long has this been the case? b) Please provide a list of all complaints relating to reliability of supply by customers served by this section of the feeder. What percentage of all complaints related to reliability on NP's system does this represent? c) Please list each reliability problem with this feeder that NP has addressed since 2000, describe the action and cost needed to address each, and describe the associated impact on customers served by the feeder.
31 32 33 34 35	CA-NP-076	(Reference Application Schedule B, Reconstruction, page 31) It is stated "An average of 482 deficiencies were corrected annually under the Reconstruction program from 2018 to 2022, ranging from 386 in 2022 to 535 in 2018." Please provide the total and adjusted cost for the reconstruction program in 2018.
36 37 38 39 40 41 42 43	CA-NP-077	(Reference Application Schedule B, Rebuild Distribution Lines, page 33) The program is described as follows " <i>Rebuild Distribution Lines is a preventative</i> maintenance program that involves the planned replacement of deteriorated distribution structure and electrical equipment identified through inspections or engineering reviews. These programs include both the rebuilding of sections of distribution line and the selection of replacement of line components such as deteriorated poles, crossarms, conductors, cut-outs, and insulators."

1 2 3		a) Please provide the inspection and engineering reviews that were undertaken in relation to this cost.b) Have any environmental or regulatory and/or field studies or likewise been
4 5 6		undertaken in NP's planning process to mitigate unanticipated terrain / environmental issues such as those encountered with Transmission Line Rebuild 1241 2
7		
8	CA-NP-078	(Reference Application Schedule B, Relocate/Replace Distribution Lines for
9		Third Parties, page 38) It is stated that the 2024 budget of \$4,066,000 for this
10		program is based on a "historical average" of the annual costs of the program
11		from 2019 to forecast 2023.
12		a) Table 1 (page 39) indicates that the 2019 cost for the program, at
13		\$5,192,000 was significantly higher than in any of the other years used to
14		nage 47) reported the program's 2018 appual cost at \$2,496,000 (i) Why
16		was the 2019 cost so much higher than in 2018 2020 2021 2022 and
17		2023F? (ii) Did NP consider adjusting its 2024 cost to take into account
18		the fact that 2019 was an outlier? (iii) If the years 2020, 2021, 2022 and
19		2023F had been used to determine the historical average, what would have
20		been the resulting cost figure for 2024?
21		b) (i) Please confirm, based on a program cost in 2023 of \$3,803,000 and a
22		2024 budget of \$4,066,000, that NP is seeking a 6.9% increase for this
25 24		inflation for 2024? (iii) Does NP have any evidence specifically related to
25		this program that suggests that its cost will increase by more than the rate
26		of inflation in 2024?
27		
28	CA-NP-079	(Reference Application, 1.1 Distribution Reliability Initiative, pages 1 and 2)
29		It is stated "On average, the project has improved the reliability performance
30		of Newfoundland Power's worst performing feeders by approximately 69%."
31		At what cost, and what impact did this have on the number of customer
32		complaints relating to reliability?
33 34	CA ND 080	(Reference Application 1.1 Distribution Reliability Initiative pages 4 and 5)
35	CA-INI -000	It is stated "Long duration outgages on this section are primarily due to
36		equipment failures and danger tree contacts."
37		a) Is historical reliability performance a useful input to a decision to upgrade
38		a feeder?
39		b) Does the above statement suggest that NP's tree trimming and vegetation
40		management programs are inadequate?
41		c) What additional actions could be taken by NP to reduce or eliminate danger
42		tree contacts?

1 2 3		d) If NP were to take action to reduce the impact of danger tree contacts, how would that impact the reliability statistics shown in Table 2 (page 5), and at what cost?
3 4		e) If the line is relocated as proposed will danger tree contacts be eliminated?
5 6		f) Please file for the record copies of NP's tree trimming and vegetation management programs.
7		
8	CA-NP-081	(Reference Application Schedule B, Distribution Feeder Automation, page 15)
9		It is stated "A total of 13 downline reclosers are planned for installation in
10		2024. Why install 13 reclosers rather than 5 or 100?
11	CA ND 082	(Reference Application Schedule R Distribution Feeder OYP 01
12	CA-INF-062	Refurbishment page 22) It is stated "The section of three-phase distribution
14		trunk supplying Thorburn Road west of Team Gushue Highway was recently
15		inspected in 2022. The inspection identified a significant number of
16		deficiencies on the 3.2-kilometre section of three-phase trunk along Thorburn
17		Road."
18		a) How many other distribution feeders does NP own that are sub-standard?
19		b) Is OXP-01 currently a safety concern?
20		c) Please provide the results of any inspections of the 3.2-kilometre section
21		undertaken prior to 2022.
22		
23	CA-NP-083	(Reference Application Schedule B, Extensions, page 26)
24		a) With annual expenditures exceeding \$12 million on the Extensions
20 26		of forecasting average cost per connection?
20		b) Does NP's method of forecasting based on historical average cost per
28		connection take into account any trend in productivity?
29		c) In Table 1 what method is used to arrive at "Adjusted Cost"? Specifically.
30		is the Canada GDP deflator applied to the nominal 2019 to 2023 values to
31		obtain Adjusted Costs?
32		d) Table 1 shows a strong downward trend in inflation adjusted cost per
33		connection (Cost/Customer) from 2019 to 2022. What explanation can NP
34		offer for that trend?
35		e) Table 1 implies an 11.4% real increase (i.e., excluding inflation) in the
36		2023 Cost/Customer compared to 2022 (based on \$5,541 for 2023
37		compared to \$4,974 for 2022). Has NP investigated whether this large
38		increase is an anomaly and whether the downward trend may continue after
39 40		2023? D. In Table 1, the forecast value of the 2024 Cost/Customer is \$5,012
40 ⊿1		(i) Please confirm that \$5.013 represents a 6.7% increase in 2024 over
42		(1) The previous year's forecast value of \$5.541
43		(ii) Based on the GDP deflator what is the Conference Roard of
44		Canada's forecast of the inflation rate in 2024?

1 2 3 4		(iii) Does NP have any evidence specifically related to this program that suggests that the Cost/Customer will increase by more than the rate of inflation in 2024?
5 6 7 8 9 10 11 12 13 14 15 16 17	CA-NP-084	 (Reference Application Schedule B, Rebuild Distribution Lines, page 33) It is stated "<i>Rebuild Distribution Lines is a preventative maintenance program that involves the planned replacement of deteriorated distribution structures and electrical equipment identified through inspections or engineering reviews.</i>" a) Why is the Distribution Feeder OXP-01 Refurbishment project not included under this program? b) Please quantify the risk and impact on reliability if NP were to forgo this work in 2024. c) If NP were to forgo this work in 2024, would the level of reliability on the system remain above the Canadian average? Would delaying this work be consistent with providing service in an environmentally responsible manner? d) Please provide the inspection and/or engineering reports referenced at Schedula P. page 33
18 19		Schedule B, page 33.
20 21 22 23	CA-NP-085	(Reference Application Schedule B, Replacement Transformers, page 42) It is stated "The Replacement Transformers program includes the cost of replacing or refurbishing distribution system transformers that have deteriorated or failed in service."
24 25 26		a) Are transformer failures random? Why were the annual Adjusted Costs of this program consistently between \$3.5 and \$3.9 million from 2019 to 2022?
27 28 29 30 31 32 33		 b) Please provide the annual number of transformer replacements and refurbishments due to deterioration or failure in service since 2000. c) In Table 1, the Adjusted Costs in 2021 and 2022 are higher than the other years. Has NP considered that they may be anomalies arising from supply-chain issues due to COVID-19 or for 2022 in particular the impact of Russian attacks on Ukraine's electrical infrastructure? Or is the historical-cost approach used solely, with no use of any other relevant information?
34 35 36 37 38		d) According to Table 1 this program's forecast cost is \$3.345 million for 2023 and the application is requesting \$3.681 million for 2024. i) Please confirm that this amounts to a 10% increase. ii) Does NP have any engineering or cost based data to suggest that a 10% increase in this program is reasonable to expect?
39 40		e) Please provide evidence that this project is consistent with providing
40 41 42		f) Please advise of the anticipated timeframe between NP's order of the transformer and its receipt from the supplier.

1 2 3 4 5 6 7 8 9 10 11 12 13	CA-NP-086	 (Reference Application Schedule B, New Transformers, pages 46 and 48) It is stated "<i>The New Transformers program includes the cost of purchasing transformers to serve customer growth.</i>" Further, on page 48 it is stated "<i>The number of new transformers required to be installed varies annually based on customer growth and load density on sections of distribution feeders.</i>" a) Should a portion of the cost forecast be tied to the number of new customers, particularly in light of the reduction in growth of new customers in recent years? b) Table 1 indicates that the forecast cost of this program for 2023 is \$2.967 million. The budget request for 2024 is \$3.264 million. (i) Please confirm that this represents a 10% increase for 2024. (ii) How does that increase compare to the Conference Board of Canada's forecast for inflation (GDP deflator) for 2024? (iii) Does NP have any specific engineering or cost data to a surrent a 10% increase in annual specific engineering or cost data to a surrent a 10% increase in annual specific engineering or cost data to a surrent a 10% increase in annual specific engineering or cost data to a surrent a 10% increase in annual specific engineering or cost data to a surrent a 10% increase in annual specific engineering or cost data to a surrent a 10% increase in annual specific engineering or cost data to a surrent a 10% increase in annual specific engineering or cost data to a surrent a 10% increase in annual specific engineering or cost data to a surrent a 10% increase in annual specific engineering or cost data to a surrent a 10% increase in annual specific engineering or cost data to a surrent a 10% increase in annual specific engineering or cost data to a surrent a 10% increase in annual specific engineering or cost data to a surrent a 10% increase in annual specific engineering or cost data to a surrent a 10% increase in annual specific engineering or cost data to a surrent a 10% increase in annual specific engineering or cost data tor surrent annual spec
14 15 16		program?
17 18 19 20	CA-NP-087	(Reference Application Schedule B, New Street Lighting, page 52) Is the number of new street lights impacted by growth in the number of new customers?
21 22 23 24 25 26 27 28	CA-NP-088	 (Reference Application Schedule B, Replacement Street Lighting, page 55) a) Please provide annual costs and inflation-adjusted costs for this program 2021, 2022 and 2023F. b) For each of those years, please provide the number of trouble calls from customers that led to expenditures under this program. c) Based on the 2023F expenditure on this program please provide the percentage increase implied for 2024 by NP's 2024 CBA.
 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 	CA-NP-089	 (Reference Application, 2.1 2024 Substation Refurbishment and Modernization) a) Do supply chain constraints (page 1) still exist, and if so, for how long are supply chain issues expected to be a problem? b) There have been 7 major power transformer failures in the past 5 years (page 5). How many major power transformer failures were there in the previous 5-year period? c) Please provide evidence that this program is needed to supply customers in an environmentally responsible manner. d) Please confirm the following: i) the GAM substation serves 4,870 customers, 1,370 in the Gambo area via a single transformer GAM-T1, and 3,500 via a single transformer GAM-T2 supplying the radial transmission line 115L, ii) the MUN substation serves 1 customer (Memorial University's St. John's campus) via two transformers, MUN-T1 and MUN-T2. There are two transmission lines supplying the MUN substation, 12L and 14L, iii) the OPL substation serves 1,800 customers (in the Old

1		Perlican, Bay de Verde and Lower Island Cove areas) via a single
2		transformer, OPL-T1, and iv) the ISL substation serves 1,100 customers in
3		the Islington area via a single transformer, ISL-T1.
4		e) Please identify any General Service Rate 2.4 customers served by these
5		substations.
6		f) Will there be customer contributions toward the cost of any of the proposed
7		Substation Refurbishment and Modernization projects in 2024 and through
8		to 2028?
9		g) Do the looped 66 kV lines between MUN and the King's Bridge substation,
10		and between MUN and the Stamp's Lane substation serve only the
11		Memorial University's St. John's campus substation?
12		h) Why doesn't the University own the MUN-T1 and MUN-T2 transformers
13		and all equipment downstream from the transformers?
14		
15	CA-NP-090	(Reference Application, 2.1 2024 Substation Refurbishment and
16		Modernization) The projected budget for each of the four proposed substation
17		projects (Gambo, Islington, Memorial and Old Perlican) is broken down by
18		Materials, Labor-Internal, Labor-Contract, Engineering and "Other". "Other"
19		ranges from 11% to 16% of the total cost (Gambo 12%, Islington 11%,
20		Memorial 16% and Old Perlican 14%).
21		a) Please confirm these figures.
2.2		b) Please confirm that the total for "other" costs for all four substations is
23		\$2,365,000.
24		c) Specifically, what costs are included in the "other" cost category?
25		d) As a general rule, how does NP account for contingencies in its cost
26		estimation process?
27		
28	CA-NP-091	(Reference Application Schedule B. Gambo Substation Refurbishment and
29		Modernization, page 61) It is stated "The Gambo Substation Refurbishment
30		and Modernization project will mitigate risks to the delivery of reliable service
31		to customers from Gambo to Lumsden in the Bonavista-North area."
32		a) Please confirm that this statement is not based on a quantified analysis of
33		the risk of deferring this project until 2026 relative to carrying out the
34		project in 2024 because NP is unable to quantify risk
35		b) Is the risk assessment in Table 2 relevant to this point in time or 2024
36		when the project is completed or some other time frame?
37		c) The risk assessment in Table 2 indicates that the consequence of failure is
38		"serious (4)" Has the consequence of failure changed in the past 3 years?
39		Is the consequence of failure likely to change over the next 3 years?
40		d) Is the consequence of failure of any substation "serious"?
41		e) The risk assessment in Table 2 indicates that the probability of failure is
42		"likely (4)" Had the assessment been undertaken 3 years ago would the
43		nrobability of failure have been ranked "likely"? Three years from now
$\Delta \Lambda$		would the probability of failure continue to be ranked "likely" if substation
		would the probability of familie continue to be fanked likely if substation

1 2		maintenance continues and any failures that arise are addressed under programs designed to address in-service failures?
3		f) Please provide the number and duration of service interruptions to
4		customers caused by failures at the Gambo Substation from 2000 to date
5		customens caused by fundies at the Sumbo Substation nom 2000 to date.
6	CA-NP-092	(Reference Application Schedule B. Islington Substation Refurbishment and
7	011101 052	Modernization page 65) It is stated "The Islington Substation Refurbishment
8		and Modernization project will mitigate risks to the delivery of reliable service
0		to customers from the Islington and New Harbour greas "
10		a) Please confirm that this statement is not based on a quantified analysis of
11		the risk of deferring this project until 2026/27 relative to carrying out the
12		project in 2024/25 because NP is unable to quantify risk
12		b) Is the risk assessment in Table 2 relevant to this point in time, or 2024/25
13		when the project is completed, or some other time frame?
14		a) The risk assessment in Table 2 indicates that the consequence of failure is
15		"serious (4) " Has the consequence of failure changed in the past 3 years?
17		Is the consequence of failure likely to change over the part 3 years?
1/		d) The risk assessment in Table 2 indicates that the probability of failure is
10		(1) The fisk assessment in Table 2 indicates that the probability of familie is "likely (4)". Had the assessment been undertaken 2 years ago would the
19		nrobability of failure have been ranked "likely"? Three years from now
20		would the probability of failure continue to be replied "likely" if substation
21		would the probability of failure continue to be ranked likely if substation
22		maintenance continues and any failures that arise are addressed under
23		a) Plasse provide the number and duration of service intermutions to
24		e) Please provide the humber and duration of service interruptions to
25		customers caused by families at the fsington Substation from 2000 to date.
20	C A ND 002	(Deference Application Schedule D. Memorial Substation Defurbishment and
21	CA-INF-095	(Reference Application Schedule B, Memorial Substation Refurbishment and Modernization, page 60) It is stated "The Memorial Substation Potumbishment
20		and Modernization project will mitigate risks to the delivery of reliable service
29		to the Company's largest systemer"
20 21		a) Diago confirm that this statement is not based on a quantified analysis of
22		a) Please confirm that this statement is not based on a quantified analysis of the right of deforming this project until 2026 relative to comming out the
32 22		me fisk of deferring this project until 2020 relative to carrying out the
22		b) Is the risk accomment in Table 2 relevant to this point in time, or 2024
54 25		b) is the fisk assessment in Table 2 relevant to this point in thire, or 2024
33 26		when the project is completed, or some other time traine?
30 27		c) The risk assessment in Table 2 indicates that the consequence of failure is $(4)^2$. Use the superscript of failure above and in the next 2 man
27 20		Le the server as of failure likely to share a sour the rest 2 years?
38		Is the consequence of failure likely to change over the next 3 years?
39 40		u) The risk assessment in Table 2 indicates that the probability of failure is $(1)^{1}$ to $(4)^{2}$. It takes that the probability of failure is
40		"likely (4)". Had the assessment been undertaken 3 years ago would the
41		probability of failure nave been ranked "likely"? Inree years from now
4Z		would the probability of failure continue to be ranked "likely" if substation
45		maintenance continues and any failures that arise are addressed under
44		programs designed to address in-service failures?

1 2 3 4		e) Please provide the number and duration of service interruptions to Memorial University caused by failures at the Memorial Substation from 2000 to date.
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	CA-NP-094	 (Reference Application Schedule B, Old Perlican Substation Refurbishment and Modernization project will mitigate risks to the delivery of reliable service to customers in the Old Perlican, Bay de Verde, and Lower Island Cove area." a) Please confirm that this statement is not based on a quantified analysis of the risk of deferring this project until 2026 relative to carrying out the project in 2024 because NP is unable to quantify risk. b) Is the risk assessment in Table 2 relevant to this point in time, or 2024 when the project is completed, or some other time frame? c) The risk assessment in Table 2 indicates that the consequence of failure is "serious (4)". Has the consequence of failure changed in the past 3 years? Is the consequence of failure likely to change over the next 3 years? d) The risk assessment in Table 2 indicates that the probability of failure is "likely (4)". Had the assessment been undertaken 3 years ago would the probability of failure have been ranked "likely"? Three years from now would the probability of failure continue to be ranked "likely" if substation maintenance continues and any failures that arise are addressed under programs designed to address in-service failures? e) Please provide the number and duration of service interruptions to customers caused by failures at the Old Perlican Substation from 2000 to date.
28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43	CA-NP-095	 (Reference Application Schedule B, Substation Replacements Due to In-Service Failures, page 75) It is stated "<i>The Substation Replacements Due to In-Service Failures program involves replacing substation equipment that has failed as a result of storm damage, lightning strikes, vandalism, electrical or mechanical failure, corrosion damage, technical obsolescence or failure during maintenance testing.</i>" a) For each year since 2000, please provide the number of substation inservice failures and their average duration. Describe the impact such failures typically have on customers. b) The amount requested for 2024 is \$4.797 million while Table 1 indicates a forecast expenditure on substation replacements of \$4.422 million in 2023. (i) Please confirm that this represents an 8.5% increase in 2024. (ii) How does that increase compare to the Conference Board of Canada's forecast for inflation (GDP deflator) for 2024? (iii) Please provide specific engineering or cost data that NP has available to justify an 8.5% increase in spending on the Substation Replacements program in 2024.

1	CA-NP-096	(Reference Application Schedule B, Transmission Line 146L Rebuild, page
2		82) It is stated "The Transmission Line 146L Rebuild project will mitigate risks
3		to the delivery of reliable service to customers supplied by the Central
4		Newfoundland 138 kV looped transmission network."
5		a) Please confirm that this statement is not based on a quantified analysis of
6		the risk of deferring this project until 2026/27 relative to carrying out the
7		project in 2024/25 because NP is unable to quantify risk.
8		b) Is the risk assessment in Table 2 relevant to this point in time, or 2024/25
9		when the project is completed, or some other time frame?
10		c) The risk assessment in Table 2 indicates that the consequence of failure is
11		"critical (5)". Has the consequence of failure changed in the past 3 years?
12		Is the consequence of failure likely to change over the next 3 years?
13		d) The risk assessment in Table 2 indicates that the probability of failure is
14		"likely (4)". Had the assessment been undertaken 3 years ago would the
15		probability of failure have been ranked "likely"? Three years from now
16		would the probability of failure continue to be ranked "likely" if
17		transmission line maintenance continues and any failures that arise are
18		addressed under programs designed to address in-service failures?
19		e) Please provide evidence that this program is needed to supply customers
20		in an environmentally responsible manner.
21		
22	CA-NP-097	(Reference Application, Schedule B, Information Systems, pages 104-120)
23		The total amount for annual internal labour for application enhancements,
24		shared server infrastructure, system upgrades and cyber security upgrades is
25		\$2.859,000, representing about 57% of the total budget for Information
26		Systems.
27		a) Please confirm these figures.
28		b) What are the budgeted costs for Information Systems labour in 2024 for
29		projects that cost less than \$750,000?
30		c) Please identify the total number of staff in NP's Information Systems
31		department, and the total budget for the department broken down by cost
32		component.
33		d) Please identify staff levels in NP's Information Systems department in
34		each of the past 10 years and forecast over the next 5 years
35		e) Please identify the total staff and labour cost savings resulting from the
36		new customer information system in each of the next 5 years
37		f) Please identify the total staff and labour cost savings resulting from other
38		information systems projects proposed for completion in 2024 in each of
30		the next 5 years
40		g) How many Information Systems department staff have retired over the past
41		5 years and are projected to retire in each of the next 5 years
42		5 years, and are projected to retrie in each of the next 5 years.
т <u>2</u> ДЗ	CA-NP-008	(Reference Application 3.1.2024 Transmission Line Rebuild page 1) It is
44	0/1/11/0/0	stated "Transmission line failures typically result in outages to a significant

1 2 3 4 5		number of customers at once." How many customers would experience an outage if the 66kV transmission line between King's Bridge and MUN or the 66kV transmission line between Stamp's Lane and MUN failed? What is the likelihood of both of these lines being out of service at the same time?
6 7 8 9 10 11 12 13	CA-NP-099	 (Reference Application, 3.1 2024 Transmission Line Rebuild, page 3) It is stated "<i>The substandard design of this line means it is not built to withstand local climatic conditions, which increases its probability of failure.</i>" a) Is it a statutory requirement that line 146L be built to withstand local climate conditions? b) For how long has the line not been able to withstand local climate conditions? c) Please provide outage statistics for this line for each of the past 10 years.
14 15 16 17 18 19		 d) Please provide maintenance costs for this line in each of the past 10 years. e) Have any environmental or regulatory and/or field studies or likewise been undertaken in Newfoundland Power's planning process to mitigate unanticipated terrain/environmental issues such as those encountered with Transmission Line Rebuild 124L?
20 21 22 23 24 25 26 27 28 29 30 31 32 33 34	CA-NP-100	 (Reference Application, 3.1 2024 Transmission Line Rebuild, page 7) Footnote 12 states "Reliability indices are lagging indicators that encompass historical issues on the electrical system. Waiting for reliability on the transmission system to degrade before undertaking capital investments would result in a poor quality of service being experienced by large numbers of customers for several years." a) Does that statement apply to all transmission and distribution lines, substations, and substation equipment? b) Does considering lagging reliability indicators necessarily mean that a decision is being made to wait until the transmission system degrades before undertaking capital investments, or is it just one of many considerations in such a decision? c) Should the Board and intervenors ignore all historical reliability statistics referenced in the 2024 CBA? d) Please identify all historical reliability statistics included in the 2024 CBA
35 36 37 38 39 40		and explain why they are included given that such historical information results in poor quality of service.e) How can the Board assess the merits of a project if it is to ignore historical performance, particularly when NP is unable to quantify service improvements owing to a proposed project?
41 42 43 44	CA-NP-101	(Reference Application, 3.1 2024 Transmission Line Rebuild, page 8) It is stated "An outage to Transmission Line 146L results in two sections of the Central Newfoundland 138 kV transmission system becoming radial. Following an outage, all substations in the Eastern half of the system from

1		Port Blandford to Wesleyville would be radially supplied from the series of
2		transmission lines originating from SUN Substation. When radially supplied,
3		any single failure on one of these transmission lines could result in outages to
4		between 4,900 and 8,700 customers downstream of the affected line. Similarly,
5		on the Western portion of the system, Gander Substation would be radially
6		supplied by Transmission Line 144L from Cobbs Pond Substation, increasing
7		the risk of an outage to approximately 1700 customers"
8		a) Is this a positive outcome given that supply to all customers would be
9		maintained following the loss of transmission line 1461?
10		b) What reliability criteria are used by NP to design its transmission system?
11		c) What criteria are used by NP to design its distribution system?
12		d) Would loss of any transmission line on NP's system result in a similar
12		reliability risk exposure described in the above statement?
14		e) Does the above statement suggest that NP should plan its transmission
15		system to meet an n-2 or n-3 criterion? What cost impact would result, and
16		have customers indicated a willingness to pay for increased levels of
17		reliability?
18		f) What criteria do most utilities in North America use when planning their
19		transmission systems? What criteria do most utilities in North America use
20		when planning their sub-transmission systems? What planning criteria for
20		transmission systems and sub-transmission systems are recommended by
21		NERC?
22		NERC:
23 24	CA NP 102	(Reference Application 3.1.2024 Transmission Line Rebuild page 11) It is
24 25	CA-INI - 10Z	stated "Alternative 2 ensures the continued reliability of the Central
25		Naufoundland 138 kV looped transmission system during the execution of the
20		new journal and 150 kV looped if ansmission system during the execution of the
21		the most accord accord?
28		the next several years?
29	C A NID 102	(Defense Application 2.1.2024 Transmission Line Debuild mass 14) It is
3U 21	CA-NP-105	(Reference Application, 5.1 2024 Transmission Line Rebuild, page 14) It is
31		stated The reduiting of Transmission Line 140L has been deferred by over
32		<i>To years</i> . Please explain this. Has NP been operating this line for the past 15
33		years in spite of the noted reliability issues and its sub-standard design?
34		
35	CA-NP-104	(Reference Application Schedule B, Transmission Line Maintenance, Table 1,
36		page 84) It is stated "The Transmission Line Maintenance program involves
37		the replacement of transmission line infrastructure that has failed or is at risk
38		of failure." Table 1 shows that from 2019 through 2023 the adjusted cost
39		varied from a low of \$2.5 million to a high of \$2.6 million. How is it that there
40		is so little variation in cost over a five-year period when failures are random?
41		
42 43	CA-NP-105	(Reference Application Schedule B, Lookout Brook Hydro Plant Refurbishment Table 2 page 92) It is stated " <i>not proceeding with the Lookout</i>
.5		returning in the bold of the b

1 2 3 4 5 6 7 8 9 10 11 12 13 14		 Brook Hydro Plant Refurbishment project would pose a High (20) risk to the delivery of least-cost service to customers." a) Is the risk assessment in Table 2 relevant to this point in time, or 2024/25 when the project is completed, or some other time frame? b) The risk assessment in Table 2 indicates that the consequence of failure is "critical (5)". What is the basis for the "critical" ranking? Has the consequence of failure changed in the past 3 years? Is the consequence of failure likely to change over the next 3 years? c) The risk assessment in Table 2 indicates that the probability of failure is "likely (4)". Had the assessment been undertaken 3 years ago would the probability of failure have been ranked "likely"? Three years from now would the probability of failure continue to be ranked "likely" if plant maintenance continues and any failures that arise are addressed under programs designed to address in-service failures?
13 16 17 18 19 20 21 22 23 24 25 26 27	CA-NP-106	 (Reference Application, 4.1 Lookout Brook Hydro Plant Refurbishment) a) What is the payback period for this project? b) What is the probability of the plant becoming stranded? c) Please provide evidence that this project is needed to supply customers in an environmentally responsible manner. d) On page 15 it is stated "<i>Deferring the proposed refurbishment to a future year would increase the risk of failure of a major Plant component</i>." Has there been a continuing risk of failure for the past 10 years? How much greater is the risk now? e) What are the results of the economic analysis if the plant is assumed to become obsolete in 2035?
27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44	CA-NP-107	 (Reference Application Schedule B, Mobile Hydro Plant Surge Tank Refurbishment, Table 2, pages 96-97) It is stated "Based on the current condition of the Mobile Plant surge tank, the probability of failure is possible." Further, it is stated "not proceeding with the Mobile Hydro Plant Surge Tank Refurbishment project would pose a Medium-High (15) risk to the delivery of least-cost service to customers." a) Please provide evidence that this project is needed to supply customers in an environmentally responsible manner. b) Is the risk assessment in Table 2 relevant to this point in time, or 2024 when the project is completed, or some other time frame? c) The risk assessment in Table 2 indicates that the consequence of failure is "critical (5)". What makes the consequence of failure "critical"? Has the consequence of failure changed in the past 3 years? Is the consequence of failure is "possible (3)". Had the assessment been undertaken 3 years ago would the probability of failure have been ranked "possible"? Three years from now

1 2 3 4		would the probability of failure continue to be ranked "possible" if plant maintenance continues and any failures that arise are addressed under programs designed to address in-service failures?
4 5 6 7	CA-NP-108	 (Reference Application, 4.2 Mobile Hydro Plant Surge Tank Refurbishment) a) What is the payback period for this project? b) What is the nucleability of the plant becoming strended?
/ 8		a) What are the results of the economic analysis if the plant is assumed to
9		become obsolete in 2035?
10		d) Was Kleinschmidt asked to quantify the risk of project deferral? If not.
11		why not?
12		e) How much did the Kleinschmidt assessment cost?
13		f) Please describe the procurement process followed that resulted in the
14		selection of Kleinschmidt.
15		
16	CA-NP-109	(Reference Application Schedule B, Replace Vehicles and Aerial Devices
17		2024-2025, page 131) Please provide a table showing the types, number and
18		cost of vehicles replaced in each of the past 5 years.
19	CA ND 110	(Deference Application Schedule D. Allowance for Unforcement Items, name
20	CA-INF-110	(Reference Application Schedule B, Anowance for Onforeseen fields, page 137)
$\frac{21}{22}$		a) Is there any basis on which NP is proposing a \$750,000 budget for this
22		item other than that is the amount selected in recent years?
23		b) According to the Capital Budget Expenditure Status Report (page 4 of 6)
25		none the 2023 allocation of \$750.000 had been spent up to May, but an
26		expenditure of \$750,000 was still forecast for the year. What is the basis
27		of that forecast for the remainder of the year?
28		c) According to section V.A.7 of the Capital Budget Application Guidelines
29		(Provisional) effective January 2022, a utility must file a final report on
30		work carried out using these funds and "This report should be copied to
31		the intervenors in the utility's most recent annual capital budget
32		application." Has any such report been filed with the current application?
33		If not, please provide.
34		d) Recent amendments to the Public Utilities Act now allow for a utility to
35		undertake capital expenditures of up to $5/50,000$ without prior approval of the Decade this basis being the provent for
30		the Board. Does this legislative change make this budget request for
38		\$750,000 for Allowance for Unioreseen items unnecessary?
39	CA-NP-111	(Reference Application Schedule C page 1 of 9 Replacement Meters and
40		New Meters)
41		a) What types of meters are used to replace deteriorated meters, and what
42		types of meters are installed at new customer sites?
43		b) Is Advanced Metering Infrastructure (AMI) being used, and if not, why
44		not?

1 2 3		c) Will meters required for the load research study be used for replacement meters or meters at new customer sites?
4 5 6 7	CA-NP-112	(Reference Application Schedule C, page 2 of 9, Distribution Feeder BIG-02 Relocation) Why isn't this project included as part of the Transmission Line 24L relocation project?
8 9 10 11 12	CA-NP-113	(Reference Application Schedule C, page 3 of 9, Substation Protection and Control Replacements and Substation Ground Grid Upgrades) Why aren't these projects included as part of the Substation Refurbishment and Modernization project?
12 13 14 15	CA-NP-114	(Reference Application Schedule C, page 3 of 9, Oxen Pond Substation Bus Upgrade) Why isn't this project included as part of the Feeder Additions for Load Growth project?
10 17 18 19 20	CA-NP-115	(Reference Application Schedule C, page 5 of 9, Transmission Line 24L Relocation) Why isn't this project included as part of the Transmission Line Rebuild Project?
20 21 22 23 24 25 26 27	CA-NP-116	(Reference Application, 5.1 2024 Application Enhancements) It is stated (page 10) " <i>The Various Minor Enhancements item allows Newfoundland Power to respond to unforeseen requirements that occur throughout the year, such as legislative and compliance changes.</i> " A number of examples of previously completed projects are listed. Which of these projects were carried out owing to "legislative and compliance changes"?
28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43	CA-NP-117	 (Reference Application) Regarding Newfoundland Power's Wood Pole Line Management Program: a) What programs, if any, does NP have to ensure the extension of wood pole asset life? b) What are NP's policies and practices regarding reduction of the environmental footprint relating to wood pole disposal? c) What preservation treatments has NP used to preserve the life of wood poles? d) What wood pole line management programs are in place in Atlantic Canada? e) What wood line management programs are in place in other Fortis companies in Canada? f) What is the unit cost for the purchase of wood poles? Provide a table showing the unit costs for wood pole purchases for the last ten years. g) What is the average life of wood poles and how has the average life been improved, if at all?

1 2 3		h) Please provide details of NP's inspection plan for wood poles and compare your inspection program with that of NL Hydro.i) What is NP's inspection cycle for wood poles?
4		i) what is it is inspection eyere for wood poles.
5 6 7 8	CA-NP-118	(Reference Application) On April 21, 2023, NL Hydro filed with the Board a report entitled "Wood Pole Line Management Program – Progress Report". The report concludes (page 12)
9 10 11 12 13 14 15 16 17 18		"Hydro's WPLM Program is achieving the goals of increasing reliability, extending asset life, reducing Hydro's environmental footprint and reducing total cost of ownership. Hydro is projecting an average life extension of its transmission wood pole plant of at least 17 years beyond the benchmark Iowa- 50 survival curve. Hydro's WPLM Program is well aligned with best practices used in the industry. Hydro's assessment demonstrates that the cost of the WPLM Program is well justified by cost avoidance savings through reduced in-service failures and reduced unplanned repair costs, as well as reliability improvements and life extension of existing pole plant assets. In addition, the program has been effective in preventing the premature retirement of viable
19		components which still have continued life expectancy."
20		
21		On June 28, 2023 NP filed with the Board comments on NL Hydro's report.
22		NP states that it has "initiated discussions with Hydro and has further meetings
23		planned with Hydro's technical and engineering staff to better understand the
24 25		potential benefits of a chemical re-treatment program for Newfoundiana Power's transmission line wood poles" NP good on to identify examples of
25 26		the types of information it will be seeking from Hydro and states:
20		the types of mormation it will be seeking from Hydro and states.
27		"Newfoundland Power is currently undertaking a review of its asset
20		management practices to ensure its practices continue to be adequate, given
30		the age of its electrical system, and remain consistent with industry best
31		practice. This review will include an assessment of the Company's
32		transmission line asset management practices including its capital investment
33		and maintenance programs. The potential implementation of a wood pole
34		chemical re-treatment program for the Company's transmission assets would
35		be considered in the full context of the lifecycle management of the Company's
36		transmission assets. The review will also ensure any changes to the
37		Company's transmission line asset management practices are consistent with
38		utility best practice."
39		
40		a) Please confirm that NP is not in favour of implementing a wood pole line
41		management program similar to that of Hydro before completion of its
42		asset management review.
43		b) Are initial components of NP's new asset management plan expected to be
44		implemented in 2025 or later?

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be impacted by the introduction of a wood pole line management program 9 similar to Hydro's. 10 CA-NP-119 (Reference 2023 Capital Budget Expenditure Status Report, page i) It is stated 11 12 "The Capital Budget Application Guidelines (Provisional) require variance 13 explanations to be provided for variances of more than 10% of approved expenditure and \$100,000 or greater. For the 2023 Capital Budget 14 15 Expenditure Status Report, there are no projects that meet the criteria for variance explanations." In the 2022 Capital Budget Expenditure Status Report 16 17 included with NP's 2023 Capital Budget Application, only one category had 18 a budget variance, Distribution budgeted at \$46,214,000 compared to the 19 forecast of \$48,130,000, resulting in an overage of \$1,916,000. This variance 20 is about 4% for the distribution cost category, and about 1.8% of the total 21 approved budget (see table on page 1 of 13). On the other hand, actual variances are provided in the 2022 Capital Expenditure Report (page 1 of 14) 22 23 which shows that 7 of the 11 project categories were over-budget by a total 24 amount of \$10,782,000. This represents about 10% of the approved 2022 25 capital budget amount. In 6 of the 7 categories that came in over budget, variances were greater than \$100,000, and in 3 of the 7 categories that came 26 27 in over budget, the variance exceeded 10% of the budgeted amount. 28 a) Please confirm, or correct, these figures. 29 b) Please confirm that 10 capital projects in 2022 exceeded budget by more 30 than 10% and \$100,000. 31 c) Can the Board and the parties expect similar cost overruns when the 2023 32 actual project cost figures come in? If not, why not? 33 d) What has NP changed in the 2024 Capital Budget Application to improve 34 its budget estimating performance? 35 e) In light of its poor budget estimating performance in 2022, will NP be 36 refiling its 2024 Capital Budget Application to reflect lessons learned? 37 f) Does this poor budget estimating performance suggest that the Capital

- Budget Expenditure reports included in the Capital Budget Applications provide little or no value, and are a waste of time and resources?
 - g) Please provide a table illustrating all Capital Budget overruns for the previous ten years showing the total amount in dollars.
- h) Are the total amounts of budget overruns referred to in g) above now in rate base?

34

information; i.e., hours, days, months, years?

benefits.

c) If it has not already gained the information from Hydro outlined in the June 28, 2023 letter, please indicate how long NP expects it will take to get the

d) Please indicate how long NP has been monitoring Hydro's wood pole line

e) Please identify NP capital and maintenance projects/programs that might

management program and when NP became aware of the potential

1 2 3 4 5 6 7 8	CA-NP-120	 (Reference 2024 Capital Budget Application, Schedule B, page ii) It is stated "While Newfoundland Power does not use estimate classifications, as referenced in the Provisional Guidelines, budget estimates for projects and programs are expected to be accurate within a range of plus or minus 10%." a) Does the large number of variances from budget in 2022 suggest that NP should adopt estimate classifications "as referenced in the Provisional Guidelines", or some other budget estimating technique? b) Does NP plan to implement the estimate classifications identified in the
9		Provisional Guidelines, and if so, when?
10 11 12 13 14 15 16 17 18	CA-NP-121	 (Reference 2022 Capital Expenditure Report, Appendix A, Substations Refurbishment and Modernization, page 1 of 8) It is stated that the project was <i>"\$2,086,000, or 30%, higher than the budget estimate. This increase was due primarily to higher material costs and contractor labour costs compared to budget estimates."</i> a) What portion of the overage was due to material and labour costs, and why did NP not foresee higher labour and material costs? b) Does a 30% overage show that NP needs to change its estimating process
19 20 21 22 23		b) Boes a borr overage show that AP needs to enange its estimating process to a methodology consistent with that documented in the Provisional Capital Budget Guidelines, or some other cost estimating technique?c) Have the higher than expected labour and material costs impacted the cost estimates provided in the 2024 Capital Budget Application?
24 25 26 27 28 29 30 31 32 33 34 35 36	CA-NP-122	 (Reference 2022 Capital Expenditure Report, Appendix A, Substations Refurbishment and Modernization, page 1 of 8) With respect to the 30% cost overrun, it is stated "unexpected site-related issues at the Glovertown and Humber Substations led to construction delays and additional costs for unplanned work." a) How much money was included in the budget for such "unexpected site-related issues"? b) Why were such site-related issues not understood? When did NP take ownership of these substations? Did NP staff visit the substation sites before preparing the budget estimate? c) What amount of money was included in the budget to cover contingencies? d) Please provide a detailed comparison of budget estimates and actual costs.
 37 38 39 40 41 42 43 44 	CA-NP-123	 (Reference 2022 Capital Expenditure Report, Appendix A, Replacements Due to In-Service Failures, page 1 of 8) With respect to the 24% cost overrun, it is stated "<i>The increase was largely due to repairs required for the DUN-T1 power transformer and costs associated with corporate spares that were higher than the historical average.</i>" a) How were these budget estimates derived, how did these increases become known, and at what point during the budgetary process did they become known?

1 b) Specifically, what repairs and costs were required for the DUN-T1 2 transformer? 3 c) Please explain why costs for corporate spares were higher than the 4 historical average. 5 d) Please provide a full accounting of work and costs for this program in 2022 6 compared to budget estimates. 7 8 CA-NP-124 (Reference 2022 Capital Expenditure Report, Appendix A, Transmission Line 9 Rebuild (124L), page 2 of 8) NP indicates that the budgeted Transmission Line 10 Rebuild (124L) was 43% higher than the budget estimate. The budget set out 11 in the NP 2022 CBA was \$6,021,000. The Actual Cost turned out to be \$8,626,000. With respect to the 43% cost overrun, it is stated "Materials and 12 construction labour costs were higher than anticipated for the rebuild of 13 14 Transmission Line 124L as a result of increased site work requirements. This 15 was primarily the result of the requirement to install a larger number of bog structures and dead-end structures than anticipated due to terrain conditions 16 17 and unanticipated environmental conditions. There were also construction 18 delays and additional contractor labour costs due to additional environmental 19 permitting and approval requirements." a) As this project was a rebuild, would its planning process have included 20 21 inspections or engineering reviews? b) What portion of the overage was due to material and labour costs and why 22 did NP do such a poor job of estimating these costs? 23 c) How much money was included in the budget for such "bog structures and 24 dead-end structures"? 25 26 d) What amount of money was included in the budget to cover contingencies? e) Why were terrain and environmental conditions not anticipated? 27 f) What additional environmental permitting and approval requirements were 28 29 needed and why were they not anticipated? g) As Transmission Line Rebuild (124L) was a "planned project" did NP 30 obtain any environmental, geophysical or similar studies to determine the 31 terrain over which it was planning to rebuild line 124L? 32 h) Were any field studies of the terrain over which line 124L was built 33 undertaken by NP, or was the planning process for Line 124L done by 34 35 desktop only? 36 i) When was the Transmission Line Rebuild Program initiated? Has 37 Newfoundland Power experienced cost overruns of this magnitude in the 38 past? i) As the planning process for Transmission Line Rebuild 124L appears to 39 have been deficient, would NP agree that ratepayers should not be 40 responsible for this deficiency? 41 42 k) Does a 43% overage show that NP needs to change its estimating process 43 to a methodology consistent with that documented in the Provisional 44 Capital Budget Guidelines, or some other estimating methodology?

2 further updates on this project. 3 m) Please provide a detailed cost comparison of budget and actual costs 4 expended on this project. Please include details of every construction delay 5 and each and every additional contractor labour cost. 6 7 CA-NP-125 (Reference 2022 Capital Expenditure Report, Appendix A, Transmission Line 8 Extension – 35L (2021 Project), page 2 of 8) With respect to the 65% cost 9 overrun, it is stated "The budget estimate for the Transmission Line Extension -35L project was based on engineering cost estimates. Original cost estimates 10 were based on building six kilometres of transmission line and construction 11 using wood poles. Due to land and right-of-way issues, the new line extension 12 was ultimately routed closer to Winsor Lake, a public water supply. This 13 change in location resulted in a requirement to construct eight kilometres of 14 transmission line using steel poles rather than treated wood poles, which 15 increased the cost of materials and contract labour for the project." 16 a) What portion of the overage was due to material and labour costs? 17 b) Please elaborate further on the land and right-of-way issues. Why were 18 these issues not anticipated? 19 20 c) Who provided the engineering cost estimate? Did the person who prepared the engineering cost estimate visit the project site, or rely only on a desk 21 22 study? d) Please provide a detailed comparison of the budget estimate to actual costs 23 24 incurred for this project. e) Did NP undertake any environmental or regulatory and/or field studies or 25 likewise to mitigate unanticipated terrain/environmental issues? 26 f) Was this alternative considered in the economic evaluation included in the 27 Capital Budget Application? Would NP have proceeded with this 28 29 alternative had it known the true cost of the alternative? g) What amount of money was included in the budget to cover contingencies? 30 h) Does a 65% cost overrun show that NP needs to change its estimating 31 technique? Does it show that NP can no longer rely on its methodology for 32 developing engineering cost estimates? 33 34 35 CA-NP-126 (Reference 2022 Capital Expenditure Report, Appendix A, Distribution Extensions, page 3 of 8) With respect to the 21% cost overrun, it is stated "The 36 37 Extensions program budget is determined based on the forecast number of 38 new customer connections and the average historical cost of constructing 39 extensions" and "The Extensions program includes the cost of extending 40 existing lines to connect new customers. The amount spent varies based on the number of new customers connected and the amount of new line that must be 41 42 built to connect those customers. The Company had forecast 2,038 new 43 customer connections for 2022. The actual number of connections was 2,646, 44 or 30% above plan, resulting in increased expenditures."

1) Please advise when the project was proposed and undertaken, and any

1 2 2		a) Please confirm that based on the budget of \$10,333,000 and the forecast of 2,038 new customer connections in 2022 the implied average cost per new customer connection would be \$5,070
5 4 5 6		 b) Please confirm that based on the actual expenditure of \$12,489,000 and the actual number of 2,646 new customers in 2022 that the average new cost per customer connection was \$4,720
7 8 9		 c) Why did the use of historical average costs lead to a higher average budget cost per customer (\$5,070) than the actual average cost per customer (\$4,720) in 2022?
10		d) Please provide a detailed comparison of budget and actual costs for this project
11 12 13		 e) Please provide details as to how Newfoundland Power calculated 2,038 new customer connections for 2022 and why the variation was 30% above?
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	CA-NP-127	 (Reference 2022 Capital Expenditure Report, Appendix A, Distribution Services, page 3 of 8) With respect to the 22% cost overrun, it is stated "<i>The Services program budget estimate is determined based on the forecast number of new customer connections, the average historical cost of connecting a new customer, and the average cost of replacing existing services over the last five years. The budget was based on 2,038 new customer connections for 2022. Actual customer connections were 2,646, or 30% above plan. The higher number of new customer connections resulted in increased expenditures."</i> a) Please confirm that based on the budget of \$3,038,000 and the forecast of 2,038 new customer connections in 2022 the implied average cost per new customer connection would be \$1,491. b) Please confirm that based on the actual expenditure of \$3,697,000 and the actual number of 2,646 new customers in 2022, the average cost per new customer connection was \$1,397. c) Why did the use of historical average costs lead to a higher average budget cost per new customer (\$1,397) in 2022?
33 34 35 36 37 38 39 40 41 42 43 44	CA-NP-128	 (Reference 2022 Capital Expenditure Report, Appendix A, Street Lighting, page 4 of 8) With respect to the 25% cost overrun, it is stated "Capital expenditures for overhead and underground wiring replacements were \$712,000 higher than anticipated as a result of higher dedicated street light pole replacements in comparison to the historical average. Capital expenditures for new street lights were in line with the historical average." a) Please provide a detailed comparison of budgeted and actual overhead and underground wiring replacements resulting in \$712,000 higher than anticipated? b) Does this cost overrun imply that using historical costs is not a particularly good methodology for estimating future costs? c) Has this impacted costs included in the 2024 Capital Budget Application?

$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\\16\\17\\18\\19\\20\\21\end{array} $	CA-NP-129	 (Reference 2022 Capital Expenditure Report, Appendix A, Transformers, page 4 of 8) It is stated "For 2022, the actual expenditure required for transformer purchases was \$1,349,000, or 23%, higher than the budget estimate. This increase is largely due to supply chain issues resulting in material cost increases and the requirement to ensure an adequate supply of inventory. In addition, actual customer connections were 30% higher than plan, which resulted in increased transformer requirements." a) Was NP not aware of supply chain issues when it prepared the budget estimate for this project? b) Please explain how these supply issues have been addressed or if current budget proposals will result in similar increases. c) Please provide details as to the source of the supply chain issues and how that has been remedied. d) Please elaborate on the "requirement to ensure an adequate supply of inventory". e) How much of the overage was due to supply chain issues and how much was due to underestimating the number of new customer connections? Please provide a breakdown of the costs incurred for the project compared to actuals. f) Does a 23% cost overrun indicate that NP needs to change its estimating process?
22 23 24 25	CA-NP-130	(Reference 2022 Capital Expenditure Report, Appendix A, Purchase Vehicles and Aerial Devices, page 5 of 8) With respect to the 13% overage, it is stated <i>"This is attributed primarily to vendor pricing increases resulting from supply</i>
26 27 28		chain disruptions affecting the price of raw materials and parts and a manufacturer labour shortage."a) Was NP not aware of supply chain issues and vendor pricing increases
29 30 31		when it prepared the budget estimate for this project?b) How has this impacted costs included in the 2024 Capital Budget Application?
32 33 34		 c) Please provide details as to the exact reasons for the 13% cost overrun and where in the supply chain these costs came into effect and how these costs have been remedied.
35 36 37 38		d) Please provide particulars as to how many heavy fleet vehicles ordered under the <i>Purchase Vehicles and Aerial Devices</i> project from 2021 have not been received and the reasons for this failure. Please provide details as to how this has been remedied in the current budget.
39 40 41		 e) How many budgeted vehicles approved in 2020, 2021, and 2022 have not been supplied and are not available? Provide details of any ensuing costs resulting from this lack of deliveries.
42 43		f) Why does NP continue to purchase vehicles given supply chain issues and resulting escalating costs? Are these expenditures prudent?

1 2 3 4 5 6 7 8 9 10 11 12 13	CA-NP-131	 (Reference 2022 Capital Expenditure Report, Appendix A, General Expenses Capitalized, page 7 of 8) It is stated "In 2022, actual capital expenditures for General Expenses Capitalized were \$659,000, or 10%, higher than the budget estimate resulting primarily from inflationary increases and additional labour costs for capital planning." a) Was NP not aware of inflationary increases and labour costs for capital planning. b) What inflation rate did NP assume in the budget estimate and how does it compare to actual inflation? c) What labour costs for capital planning did NP assume in the budget estimate and how does it compare to the actual cost incurred? Please provide a breakdown of the budget for this project compared to actual costs incurred.
14 15 16 17 18	CA-NP-132	(Reference Application) It is understood that NP is currently in collective bargaining talks with employees. If so, how will this impact internal labour costs included in the Application?
19 20	CA-NP-133	Please provide a trajectory for Capital Budgets over the next ten years.
20 21 22 23 24 25 26 27 28 29 30 31	CA-NP-134	 Midgard Consulting Inc. ("Midgard"), in its October 29, 2020, Consulting Report to the PUB informed that Midgard was of the opinion that existing legislation enables the PUB to approval Capital Budget envelopes that represent all or some portion of the total proposed utility budget. a) Does Newfoundland Power support the utilization of capital budget envelopes as referenced by Midgard? b) Are any of the other Fortis companies in Canada subject to the imposition of a Capital Budget Envelope by its regulatory body and, if so, which ones? c) What other utilities in Canada are subject to regulatory imposed Capital Budget Envelopes?
32 33 34 35 36 37 38 39 40 41 42 43 44	CA-NP-135	Midgard, at page 85, recommended "that Capital Leases be evaluated not on an annual payment basis but rather on the full lifecycle of the lease (i.e., over a term that is comparable to the term that the asset was purchased or constructed). This approach was recommended because it more accurately reflects the total lease commitment cost on a comparable basis to purchasing or constructing an asset. Simply put, it is not the annual payment that matters, but rather the total financial commitment that is being made to acquire the asset rights over the leased term (i.e., on a similar basis as purchasing an asset with an expected lifetime). As a result, the recommended thresholds enable a reasonable balance of discreet projects/programs within each segmented materiality bin and the treatment of capital leases has changed to make it similar to the commitment required to purchase or construction [sic] an asset."

1 2 3 4		a) Please advise what leases Newfoundland Power is proposing in this Capital Budget.b) Please advise as to research undertaken by Newfoundland Power to compare the cost of leasing versus proposed Capital Budget expenditures.
5 6 7 8 9	CA-NP-136	What range of alternatives for all capital projects proposed has Newfoundland Power filed with this Application? List the range of alternatives for each and every capital project proposed.
10 11 12 13 14 15 16	CA-NP-137	Midgard, at page 95, recommended "that the Technical Conference always be transcribed, because transcription is needed to develop expanded and new evidence that is otherwise missing from the Capital Budget Application. Moreover, transcription is recommended so that a consistent pattern of evidence presentation and subsequent clarification be applied through the Capital Budget Application process." Does Newfoundland Power agree that technical conferences in this jurisdiction should be transcribed?
17 18 19 20 21 22 23 24 25 26 27 28 29	CA-NP-138	 In reference to Capital Budget expenditures, please inform: a) What variances Newfoundland Power anticipates from the proposed capital expenditures to actual capital expenditures in this budget? b) Please provide a list of variances between proposed capital expenditures in approved budgets over the last five years and the actual expenditures and the reason for the variance. c) Please provide evidence that projects with variances continued to be the least cost option. d) In reference to "unforeseen amounts" please provide a cross-Canada canvas of jurisdictions where "unforeseen amounts" are in capital budgets and the amount of same in each jurisdiction.
29 30 31 32	CA-NP-139	In the Capital Budget proposals, what independent verification is there to support the proposal?
33 34 35	CA-NP-140	What environmental benefits could result from these proposed capital budget expenditures?
36 37 38 39 40 41 42 43	CA-NP-141	 In Board Order P.U. 36(2021) the Board quotes Newfoundland Power as follows: <i>"Newfoundland Power also reiterated that it does not expect the execution of its 2022 Capital Budget to be impacted by the Covid-19 pandemic."</i> a) How did the Covid pandemic impact the execution of Newfoundland Power's 2022 Capital Budget and subsequent budgets?

1 2 3 4 5 6 7 8		 b) Please provide details of any supply chain problems Newfoundland Power had and continues to have since the Covid pandemic. c) Please list each and every budgetary item beginning in 2022 which has been put on hold, postponed, or delayed as a result of the impact of supply chain and labour issues resulting from the Covid pandemic, and the approved original budget for the item, and any changes in the budget which resulted.
 9 10 11 12 13 14 15 16 17 18 19 20 21 22 	CA-NP-142	 In Board Order P.U. 36(2021) the Board quoted Newfoundland Power stating that: "The proposed expenditures for 2022 are higher than historical expenditures due to the once in a generation project to replace a customer service system. Excluding this project, 2022 capital expenditures would total \$94 million, consistent with capital expenditures in 2017 when adjusted for inflation." a) Have capital expenditures proposed in the 2024 CBA returned to 2017 levels, when adjusted for inflation, and, if not, why not? b) What has been the total cost to date of the above-referenced customer service system? Please provide particulars as to the proposed and the actual cost to date. c) Please quantify as to what savings will result for ratepayers following the implementation of this customer service system.
22 23 24 25 26 27 28 29 30	CA-NP-143	 (Reference Application, Transmission Line Rebuilds) a) What percentage of Newfoundland Power's transmission line re-build strategy has now been completed? b) When will ratepayers expect the annual cost of transmission line rebuilds to decrease in the result? c) What savings are to be found for ratepayers in this transmission line rebuild strategy and quantify the same?
31 32 33 34 35 36	CA-NP-144	(Reference Application)a) Please provide a table of NP's actual distribution expenditures from 2002 to the present.b) Please provide a table showing growth in actual new customers connected to the system for this same period.
 37 38 39 40 41 42 	CA-NP-145	(Reference Application) In reference to the allowance for "unforeseen items", please provide a history on a table of each allowance from 2000 to the present, and where and when the allowance was called upon, and for what reasons, and what was left in the allowance for unforeseen items at the end of each particular year.
43 44	CA-NP-146	(Reference Application) Please provide a table of system upgrades for the period 2000 to the present and the percent of increase/decrease year over year

1		as the case may be. Please inform as to the rate of inflation year over year in the table
2		the table.
3		
4	CA-NP-147	(Reference Application) In reference to NP's Workforce Management System
5		Replacement approved by the Board in Order No. P.U. 36 (2021):
6		a) Please inform what the total cost of the replacement system was and
7		compare the proposed cost to the actual expenditure.
8		b) Please inform as to the efficiencies and quantify the cost savings which
9		resulted from the Workplace Management System Replacement and how
10		these savings, if any, were passed on to ratepayers.
11		c) What alternatives were considered in this Workforce Management System
12		Replacement, and were leasing alternatives considered and quantified?
13		And if not, why not?

DATED at St. John's, Newfoundland and Labrador, this 9th day of August, 2023.

Per:

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