- Q. (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."
  - 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.
  - 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"?
  - c) What is the purpose of the "Substation Replacements Due to In-Service Failures" program?
  - d) Can cost overages for this program be recovered under a project variance?
  - e) What is the current status of the MUN-T2 replacement project and how much money has been expended on the project to date? Could the project have been deferred until the 2024 Capital Budget? What impact did the filing of a supplemental capital budget application for the MUN-T2 replacement have on regulatory costs and efficiency?
  - f) By submitting a supplemental capital budget application for the MUN-T2 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" program? Please identify all qualifiers in the 2023 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.
- A. a) See part a) of the response to Request for Information CA-NP-032.

- b) The Board addressed the appropriateness of excluding expenditures associated with the replacement of the MUN-T2 transformer from the *Substation Replacements Due to In-Service Failures* program in Order No. P.U. 14 (2023).<sup>1</sup>
  - For more information on cost impacts associated with the *Substations Replacements Due to In-Service Failures* program, see parts d) and g) of this response.
- c) The purpose of the *Substation Replacements Due to In-Service Failures* program is to enable expeditious replacement of substation equipment that has failed typically as a result of storm damage, lightning strikes, vandalism, electrical or mechanical failure, corrosion damage, technical obsolescence or failure during maintenance testing. The purchase of substation equipment to maintain sufficient inventories of spare equipment is also included in the *Substation Replacements Due to In-Service Failures* program.
- d) The cost of the *Substation Replacements Due to In-Service Failures* program cannot be recovered under a project variance for another capital project or program in the Substations asset class. Newfoundland Power reports variances of more than 10% of approved expenditures and \$100,000 or greater as part of its Capital Expenditure Report which is filed annually with the Board. There is no 2024 Substation capital project or program where a \$4.8 million-dollar variance would be appropriate.
- e) The MUN-T2 replacement project is currently in the procurement stage with expected project completion by the end of 2024. The procurement contract was awarded in the second quarter of 2023 following the Board's approval in Order No. P.U. 14 (2023). Approximately \$1,000 has been spent to date to procure MUN-T2 transformer.
  - The Board addressed the appropriateness of a supplemental capital expenditure application to address the need to replace the MUN-T2 transformer in Order No. P.U. 14 (2023).<sup>2</sup>
- f) Newfoundland Power's rate base and revenue requirement is not influenced on the basis of whether a capital expenditure is approved as part of a supplemental capital budget application or as part of Newfoundland Power's annual capital budget application. Capital expenditures are not included in rate base until the project is completed and commissioned.
- g) See part a) of the response to Request for Information CA-NP-032.

The *Substation Replacements Due to In-Service Failures* program budget for 2024 is approximately \$4.8 million.<sup>3</sup> Evaluation of whether it is appropriate to exclude a capital expenditure from the *Substation Replacements Due to In-Service Failures* program is done on an individual basis and depends on factors including the

<sup>&</sup>lt;sup>1</sup> See Order No. P.U. 14 (2023), page 5, lines 17-37.

<sup>&</sup>lt;sup>2</sup> Ibid

<sup>&</sup>lt;sup>3</sup> See Newfoundland Power's 2024 Capital Budget Application, Schedule B, page 75.

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magnitude and timing of the expenditure and associated equipment procurement as well as the criticality of the issue being addressed.

In relation to the replacement of the MUN-T2 transformer, the Board addressed the appropriateness of proceeding by way of a supplemental capital expenditure application as opposed to relying on the *Substation Replacements Due to In-Service Failures* program in Order No. P.U. 14 (2023).<sup>4</sup>

- h) In addition to the supplemental capital budget application for the approval of the replacement of the MUN-T2 transformer, Newfoundland Power submitted a supplemental capital budget application for the *Riverhead Substation Transformer Replacement* in 2017. The application was approved by the Board in Order No. P.U. 6 (2017).
- i) See Attachment A for the requested information.

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<sup>&</sup>lt;sup>4</sup> See Order No. P.U. 14 (2023), page 5, lines 17-37.

## **ATTACHMENT A:**

Substation Replacements Due to In-Service Failures Expenditures (2018 – 2022)

Table 1 Substation Replacement Due to In-Service Failure Projects <sup>1,2</sup> (2018 – 2022)										
Year	2018		2019		2020		2021		2022	
Budget (\$000s)	3,814		3,547		3,269		3,413		3,691	
Project Type	Cost	%								
Corporate Spares	1,086,174	28.5	889,081	25.1	1,059,750	32.4	800,127	23.4	1,440,937	39.0
Switch Replacements	867,021	22.7	176,692	5.0	21,469	0.7	408,885	12.0	740,825	20.1
Breaker Replacements & Refurbishments	310,588	8.1	472,460	13.3	306,477	9.4	365,342	10.7	565,982	15.3
Transformer Replacements & Refurbishments	931,684	24.4	2,259,554	63.7	1,456,359	44.6	1,210,940	35.5	1,246,305	33.8
Instrument Transformer Replacements	47,838	1.3	26,899	0.8	36,942	1.1	290,133	8.5	1,978	0.1
Battery Bank/Charger Replacements	19,812	0.5	2,562	0.1	1,406	0.0	0	0.0	60,654	1.6
Voltage Regulator Replacements	133,538	3.5	19,979	0.6	109,750	3.4	149,085	4.4	24,473	0.7
Bus Replacements & Refurbishments	3,566	0.1	278,518	7.9	0	0.0	143,130	4.2	13,074	0.4
Protection & Control Replacements	94,629	2.5	84,560	2.4	285,201	8.7	136,015	4.0	269,249	7.3
Lightning Arrestor Replacements	25,448	0.7	23,613	0.7	0	0.0	0	0.0	3,927	0.1
Recloser Replacements & Refurbishments	81,253	2.1	74,849	2.1	107,570	3.3	110,786	3.2	119,425	3.2
Ground Grid Repairs	0	0.0	49,608	1.4	117,406	3.6	40,093	1.2	0	0.0
Metering Tank Replacements	3,114	0.1	112,376	3.2	9,643	0.3	185,618	5.4	20,025	0.5
Communication Equipment Replacements	3,308	0.1	0	0.0	8,606	0.3	2,000	0.1	0	0.0
Miscellaneous	253,394	6.6	61,365	1.7	164,200	5.0	271,249	7.9	55,235	1.5

Percentages do not total 100% of budget as actual costs for each year included variances from the approved budget.

The timing for each project is dependent on the customer impact, availability of corporate spares, the amount of engineering design required and the delivery times of new equipment required.