

- 1 **Q.** (Reference Application Schedule B, Gambo Substation Refurbishment and
 2 **Modernization, page 61) It is stated "The Gambo Substation Refurbishment
 3 and Modernization project will mitigate risks to the delivery of reliable service
 4 to customers from Gambo to Lumsden in the Bonavista-North area."**
 5 **a) Please confirm that this statement is not based on a quantified analysis of
 6 the risk of deferring this project until 2026 relative to carrying out the
 7 project in 2024 because NP is unable to quantify risk.**
 8 **b) Is the risk assessment in Table 2 relevant to this point in time, or 2024 when
 9 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 "serious (4)". 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) Is the consequence of failure of any substation "serious"?**
 14 **e) The risk assessment in Table 2 indicates that the probability of failure is
 15 "likely (4)". Had the assessment been undertaken 3 years ago would the
 16 probability of failure have been ranked "likely"? Three years from now
 17 would the probability of failure continue to be ranked "likely" if substation
 18 maintenance continues and any failures that arise are addressed under
 19 programs designed to address in-service failures?**
 20 **f) Please provide the number and duration of service interruptions to
 21 customers caused by failures at the Gambo Substation from 2000 to date.**
 22
- 23 **A.** a) This statement is based on the risk matrix methodology, as outlined in the *2024
 24 Capital Budget Overview*.¹ The risk matrix was used to evaluate the potential
 25 consequences of not completing the *Gambo Substation Refurbishment and
 26 Modernization* project, and the probability of those consequences occurring if the
 27 project did not proceed.
 28
- 29 b) The risk assessment in Table 2 is relevant to the point in time when the condition
 30 assessment was completed.
 31
- 32 c) Newfoundland Power does not quantify risk increases year over year. The
 33 evaluation of the consequence of failure is based on the Company's risk assessment
 34 methodology. The primary consequence to customers of a failure of Gambo
 35 Substation was identified to be reliability. Gambo Substation serves approximately
 36 1,370 customers and an additional 3,500 customers that rely on radial Transmission
 37 Line 115L from Gambo Substation, for a total of approximately 4,870 customers.²
 38 Based on the criteria outlined in the risk matrix methodology, this results in a
 39 consequence value of four (4), or serious. For additional details on the consequence
 40 of failure over time, see the response to Request for Information CA-NP-045.
 41
- 42 d) No, the consequence of failure of any substation is not necessarily "serious".
 43 Substation refurbishment and modernization projects are evaluated using the
 44 Company's risk matrix methodology. A substation may serve any number of
 45 customers which would directly impact the consequence value assigned to it.

¹ See Newfoundland Power's *2024 Capital Budget Application, 2024 Capital Budget Overview*, Appendix C.

² See Newfoundland Power's *2024 Capital Budget Application, Schedule B*, pages 61 and 62.

- 1 Additionally, if safety or environmental hazards existed, this could impact the overall
 2 consequence score assigned for a particular substation.
 3
 4 e) Generally, the probability of failure changes over time.³ The *Substation*
 5 *Replacements Due to In-Service Failures* program would only address failed
 6 equipment or equipment at imminent risk of failure, and would not address all
 7 deteriorated and obsolete equipment identified at Gambo Substation. Therefore, the
 8 probability of failure would likely continue to be ranked “likely” over time.
 9
 10 f) The date and duration of service interruptions to customers caused by failures at the
 11 Gambo Substation are shown in Table 1.

Table 1 Gambo Substation Equipment Failure Service Interruptions (2000-2022)	
Date	Duration (Minutes)
November 13, 2008	7
April 4, 2009	205

³ See the response to Request for Information CA-NP-045.