

- 1 **Q.** (Reference Application Schedule B, Islington Substation Refurbishment and
 2 **Modernization, page 65) It is stated "The Islington Substation Refurbishment
 3 and Modernization project will mitigate risks to the delivery of reliable service
 4 to customers from the Islington and New Harbour areas."**
 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 "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) 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 substation
 17 maintenance continues and any failures that arise are addressed under
 18 programs designed to address in-service failures?**
 19 **e) Please provide the number and duration of service interruptions to
 20 customers caused by failures at the Islington Substation from 2000 to date.**
 21
 22 **A.** a) This statement is based on the Risk Matrix Methodology, as outlined in the *2024
 23 Capital Budget Overview*.¹ The risk matrix was used to evaluate the potential
 24 consequences of not completing the *Islington Substation Refurbishment and
 25 Modernization* project, and the probability of those consequences occurring if the
 26 project did not proceed.
 27
 28 b) The risk assessment in Table 2 is relevant to the point in time when the condition
 29 assessment was completed.
 30
 31 c) Newfoundland Power does not quantify risk increases year over year. The
 32 evaluation of the consequence of failure is based on the Company's risk assessment
 33 methodology. The primary consequence to customers of a failure of Islington
 34 Substation was identified to be reliability. Islington Substation serves approximately
 35 1,100 customers and an additional 1,800 customers that are affected by faults at
 36 Islington Substation as they rely on the same transmission line, for a total of
 37 approximately 2,900 customers.² Based on the criteria outlined in the risk matrix
 38 methodology, this results in a consequence value of four (4), or serious. For
 39 additional details on the consequence of failure over time, see the response to
 40 Request for Information CA-NP-045.
 41
 42 d) Generally, the probability of failure changes over time.³ The *Substation
 43 Replacements Due to In-Service Failures* program would only address failed
 44 equipment or equipment at imminent risk of failure, and would not address all

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 65 and 66.

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

- 1 deteriorated and obsolete equipment identified at Islington Substation. Therefore,
2 the probability of failure would likely continue to be ranked "likely" over time.
3
4 e) The date and duration of service interruptions to customers caused by failures at the
5 Islington Substation are shown in Table 1.

Table 1 Islington Substation Equipment Failure Service Interruptions (2000 to 2022)	
Date	Duration (Minutes)
April 11, 2008	69