Q. (Reference Application Schedule B, Old Perlican Substation Refurbishment and Modernization, page 73) It is stated "*The 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.

A. a) This statement is based on the risk matrix methodology, as outlined in the *2024 Capital Budget Overview*.[1] The risk matrix was used to evaluate the potential consequences of not completing the *Old Perlican Substation Refurbishment and Modernization* project, and the probability of those consequences occurring if the project did not proceed.

b) The risk assessment in Table 2 is relevant to the point in time when the condition assessment was completed.

c) Newfoundland Power does not quantify risk increases year over year. The evaluation of the consequence of failure is based on the Company's risk assessment methodology. The primary consequence to customers of a failure of Old Perlican Substation was identified to be reliability. Old Perlican Substation serves approximately 1,800 customers.[2] Based on the criteria outlined in the risk matrix methodology, this results in a consequence value of four (4), or serious. For additional details on the consequence of failure over time, see the response to Request for Information CA-NP-045.

d) Generally, the probability of failure changes over time.[3] The *Substation Replacements Due to In-Service Failures* program would only address failed 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,* page 73.
[3] See the response to Request for Information CA-NP-045.

deteriorated and obsolete equipment identified at Old Perlican Substation. Therefore, the probability of failure would likely continue to be ranked "likely" over time.

e) The date and duration of service interruptions to customers caused by failures at the Old Perlican Substation are shown in Table 1.

Table 1
Old Perlican Substation Equipment Failure Service Interruptions
(2000 to 2022)

Date	Duration (Minutes)
May 11, 2007	36
May 11, 2007	13