Q. (Reference Technical Conference Issue 3).

a) What is the purpose of the risk matrix?

b) Does the risk matrix show relative priorities of projects and a priority ranking of these projects?

c) Does the matrix quantify the risk associated with project deferral?

d) Does NP use its risk matrix for decision-making? In particular, does it eliminate any capital projects based on an application of the matrix?

e) Why are the weights assigned to probabilities for the matrix not proportionate to the underlying probabilities? For example, a project/program with a probability of 5% is assigned a value of 1 but a project/program with a probability of 80%, which is 16 times higher, is assigned a weight of 4, which is just 4 times higher.

f) Why are the weights assigned to consequence values for the matrix not proportionate to the underlying values when those underlying values can be expressed in numerical terms? For example, a project/program with an NPV of $50,000 is assigned a value of 2 but one with a NPV of $750,000, which is 15 times larger, is assigned a value of 4, which is only twice as much as 2.

g) Would Newfoundland Power use the risk matrix to prioritize projects to be completed if the Board were to approve a capital budget envelope in an amount that is less than that requested?

A. a) Newfoundland Power's risk matrix was developed in 2022 to comply with the spirit and intent of the Provisional Guidelines.[1] The purpose of the risk matrix is to: (i) establish a consistent methodology for communicating the risks of not proceeding with capital expenditures across asset classes; and (ii) to allow those same expenditures to be presented in the form of a prioritized list.

b) All capital projects and programs included in Newfoundland Power's *2023 Capital Budget Application* (the "Application") were prioritized through the Company's capital planning process, which determines which expenditures are required to provide safe and reliable service to customers at the lowest possible cost.

The risk matrix methodology included in the Application shows the degree of risk to which customers would be exposed if a project or program does not proceed. The degree of risk was assessed for projects and programs by applying a set of scoring guidelines for the risk matrix that are applicable to all asset classes. The use of these scoring guidelines allowed the Company to: (i) evaluate the relative risk of not proceeding with one project or program versus another; and (ii) use the results of those evaluations to present projects and programs in the form of a prioritized list.[2]

c) No. The risk matrix methodology provides qualitative assessments of risk using quantifiable data when available.

[1] The Provisional Guidelines were issued by the Board in December 2021 with an effective date of January 2022. The Provisional Guidelines require: (i) evaluations of risk mitigation; and (ii) the provision of a prioritized list of capital expenditures. See the Board's Provisional Guidelines, page 17.

[2] See the *2023 Capital Budget Application, 2023 Capital Budget Overview, Appendix C*.

Producing quantifiable values of risk mitigation would require advanced data analytics, such as statistically derived failure curves and models that estimate the financial impacts of equipment failures. Newfoundland Power intends to investigate these methodologies as part of its asset management review.

d) The risk matrix was not used for decision-making purposes when preparing the Application.

Decisions regarding which capital projects and programs were included in or eliminated from Newfoundland Power's *2023 Capital Budget Application* were determined through the Company's comprehensive capital planning process, as described in the *2023 Capital Budget Overview, Section 2.2 Capital Planning at Newfoundland Power.* The risk matrix was used to evaluate each capital project and program once the Company's capital planning process had identified the required expenditures.

e) Newfoundland Power designed the scoring guidelines for its risk matrix to provide a meaningful distinction between the different probability values that can be assigned to capital projects or programs.

The risk matrix methodology is designed such that a higher degree of certainty is required for the highest and lowest values. This is because a reasonably high degree of certainty is required when indicating that an event is "Near Certain" (value of 5) or "Rare" (value of 1). By contrast, a probability of "Possible" (value of 3) is conceptually broader and encompasses a wider range of potential results.

The Company observes that its probability values are consistent with what is typically seen in the utility industry. For example, Nova Scotia Power uses a risk matrix as part of its annual capital budget applications that applies the same probability values as those used by Newfoundland Power.

In Newfoundland Power's view, assigning proportional probability values would be arbitrary and would not provide a meaningful distinction when evaluating the risks associated with capital projects or programs.

f) Newfoundland Power designed the scoring guidelines for its risk matrix to ensure the consequence values provide a meaningful distinction between the different values. The specific values are designed to reflect the size of its electrical system and operations.[3]

The potential consequences of not proceeding with capital projects and programs are not conceptually proportional. For example, a safety consequence assessed as "Negligible" (value of 1) would reflect a single first aid incident, whereas a safety consequence of "Critical" (value of 5) would reflect a fatality or permanent

[3] For example, for reliability consequences, a value of Negligible (1) applies to projects and programs that affect less than 100 customers, which would primarily reflect small taps or neighbourhoods. By contrast, a value of Critical (5) applies to projects and programs that affect greater than 5,000 customers, which would apply to large substations and looped transmission lines.

disability. A fatality or permanent disability is of exponentially greater consequence than a single first aid incident. This logic also applies to the factors used when assessing reliability, environmental and economic consequence.

In Newfoundland Power's view, assigning proportional consequence values would be arbitrary and would not provide a meaningful distinction when evaluating the risks associated with capital projects or programs.

g) The Company cannot speculate as to how it would proceed under this hypothetical scenario. The Board has never established a budget envelope for Newfoundland Power and any resulting action taken by the Company under such a scenario would depend on circumstances surrounding the Board's decision.