

1 **Q. (Reference 2027 Capital Budget Overview, Appendix C)**

2
3 **It is stated that NP does not currently have the software or data to calculate**
4 **risk mitigation per dollar or reliability improvement per dollar as**
5 **contemplated by the provisional guidelines, and instead relies on a risk matrix**
6 **informed by engineering judgment.**

7
8 **a) For each project and program over \$750,000, please provide the**
9 **workpaper or analysis supporting the assigned probability and**
10 **consequence scores, identifying the consequence category (reliability,**
11 **safety, environment, economic) that drove the score and all**
12 **quantitative evidence relied upon. Where a score rests on engineering**
13 **judgment without quantitative support, please state so explicitly.**

14
15 **b) The four proposed power transformer replacements (LAU-T1, LBK-T1,**
16 **HAR-T1 and RRD-T3) are each scored 16, while NP's evidence**
17 **emphasizes extended transformer procurement lead times, an aging**
18 **transformer fleet, and increasing pressure on the portable substation**
19 **fleet. Please reconcile the score of 16 with this evidence and explain**
20 **what circumstances would cause these projects to score 20 or 25.**

21
22 **A. a)** Newfoundland Power does not maintain a workpaper or analysis to derive risk
23 scores separate from the capital budget filing.¹ The Company's risk matrix
24 methodology was developed to comply with the spirit and intent of the Provisional
25 Guidelines.² For projects and programs over \$750,000, the data and quantitative
26 evidence supporting each risk score is contained in the detailed descriptions of
27 the projects and programs set out in Schedule B to the Application, or in
28 individual project reports. In Schedule B, each Risk Assessment section contains
29 an explanation of how the scores were derived.

30
31 The Risk Assessment sections may rely on or incorporate data or information
32 contained in the Asset Background or Assessment of Alternatives sections in
33 Schedule B or project reports.³ The quantitative evidence relied upon for the risk
34 assessment is laid out across those areas of the capital budget and takes various
35 forms depending on the asset category.⁴ These areas also contain qualitative
36 evidence that is relied upon for purposes including the corresponding risk
37 assessment.

¹ For a detailed description of Newfoundland Power's risk matrix methodology, see the *2027 Capital Budget Application, 2027 Capital Budget Overview, Appendix C*.

² The requirement for an assessment of risk is laid out in Appendix A of the Provisional Guidelines. Part III of Appendix A, Filing Requirements, requires an assessment of risk only for three investment classifications: Renewal, Service Enhancement and General Plant. Part IV of Appendix A lays out the requirement for a prioritized list of capital projects and programs.

³ In project reports, relevant data and information is also laid out in appendices.

⁴ Examples of quantitative data referenced in the *2027 Capital Budget Application* include, but are not limited to, reliability metrics such as SAIDI and SAIFI, distribution overload measurements, inspection data such as PTX condition assessment results, data on asset age and condition, or detailed economic analyses.

1 The Company's risk matrix methodology applies scoring guidelines that use
2 quantifiable factors in determining overall scores.⁵ This approach allows the
3 Company to communicate risk with reasonable consistency across asset classes.
4 This, in turn, allows proposed capital expenditures to be presented in the form of
5 a prioritized list as required by the Provisional Guidelines.
6

7 None of Newfoundland Power's risk scores are purely qualitative. The Company
8 continues to primarily rely on engineering judgment, including its familiarity and
9 operational experience with its assets, to assess risk and to inform the capital
10 planning process. Engineering judgment may take into account quantitative
11 information, such as the number of deteriorated poles or PTX results, or
12 qualitative information, such as procurement lead times or the availability of
13 future vendor support for Information Systems. However, the risk matrix
14 methodology relies on a combination of quantitative scoring factors and
15 engineering judgment to standardize the Company's communication of risk. As
16 such, no risk score in the capital budget rests solely on engineering judgment
17 without any quantitative element.
18

19 Attachment A provides the consequence category assigned to each relevant
20 project and program in the *2027 Capital Budget Application*.
21

- 22 b) The derived risk score of (16) for each of the four proposed power transformer
23 replacements is based on the criteria outlined in Appendix C of the *2027 Capital*
24 *Budget Overview*.
25

26 The Company has outlined persistently long transformer procurement lead times,
27 an aging transformer fleet, and increasing pressure on the portable substation
28 fleet as key drivers for its investments in power transformers and a portable
29 substation. These factors are common to the Company's entire power transformer
30 fleet. However, the probability analysis of the consequences of not proceeding
31 with the proposed expenditures on LAU-T1, LBK-T1, HAR-T1 and RRD-T3 also
32 includes a focus on quantitative and qualitative data pertaining to the age and
33 condition of those transformers.
34

35 Circumstances that could have lead to a risk score of (20) or (25) for these
36 proposed power transformer replacements may include: (i) a probability of a
37 transformer at risk of imminent failure resulting in a higher probability score; or
38 (ii) a power transformer that serves over 5,000 customers resulting in a higher
39 consequence score as defined in Appendix C of the *2027 Capital Budget*
40 *Overview*. Such circumstances would be considered in evaluating the
41 consequence and probability of not proceeding with the proposed transformer
42 replacement project.

⁵ The Risk Assessment section for each relevant project and program provides the consequence and probability scores used to calculate every risk score.



ATTACHMENT A:

Consequence Categories

Consequence Categories Proposed 2027 Projects and Programs	
Project/Program	Consequence Category
Distribution	
Distribution Reliability Initiative	Reliability
Distribution Feeder COB-02 Extension	Reliability
Distribution Feeder GBY-01 Refurbishment	Reliability
Distribution Feeder ILC-02 Refurbishment	Reliability
Distribution Feeder CAB-01 Refurbishment	Reliability
Distribution Feeder GDL-02 Loop 10 and 20 Refurbishment	Reliability
Reconstruction	Reliability
Replacement Transformers	Reliability, Environment
Rebuild Distribution Lines	Reliability
Replacement Street Lighting	Reliability
Substations	
Portable Substation	Reliability
Blaketown Substation Refurbishment and Modernization	Reliability
LAU-T1 Power Transformer Replacement	Reliability
HAR-T1 Power Transformer Replacement	Reliability
RRD-T3 Power Transformer Replacement	Reliability
LBK-T1 Power Transformer Replacement	Reliability, Economics
Rattling Brook Substation Refurbishment and Modernization	Reliability
Mobile Plant Substation Refurbishment and Modernization	Reliability, Economics
Substation Replacements Due to In-Service Failures	Reliability
Transmission	
Transmission Line 114L Replacement and 142L Relocation	Reliability
Transmission Line Maintenance	Reliability
Generation - Hydro	
Hydro Facility Rehabilitation	Reliability, Economics

Consequence Categories Proposed 2027 Projects and Programs	
Project/Program	Consequence Category
Rose Blanche Hydro Plant Refurbishment	Reliability, Economics
Hydro Plant Replacements Due to In-Service Failures	Reliability, Economics
Information Systems	
Shared Server Infrastructure	Reliability
System Upgrades	Reliability
Application Enhancements	Reliability, Economics
Cybersecurity Upgrades	Reliability
Microsoft Enterprise Agreement	Reliability
Personal Computer Infrastructure	Reliability
Transportation	
Replace Vehicles and Aerial Devices 2027-2028	Reliability, Safety