

1 **Q. (Reference CA-NP-078) It is stated "A white paper entitled "Worst Performing**
 2 **Feeders" released by Electricity Canada in 2015, suggests that within the**
 3 **industry one common methodology used to identify Worst Performing Feeders**
 4 **is based on feeder reliability metrics exceeding the corporate average by**
 5 **300%."**

6 **a) It is understood that this methodology is used to identify worst-**
 7 **performing feeders, but is it also used in the industry as a basis for**
 8 **taking action to improve reliability performance on such feeders?**

9 **b) Does Newfoundland Power subscribe to this methodology? If not, to**
 10 **what methodology does Newfoundland Power subscribe?**

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 12 **A. a) See part b).**

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 14 **b) Newfoundland Power's methodology is explained in report 1.1 Distribution**
 15 **Reliability Initiative. As stated in the report:**

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 17 *"The Distribution Reliability Initiative involves: (i) calculating reliability*
 18 *performance indices for all feeders; (ii) analyzing the reliability data for the*
 19 *worst performing feeders to identify the cause of the poor reliability*
 20 *performance; and (iii) completing engineering assessments for those feeders*
 21 *where poor reliability performance cannot be directly related to isolated*
 22 *events that have already been addressed."*¹

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 24 The feeders selected as the worst performing feeders in each budget year are
 25 the 15 displaying the worst five-year average reliability for each of the System
 26 Average Interruption Duration Index ("SAIDI"), System Average Interruption
 27 Frequency Index ("SAIFI"), customer minutes of outage, Customer Hours of
 28 Interruption per Kilometre ("CHIKM"), and Customers Interrupted per Kilometre
 29 ("CIKM").² A data analysis for each feeder identified is presented in Appendix B
 30 of the *Distribution Reliability Initiative* report.

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 32 Where the data analysis suggests further analysis is needed, an engineering
 33 assessment is carried out. In the *2023 Capital Budget Application*, the only
 34 feeder requiring further assessment was distribution feeder SUM-01. While that
 35 feeder meets the 300% threshold referenced in this Request for Information, it
 36 was an engineering assessment that ultimately determined the need for capital
 37 improvements to address the feeder's poor reliability performance.³

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 39 The 300% threshold referenced in this Request for Information is widely used as
 40 an indicator in the utility industry to identify that further assessment of a worst
 41 performing feeder is required. Newfoundland Power does not have information
 42 on the nature of the engineering assessments completed by utilities to determine
 43 whether capital improvements are required on those feeders.

¹ See the *2023 Capital Budget Application*, report 1.1 *Distribution Reliability Initiative*, page 1.

² *Ibid.*, page 2.

³ *Ibid.*, Section 3.3 Engineering Assessment.