

- 1 **Q. (Reference PUB-NP-031)**
 2 **It is indicated that while 108L has experienced relatively high SAIFI over the**
 3 **period 2019-2023, its SAIDI has been 0.85. That is well below NP's overall**
 4 **SAIDI value of 1.79 and appears to reflect the available back-up supply.**
 5 **a) Please reconcile this low SAIFI value with the proposition that the**
 6 **transmission line is in imminent need of replacement.**
 7 **b) Please provide the SAIFI and SAIDI values for 108L from 2010 to 2023.**
 8 **c) For the transmission lines given in Table 1, please provide the amount of**
 9 **expenditure on corrective and preventative maintenance on each over the**
 10 **same 10-year period during which the \$262,000 was spent on**
 11 **maintenance expenditure.**
 12 **d) Please provide any documentation of complaints from customers served**
 13 **by 108L related to power interruptions over the past 10 years.**
 14
- 15 **A.** a) The T-SAIFI value for Transmission Line 108L, which represents the frequency of
 16 service interruptions experienced by customers due to transmission outages on the
 17 semi-radial 108L system, is the largest of the 10 systems included in the analysis.
 18 This value indicates that transmission outages on 108L result in service interruptions
 19 to customers more frequently than transmission outages on other radial systems
 20 analyzed in the study. This is a lagging performance indicator that is broadly
 21 reflective of the condition of the line. The low T-SAIDI values for the same system
 22 reflects the partial backup capabilities that are provided through the 114L/142L
 23 system. This allows power to be restored through reconfiguration during certain
 24 times of the year, while 108L remains out of service for repairs. As 108L continues to
 25 age and deteriorate, there is an increasing likelihood of a failure occurring during
 26 loading conditions that would not permit the use of 114L/142L to maintain service to
 27 customers.
 28
 29 Newfoundland Power has proposed to rebuild Transmission Line 108L as a result of
 30 inspections that have identified significant deterioration of the transmission line. By
 31 approaching this project in a planned fashion, Newfoundland Power will avoid costly
 32 unplanned repairs and mitigate future risk of customer outages. The project is
 33 justified based on transmission line condition, not reliability performance.
 34
 35 b) The data granularity required to analyze reliability data by radial transmission system
 36 was provided by the Outage Management System implemented in 2019. Therefore,
 37 Newfoundland Power is not able to provide the requested data prior to 2019.¹

¹ See Request for Information PUB-NP-031 from Newfoundland Power's *2025 Capital Budget Application* for T-SAIFI and T-SAIDI values for Transmission Line 108L.

- 1 c) Table 1 shows the amount of corrective and preventative maintenance expenditures
 2 over the same 10-year period for the transmission lines in Request for Information
 3 PUB-NP-031, Table 1.

Table 1: Transmission Line Maintenance Expenditures	
Transmission Line	Maintenance Expenditures (\$000s)
95L	1,059
140L	1,360
113L	17
65L	95
358L	606
5L	261
353L	338
110L	27
142L	736
114L	1,113

- 4 d) Newfoundland Power does not track complaints from customers relating to
 5 transmission reliability and, as a result, cannot provide the requested information.