Reference: 1.1 Distribution Reliability Initiative

Q. Page 1. It is stated that a new Outage Management System implemented in 2019 provides outage data with greater granularity and precision than previously which allows Newfoundland Power to identify sections of feeders that are experiencing poor performance. Has Newfoundland Power changed its approach for this program following the implementation of the new outage management system to focus on the reliability performance of a section of a feeder rather than the overall performance of the feeder? In the response, explain the criteria Newfoundland Power used to determine the appropriate section of a feeder to consider for a capital upgrade.

A. Newfoundland Power has not fundamentally changed its approach to the *Distribution Reliability Initiative* following the implementation of the new Outage Management System ("OMS"). The *Distribution Reliability Initiative* still involves: (i) calculating reliability performance indices for all feeders; (ii) analyzing the reliability data for the worst performing feeders to identify the cause of the poor reliability performance; and (iii) completing engineering assessments for those feeders where poor reliability performance cannot be directly related to isolated events that have already been addressed.[1]

In recent years, the Company has started to supplement the *Distribution Reliability Initiative* process by incorporating more granular reliability data provided by the new OMS. This has been done in two ways.

First, once a worst performing feeder has been identified, reliability data provided by the new OMS can identify specific geographic locations where there are higher concentrations of customer outages. This can aid the engineering assessment in determining if a specific section of a distribution feeder would benefit from targeted upgrades to improve the reliability performance for customers. This approach was used in the 2023 *Distribution Reliability Initiative* project to identify a 6.5-kilometre section of distribution feeder SUM-01 that contributed to the feeder's poor reliability performance.[2]

Second, the new OMS can also identify sections of feeders where customers experience poor reliability performance that is comparable to the worst performing feeders, even though the entire feeder may not be on the worst performing feeders list. Engineering assessments can then be undertaken to determine if capital upgrades are required on these sections. This approach was used to identify the 2024 *Distribution Reliability Initiative* project to address a 4.8-kilometre section of distribution feeder WAV-01.[3]

[1] See Newfoundland Power's *2024 Capital Budget Application,* report *1.1 Distribution Reliability Initiative*.
[2] See Newfoundland Power's *2023 Capital Budget Application,* report *1.1 Distribution Reliability Initiative*, page 7.
[3] See Newfoundland Power's *2024 Capital Budget Application,* report *1.1 Distribution Reliability Initiative*, page 4.

As time progresses and more historical reliability data becomes available, it is reasonable to expect that more sections of feeders will be identified in the future using this approach.[4]

Overall, the more granular and precise data available through the new OMS has improved the Company's ability to identify and assess the worst performing sections of the distribution network. However, the decision to proceed with a project as part of the *Distribution Reliability Initiative* still relies on engineering assessments. For additional details, see the response to Request for Information PUB-NP-029.

[4] The *Distribution Reliability Initiative* identifies worst performing feeders using five-year average reliability indices. The new OMS was implemented in late 2019 and therefore the more granular reliability data is only available for the past three years.