Transmission

Q. Reference: "2024 Capital Budget Application," Newfoundland Power Inc., June 22, 2023, Supporting Materials, Transmission: 3.1, sec. 3.2, p. 6.

> **Numerous hardware deficiencies were observed on the H-Frame structures comprising Transmission Line 146L. This includes 90 worn ball link eye bolts used to connect insulators to cross arms, failure of which can result in the energized conductor falling free from the cross arm.**

What criteria does Newfoundland Power use to determine the end of useful life for these components?

A. Newfoundland Power determines the end of useful life for transmission line components in accordance with the Company's *Transmission Inspection and Maintenance Practices.* These practices outline the classification priority, and inspection and testing procedures for all components on Newfoundland Power's transmission lines. Ball link eye bolts, in particular, are visually inspected for wear in the link connection and prioritized based on the level of wear identified.

Table 1 provides the priority classifications for link eye bolts outlined in the Company's *Transmission Inspection and Maintenance Practices.*

Table 1
General Guidelines for Classification of Priority Ball Link Eye Bolts

Emergency	TD1	TD2	TD4
		Visible wear in link, >50% worn	Visible wear in link, <50% worn

These classification criteria are evaluated by Planners with experience in conducting inspections. Using these criteria, Planners determine the priority and type of maintenance or replacement required for all ball link eye bolt deficiencies identified during line inspections. A deficiency categorized as TD2 means that the component has reached end of life and should be replaced within one month. Deficiencies categorized as TD4 are not an immediate safety hazard and should be assessed as part of the capital plan for the following year.