

Substations

Q. Reference: "2025 Capital Budget Application," Newfoundland Power Inc., June 28, 2024, Supporting Materials, Substations: 2.1, app. C, att. A. Newfoundland Power's five-year plan provided in its 2024 Capital Budget Application indicated refurbishment of the Lockston Substation was scheduled to commence in 2026. Why has Newfoundland Power decided to advance the Lockston Substation project to begin in 2025?

A. The Lockston ("LOK") Substation refurbishment and modernization project was advanced by one year as a result of deteriorating infrastructure, the need to address regulatory requirements, and the increased risk of equipment failure.

The three generation transformers, LOK-T1, LOK-T2 and LOK-T4 are arranged in a non-standard configuration with a non-standard 46 kV voltage. LOK-T1 has a PCB concentration above 50 ppm that must be addressed by the end of 2025 to comply with Government PCB regulations. LOK-T1 and LOK-T4 are the fourth and fifth oldest power transformers in the Company's fleet with both at 69 years old. If any one of the power transformers failed, a portable substation would be required to bypass all three transformers in order to maintain the existing electrical capacity. Replacing these transformers with a single power transformer will eliminate the non-standard 46 kV voltage, reduce electrical losses on the system and reduce the amount of equipment maintenance required at the substation.

A majority of the substation switches have deteriorated and are now at end of life, the wood pole structures are deteriorated, and there are deficiencies with the ground grid that pose a risk to safety and reliability.

Coordinating these replacements achieves efficiencies in project planning and execution. Advancing the project mitigates risks to safety, reliability, and environmental compliance, ensuring continued delivery of reliable service.