

Greggs Substation Rebuild

**TCA Submittal Presentation
ES-22-TCA-38
ISO-NE ACL #351**

NEPOOL Reliability Committee Meeting

May 16th, 2023

Agenda

- Project Background
- Project Drivers
- Project Location
- Project Summary of Work

Project Background

- This presentation covers an asset condition project to rebuild the Greggs Substation located in Goffstown, NH
 - Project was presented at the [October 15th, 2022](#) PAC meeting
- Project Background
 - Greggs Substation was built in 1945 (77 years old) as a dual straight bus design which supports seven 115 kV transmission lines (all PTF)
- Substation suffers from a substantial number of asset condition issues in the control house and substation yard
 - Substation yard – Foundation deterioration, rusting of steel members, ground system deterioration, and 115 kV center break disconnect switches and drive pipe flexing
 - Control house – Capacity issues, overloading or cable trays, and asbestos contamination

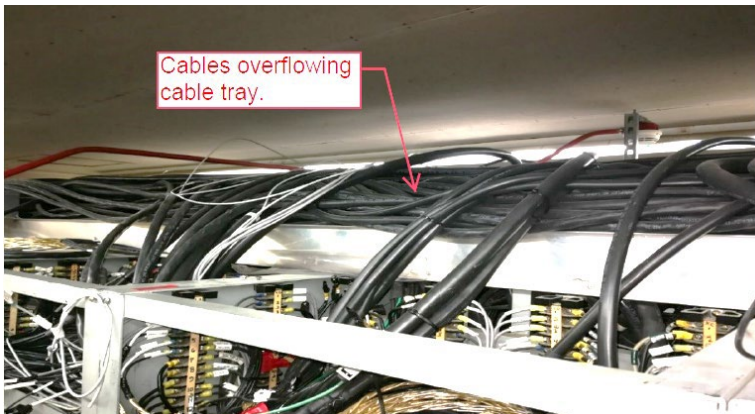
Project Drivers - Asset Condition



Foundation deterioration



Steel member deterioration



Overflowing cable trays



Overflowing switchboard

Cables overflowing cable tray.

switchboard cable wireway overflowing. Hazard for personnel walking through as well as making removals and additions more difficult

Project Scope – Preferred Solution



Summary

- Rebuild Greggs Substation (Goffstown, NH) currently dual straight bus design, as a breaker-and-a-half air-insulated substation on land adjacent to existing substation
 - Addresses all asset condition project drivers and increases overall system reliability at lowest cost
 - Meets all current ISO PP9 requirements and guidelines for Major Substation design
 - Room for future expansion and less costly ongoing maintenance
- **Total Estimated PTF Cost: \$72.193M (+/- 10%)**
- **In-service Date: December 2024**

Questions

