Orange and Rockland Utilities

Tuxedo Park Phase 3 Tower Hill Rd Reconductoring

Tuxedo Park Village Board Meeting July 20, 2022 7:00pm

Agenda

- Overview
- Existing Conditions
- Proposed Upgrade
- Construction Impacts

Overview

- Will convert Tower Hill Road to 13.2kV
- Install Hendrix conductor between Continental and East Lake Road
- Will provide a 2nd source from Blue Lake Sub to back up Tuxedo Park
- Third of five major projects to upgrade the main line overhead distribution system and increase reliability. The area has experienced load growth from customer service upgrades.

Benefits

- During Hurricane Isaias the upgraded areas did not lose power.
- Danger Trees were preemptively removed lowering the risk of future outages.
- Motor operated air breaks were added to the system. This will allow for remote switching and reduce response times, shorten outages, and minimize customer impact.
- Using spacer cable (Hendrix) design, the conductor will withstand both tree and miscellaneous branch contacts and eliminate temporary faults. This project will enhance overall resiliency and will have a positive impact on the reliability for local customers.
- Increased use of automation to improve resiliency
- Creation of new distribution ties
- Increased clearances for veg management

Existing Conditions

- Original system open 3 wire design
- Majority of the Village is fed by 2.4kV open wire overhead primary
- Aging infrastructure and overloaded conductors
- Susceptible to tree outages
- Low voltage conditions during peak periods

Proposed Upgrade

- Reconductor of three-phase distribution system along Tower Hill Road between Continental and East Lake Road with a three-phase overhead Hendrix construction.
- Project will begin at existing step-down bank P# 53685/43969) and will end on East Lake Rd (P# 53640/43775), approximately 4,700 feet.
- Installation of 3 MOABs to assist in isolation and restoration and future conversion.
- A new temporary "no tie" will be created near the intersection of Tower Hill Road and East Lake on Clubhouse Road and Circuit Road.

Installation



Installation



Construction Impact

- Material Storage
 - 40 poles
 - 5 Reels Hendrix cable
 - Secondary conductor reels
 - Pole mounted transformers 25 & 50KVA
 - Cross-arms
 - Connectors, lighting arrestors, bushings, brackets, etc.
 - Dumpsters
- Tree Trimming
 - Completed in late 2021 (not in scope)

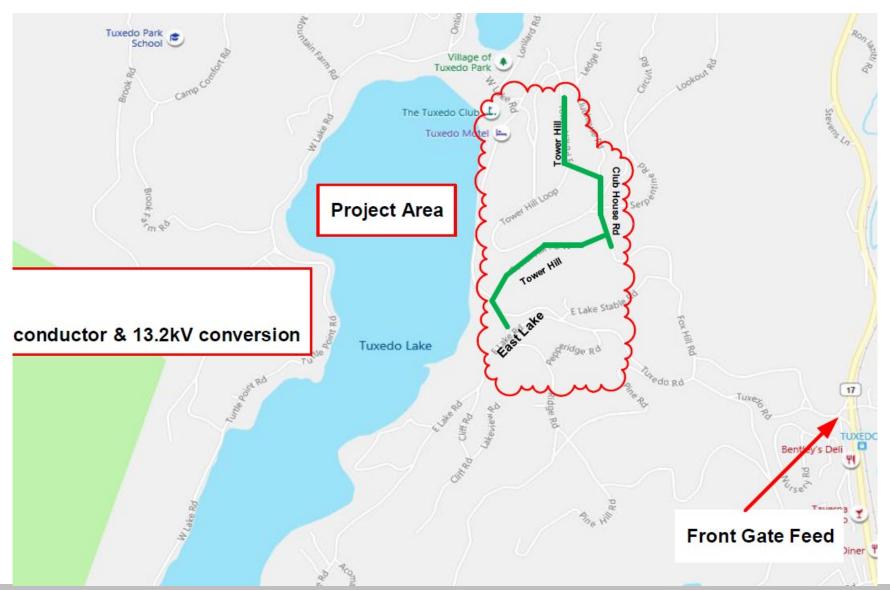
Roads affected

- East Lake Road
- Tower Hill Road
- Clubhouse Road
- Tower Hill Loop

Approximately 300 feet off side roads as follows:

- Continental Road
- Circuit Road

Phase 3 Road Map



Installation



Schedule

- 7/20 Village Board Meeting
- 8/15 Target to mobilize OH contractor
- 9/2 Hendrix Conductor/material
- 12/30 OH construction complete

QUESTIONS?