Orange & Rockland
Tuxedo Park – 4kV conversion

May 20, 2019
Agenda

- Overview
- Existing Conditions
- Proposed Upgrade
- Construction Impacts
- Example Photographs
- Example Installation
Overview

- Tuxedo Park serves a total of about 418 customers
- This project area serves 270 residential customers, the Tuxedo Park School, Tuxedo Park Country Club, Tuxedo Park DPW and Sewer Plant, and a Verizon Communication Switching Station
- Load growth from customer service upgrades
- First of four major projects to upgrade the main line overhead distribution system and increase reliability
Existing Conditions

- Original system
- 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

• Upgrade to 13.2kV Hendrix overhead distribution

• Install step down transformers to service side spurs

• Replacement of approximately 15,000 feet of existing overhead conductor with higher capacity mainline spacer cable (Hendrix)

• Installation of 7 MOABs and 2 GOABs to assist in isolation and restoration
Construction Impact

• Material Storage
  – 94 poles
  – 5 Reels Hendrix cable
  – Secondary conductor reels
  – Pole mounted transformers and step banks
  – Cross-arms
  – Connectors, lighting arrestors, bushings, brackets, etc.
  – Dumpsters

• Tree Trimming
  – Majority of new poles are 45’ or 50’ to meet construction standards
Roads affected

- Continental Drive
- We-Wah Road
- Continental Road
- West Lake Road
- Clubhouse Road
- Turtle Point Road
- Lake Road
- Tower Hill Road
- Laurel Road
- Circuit Road
- Lorillard Road
- Ontio Road
- Summit Road
- Mountain Farm Road
Construction Impact

- Approximately 6-9 month duration
- Double wood condition where telephone and cable have to transfer facilities to new poles
  - Contractor will remove double wood after transfer
Construction Impacts

- Bucket Trucks
- Digger Derricks
- Movement of equipment and materials
Example Photographs

Pole Delivery

Pole Storage

Pole transport example 1

Pole transport example 2
Example Installation

New Hendrix Spacer Cable

Secondary circuit (services)

Cable/Telephone to be transferred

Double Wood

Old pole

New pole