Non-Wires Alternatives Opportunities

Project Name/Description:	**Sterling Forest 67-1-13 (Tuxedo Park)**
Project Type:	Load Relief & Reliability
Project Size:	Small
Estimated RFP Timing:	Q3 2019

The Village of Tuxedo Park is a gated community of approximately 420 customers located in southern Orange County. The majority of the distribution system inside the park is 2.4 kV and is supplied from (4) – 1500kVA, 13.2/2.4 kV step transformer banks. The step transformer bank at the main gate and the south gate are capable of providing 100 percent backup for each other (with assistance from the north gate (Warwick Brook Rd) step transformer bank). The west gate step transformer bank (Mountain Farm Rd) and north gate step transformer bank also tie, but are unable to provide 100 percent backup at peak time due to thermal and voltage issues. In the event of a failure of the Mountain Farm Road step transformer banks, the Warwick Brook Road step transformer bank can only provide 32.8 percent backup. For a loss of the Warwick Brook Road step transformer bank, Mountain Farm step transformer bank can only provide approximately 22.0 percent backup at peak time. Because the area is 2.4 kV, the current rating of the devices and primary conductor limit the rating of the step transformers.

The traditional solution for the area is to install a 13.2 kV tie through the park. This would be a Hendrix spacer cable system to reduce the impact of tree trimming and decrease the probability of tree-related outages from the higher voltage. The 13.2 kV “backbone” will allow the area described above to have 100 percent backup with smaller 2.4 kV areas fed radially from step transformers. In the area of Tower Hill Road, a new 13.2/2.4 kV step transformer bank will be installed that will provide relief/backup to the main gate step. Due to the costs of these projects, an NWA is being considered. The goal of the NWA is to reduce the load in the targeted areas by 746 kW at peak time.

This reduction would allow the Warwick Brook Road and Mountain Farm Road steps to provide 100 percent backup at peak time.

NWAs to be implemented in the Tuxedo Park area will seek to provide capacity reductions of 746 kW by 2021. Acceptable DER/NWA plans must include appropriate diversity to reliably achieve the required capacity/demand offsets. O&R expects to release an RFP in the first quarter of 2019.