

Non-Wires Alternatives Opportunities

Project Name/Description:	West Warwick
Project Type:	Load Relief & Reliability
Project Size:	Large
Estimated RFP Timing:	Q3 2019

The Wisner Substation (#80) is located in Warwick, in Orange County. The substation serves the majority of the load west of Ball Road toward the New Jersey border, Pine Island, Village of Warwick and parts of Florida in New York. In total, the substation serves 7,624 customers. The substation is a two transformer bank substation with five 13.2 kV distribution circuits that feed the area. The substation has multiple operating limitations, such as non-LTC banks, bus rating limitations (1200 amps), no transmission breakers, and both substation transformer banks are served from the same 69 kV bus. In the event of a transformer bank or bus failure, the entire Wisner load pocket cannot be restored by surrounding feeders without one of the transformer banks being in service and a mobile transformer installed. Additionally, one of the five distribution circuit feeders served from the substation fails the distribution design standard.

O&R's traditional solution is to construct a new substation with two 50 MVA transformer banks, and additional distribution circuits to serve the growing load in West Warwick, Pine Island and Florida areas to be in-service by 2025. The traditional solution would solve the load relief and meet substation contingency and distribution design standards. Additional benefits of the substation include load relief and improved reliability and contingency back up for Westtown, South Goshen and Chester Substations, as well as the retirement of Pine Island Substation.

To defer the capital project, the Company determined that approximately 7.0 MW of capacity reduction will need to be implemented by the summer of 2022. These capacity requirements will be increased by a reliability factor to provide equivalent reliability of

the traditional solution. O&R conducts an annual planning cycle to monitor local area needs and will adjust capacity requirements based on actual growth, block load additions and other factors as necessary. O&R expects to release an RFP in third quarter of 2019 requesting load reduction on the Wisner distribution circuits serving load predominantly west of the existing substation.