

Non-Wires Alternatives Opportunities

Project Name/Description:	Blooming Grove
Project Type:	Load Relief & Reliability
Project Size:	Large
Estimated RFP Timing:	Q4 2018

The Blooming Grove Substation is a single bank substation with a 25 MVA, 69/13.2 kV transformer. This substation serves an area at an extremity of O&R's service territory, serving 6,505 customers. Due to already realized load growth and limited backup, the area distribution circuits are approaching the point of failing design standards and were included in O&R's top 20 worst performing circuits during 2016. This single-bank station only has two high-exposure limited capacity distribution ties to adjacent stations. In the event of a transformer bank contingency, a large portion of the load of the existing substation would be out of service until installation of a mobile transformer. The resulting customer-hours of interruption exceed risk exposure, and fail O&R's Distribution Design Standards.

O&R's traditional solution is to retire the existing substation and construct a new substation consisting of two (2) 35 MVA transformer banks and additional distribution circuits by 2023. In order to defer this traditional infrastructure project, the Company had determined that approximately 15.5 MW of capacity reduction is needed by 2021. 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 station 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 the fourth quarter of 2018, requesting load reduction on all of the Blooming Grove circuits served from the substation that would be the geographic area east of Craigville Road to Clove Road, and South Route 94 to Clove Road.