

VFD Replacement for Filter Influent Pumps

Project Name:	VFD Replacement for Filter Influent Pumps
Location:	23 rd Avenue WWTP, Phoenix, AZ
Owner:	City of Phoenix Water Services Department
Pump Station Capacity:	80 MGD
Project Construction Cost:	\$750,000

Project consisted of designing the replacement of 6-pulse VFDs (with Delta/Wye transformers) with 18-pulse VFDs for four 350HP Filter Influent Pumps. The replacement had to take place such that the filter would be operational at all times. Limited shutdown windows were available at midnight for critical load disconnection and reconnection. Segmentation of work and tight scheduling were required in order to keep the filters operational.

Project includes the following electrical and I&C feature:

- Four 350 HP pump VFDs
- Modification to the existing 3200A drawout switchgear
- Modification to the VFD's local control panel
- Modification to the Plant's DCS control system

