

Deer Valley Water Treatment Control Optimization Power Factor Correction Capacitor

Project Name:	Deer Valley Water Treatment Control Optimization Power Factor Correction capacitor
Location:	Phoenix, Arizona
Owner:	City of Phoenix Water Services Department
Plant Capacity:	100 MGD
Project Construction Cost:	\$400,000

As an efficiency measure to reduce the City of Phoenix's plant utility power cost, a power factor correction project was put forward. The project consisted of determining the capacitance corrective requirements and necessary integrated design into the existing plant main power distribution switchgear. The project resulted in the addition of two 600kVAR power factor correction capacitor banks, one at each service feed to the plant's main power distribution switchgear.

Each 600kVAR power factor correction capacitor was equipped with the following:

- Four 150kVAR automatic power factor correction capacitors
- Switching and protection equipment
- Grounding and testing ports
- Control and monitoring by the existing Plant SCADA system

