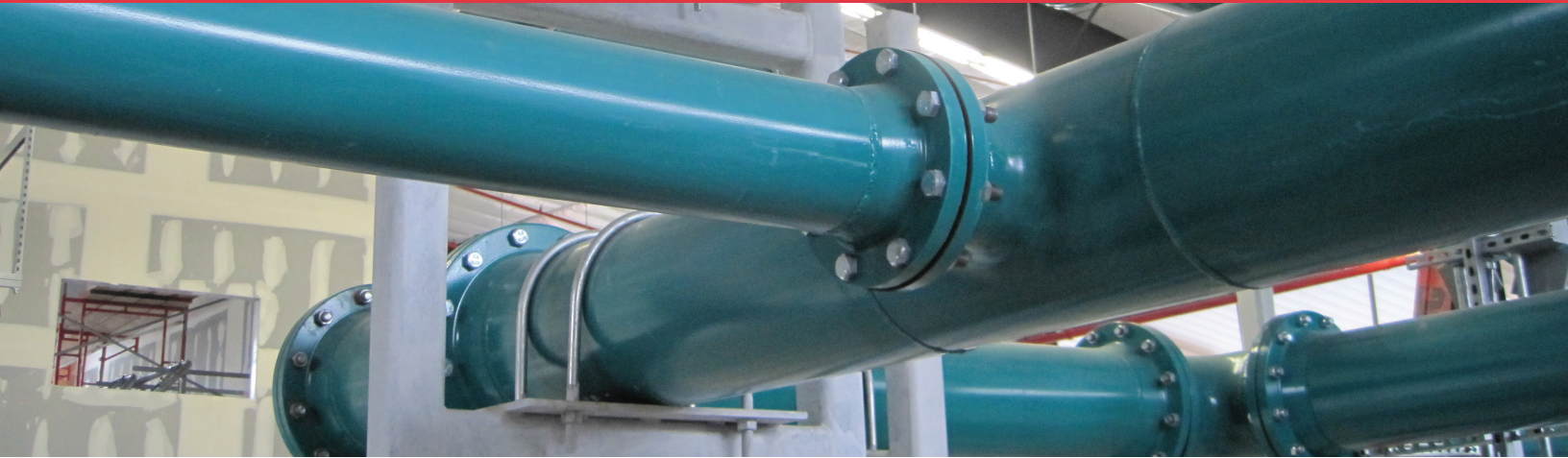




*“Accuracy, Efficiency, Automation – It’s at the Core!”*

## Water Treatment Plant Automation



### **PROJECT DETAILS**

#### **Project Name**

Water Treatment Plant Automation

#### **Location**

Sacramento, California

#### **Project Type**

Integrated (Totalized Flow, Power Monitoring, and Operational Control)

#### **Installation**

Retrofit & New

#### **Equipment Installed**

Modicon Compact & Quantum PLC's, USData FactoryLink, GE MDS Radio Transceivers, EASON HMIs

#### **Network**

Modicon Modbus & Modbus Plus

#### **Total System Points**

~230 points

### **PROJECT DESCRIPTION**

Coordinating the water demands and water quality issues of a growing suburb while providing a consistent water supply, created several obstacles for this water utility. Throughout the course of this project, water delivery was paramount for the fifteen (15) million gallon a day domestic water treatment facility and its twenty-four (24) remote pumping stations.

Operating commands for the remote pumping stations and treatment plant are issued from a central SCADA system. Distributed controllers throughout the treatment facility were coordinated with a Modicon Quantum PLC. The FactoryLink SCADA software was configured to perform real time data collection, trending, and control of all remote sites. In addition, automated report generation, call out alarming, and alarm management were also integrated within the system.

Remote pumping stations are controlled by Modicon Compact PLCs and utilize an EASON HMI for local control parameter entry and monitoring. Remote communication at each site is accomplished by utilizing a GE MDS spread spectrum radio transceiver connected to the main data concentrating PLC.

Electrical power monitoring was achieved using a PM650 power monitor integrated into the pumping station which allowed for the monitoring of energy parameters while minimizing energy consumption.