

Featured Project

Petaluma Water Recycling Facility SCADA

Petaluma, California

ArcSine Engineering developed a comprehensive SCADA system for Petaluma's \$110 million Water Recycling Facility. The project included the design and programming of the new facility, as well as off-site access to two terminal servers.

Unique features to the project:

- A complete plant control system, with provisions for later addition of water, wastewater collection, and recycled water.
- Extensive access to PLC and network statuses.
- Embedded Intranet PLC web server within the HMI system.
- Redundant fiber optic control network.
- Exceptional cooperation between the design engineer, the City's programmer (ArcSine), and the low bid construction contractor.

Arcsine's work included the programming of:

- HMI – Wonderware InTouch.
- PLC's – Schneider Automation Modicon control system consisting of local and distributed control.
- Communications – Data Acquisition Server Modbus TCP over a redundant fiber optic network; fiber optic supervisory network; integration with the City WAN via firewall. Radio communications with remote sites.
- Dedicated business server.
- Distributed HMI consisting of redundant tag servers, redundant terminal services, and multiple clients.
- InSQL historian and ActiveFactory client tools.
- SCADAAlarm.
- Offsite access via SCADA terminal services.
- 10 PLC's, 150 process screens, 350 network status screens.
- Development of a comprehensive troubleshooting support information system keyed to any SCADA alarm.
- Related projects for wastewater collection and recycled water.
- Computerized maintenance management.

Owner Contact Information:

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Design Completion Date

N/A

Construction Completion Date

2009

Electrical
Mechanical
Programming
Lighting
Power Distribution
Construction Services
Water/Wastewater



" Thanks for clarifying the best solution for the City. You saved us a lot in potential change orders. The result of your team's work has been tremendous."

— Margaret Orr
Engineering Manager

