Featured Project

Town of Windsor SCADA

Windsor, California

Design Completion Date

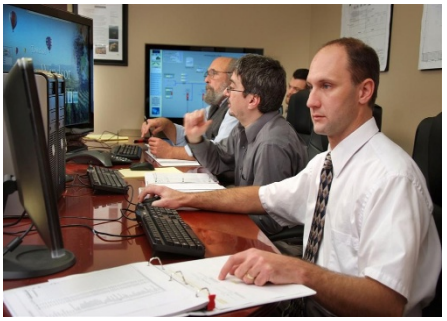
Ongoing

Construction Completion Date

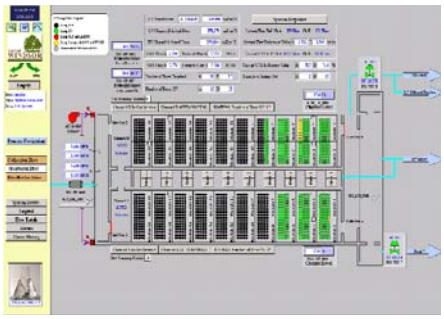
Ongoing

Electrical
Programming
Power Distribution
Construction Services
Water/Wastewater

Through a competitive selection process, ArcSine Engineering was hired by the Town of Windsor to develop SCADA predesigns for the Town's Water and Water Reclamation systems. ArcSine performed detailed investigations of the Town's 11 water system sites, 8 wastewater collection and reclaimed water remote sites, and the Town's water reclamation plant (wastewater treatment plant). The Predesign Reports included P&IDs created in the field for each site as well as all process areas in the plant, along with a block diagram of the ultimate SCADA build out to provide a logical migration path toward the Town's end goal. Optional configurations and exclusions were presented in a "cafeteria"-style menu that allowed the Town to select which components best served their needs for initial budget-driven implementation.



Subsequently, through a second competitive selection process, ArcSine was awarded a design-build contract to implement the new SCADA systems. A series of projects ensued, with a structured and low risk migration to the target arrangement.

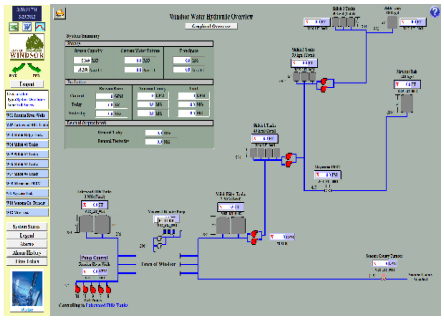


Unique features to the project:

- A multi-utility SCADA s system, with provisions for later process, instrumentation, and I/O additions.
- Extensive access to PLC communications, and network statuses.
- Offsite access via SCADA terminal services.
- Integration with Town networks

ArcSine's work included the programming of:

- HMI-Wonderware InTouch
- Distributed HMI consisting of redundant tag servers, terminal services, historians, and multiple clients.
- PLCs—Schneider Automation Modicon control system consisting of local and distributed control.
- 28 PLCs/PACs 190 process screens.
- Wonderware historian and ActiveFactory client tools.
- Communications—Data Acquisition Server Modbus TCP over a fiber optic network; fiber optic supervisory network; integration with the Town WAN via firewall. 900 MHz Ethernet radio communications with remote sites.
- A comprehensive troubleshooting support system keyed to any alarm.
- Design and replacement of the OEM UV control system for improved reliability and enhanced functionality.



TOWN OF WINDSOR