

CUSTOMER REFERENCES



Suffolk County Water Authority (SCWA)

Customer since 1998

SCWA serves approximately 1.2 million Suffolk County residents. The Authority is the largest groundwater supplier in the country. This project has over 450 locations over 400 square miles and operates the entire water system. RTUs: 400 GE 90-30 PLCs equipped with SI communication co-processors. Software: *oNSITE*® HMI SCADA Software. Wireless: 600 Metricom spread spectrum radios. All of the remote sites have direct communications access over the wireless network to all other sites with all of the RTUs having the ability to directly communicate with other RTUs to continually operate the water distribution system even if there is a complete failure of the central site.

Elsinore Valley Municipal Water District (EVMWD)

Customer since 2004

EVMWD is a distributed wireless control system used to control the water production and flow of drinking water to Elsinore Valley and operate the lift stations and treatment plants. There are over 300 sites in the system with multiple redundant communications solutions all using wireless communications. Radios: Proxim MP11 5.8Ghz Point-to-Multipoint Radio System. The Telemetry Control Panels located at each of EVMWD's sites incorporated the Allen-Bradley CompactLogix Programmable Automation Controller hardware to harness Ethernet connectivity. Software: Migrated from Wonderware to *oNSITE*® HMI SCADA Software. All of the remote sites have direct communications access over the wireless network to all other sites with all of the RTUs having the ability to directly communicate with other RTUs to continue the operation of the water distribution system even if there is a complete failure of the central site.

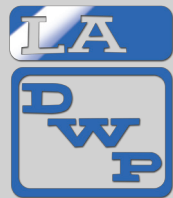


Seattle
Public
Utilities

Seattle Public Utilities

Customer since 2004

Operates the largest gravity system in the US. SI provided a turnkey Water Distribution SCADA system for control and monitoring of the potable water distribution system throughout the greater Seattle metropolitan region. The system consists of a main Operations Control Center, a backup Network Operations Center and 110 Allen Bradley PLC control panels connected via frame relay network. The scope of supply includes computers, *oNSITE*® software, PLCs, instrumentation, communications, and network LAN/WAN appliances.



Los Angeles Department of Water and Power

Customer since 2010

In 2010 Systems Integrated was selected to engineer and furnish the control system upgrade for the largest hydroelectric pumped storage generation system in the western United States. The project scope includes the control system upgrade for the six 270 Megawatt generator / pumps; all of the balance of plant support equipment (including the 230KV switchyard, the 4160V switchyard, and the penstock protection system); interfaces to the dispatch control system (ECC-SCADA), and provides a system that is fully compliant with the NERC cyber security requirements for critical cyber asset infrastructures.

Metropolitan Water District

Customer since 1994

MWD is the world's second largest water wholesale entity and provides water to 18+ million people in parts of Los Angeles, Orange, San Diego, Riverside, San Bernardino and Ventura counties. SI provided engineering, installation and support services for a new SCADA system controlling 6 water filtration plants and 400 remote facility sites. SI provided a computer based control system designed to provide supervisory control of 60% of MWD's operations infrastructure related to water delivery. There are six Area Control Centers (ACCs) interconnected with bridges and routers using a redundant T1 (1.44 Mbit communications circuit) WAN scheme. The operator workstations connect to the SCADA server using a fiber optic LAN. The RTUs connect to their control centers using a second tier LAN.



Uniting Technology and Experience for Total Solutions



Systems Integrated

2200 North Glassell Street, Orange, CA 92865

Tel: 714/998-0900 Fax: 714/998-6059

Email: sales@systemsintegrated.com

Website: www.systemsintegrated.com

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UNITING TECHNOLOGY AND EXPERIENCE
FOR TOTAL SOLUTIONS

COMPANY PROFILE

Since our founding in 1974, Systems Integrated (SI) has been in the forefront of technology, delivering innovative solutions that put our customers in control. Our experience spans a wide range of industries including - power generation, electric utilities, water/wastewater utilities, intelligent transportation systems and communications.

By focusing on solving complex problems across diverse areas of application, we have gained the knowledge and proven abilities to assess our customers’ needs and choose from the broadest assortment of technical options, to derive the most effective solution. SI is accustomed to projects requiring the integration of various generations of existing equipment with new technologies. Our engineers know how to take disparate pieces, integrate them together, optimize performance and deliver a seamless, maintainable system that provides growth without disruption.

CAPABILITIES & EXPERIENCE

Systems Integrated provides a full suite of capabilities to support our customer’s objectives. Whether it is providing a completely new system, upgrading an existing system or providing ongoing support, SI can apply the necessary resources to ensure a successful outcome.

Systems Integrated is a licensed contractor and fully capable of providing turnkey design, build and construct solutions. SI also works with the leading industry design and consulting firms on a variety of projects in both prime contractor and subcontract roles.

Systems Integrated’s multi-discipline professional staff includes electrical and mechanical engineers, software developers, HMI and CAD designers and field technicians with a broad range of experience in delivering successful projects.

ONSITE® - OPEN & SECURE SCADA SOFTWARE FOR MODERN CONTROL SYSTEMS

THE ONSITE® SOFTWARE SUITE

ONSITE® SCADA software is a fully integrated suite of products that delivers the most powerful system for water and wastewater controls available today. ONSITE® is a fully distributed SCADA solution designed to be scalable from a single workstation to fully redundant multi-plant configurations. ONSITE® is ready for any control task or need.

Based on the powerful Oracle RDBMS, ONSITE® combines the process functionality of a Distributed Process Control System (DCS), the archival functions of commercial historians, and the data presentation capabilities of dedicated graphics packages. Designed specifically for the water utility industry, ONSITE® is a powerful solution for your data acquisition and equipment control requirements.

OPERATING SYSTEM PLATFORM

The ONSITE® server is built on a secure Linux operating system and supports virtualization for efficient system management and administration.

HMI SYSTEM

The ONSITE® client is built on the GE DataViews HMI software platform that delivers a series of powerful, customizable graphic development tools that allows you to create robust, dynamic system graphics.

OSISOFT PI INTERFACE

ONSITE® has a native interface to the powerful OSIsoft PI real-time data and event management system.

MOBILE APPLICATION INTERFACE

The ONSITE® web server delivers a fully functional ONSITE® client for mobile users including laptop computers, tablets and smartphones.



ONSITE® SlightVIEW HMI NODE

Systems Integrated developed the SlightView HMI Node to replace proprietary HMI devices used throughout SCADA systems as primary operator interfaces. The main problem with proprietary operator interface platforms is that they require a completely separate set of HMI graphical user interface screens to be developed and maintained. This requires additional time and training along with the added burden of managing two HMI systems.

The SlightView HMI Node does not require a separate set of HMI graphic screens to be developed and maintained. The SlightView HMI Node utilizes all of the HMI screens already developed for the ONSITE® SCADA system operator workstations.

The SlightView HMI Node is available as a stand-alone HMI node or built into a PLC control cabinet to provide a local operator HMI.

Each SlightView HMI Node is configured for a specific type of mounting and SCADA system network.

Base Specifications:

- 23” LCD High Resolution Monitor with painted or stainless steel NEMA 4 bezel (other sizes available)
- 0 - 60° C extended temperature ruggedized, fanless computer
- NEMA 4X sealed keyboard with integrated pointing device
- 120 VAC or 24 VDC Power

Options Include:

- Touchscreen monitor
- Application software



FIBERWIRE 8111 DUAL-RADIO

300 Mbps 5GHz LTE-U Fiber capacity wireless backhaul and 2.4GHz Wi-Fi hot spot for local agency access.

Applications include:

- Remote site communication for remote monitoring and control without having to pay monthly cellular bills
- 24x7 wireless CCTV monitoring

Advanced Features:

- Non-line-of-sight capable, utilizing OFDM and MIMO techniques to improve link performance and better penetration through or around obstructions
- AES Encryption
- Bridging and Routing
- Advanced QOS and VLAN support
- Mobility
- Jitter Correction Algorithm with built in multicast support for CCTV backhaul
- Spectrum analysis feature helps to study frequency bands for interference to automatically switch channels when interference is detected
- IIP67 enclosure, built in heating and cooling and lightning protection to work in all environments
- -40° C to +60° C