



# CITY OF SANTA BARBARA

## COUNCIL AGENDA REPORT

**AGENDA DATE:** April 13, 2010

**TO:** Mayor and Councilmembers

**FROM:** Water Resources Division, Public Works Department

**SUBJECT:** Approval Of Three-Year Pre-Qualified Supervisory Control And Data Acquisition Service Providers

**RECOMMENDATION:** That Council:

- A. Approve a pre-qualified list of firms for a three-year period, ending June 30, 2013, for the Supervisory Control And Data Acquisition (SCADA) system. The firms were pre-qualified through a Request for Proposal process to provide SCADA system design, maintenance, and support for the City's Water Resources Division; and
- B. Authorize the General Services Manager to issue purchase order contracts to firms on the approved list in accordance with approved budgets.

**DISCUSSION:**

SCADA is a sophisticated computer system that has become a water and wastewater industry standard for collecting and monitoring system data in real time. SCADA systems consist of specialized computer hardware and software equipment that is operated through Programmable Logic Control via computer networks. These integrated SCADA systems have elements of computer programming, fiber optic networks, and database design and management. The unique structure of individual SCADA systems lends each system to having only highly qualified, specialized contractors working on them.

Water Resources staff depend on SCADA systems to monitor and control system equipment and processes at the Cater Water Treatment Plant, El Estero Wastewater Treatment Plant, and at facilities located throughout the distribution and collection systems. SCADA provides data recordation required for regulatory permit compliance, and allows staff to remotely monitor system equipment and operations. In the event of an equipment failure or system operations outside of pre-set ranges, SCADA will notify staff via remotely-sent alarms, thus eliminating the need to staff the treatment plants during a graveyard shift, and improving emergency response time to equipment failures at facilities located throughout the water distribution and wastewater collection systems.

Water Resources routinely contracts with professional SCADA service providers for maintenance projects and emergency support, such as an equipment failure. Water Resources also has many upcoming projects that include new SCADA systems, which will require the services of a SCADA contractor to design, install, and integrate new SCADA programs into existing systems. Water Resources staff desires to create a list of pre-qualified SCADA vendors from which they can solicit proposals for specific SCADA projects and issue purchase orders for SCADA maintenance support.

Staff conducted a Request for Proposals/Qualifications process; and with the assistance of a Water Commissioner, the following firms have been determined to be qualified to provide SCADA design, integration, installation and support services.

1. AIA Automation, Inc. (Irvine, CA)
2. Pacific Rim Automation, Inc. (Huntington Beach, CA)
3. HiTech Concepts, Inc. (Anaheim, CA)
4. Wunderlich-Malec Systems (Pleasanton, CA)
5. DLT&V Systems Engineering (Irvine, CA)
6. Minot Enterprises, Inc. (Santa Barbara, CA)
7. Systems Integrated (San Diego, CA)

AIA Automation, Inc., Pacific Rim Automation, Inc., and Hi-Tech Concepts, Inc. are contractors who have been instrumental in the development of the City's water and wastewater SCADA systems and have proven to be capable firms. Wunderlich-Malec Systems, DLT&V Systems Engineering, Minot Enterprises, Inc, and Systems Integrated are new to Water Resources' SCADA systems. Each firm has a solid SCADA team with vast experience and good references. Staff believes the four new firms will provide new approaches and competitive bidding for Water Resources' SCADA projects.

#### **BUDGET/FINANCIAL INFORMATION:**

Expenditures for SCADA were anticipated and have been budgeted in the Water and Wastewater Funds. Costs for SCADA integration particular to an individual capital project are included with the specific project's costs.

#### **SUSTAINABILITY IMPACT:**

SCADA systems allow for remote monitoring and operation of critical equipment, which provides for more efficient operation of water and wastewater facilities, improved response times to equipment failures, thus preventing sewer overflows, and fewer truck trips for routine facility inspections. SCADA systems have also eliminated the need for around-the-clock staffing at the treatment plants, resulting in reduced labor costs.

**PREPARED BY:** Catherine Taylor, Water System Manager/CT

**SUBMITTED BY:** Christine F. Andersen, Public Works Director

**APPROVED BY:** City Administrator's Office