

KINGFISHER RTUs

Application Note **Ventura River County Water District, USA**
Scada System Installation

About the Project

This project was undertaken by our American Kingfisher RTU distributor, ATSI.



The client is the Ventura River County Water District, located in Ojai, California.

The solution used is an ATSI Intelligent RTU SCADA system utilising Kingfisher RTUs.

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The SCADA System

The system was designed with a 'Distributed Control' architecture, to provide 'Fail-Safe' operation, and to minimize the impact of single and multiple component failures to system operation.

The SCADA computer is updated with data to accurately display field conditions, while also allowing operators to transmit new set-points to the field RTUs. The computer is no longer a 'critical' piece of system operation.



"Our ATSI SCADA system costs \$55,000 to put in, and the first year alone, we saved \$42,000 in energy costs. Time of Use Pumping Operation has saved thousands of dollars during the peak energy billing periods of summer."

Ventura River County Water District

PC programmable radio modems (2 watt UHF, 9600 bit/sec) transmit data in a peer to peer network across the system. The configuration of the radio network is accomplished in ATSI SCADA RTUs.

Operationally, the SCADA system automatically controls and monitors the following parameters:

- Reservoir Levels & Level Trending
- Well Water Levels
- Well / Booster Flow & Total
- Booster / Well Call (Start/Stop)
- Booster / Well Status (Running/Off/Fail)
- Booster / Well Run Time & Number Starts
- RTU Communications Status
- RTU Back-up Battery Status
- Power Status
- Real Time & Historical Trending

System alarms are uniquely handled.

Not wanting a 'computer' to have the ultimate destiny in the dispatch of very necessary system alarms, the customer elected to use the ATSI-RTU Alphanumeric Paging functions built into the RTU/FEP firmware. If computer operation is halted, for any reason, the ATSI Front End Processor RTU still sends the alarm information to field maintenance personnel via Alphanumeric Paging. This has proven to be highly reliable and effective in the transmitting of alarms.

Reports are generated automatically based upon data collected from field devices. Reports are done in such a manner so as to provide ready information for reports required by Local, State and Federal agencies.

Data, besides being stored on the hard disk drive, is also exported to a 100 Megabyte drive for archival storage.

The SCADA system features 'Remote Access' for remote viewing of system displays screens as well as remote access to the ladder logic running in field RTUs.

Any RTU may have its logic checked or changed over radio links, even from remote locations.